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FINANCING THE HEALTH CARE SYSTEM IN
BULGARIA: OPTIONS AND STRATEGIES

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ABSTRACT

The transition to democracy in 1989 forced the Bulgarian health system to change. Falling government revenues and popular demand for a more transparent regime brought pressure for a new system of financing.

The process of reform was slow and inconsistent. In part this reflected a lack of political will but there was also an absence of relevant information on the consequences of different options. This thesis seeks to fill this gap by means of an integrated series of studies to analyse the previous system and evaluate the options for change. The research uses literature review, documentary analysis, quantitative research (a population based survey) and qualitative research (interviews and focus groups).

The research documents the scale of inequalities in health and health seeking behaviour. Self reported health varies considerably. Utilisation is more evenly distributed, although the poor access less care after allowance for their poorer health. They are also more likely to be cared for in lower tiers in the system.

Informal transactions play an important role in the Bulgarian health care system. This has two components. One is a traditional ‘culture of gifts which typically imposes no more than minor inconvenience and is not a prerequisite to receive care. A second has appeared more recently. It compensates for genuine shortages and reductions in salaries and does have an impact on access.

The existing financing system is regressive and hospital stays can incur considerable expenditure. This is generally found from current income and there was little evidence of ill health leading to impoverishment. This was, however, largely because of the persistence of strong informal support mechanisms.

The introduction of social insurance is seen as a solution to the problems of the existing system and receives widespread support, but it is poorly understood. The misconceptions threaten its sustainability.

This thesis demonstrates how different methods can be integrated to evaluate a health care financing system and provides important new insights into payment for health care in countries in transition.
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ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>BSP</td>
<td>Bulgarian Socialist Party</td>
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<tr>
<td>CEEC</td>
<td>Central and Eastern Europe</td>
</tr>
<tr>
<td>CMEA</td>
<td>Council for Mutual Economic Assistance (or COMECON)</td>
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<tr>
<td>FSU</td>
<td>Former Soviet Union</td>
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<tr>
<td>GFS</td>
<td>Government Financial Statistics</td>
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<td>GHS</td>
<td>General Household Survey</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>GNP</td>
<td>Gross National Product</td>
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<tr>
<td>HIS</td>
<td>Households Income Survey</td>
</tr>
<tr>
<td>Lev</td>
<td>The currency of Bulgaria (multiple: Leva)</td>
</tr>
<tr>
<td>LSMS</td>
<td>Living Standards Measurement Study</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health, Bulgaria</td>
</tr>
<tr>
<td>MRF</td>
<td>Movement for Rights and Freedoms</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Health Care</td>
</tr>
<tr>
<td>PPP</td>
<td>Purchasing Power Parity</td>
</tr>
<tr>
<td>UDF/ADF</td>
<td>Union of Democratic Forces/ Alliance of Democratic Forces</td>
</tr>
<tr>
<td>WDR</td>
<td>World Development Report, the World Bank</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
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CHAPTER 1. INTRODUCTION

Background

The democratic transition of 1989 dramatically influenced all aspects of the economy and politics in Bulgaria, creating the expectation of reconstruction of the social sector, health care in particular. Soon after the initial enthusiasm, it became clear that health care reform was, in reality, low on the political agenda.

During 1990-1994, priority was given to political and macro-economic reforms which aimed to dismantle the command-and-control economy, rather than to initiatives in the social sphere. Health care reform was perceived as secondary to general economic recovery. The dominant view of successive governments was that general economic measures such as privatisation, stimulation of small businesses, competition and establishment of market mechanisms would improve incomes and thus the people’s ability to pay more for health care, whether out-of-pocket or through heavier taxation. This was not unique. There was a similar focus on macroeconomic transition, with a lower priority given to reform of the ‘non-productive’ health sector in other Central and Eastern European countries. Furthermore, even in Western Europe, development of national and European Union (EU) health care policies has been considered secondary to macroeconomic policies aimed at regulating industry, trade and agriculture\(^1\) \(^2\) and at EU-level health was considered a “non-issue” and “only a component of any economic policy”\(^3\).

The main reform developments of the early 1990s were re-establishment of the Bulgarian Medical Association and the Bulgarian’s Physicians Union (1990), legalisation of outpatient private medical practice (1991) and new Constitution which guaranteed the right of Bulgarian citizens to free health care in the state facilities (1991), as well as some liberalisation of pharmaceutical trade.

While radical economic measures were viewed as unavoidable, health care was supposed to undergo a process of gradual incremental adjustment through a “step-by-step strategy”, similar to the slower and more evolutionary pace of health care reforms in Poland\(^4\) \(^5\). However, the “shock therapy” applied to the general economy failed to deliver expected economic recovery and visible improvement in living standards. Macro-
economic restructuring was long delayed for political reasons. A series of ill-advised and unpopular policies further exacerbated the crisis. The polarisation of wealth increased the vulnerability of poorer groups as there were no means of protection built into the system. Such divisions in society did not allow the emergence of consensus on the aims and pace of the health care reform.

The failure of the macroeconomic reform had direct consequences for the context within which health care reform was to take place. Falling incomes and social insecurity contributed to the worsening health status of the population. The implications for the health care system were a larger share of out-of-pocket expenditure and higher payments for pharmaceuticals and for what had been state-subsidised services.

As a consequence, in the early 1990s, there was no coherent impetus for reform of the Bulgarian health sector. The prerequisites for reform, such as a legal and institutional framework, had not been developed. The policy debate regarding health care reform was dominated by the professional unions, and in particular the physicians, who pressed for introduction of a compulsory social insurance system, viewing it as an instrument for a rapid increase in their income. Compulsory health insurance was also attractive to many policy makers and members of the public who viewed it as an opportunity to bring extra-budgetary resources to the system and improve the deteriorating quality of care. Other options for health care financing in Bulgaria were barely considered.

A further factor delaying health care reforms was that, unlike other sectors that were obviously collapsing, such as manufacturing industry, the health care sector gave the impression of coping with the consequences of transition. In fact this was due to a range of often cosmetic changes and adaptive mechanisms, including increasing direct user payments and hidden subsidies. Such an approach, coupled with a failure to invest in maintenance, training and new technology, was ultimately unsustainable.

Other than offering political slogans, governments and political leaders were unwilling to address the sensitive issues of health care reform. It was recognised that fundamental reform would incur high political risks in the short-term. Thus health care reforms in Bulgaria have been slow and inconsistent. Successive governments have avoided making far-reaching decisions, instead opting for specific, small scale, more manageable or politically acceptable problems.
An important obstacle to a coherent reform framework was a lack of debate about alternative models for organisation and financing of the health system. Government officials often acted on the advice of international consultants who sought to apply models from elsewhere, either with little relevance to the Bulgarian context, or using statistical data irrelevant to health care. No primary surveys addressing issues such as affordability were commissioned. There was no specialised information on health expenditures, ability of households to cope and options for restructuring the financial basis of the system, which would have facilitated the decision-making process in health care reform.

In December 1994, partly as a result of the failure of previous governments to achieve social improvements, the Socialist party (reformed Communists) won the general election. Their platform offered an agenda for comprehensive social sector reform, with an accent on health care sector reform. The socialist government’s main achievement was to enact a “National Health Strategy” in co-operation with the World Health Organisation (WHO) (1995), setting broad policy guidelines for health reform and formulating explicitly goals and principles of health policy and directions of health reform (Box 1.1). Other developments included several decrees to regulate the pharmaceutical market and a series of primary care initiatives, such as training for general practitioners (GPs). Health policies remained incremental and targeted particular isolated symptoms rather than focusing on the underlying causes.

Reform of health care financing was low on the government’s priority list. Although a draft law for universal health insurance, which gained support from a number of stakeholders, was submitted to the Parliament in 1993, the government withdrew it, and sidetracked the preparation of another draft. The government was involved in several scandals involving mismanagement in the health sector, leading to confrontation with medical professionals, which had the effect of derailing their efforts and reduced political support for reform.

The political and economic situation in Bulgaria changed dramatically in 1996-1997, with major implications for health sector reform. 1996 marked the beginning of severe economic decline, culminating in January–February 1997 in what was described as ‘the worst economic crisis in the country since the demise of the communist regime in 1989’. The national currency (Lev) suffered catastrophic devaluation by 11% (1996: $1=70 Leva and January 1997: $1=660 Leva). In January-February 1997 alone, the value of the
Lev decreased five-fold. Monthly inflation of 20% at the end of 1996 rose to 300% in January. While in 1996 the average monthly wage in Bulgaria was about $70 per month, by January 1997 it had fallen to $30, and in February to $10-12, thus diminishing purchasing power and eroding savings. Bread, fuel, and other basic commodities were in short supply, or available at disproportionately high prices compared to unadjusted wages and pensions. The banking system was close to bankrupt due to insolvent borrowing. The dramatic decline in living standards caused mass protests which ultimately led to the downfall of the Socialist-led government and early elections, won by the right wing Union of Democratic Forces.

**Box 1.1. Key features of the National Health Strategy, 1995**

*Goal:* To put an end to the adverse trends that currently characterise the nation’s health and to ensure its sustainable improvement in agreement with the WHO Health For All by the Year 2000 strategy.

*Main achievements:*
- Assessment of demographic factors, morbidity and physical development indicators. The main problems: ageing, low birth rates, recent increases in total and infant mortality, negative natural growth, high abortion rates. Circulatory conditions, neoplasm, and traumas are main causes of death, with resurgence of tuberculosis, mental disorders and STD.
- Identifying the main broad groups of risk health factors: life-style related risks (smoking, alcohol abuse, physical inactivity, unbalanced nutrition, psycho-social distress, drug addiction); environmental risks (air, water and soil pollution, risks in work environment, and socio-economic factors such as income loss, unemployment, changing consumption patterns; health care system deficiencies.
- Assessment of the advantages and disadvantages of the current health care system and its ability to respond to the pressing health needs.
- Outline of reform priorities: containing cardiovascular diseases, increasing the effectiveness of cancer prevention and treatment and focus on protecting the health of children, women in fertile age and other vulnerable groups such as the elderly, the disabled, and the socially disadvantaged.

*Recommendations:*
- Health policy should promote lifestyle changes, environmental factors, and reform of health care, to achieve better health outcomes.
- Design of programmes addressing the risk factors and main causes of morbidity, mortality and disability, specific to Bulgaria.
- Intersectoral and international collaboration and joint health and social initiatives.
- Involvement of all stakeholders: professional associations, trade unions, research institutions, health care staff, NGOs, international organisations, mass media and public.
- Following a ‘national consensus’, to introduce full-coverage national health insurance system, according to ‘the principles of equality and solidarity’.
- Implementation management system to monitor, evaluate and control reform.
This crisis had a devastating effect on the health care system, and the earlier appearance of coping collapsed. The government budget was insufficient to provide even basic supplies of antibiotics and other essential drugs and materials in state hospitals. Many scheduled operations were cancelled. Those who had opted for out-patient private services were increasingly unable to pay, many returned to the public system, increasing the pressure for additional public funds. Although the crisis was a result of structural economic failure and had been forecast by experts, almost no safety nets for the population were provided. Belatedly, the importance of social sector reform to protect against similar crises of transition became widely recognised.

For these reasons, following the April 1997 elections, health care reform has risen on the political agenda, with high motivation for reform. In the light of economic events it became clear that the current financing of the health sector was unsustainable, invoking a new understanding of reform priorities. Health financing reform was one of the salient recommendations in the election manifesto of the Union of Democratic Forces and enacting of a legal framework was viewed as the first step in this direction. The 1998 Law on Health Insurance was among the first passed by the democratic government, only a month after they took office. Implementation of the Law was scheduled for 1999-2000. Nevertheless, many of the original obstacles remain. In particular, there has been little discussion of different options for design of a health financing system, and policy-makers have little empirical information on which to base their decisions.

In effect, at the beginning of the 21st century, the Bulgarian health care system is still largely based on the “Semashko” model, although some of its features have been modified under pressure from the transition to democracy and open markets. There is no evidence of a consensus-based reform strategy or coherent health policies. Some of the legal framework is already in place, but there is a need for institutional capacity building and training of experts. Most health reform developments in 1989-98, although significant, remained partial and isolated and did not change radically the structure of the health care system. For example, private practice in the out-patient setting is perfectly compatible with the state-controlled system; in fact, forms of private practice legally co-existed with the state sector until mid-1970s. The next logical step, which involved more preparation and higher risk, was to establish a health insurance system, which would allow for liberalisation of in-patient facilities, which was not attempted until 1998.
Furthermore, it was not until late 1997 that universal health financing was considered crucial to further reform and began to be actively discussed in the mass media.

This thesis focuses on financing the health system and examines the applicability of several types of health financing methods. Experience from a range of countries in Western and Eastern European will be examined in the light of Bulgaria’s specific economic, cultural and historical circumstances. It is impossible to impose unmodified health financing solutions from elsewhere. Nevertheless, Bulgaria is not unique as some policy makers think and the knowledge of other countries’ financing arrangements could be beneficial. Bulgaria is similar to other Central and Eastern European countries in terms of its inheritance and obstacles facing the health system reform. The newly introduced market mechanisms create challenges similar to those in Western Europe. Similarly, the massive impoverishment of large segments of society means that financing options used in some of the wealthier countries of Africa and Asia may offer valuable insights.

**Topic of the thesis: why focus on financing?**

This thesis seeks to inform the process of health care reform in Bulgaria. It focuses on the financing side of the system. This can be justified for several reasons:

I. The centrality of financing in the reform framework

The process of health care reform in Bulgaria so far has largely ignored the issue of health care financing. The reforms have addressed other areas, which are also important. Nevertheless, looking at other countries’ experience, it is clear that failure of health care reform has often been due to unsustainability of financing mechanisms. It has been clearly demonstrated that countries such as Hungary, the Czech Republic, Slovakia, Slovenia, Croatia and the Former Yugoslav Republic of Macedonia, which have national health insurance systems implemented after 1989 or existing beforehand, spend more on health care as share of Gross Domestic Product (GDP) (6-8%) and in real terms, than countries which finance their health care from general taxation, such as Albania, Bulgaria, Latvia, Lithuania, Poland and Romania (3-5% of GDP).

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The ‘Bismarck’ model of health system financing has been considered economically feasible and matching cultural, historical and political traditions and preferences of different interest groups across Central Europe. In 1992 a health insurance system was fully implemented in the Czech Republic, but within a short period led to cost-escalation as a result of incentives for overtreatment, an over-comprehensive package of benefits and fee-for-service ‘point’ remuneration of the physicians in the private sector. These design faults led to an increase in the share of GDP for health, from 5.2% to 9.4% in the first year, and the system proved to be unsustainable without additional subsidies.

Similarly, inadequate financial incentives for providers led to a rise in health insurance costs and fiscal crisis in Hungary and Slovakia. Side effects of the health insurance system have been structural deficits of the insurance funds, requiring subsidies from the general health care budget in most of the CEE countries that adopted the compulsory insurance system. Deficits occurred due to lack of cost-containment mechanisms, failure to adjust the premiums to the prevailing employment structure, limits to insurance coverage and higher cost of services for state-covered groups than was provided for by transfers from the state. However, little of this experience with national insurance schemes has been discussed in Bulgaria.

The key question to be asked is, therefore, what is feasible financially in the circumstances of a particular country. Although in the 1990s nine Central and Eastern European countries implemented, and several others were in the process of preparing to implement, insurance legislation, this question has not been addressed adequately.

As already noted, in the late 1990s it became clear that there was a need to reorganise the financial basis of the Bulgarian health care system. As in the West, there is sustained upward pressure on health care costs from ageing of the population, new medical technology and rising demands for increasing health expenditure which is not matched by growth in the resources available from the health budget. The government has been unable to increase, or even maintain, social spending in the face of demands from other sectors such as energy and defence. The scope for savings from efficiency improvements is also limited. The current solution is to shift some of the health care costs to users, this research will seek to demonstrate whether this is affordable for them.

It is also important to consider the financial and policy context within which reform will take place, i.e. economic stagnation, inflation, unemployment and low purchasing power.
Reform of financing mechanisms is a radical, but necessary, approach to revitalising the health sector. It is a decisive issue around which the whole reform process is organised and influences every part of the health system.

There is widespread agreement that whatever system of financing is adopted should seek to achieve certain objectives. These include: a) to be sustainable and to attract additional extra-budgetary resources for health; b) to guarantee high-quality care and availability of pharmaceuticals and treatments; c) to contain cost-escalation but to maintain the budget for health care both as a share of GDP and in real terms; d) to define clearly the rights of users and professionals; e) to improve the well-being and motivation of the medical profession and to discourage corruption; f) to induce cost-consciousness; g) to provide scope for some consumer choice; h) to be transparent; i) to be equitable; j) to be politically and administratively feasible in the current economic conditions, with no requirement for large-scale health sector restructuring.

II. The need for a comprehensive analysis of alternative financing methods and an exploration of their applicability to Bulgaria.

The complexity of health care financing reform has not been well recognised by policymakers in Bulgaria. The public discussion in 1996-7 relied on inadequate knowledge of how mechanisms of financing might work in Bulgaria and which might be compatible with the value system of the Bulgarian society. It is known that different policies affect groups differently, hence there is a need to look at distributional effects across society and to identify losers and winners under each scheme. It is clear that simplistic solutions will not work and could further damage the system. The reform process has been seriously handicapped by the lack of information on the nature of different financing mechanisms and their impact on the households.

No systematic research has been conducted on the finance side of the health system. There is only one independent review of alternative strategies and options for financing, funded by NATO (Box 1.2).
Box 1.2. Key issues discussed in the NATO funded report: Comparative Analysis of Different Insurance Health Care Systems Aimed at the Development of Theoretical and Practical References for the National Health Policy

**Objective:** To review systematically options for health financing and experiences in a range of countries, and to develop theoretical and practical references for the needs of policy-makers and reform in Bulgaria.

**Main achievements:**

- Detailed overview of elements of the health financing systems: institutions, type of contribution, actors, and types of payment to providers etc.
- Definition of public expenditure, structures, and other concepts, as used in Bulgaria in order to facilitate international comparative research.
- Developing a reference guide to financing systems for policy-makers.
- Practical recommendations for harmonisation of terminology, collection of health data etc., with those used in Western Europe.
- Stresses the importance of societal and psychological factors, such as values, which have to be considered when reforming a health financing system.

A review of the development of the reform process, through official documents and the limited available research, indicates that only a few topics, such as assessment of volumes of work, medical ethics, regulation of professional organisations etc., have received attention. Most of this work, apart from a few experiments on the provider side, has been completely theoretical and not well validated empirically or with reference to the international literature. Had a general framework for reform of the health system financing and delivery existed, this research could have been used productively to clarify the finer details. However, the available research, although interesting, has been rooted in an unclear general conception of how health care should be financed. In this form it is isolated and, in practice, less useful for policy makers.

**III.** The need for a comprehensive analysis of alternative financing methods from the user’s perspective.

Over the last ten years, the majority of Bulgarian households have experienced a dramatic decline in their welfare, caused by increased poverty, unemployment and income insecurity. Democratic reforms in Bulgaria were marked by a series of conflicting paradigms for recovery and frequent political mistakes. Surveys show that, for average households, the predominant attitudes are those of pessimism, indifference and lack of enthusiasm for further liberalisation of the economy\(^1\). The lack of feedback from the population or public participation in the reform process by means of
representative organisations and other civil society channels was an important obstacle to achieving consensus in society at large. Furthermore, the users’ willingness to pay for a particular scheme is decisive for compliance and ultimately for the success of the scheme. Too often, in the past, policies have not taken into account the preferences and interests of different groups.

The government approach to research, as implied by funding decisions, has been directed entirely towards the supply side of the health care system, even though many studies have demonstrated the importance of understanding the demand side: current expenditure, ability and willingness of households to pay for health care or to exercise a choice. There are no household surveys with data on health status, utilisation or spending. Explanations could be sought in the persistence of totalitarian attitudes of the administration towards citizens; its inability to enter a discussion; and undeveloped political dialogue in which the users could be empowered to participate. One element of this thesis will seek to fill this gap.

The ability of the population to pay for an acceptable quality of health services, measured in terms of disposable income, is an important aspect of the finance reform of the health system. Yet such knowledge is just one input into the policy debate. Societal values and actual willingness of users to pay under different financing schemes is an essential, but poorly recognised precondition for compliance with health system re-organisation. It is the intention of this work to give an indication of both ability and willingness to pay.

IV. To draw attention to the discussion of alternative financing options in parallel with public debate regarding health financing reform and implementation of health insurance.

It is important, through further research conducted by both the Ministry of Health and independent sources, to inform those involved in the decision-making process. A new proposal for health insurance was voted on in June 1998 by the Parliament. The implementation of health insurance system is scheduled for implementation in 2000-2001. This research seeks to inform these policy developments and aims to provide new perspectives on options for financing any new system.
Scope of the research

The research that constitutes this thesis will be confined to the financing of health care reform in Bulgaria. For the reasons noted above, it will be essential to get right this element of any new system right. The importance of supply side factors is, of course, fully recognised, as is the need to ensure that they are consistent with whatever financing system is chosen. To some extent these issues will be addressed, but the necessary primary research on how best to provide services cannot be undertaken within the resources available for this project.

In brief, the research has two objectives. The first is to provide an empirical basis on which to base decisions about which systems are equitable and sustainable, exploring their effects on different groups. The second is to assess the attitudes of different elements of society to the various options available. In combination, the achievement of these objectives will provide a sound basis for decision-makers. Based on these data, a critical analysis of possible methods for health care system financing in Bulgaria will be undertaken. Inevitably this covers an extremely broad area.

The thesis aims to apply some theoretical ideas and applications of financial solutions from developed and developing countries to the particular political, economic and social circumstances of Bulgaria and its health sector. The limitations and advantages of each finance method will be discussed in terms of patterns of household income and health expenditure, societal values, culture and attitudes towards payment for health care etc.

Rather than recommending a single financing strategy, this research will seek to present a detailed analysis of several models according to their suitability and actual potential for implementation. The concluding discussion will examine possible ways to present information to inform the public and policy makers and enable them to analyse the ability and willingness of users to pay. More importantly, the validity of the underlying ideas will be tested empirically.

This thesis will argue that there is scope for a substantial revitalisation of financing of the health service and thus ultimately, the health status of the population in Bulgaria through the establishment of a different financial framework. Such a framework will seek to achieve a more efficient allocation of resources spent on health care by government and by households, control of excessive informal payments and establishment of effective incentives for staff.
Beyond the scope of this work are several important dimensions that are clearly related to the financing of health care: how to provide care more efficiently; how to raise revenue, distribute resources and reduce wastage within the existing budget; and how to improve resource management at national and health establishment level. Attention will be focused on the choice of health financing mechanism rather than on the process of implementation and adaptation of the existing bureaucratic structure. Similarly, an in-depth policy analysis of alternative financing options could be a focus for further research. Lifestyle and environmental risk factors, rooted in the economic and political conditions, are considered to have a decisive impact on the health of the CEE populations\textsuperscript{13}, and require separate analysis. It is recognised, however, that to achieve best results, all these aspects of health care financing reorganisation should be addressed simultaneously in an integrated reform effort.

**Potential contribution**

The potential contribution of this research lies in:

1. developing an interdisciplinary approach towards selection of a suitable health financing model for the circumstances of a country in transition, in this case Bulgaria, incorporating a range of factors critical to the success of a given financing option: willingness and ability to pay for health care; political and administrative and economic circumstances.

2. providing an insight into the forces behind, and obstacles facing, the restructuring of health sector financing in the economies of transition, namely Central and Eastern European countries. It aims to prepare the ground for further analysis and comparisons between countries in the region.

3. producing an independent empirical analysis of factors related to health care financing

4. attempting to inform decision-makers about alternative options for financing a health system and their applicability in Bulgaria, and empirically testing premises that have formerly been taken as givens.
CHAPTER 2. MODELS FOR HEALTH CARE FINANCING: LITERATURE REVIEW

Introduction

This chapter will analyse critically several approaches to health care financing by means of a review of the relevant literature. It will seek to describe key features of each health financing model, including common variants, and review the evidence on whether the model actually achieves its purported objectives. The next step will be, on the basis of findings from this study, to project how models might work in Bulgaria (chapter 12).

In the light of the large volume of materials, some criteria have been used to limit the subject area. First, the analysis will concentrate on health care financing, with occasional references to provision. Second, only financing methods with direct relevance to the current situation in Bulgaria will be discussed. These are the still dominant “Semashko” tax-based model, user payment, compulsory health insurance (currently being implemented), and voluntary insurance.

The reviewed literature was located through searches of databases and libraries, priority being given to materials directly addressing financing issues for Central and Eastern Europe and the Former Soviet Union. For user charges, literature on developing countries has been used due to lack of other relevant information. The materials include journal papers, monographs and textbooks.

Approaches to classification of financing models

There are various classifications of health care financing models. It is important, at the outset, to distinguish between financing and provision (Table 2.1). Each financing model can co-exist with public or private provision. Abel-Smith also emphasises the need to clearly distinguish between sources of health finance and ownership of facilities. These distinctions have tended to be overlooked in policy debate in Bulgaria.
Table 2.1 Public/private mix in health care financing and provision

<table>
<thead>
<tr>
<th>Finance</th>
<th>Provision</th>
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<td>Public</td>
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<td>Private</td>
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A framework for analysis of health systems, suggested by Saltman, is based on three core elements: financing (revenue raised through tax, insurance premiums or out-of-pocket), production (service delivery), and allocation mechanism (integrated, contractual or reimbursement-type transfer of revenue) (Figure 2.1).

Figure 2.1. Basic structure of health systems

Financing systems are often divided into public (taxation and insurance) and private (voluntary insurance), according to the source of revenue. Public systems are further classified according to whether contributions are earmarked for health care, and whether health service entitlement is conditional on contribution (general taxation, earmarked payroll tax and social insurance). Other important funding sources in developing...
countries and economies in transition are private (household), and external sources (foreign aid or donations)\(^5\).

An analytical framework used by the OECD\(^18\)\(^19\) sought to construct a comprehensive picture of health care systems incorporating both financing mechanisms and elements of provision. The financing models were grouped in separate, but not mutually exclusive generic types according to sources of finance (public and voluntary) and methods of paying providers (out-of-pocket payment without insurance; out of pocket payment, reimbursed by insurance; payment by third parties via contracts; or by third parties via budgets and salaries within an integrated organisation) (Figure 2.2). The combinations of these two sources of financing and four methods of paying providers give eight sub-systems, with compulsory out-of-pocket payment type being rare. This framework also takes into account five groups of actors (consumers; first- and second-level providers, third-party payers, and the government) and their interaction with the health system.

**Figure 2.2. Financial flows in the health care system (only possible ones)**

*Based on OECD. The Reform of Health Care. A Comparative Analysis of Seven OECD Countries. Paris: OECD, 1992*

In a recent analysis of health reforms, Saltman and Figueras divide the European health systems into compulsory (Beveridge-type taxation systems and Bismarck-type social insurance systems); voluntary (voluntary insurance and out-of-pocket payment); and
systems in transition between the two models. Typically, health care financing systems across Europe are based on tax or social or compulsory health insurance, in many cases accompanied by co-payments or voluntary insurance, but with different proportions of public and private financing sources.

This framework for classification of financing models has been adapted for use in this work (Figure 2.3) due to its relevance to health financing in Bulgaria. Financing and provision of health care are clearly separated, with a focus on sources of financing and mechanisms for raising funds. The main distinction will be between compulsory (social insurance and taxation) and voluntary (private insurance, formal and informal cost-sharing) sources of funding.

Figure 2.3. Framework for classification of financing models used in the thesis


These classifications treat health financing models as “ideal types”, having a set of characteristics. In reality, most health care financing systems are mixed, with different elements co-existing. Thus, capital and recurrent expenditure may be financed differently.
The rest of this chapter will examine in turn voluntary insurance, out-of-pocket payments, social insurance and taxation. This will be done for clarity, although since mid-2000 the Bulgarian health care system has been financed through a mixture of social insurance, out-of-pocket payments and tax. The strengths and weaknesses of each model, its objectives, and the lessons from elsewhere, especially from Central and Eastern Europe, will be considered. Provider payment methods will be referred to where relevant. Other aspects of financing, such as public/private control and ownership; decentralised/centralised management or regulation; monopoly/competition in commissioning, collecting and spending for health care, though important, are beyond the scope of this review.

**Voluntary insurance**

**Characteristics**

It is recognised that demand for health care is highly uncertain as illness is an event with low probability but high cost. The burden of expenditure on the household budget can be catastrophic, and often occurs when income is the lowest. The proportion of those who can cover health care costs entirely out-of-pocket is small. The unpredictability of illness, outcome of treatment (for consumers, as well as professionals), and health care costs can be countered through insurance. Against a regularly paid premium, the insurer covers the cost of health care for a pre-determined range of services. In this sense, voluntary insurance offers users protection from the risk of impoverishment.

Private health insurance typically counters uncertainty of health care consumption with premiums adjusted to individual risk. Insurers could be private agencies, friendly societies, or provider-controlled bodies. Profits could be redistributed as lower premiums; as dividends; or where the insurance and provision are integrated as with the non-profit hospitals in the US, profits are reinvested in the facilities.

Voluntary insurance usually covers specified risks and services, at certain levels of care and in designated facilities. The premium is determined strictly according to the scope of services included. Services that can be risk-rated and which are potentially profitable are the most likely to be covered, excluding services where expenditure is likely to be high, open-ended, controlled by the patient, or occurring regularly. A larger choice of services is associated with higher premiums.
Voluntary health insurance usually provides top-up supplementary coverage for particular services not covered by the public system. Importantly, private insurance may cover people who are ineligible for public insurance. Even in predominantly public systems such as the British NHS, it may be the only pathway to certain treatments. Private insurance often expands where coverage by government or social insurance schemes is insufficient, as in the US and in many developing countries, with private insurance ensuring access to adequate health care.

Voluntary insurance can potentially alleviate the burden on government services and focus scarce state resources on those not covered. It is often seen as widening consumer choice and improving quality and efficiency of care. Private insurance can facilitate capital investment in the health delivery system. In many cases, insurance premiums may be covered partly by employers or social security funds. Premiums may be tax-deductible, thus encouraging personal investment in health insurance.

The problems with private health insurance are well recognised. Some, such as moral hazard (of users and providers), are, although controversial, intrinsic to all third party-funded systems. In voluntary insurance markets there are asymmetries of information between insurer and insured, and between insurer and physicians as the risks, while often obvious to a physician, are difficult to quantify by means of formulae. It has been argued that patients who do not pay for treatment directly may be less cost-conscious and might overuse health services. User moral hazard is exacerbated by fee-for-service provider payment with reimbursement by insurers, which creates incentives for supplier-induced demand. In this situation both users and providers lack incentives to constrain medical costs as illustrated by the experience of the United States.

Theoretically, under voluntary insurance, health services are provided at zero price at the point of use. However, the incentives for overutilisation and user moral hazard are often countered by co-payments, deductibles, co-insurance, or other cost-sharing instruments, some payable at the point of use. Non-utilisation may be rewarded by discounts or no-claim bonuses.

Other problems, such as cream-skimming (selection of low risks) and adverse selection (selection of high risks), are specific to the voluntary insurance industry. Insurers seek to maximise their profits. Insurers make a profit if the sum of premiums collected is higher than claims paid out plus operational costs. This could be achieved by reducing risk through risk-rating, where the premium is adjusted to the expected claims paid out. High-
risks groups are charged higher premiums. Better-off, younger and healthier patients, might be offered better insurance packages. Older, poorer, or chronically ill people are less likely to be offered affordable premiums. If the risk is spread evenly, with low and high risks charged similar premiums, low risk groups will subsidise high risks, giving incentive for low risks to leave the scheme thus increasing the premiums for those remaining. Adverse selection is difficult to counter, even when quotas, and requirements for wider risk-pooling, are in place. To minimise adverse selection, there is a preference for insuring large groups of people so as to achieve random selection of risks, with employers often sharing the costs.

Voluntary insurance is a relatively expensive method for funding health care. Competition to ‘sell’ services involves higher transaction costs, as in the USA. These costs translate into higher premiums for users. In contrast, compulsory insurance schemes typically are not required to realise profit. Governments also face the costs of monitoring the system.

Voluntary insurance affects equity and solidarity adversely. Premiums are regressive, related to individual risk rather than to income, as in social insurance. Access to voluntary insurance depends on ability to pay, and the poor are more likely to be ill and to be classified as “poor risks”. Voluntary insurance could potentially provide coverage (basic or supplementary) to high-income, low risk, employed people, but risks creating a two-tier system. Other groups can be left with partial or no cover, as in the USA. Utilisation of health services by those less well-off would ultimately be reduced or deterred due to unaffordability of the premiums. In addition, extensive use of cost-sharing means that even those who are insured privately often have to pay at the point of use. Untreated illness among the uninsured can also increase costs in the public sector as people who have limited or no coverage are likely to use the public sector as a last resort. Voluntary insurance is thus inefficient at either a macro- or micro-economic level.

Another concern is that private insurance companies usually create an “oligopolistic” market dominated by several large companies. Despite potential economies of scale, companies have an incentive not to compete with each other, but to agree on maintaining high premiums. Individual insurers are in a weak position relative to providers due to their collective monopoly power. According to Reinhardt, in the USA the introduction of a national insurance scheme that would have stronger monopsony power has been opposed by provider lobbies who benefit from the existing fragmentation.
Some have attempted to reduce the risks associated with private insurance through regulation. In the Netherlands, private insurers use reduced premiums (no-claim bonus), deductibles, block contracts and insurance for hospital care only, but the effects of such measures are controversial. Attempts to reduce the effects of adverse selection may include subsidies for users at high risk, such as vouchers for purchasing insurance. Although governments have attempted to regulate such systems, it has proved difficult to protect equity without discouraging insurers from entering the market.

**Experience with voluntary insurance**

The relative contribution of voluntary insurance to health care financing varies. It usually supplements other methods, and covers only minor, routine or elective services. Even in the USA, where private health insurance has been viewed as the ‘financial cornerstone’ of the health system, it still covered only 37% of all individual health expenditure in 1994.

Voluntary insurance is also used in Europe, in combination with statutory tax-based or insurance systems. In Western Europe voluntary insurance mainly provides optional supplementary cover for certain sections of the population already covered by statutory tax or insurance health financing; or in cases of statutory insurance systems, as an insurance cover for high-income or other non participating groups. Compulsory private insurance models have been rare with the exception of Korea, where 94% of the population is covered by compulsory private insurance, and Singapore’s Medical Savings Accounts.

Private insurance is comparatively less common in the tax-based systems, as in the UK, Italy and Spain, which aim at comprehensive coverage. In most cases it is sought as a supplementary luxury cover, in order to obtain quick and convenient access to a physician of one’s choice. In some statutory insurance systems, exclusions of high income groups or high co-payments require additional coverage. In a predominantly compulsory health insurance system, voluntary insurance may cover otherwise non-reimbursable out-of-pocket health expenditure (Belgium, France, Switzerland). In some cases, a significant percentage of high-income population can opt out of the statutory insurance schemes (20% in Germany and 40% the Netherlands), and take private insurance cover.
In Central and Eastern Europe, following the demise of the Semashko model, there has been pressure to adopt private insurance in line with economic liberalisation. An increasing private involvement reflects diminishing solidarity and an emphasis on individual responsibility. Private insurance is available in Slovakia, the Czech Republic, Russia and Latvia as basic and supplementary cover, and is likely to grow further. Potential constraints have been immature financial markets, small-sized private (insurance) sector, low living standards and introduction of universal compulsory insurance.

In the developing countries, private insurance plays a relatively insignificant role. Although in some cases coverage might reach 5% of the population, the high cost of premiums limits further expansion. High burdens of disease, especially HIV/AIDS often make it economically non-viable, and thus, benefit ceilings are low.

Summary

In developed and transitional economies, facing shortages of resources, the market can be seen as a “magic pill” that will improve the health care system. Often, the hypothetical advantages of the market have been extolled to justify its use in health care. However, market based strategies in health care financing - in particular, private insurance do not necessarily deliver efficient and equitable services, due to market failure. The voluntary insurance sector aims to achieve profit, rather than better health outcomes for the population. A greater role for private insurance requires significant government regulation, especially where insurers are underdeveloped and users largely unprotected.

Out-of-pocket payments

Out-of-pocket payments are often seen as a specific case of health financing. They are a tool that can be used within all financing systems, illustrated by co-payment in health insurance systems, and user charges in tax-based models. Although largely a supplementary source of health financing, out-of-pocket payments will be considered as a separate financing method due to their significant contribution to health expenditure in Central and Eastern Europe.

Out-of-pocket payments are a direct transaction between patients and providers. Payments are typically fee-for-service. Private out-of-pocket spending as a proportion of total health expenditure is highest in poorer countries with a large informal sector. In
most cases direct payment is out-of-pocket, with limited financial support from employment-related insurance, state budget, or another third party. Under this model, multiple providers compete for patients on the basis of quality, choice, but usually not price, according to market rules.

Out-of-pocket payments for health care may be formal or informal. Cost-sharing has been at the centre of an international debate. Out-of-pocket payments are a major source of health financing in many developing countries. Most user payments in industrialised countries are covered by insurance. In Central and Eastern Europe, in the 1990s, there has been substantial reliance on out-of-pocket payments to sustain the health systems. In Bulgaria, users pay directly for private treatment, while formal and informal user payments have pervaded all levels of the state health system. This section will outline the main types of formal out-of-pocket payments, the debate surrounding them, and experience gained. Evidence on informal payments is still scarce and is presented in chapter 7 in relation to the findings of this study.

**Formal out-of-pocket payments (cost-recovery)**

As mentioned earlier, cost-sharing is widely used in industrialised countries as a supplementary tool for cost-containment. In the 1980s it enjoyed a resurgence as a means for cost-recovery in less developed countries, following recommendations by international agencies.

Introduction of cost-recovery is often triggered by major economic or political turmoil. The oil shocks of 1973, global recession and structural adjustment programmes affected dramatically the economies of many developing countries. Structural adjustment policies sought to deal with macro-economic imbalances and to promote long-term growth, leading to contraction of public spending. The loss of export markets, devaluation of currencies and a greater reliance on imported drugs and technology, undermined health sector expenditure, with many governments resorting to cuts in recurrent expenditure. In parallel, demand for health care rose due to HIV/AIDS, marketing of new technology, and changing demography. Bulgaria experienced similar pressures in the 1990s, especially during the 1994 and 1996 economic collapses.

Many countries had to respond to shortages by accessing extra-budgetary resources. Increasing tax revenue was difficult given weak tax collection, tax evasion and general
poverty. It proved easier to shift part of the expenditure burden to the population by introducing direct payment at the point of use. The World Bank promoted the concept of cost-recovery as an option to channel untapped resources to underfunded public sectors, to finance a basic package of health services. Charges generate revenue, directly or indirectly, through savings from reduced utilisation. In countries such as China and Hungary, reliance on out-of-pocket payments in health reflected changing economic and ideological paradigms in the wider society.

In developed countries users mainly pay out-of-pocket for non-prescription drugs, some element of prescribed drugs, dental services, spectacles and some private treatment. Abel-Smith et al. note that “all Member States (of EU) have, at certain stages, used cost-sharing to reduce demand to some extent, but it has not been by any means the most important mechanism for cost-containment”.

The term cost-sharing suggests a degree of participation by the consumer in the costs of their treatment. Even if symbolic, cost-sharing informs users about the cost of health services, and thus, is often used with third-party payment systems to increase cost-consciousness. Whether state, insurer or user bears the cost of health care has implications for the individual behaviour and potential moral hazard. It is important to consider user and provider incentives when health care is provided free of charge or heavily subsidised at the point of use, which was the case for primary health care in most African countries following independence, and for all services in Central and Eastern Europe. The term cost-sharing, used intermittently with cost-recovery, designates another aim of out-of-pocket payments, namely to recover a proportion of treatment cost. User fees shift the financial burden from the general pool of taxpayers to health care users. Users are less able to avoid payment than taxpayers can avoid paying tax, so creating the potential to raise more revenue.

Cost-sharing can take various forms according to the amount paid by the patient: a. fixed charge; b. co-payment (proportion of service cost), in excess (payment above certain level) or deductible (payment of the full service cost up to a specified maximum contribution); c. access fee (flat-rate registration or consultation fee).

There are differences in the way cost-sharing instruments work. Basic fees aim to charge directly for utilisation of health care services, while referral fees seek to distribute efficiently patient flows across the health system by creating “correct” incentives for the users, e.g. for use of preventive care and restricting access to specialists. Co-payments
can be applied at all levels of care, with no upper ceiling. They are more responsive to changes in service costs and frequent increases are less sensitive politically, but they are problematic in the event of catastrophic illness. Co-payments and deductibles are less transparent than flat-rate fees and administratively costly. The fact that users cannot foresee the size of payment could deter utilisation in addition to any effect caused by the fee itself. Fixed fees reduce uncertainty and are easier to understand, but are regressive. In countries where flows within the health system are less regulated, and informal payment is widespread, formal fees are unlikely to have a substantial impact on patient behaviour.

The case for introduction of fees is based on their potential to achieve the following objectives:

- **Revenue raising**
- **Greater efficiency**
  - discouragement of “unnecessary” demand or “frivolous” use of subsidised services
  - prevention of bypassing first contact facilities
  - fostering consumption of preventive and other cost-effective services (positive externalities)
  - redirection of household expenditure from high-cost private or traditional services to the public sector
- **Improved equity and access**
  - extension of coverage through redistribution of revenue
  - investment of revenue to subsidise services for vulnerable groups
  - quality improvement and consumer choice

Russell and Gilson’s review of user fee policies in 26 countries showed that “raising revenue” and “improving quality” have been the most frequently stated objectives. Across countries, these objectives have been prioritised differently and implemented by central or district authorities often with external (donor) support, with controversial results. Charges have usually failed to achieve significant cost recovery, but even where partial cost-recovery has been achieved, maintaining equity has proved problematic. Discussion is still open as to whether the alleged benefits actually occur and can be sustained.

**Fees and revenue raising**

The capacity of user charges to raise revenue has been challenged from different points of view. User fees play only a supplementary role in health care financing and are an unreliable instrument for revenue generation. User fees typically recover about 5% of
recurrent government costs\textsuperscript{30 32 39} with the exception of Ghana, where this figure is 15\%\textsuperscript{38}. This reflects inability to pay, inefficient collection, or high formal or informal exemption rates. The high cost of collection is a major problem in the absence of investment in administrative infrastructure\textsuperscript{32}. The share of co-payments from total health expenditure is modest in the EU, apart from Portugal and France, and varies by income group. In France, 20\% of the health expenditure on ‘ticket modérateur’ (a cost-sharing tool) is largely neutralised through private co-insurance (80\%).

User fees as a means of cost recovery have proved more successful in community based schemes in Sub-Saharan Africa\textsuperscript{38}. Smaller projects have registered a much higher cost-recovery (about 79\% in Zaire), compared to approximately 5\% in national programmes\textsuperscript{40 37}. Fiedler considers fees practical at local level, citing the example of community health boards in El Salvador\textsuperscript{41}. In such schemes the cost of collection is lower and the consequences more visible, leading to greater popular support\textsuperscript{42 43 44}.

In some cases introduction of user fees has served as justification for cuts in public spending, but in most countries this has not actually reduced central government allocation\textsuperscript{32 45 38}. According to Nolan and Turbat\textsuperscript{38}, user fees can be seen as a “soft option” for countering pressures for changing government spending priorities, or as “pragmatic acceptance of political realities”, as in African countries that spend far more on defence.

Systems must incorporate mechanisms to distribute and use resources gathered. In Ghana, some revenue returned to the central level is wasted in non-interest bearing accounts, while the part retained at health facilities is often not spent due to complicated administrative procedures\textsuperscript{43}. In Kenya, 40\% of health facilities did not spend the revenue they retained because their expenditure plans were not approved by the Ministry of Health\textsuperscript{44}.

\textbf{Cost-sharing and health policy objectives}

The explicit purpose of cost-sharing is often to raise revenue. In contrast to the private sector, cost-recovery is not an end in itself, but an instrument of health policy\textsuperscript{37 30}, as its underlying policy objective is to use generated resources to improve access. However, Ryan and Birch\textsuperscript{46} argue that, even in the United Kingdom, the negative health consequences of prescription charges are likely to outweigh the benefits of additional revenue generated. Charges may raise revenue but only at the expense of a reduction in
utilisation. Thus, fees should recover costs, but also be affordable. The Netherlands has taken the view that the adverse impact of cost-sharing on the poor should be compensated for by means of social funds external to the health insurance system.

Charging for health services in systems based on universality and accessibility raises ethical issues. The public systems are already subsidised through taxation or public insurance. Greater use of co-payments creates a conflict between access to health care based on need and on ability to pay. For example, the Canada Health Act has the power to apply financial penalties against user fees by withholding federal budget contributions to the provinces.

**Cost-sharing and utilisation**

Many studies report significant decreases in health services utilisation following the introduction of fees or increases in fee levels. De Bethune et al. give evidence of a sharp drop in attendance rates in Zaire after each fee increase, followed by slow “recovery” indicating price-elastic demand for health care. Fees constituted a large part of the users’ income. The author’s conclusion is that too big a reliance on cost-sharing will further decrease utilisation and undermine equity. Waddington and Enyimayew registered drops in utilisation after an increase in user charges in Ghana. Rural utilisation declined by 49%, especially among men over 45, while there was a massive increase in the 15-44 age group suggesting that households prioritise breadwinners. Weaver concludes that patient behaviour is influenced by price, as there were significant delays in seeking out-patient care in Niger due to payment difficulties among the less well-off. Yoder reports that after a nation-wide flat rate increase of user fees in Swaziland, there was 32% decline in attendance in government facilities and 10% increase in use of the mission facilities. Mwabu et al. estimate that the higher costs of obtaining care led to a 52% fall in the number of out-patient visits in governmental health establishments, which rose by 41% after the suspension of fees. After taking account of the shift to the private sector, 20-26% of those expected to attend did not seem to have visited any facility and were “forced out of the system”. Kupor et al. present evidence that co-payments have exercised a small but significant negative effect on the utilisation of all services by subscribers to Japan’s National Health Insurance System, the effect being greatest for in-patient care among the lowest-income group. Some of these
studies found smaller effects after introduction of fees in urban settings\textsuperscript{52}, or for in-patient services\textsuperscript{53} where demand is less elastic.

A few studies had contradictory conclusions\textsuperscript{57, 42}. It is argued that studies that register a fall in demand do not often take into account the scope for improvements in quality as a result of fee revenue, which may actually increase utilisation. When people are asked to pay without quality improvements, their utilisation will be deterred as they get less value for money. Diop et al. describe a pilot study of household responses to two models of payment for health services in three districts of Niger: pure fee-for-services financing; and a small pre-payment scheme plus lower fees, with a selectively applied package of quality and administrative improvements (drug supplies etc.) to accompany the changes in financing policy\textsuperscript{57}. The results showed that under a fee-for-service model, the number of initial visits declined slightly but the total number of consultations increased significantly. With an annual tax and lower fees, utilisation increased from 36\% to 43\% and the number of initial visits increased by 40\%. Although primary health services in Niger have been free since 1960, quality improvements have stimulated demand and neutralised the negative effects of user fees, with the total demand increasing by 70\%. The effect of quality improvement combined with payments shifted demand from the informal to the formal sector and illness-related expenditure declined significantly, in one district up to 40\%. Introduction of cost-recovery did not impose greater financial charges on users compared to the previously "free" system. Litvack and Bodart showed that, in Cameroon, the probability of using a health centre increased significantly for people in areas with fees compared to controls, with non-monetary costs being high in both cases\textsuperscript{42}. The authors note that it is essential that introduction of user fees is accompanied by quality improvements. The charges were "modest", lower than in the private sector, and included drugs. Due to the availability of drugs in the local health centre, the fee effectively reduced the price of care and boosted utilisation. The poorest sections benefited from fees proportionately more and had a higher rate of seeking care because they are more responsive to price changes and seek the cheapest option for treatment. In the case of Cameroon, the poor are more likely to use the local health centre, for a fee, if they receive adequate treatment and drugs there; and less likely to do so if the health care is formally free, but they have to pay higher price for drugs, and the time and travel costs are higher, the latter acting as a prohibitive barrier. Shepard et al. estimate that if higher fees are to be introduced in Rwanda, it would have only a very
slight effect on total utilisation (low price elasticity of demand: -0.25) and would rather influence the choice of provider. Data showed that approximately 90% of the low- and higher-income patients were willing to pay more for health care in order to assure availability of medications. Higher fees combined with higher quality deterred the utilisation at a health centre by only 3 percentage points. In the Dominican Republic outpatients were charged hospital fees at 10% of the private rate for similar services, according to perceived ability to pay of the patient. The fees considerably improved the public services and increased productivity and staff morale.

On balance, there is extensive evidence that fees discourage utilisation, especially in poorer countries and among vulnerable groups. A review of cost-sharing literature found methodological weaknesses in studies suggesting a low effect of fees on utilisation. While some argue that fees improve the quality and accessibility of services, compensating for regressive effects, Gilson notes that such studies are confined to particular circumstances of a country and do not consider the long-term effects on coping strategies of households, which may undermine the ability to pay. In Niger, funds generated from fees were used to finance quality improvements on an “on-going basis”, but financial sustainability requires that variable costs of “quality” (drugs, training, administrative improvements) are covered by other means. Thus, the incurred debt for every patient has to be covered by public budget. The potential for quality improvements from fees is small because the revenue in very poor areas is insufficient.

There is contradictory and inconclusive evidence about whether reduced utilisation is due to user charges, to non-monetary country-specific factors, or a combination of both. The aforementioned studies suggest that the poorest sections of the population are the most affected and multiple factors deter them from seeking care. A higher elasticity of demand for health care in rural areas may be a consequence of either a shift in demand to the private sector due to high user charges or to geographical misallocation of resources. Waddington and Enyimayew found that the major determinants of utilisation in Ghana were not only the size of the fees, but quality of care, availability of drugs and equipment, accessibility, waiting times, staff attitude, and payment mechanisms. Cost-awareness seemed to be high among even the poorest members of the public and the necessity of fees was not questioned as long as quality standards were maintained. Moreover, free care may be perceived as poor care. Other data show that the poor may be less willing to pay for preventive care, perceived as non-essential. Disadvantaged
groups have to cope with the inequities of access caused by non-financial barriers such as distance, poor quality, socio-cultural barriers, age, gender\textsuperscript{45}. In contrast, Akin considers price and distance to be less important determinants of demand than usually assumed, and argues for a greater use of fees in full or partial financing of out-patient services\textsuperscript{30}.

\textbf{Cost-sharing and equity}

It has been demonstrated that user charges are more likely to burden the poor and restrict their access to health services. The main argument against cost-sharing is that it enhances inequity. The most obvious danger from introduction of fees is a decline in utilisation that is not uniformly distributed across the population, but affects disproportionately the low-income groups. With user charges there is a trade-off between health gain and revenue generation: fees may generate income, but deter patients in need from cost-effective treatments and create socio-economic inequalities in health\textsuperscript{62}. According to estimates by Yoder, the decline in attendance in Swaziland was higher (34\%) among those who previously paid the least for health care, although it is not clear whether this is due to unaffordability\textsuperscript{54}. Importantly, there was a fall in preventive practices, immunisations, diarrhoea and STD treatments during the period of fee increase, which contradicted the objective of user fees to promote preventive services. The author concludes that the introduction of fees was neither an equitable nor efficient solution to the financing problem, with only 2\% of the recurrent Ministry of Health budget recovered, at the expense of increased inequity. Mwabu at al. report that individuals who could not afford to pay were likely to be those without wage employment, assets, or strong social or family connections\textsuperscript{44}. The fact that a very small percentage of the population sought exemptions can also be interpreted as meaning that people who could not afford services were excluded from the system altogether.

Arguments for user fees based on studies of willingness to pay and actual health expenditure could be misleading. In a perfect market consumers pay for a service if they are willing to pay, but in the health sector users often have no choice. Waddington and Enyimayew observed that utilisation based on “willingness to pay” for indigent groups is rather a “necessity to pay”\textsuperscript{43}. Payment is made at considerable cost to households and involves borrowing, selling assets, giving large proportion of yearly income, or using savings. In an equitable system willingness to pay should reflect the ability to pay.
An economic argument against user fees is that they may be regressive (welfare loss relative to income is larger for the poor) and not allow all income groups equal access, as the poor are more price sensitive than the rich. Gertler et al. showed that the demand for health care in Peru becomes more elastic as income falls, showing that health care is a normal good and thus price is a significant determinant of demand. Griffin objected to this analysis, arguing that Gertler et al. relied purely on theoretical probabilities in the absence of user charges, and that given the government-subsidised prices, there is an excess demand and inadequate level of output. People are unable to use services due to non-price rationing through queues and poor access, and an increase in health services quantity will neutralise the negative effect of a price increase. The regressive effect of fees could be neutralised through uniform fees for consultation and price discrimination at a later stage of treatment, although the better-off can opt out of the public sector. In addition, there could be lower fees for people for whom the other costs of care are higher, e.g. patients in rural areas with difficult access, who are also usually poorer. However, applying fee schedules that increase with ability to pay could be administratively expensive.

Sustainability of user fee systems and the trade-off with equity is a serious problem. Better off groups may opt for private care, thus reducing the collection base and the potential for cost-recovery. If only a small percentage of the population pays fees, the administrative cost of exemptions will be high. One strategy to retain the wealthier in a public sector with user fees can be to provide perceptible benefits: local treatment, affordability, adequate quality (availability of drugs, good staff attitude) keeping overall cost (sum of payment, travel and drug costs) lower than in the private sector, thus creating "value-for-money" incentives to use public facilities.

If fixed fee schedules are set at middle-income levels, disproportionately low for the rich and high for the poor, the heaviest burden will fall on the low-income, non-exempted groups, those just above the poverty line and on the middle-income groups that could easily lapse into poverty. In practice, although the poorest sections of the population are to be exempted, any margin of error in means-testing procedures is likely to affect them negatively. The costs of collecting fees may exceed revenue, but may improve outcomes through promoting preventive services benefiting the poor. Mechanisms that can promote equity in a fee system include:

- appropriate fee schedules and use of revenue; accountability
• effective exemption practice or protection of the poor from the full cost of services
• retention of revenue at the point of collection at central (Ministry of Health, not Treasury) or at district level; mechanisms for redistribution; staff incentives
• investing revenue in service improvements benefiting the poor
• fees subsidising essential and preventive services
• user fees tied to a price index system or to the cost of drugs; inflation-adjusted
• building of management skills, capacity and financial institutions (rural banks)
• decrease in waste and inefficiency
• access cost reduced for all users

Such mechanisms are desirable, but rarely used in developing countries. They require government commitment to an equitable policy and its enforcement, and administrative and managerial capacity. Such capacities have often been developed on a “trial and error” basis, after the fees have been introduced. Fiedler suggests that user fees, especially if implemented and controlled at facility level, should rely on existing infrastructure and should not attempt to achieve radical legal, administrative or managerial reforms.

Cost-sharing in “free” health care systems

In theory, charges could have some positive effect in a situation of chronically underfunded “free” health services, where the poor have to resort to the private sector at a much higher cost for appropriate treatments or drugs. Even in the absence of fees, access is not guaranteed if the non-monetary costs are high. Abel-Smith and Rawal report that the costs incurred for treatment, including loss of working time, travel costs, drugs, food etc. were substantial in the formally free health system in Tanzania, with these factors acting to deter utilisation despite the absence of charges. Many patients reported attending non-government facilities because of better drug supplies, even though these services were unaffordable for 42%. Respondents were more willing to pay for improved services and availability of drugs and less so for reduction of waiting times. Thus, use of “free of charge” governmental services placed a significant financial burden on the poor. The authors conclude that the population will be better off paying a modest charge for available drugs and services at the government facilities, given that fees are set at an optimal level to improve services while preserving equity. In the 1993 World Development Report, it is also noted that “free” health services can incur direct and indirect costs two or three times the level of small official fees.
Cost-sharing and “frivolous demand”

Another objective of user fees is to discourage unnecessary demand for health care. It is extremely difficult to measure so-called “frivolous” demand as a proportion of total demand and few studies have attempted to do so. Kutzin states that charges may limit unnecessary utilisation in settings where non-fee access costs are low (e.g. urban areas with easy geographical access)\(^3\). In areas with high non-fee costs of access, users potentially are already deterred from utilisation\(^4\). Diop et al. report that the “less necessary use” of service may have been discouraged in Niger because, in facilities within one hour’s walk, utilisation declined slightly after introduction of fees\(^5\). If drugs are available at public health facilities, the marginal benefits of using the service are higher than the marginal costs of the long travel time. It is concluded that geographical location is a more important determinant of access than cost. The relationship between need for treatment and use of services is complex and user fees are only one factor involved\(^6\). De Bethune et al. found that a decline in use of services after the introduction of charges in Zaire has not been confined to “frivolous” demand\(^7\).

Similarly, in the United Kingdom, Ryan and Birch estimated the effects of increases in patient charges on utilisation by adult non-elderly patients, using data on NHS prescribed drugs for 1979-85\(^8\). Frequent and regular increases were associated with a reduction in utilisation that is unlikely to be limited to “unwarranted consumption”. Charges acted as barriers to health care and had insignificant effect on suppliers’ behaviour, measured by average prescription content. It is concluded that it is not the users’ but the suppliers’ frivolous prescribing that should be countered, through budgetary controls on GPs prescribing and encouragement of generic substitution. Solutions aimed at suppliers’ or purchasers’ behaviour, rather than users’, are more common in developed countries as providers play a major role due to "agency relationship". In a study of a Canadian drug benefit programme, it appeared that co-payments could reduce drug utilisation but caused more illness and higher subsequent costs due to forgone drug therapies\(^9\).

Promoting equity: collection procedures, targeting and exemptions

User fees can potentially be designed to promote equity through carefully devised exemption policies to alleviate the burden on the poor, and through re-distribution of tax revenue from the better-off to the poor, although this is complex\(^10\). Fees should be set at
an affordable level and not act as a barrier to utilisation according to the principle of horizontal equity that "payments for health care should be related primarily to the ability to pay...with distribution according to need" \( ^{21} \). The process of targeting includes both exemptions and use of fee revenue to subsidise services heavily used by the poor. Evidence from many countries shows that national exemption policies are often absent or vaguely formulated. Exemptions are often based on personal discretion \( ^{44} \ 51 \ 43 \), often ineffective and differ according to attitudes, social climate and culture. In Thailand, exemptions are based on the "subjective judgement" of the local staff, and the perception of poverty differs across regions \( ^{61} \). In El Salvador, collection was local, facility-specific, and with discretionary exemptions. Payments were voluntary, but all patients were expected and pressurised to contribute \( ^{41} \).

User fees have been promoted in low and middle-income countries without clear strategies for protecting equity. There might be reluctance to exempt, in the absence of formal criteria or income data. Huber observed that staff were often required to grant exemptions based on intuitive judgements according to socio-economic characteristics such as sex, age, family size or occupation, even though they had no information on income, assets, or other indicators of ability to pay and did not know the person \( ^{50} \). Although household size, sex and education are significant predictors of income, these accounted for only 10% of the actual variation in the annual cash income of the households. In Kenya, the system of charges collapsed after a large drop in demand resulting from abuse and insufficient use of exemptions. Exemptions were neither fully established nor readily applied, and the public was not informed of the criteria for exemptions. Lewis showed that proxy criteria related to income (education, housing, appearance, occupation) used in informal means testing, proved to be inaccurate and failed to protect the poor \( ^{9} \).

Gilson et al. review different targeting mechanisms and distinguish between direct targeting based on income; group geographical, demographic (age/sex) or health characteristics (medical condition); and self-selection (personal choice of private care / stigma on claiming exemption) \( ^{45} \). Direct targeting has the advantage of preventing "leakage" to the non-poor, facilitating identification of those able to pay, containing costs and allowing cross-subsidisation from the better-off to the poor. A study in Niger showed that means-testing has enhanced both fee collection (permitting collection of fees from those able to pay) and equity (applying safety net for the poor) \( ^{67} \). It can, however,
exclude some of the eligible low income population. Income data in less developed countries is often inadequate due to a large informal sector, seasonal or in-kind incomes, intra-household transfers, and errors in self-reported data. People engaged in subsistence farming may not know their precise income\textsuperscript{15}. The poor may be unaware of exemptions or find it difficult to claim benefits. Characteristic targeting is administratively cheaper\textsuperscript{44} and easier to apply. It better captures the poor because it relies on data that are easier to obtain than income data. Characteristic targeting is less stigmatising than income-related targeting, but can also benefit non-poor groups. Administrative problems include lack of management skills and capacity to monitor and adjust exemptions over time\textsuperscript{45}. In Thailand, budget funds are allocated according to volume of work and number of poor treated, but some patients do not attend due to the high cost of claiming or stigma\textsuperscript{61} and poor attendance has curtailed budgets in the poorest areas. There is also the question of whether to charge people first and treat them afterwards, thus accumulating bad debts; refuse treatment until charges are paid; or require a deposit\textsuperscript{15}.

It is recognised that the exemptions should be simple, easy to apply, transparent, and prevent abuse. Exemptions have high administrative costs and are expensive to users so a trade-off is needed.

**Summary**

Fees have been promoted in the 1990s as an option in developing countries in an attempt to improve access to basic health care in accordance with the WHO “Health for All by the Year 2000” goals. Out-of-pocket payment has been employed as a practical option to increase revenue and improve efficiency and sustainability of services and to influence user and provider behaviour\textsuperscript{8}. Russell and Gilson observe that user fees were introduced largely for pragmatic rather than for political or economic reasons\textsuperscript{39}.

There is an argument that user fees are fundamentally flawed. Reviews of European health care reforms stress that interventions on the demand-side (e.g. cost sharing or limiting public financing) have rarely succeeded due to equity problems and their dependence on provider behaviour; and that incentives aimed at suppliers should be addressed\textsuperscript{7 68}. In Western Europe, co-payments have often been mitigated through additional insurance, thus reducing their impact. In contrast, in Sub-Saharan Africa user fees were among the few financing options perceived as feasible to support primary health care locally. Insurance schemes are considered expensive and complex, requiring
particular cultural conditions (solidarity, common language etc.) or suitable mainly where there is a substantial regular employment sector. Charges are relatively straightforward to implement compared to other finance options (e.g. rural insurance) through training of health staff locally, and applying discretionary exemptions. In some cases charges are considered a preliminary step to insurance. Nevertheless, successful revenue collection and distribution as well as effective exemption practices require investments in research, administration (especially for nation-wide schemes), local infrastructure, information systems, and monitoring.

The issue of cost-sharing is politically and ethnically controversial in traditionally free of charge health systems, as it is more visible to the public than other cost-containment mechanisms. The acceptance of fees depends on the particular economic, political and historical background and values of the country. With user fees, risk-pooling between population groups or regions is complex. The redistribution of revenues from fees requires government commitment.

**Statutory health insurance: Bismarck model**

**Characteristics**

Compulsory health insurance evolved from traditional schemes for industrial workers and their dependants in Western Europe, with coverage progressively extended. In Central and Eastern Europe, it was initially introduced on a large scale. If part of social security system, and financed by a payroll tax, it could be called social health insurance. The ‘public contract model’ (OECD typology) usually involves contracting and commissioning of services with negotiation between insurance funds and provider associations.

In Bismarckian-type systems, contributions are income-related and earmarked for health care. Collection of revenue is usually via tax or payroll-related contributions by employees and employers. Generally, contribution is compulsory, being that entitlement is conditional on participation. Contribution is based on agreed principles, such as solidarity and collective responsibility for health, requiring risk-pooling and redistribution. The compulsory nature provides for collectively shared risk and maintains the premiums at an affordable level. Premiums of poor and disadvantaged
groups are typically subsidised. However, solidarity could be undermined by co-

payments, exclusion of the rich, or limited benefit packages. Despite being based on egalitarian premises, social insurance systems are often regressive, because contributions represent a fixed percentage of income up to a certain ceiling, and high-income groups are allowed to opt-out; thus reducing the cross-

subsidisation. Doorslaer and Wagstaff report evidence on the regressivity of the social insurance systems in France, the Netherlands and Spain, where the contributions are proportional to income up to a ceiling. Projections for the UK show that under a social insurance system, redistribution of post-tax income would be regressive, favouring the better-off.

With public health insurance, third party insurers could be public (central or local governments), non-governmental “quasi-public” funding bodies (semi-independent sickness funds) or providers’ associations. In Central and Eastern Europe, third party payers are commonly public insurance bodies, with some autonomy from the state. The funding agency could be monopolistic or multiple sickness funds based on occupation or geographical area. There could be choice among public insurance agencies, even if they are non-competing.

A model based on insurance, private or public, is likely to suffer theoretical or actual weaknesses inherent in the insurance principle itself: moral hazard, supplier-induced demand and high administrative costs, which were discussed in relation to voluntary insurance. The actors involved (patients, providers and insurers) have different interests. The insurers have the highest interest to contain costs and the least ability to achieve this, as the providers competing for clients may not be willing to reduce costs. Added problems in social insurance systems are the tendency for cost escalation, a narrow contribution base, high management and transaction costs, and the political sensitivity of rationing of care as a cost containment instrument.

In societies in transition, compulsory health insurance models have sought to:

- ensure universal coverage
- guarantee access to services according to need
- “provide a stable funding base that encourages greater emphasis on individual health protection”
- mobilise untapped sources for health financing (self-employed etc.)
- promote equity and social cohesion in a situation of increasingly polarised societies, through redistribution of benefits favouring those who are poor and in ill health
National insurance systems are rarely sustainable without government subsidies, as premiums do not match risk and costs often exceed revenue. Arguably, insurance contributions often supplement rather than replace general budgetary revenues\(^7\). Insurance fund deficits and exemptions are often covered through budgetary subsidies or increased contribution rates\(^7\).

The compulsory health insurance model appears in several common variants depending on the presence of competition between intermediaries (funds or public insurance agencies), and degree of decentralisation in management and regulation of insurance funds, and the use of reimbursement in public insurance schemes.

Payment methods under the public contract model can vary considerably, but are mainly prospective (contract) and retrospective. Prospective payments methods to providers seek to provide incentives for cost control and prevention, but may result in more referrals, reduced access for sicker patients, and low responsiveness to patients needs. Public insurance based on reimbursement is seen most clearly in the Belgian and French health systems\(^{18}\). Mixed systems containing large prospective components seem to be more successful in terms of micro and macro efficiency. This is a complex area, beyond the scope of this literature review.

**Experience with statutory insurance**

Compulsory health insurance is dominant in countries such as Germany, Ireland and the Netherlands. There are almost universal rights to health care in six Member States (about 99% coverage in Belgium, France and Luxembourg; over 90% in Germany)\(^{33}\). Commonly, coverage is limited to certain type of treatments and health risks, or to certain income groups. Social insurance is often supplemented by voluntary insurance schemes, e.g. for those excluded from the sickness funds in the Netherlands\(^{48}\), or by extensive co-payment such as ‘ticket moderateur’ in France. The health systems of Belgium, France, Germany and Luxembourg, although having different private / public mixes in service provision, are financed mainly by social insurance. Proposals for implementation of compulsory insurance in the UK in 1988\(^{71}\) and in Sweden in 1994\(^{16}\) did not gain support.

All Central and Eastern European countries have embarked on implementation of compulsory health insurance\(^{72,7}\), with controversial results. In the Former Soviet Union,
where a universal health system is predominantly funded by central government (from taxes and surpluses from state enterprises), the policy agenda has been dominated by the choice between social insurance and funding from general taxation. Cost increases associated with compulsory insurance often have been a consequence of provider payment methods and lack of incentives for cost containment. In the Czech Republic the use of a 'point system' for paying providers (essentially fee-for-service) in social insurance combined with uncapped public health insurance led to cost-escalation, such as 50% rise in the first two years. Compensation for deficits with no cash limits tends to escalate total health spending. Options for cost-containment are expenditure ceilings or capped budgets. Demand-side measures such as cost-sharing, 'no claim bonus' (the Netherlands), rationing of services covered by insurance, incentives for private spending such as tax concessions, and rights to opt-out of the statutory system aimed to shift part of the cost to the individual patient. In some cases these have proved to be politically unsustainable. Governmental institutions could seek to control the increase in insurance contributions or charges levied on patients, even where insurers are independent.

**Solidarity and competition**

Solidarity and competition are generally considered to be incompatible given that public as well as private insurers have an interest to compete for “good risks”. At the same time, cross-subsidisation implies averaging the risk across society based on solidarity. Solidarity only exists where the quality of care between sickness funds; between different socio-economic groups; or public and voluntary insurance is similar. The social insurance model could involve monopoly or competition in commissioning of services, collection of premiums and spending. The system might involve a large number of funds (Germany), or one or two funds covering the majority of the population (France and Greece respectively). Monopoly or competition do not always directly reflect particular values, however, in the solidarity-based social insurance system of Germany, the commissioning of services is monopolistic, with statutory membership in a fund according to place of residence, employment or location of fund. Since 1993, reforms have promoted free choice leading to competition between funds. The Czech Republic has also initiated competition within its public insurance programme, allowing regional quasi-public insurance funds to compete with the national plan.
Traditionally, the “Bismarck” model has been based on contracts: between insurer and employers or individual subscribers; between insurers (regional and national associations of sickness funds or central bodies) and providers of care as a “bilateral monopoly”; between insurance funds and between insurers and central agency. While contracts have not primarily aimed to achieve price and efficiency targets, reforms have been initiated to introduce non-price competition in the quantity and quality of services and to enhance choice. Drawbacks of competitive practices within a compulsory insurance model include funds failing to be competitive and duplicating services, cream-skimming, and a need for expensive monitoring. Truly free choice of insurer is only rarely achieved. While promoting choice, competition often increases costs and reduces solidarity.

Saltman and von Otter argue that the benefits of insurer competition are purely theoretical, in practice it is almost impossible for governments to confront risk-selection among multiple competing insurers (risk-rating formulae proved unsuccessful in the Netherlands and the UK). Saltman maintains that markets mechanisms in health care finance are rarely successful in achieving efficiency, and are more applicable in service delivery or allocative mechanisms (“...no country has succeeded in structuring a competition-based market on the finance side of their system for their entire population while still maintaining a commitment to universal access to equal services and to cost-containment”). The existence of a single purchaser of services is associated with better cost control.

Coverage

In Germany and the Netherlands, membership of funds is mandatory for people below a certain income level. Permitting opting-out (or excluding) of the wealthiest groups that are more likely to be healthy is likely to reduce cross-subsidisation from rich to poor within the system, reduce transparency and raise administrative costs. In the Netherlands, the wealthiest take voluntary insurance, while the poor are directly subsidised.

Insurance in less developed countries. Community insurance

In developing countries, compulsory insurance schemes are considered difficult to implement compared to cost-sharing. Abel-Smith criticises the view that in developing
countries compulsory insurance plans for the regularly employed should cover only catastrophic costs, while low-cost curative care is to be financed through cost-sharing\textsuperscript{76}. Both these options might be difficult given the small proportion of regular employees, and insufficient administrative infrastructure required for complex means-testing. Shepard et al. recommend introduction of user fees in Rwanda for administrative simplicity and the close link between revenues and services which makes monitoring cash flows and book keeping easier\textsuperscript{88}. Pre-payment schemes, which might be more equitable, require greater financial and management expertise and require mechanisms to address non-compliance. Often there are no reliable income data to inform pre-payment levels and exemptions.

In the past decade, there has been significant growth in small-scale pre-payment schemes operated at community level offering an “unconventional” approach to insurance\textsuperscript{76}. Such schemes, building on existing traditional support mechanisms, emerge mainly in middle and low-income countries where government health budgets are low, out-of-pocket payments are widespread, and social insurance not feasible\textsuperscript{69}. Stinson defines community financing as contributions in cash, in-kind, labour, land, by individual, families or community groups to sustain local health services\textsuperscript{77}. It requires collective action undertaken by the community on behalf of a majority of people who share common interests. Many communities have chosen autonomous strategies to maintain their health facilities in response to the government’s failure to maintain the public infrastructure. Community financing is practised in many developing countries with a varied degree of success. It is reported that community-based financing schemes manage to generate higher revenue than user fees. For non-governmental providers in Africa, the cost-recovery rate is between 25 and 50% due to higher prices, more rigorous fee collection and greater willingness to pay\textsuperscript{32}. Willingness to pay might be higher because of the reduced insecurity for a longer time period. In a study from Niger, 85% of respondents regardless of socio-economic status, declared a preference for a prepaid annual fee, allowing for seasonal income fluctuations, rather than direct user fees\textsuperscript{57}.

Community financing can be organised other than through pre-payment schemes. Households or individuals may pay at full or preferential rates for health facilities run by the community; pay for socially organised voluntary community insurance schemes linked to income and production; or donate cash, gifts, or labour in exchange for participation in collective benefits.
Arhin defines community (rural) financing as “social security defined programmes in which the community, through its representatives, fully or partially controls a pool of resources”\textsuperscript{78}. Based on data from studies of existing rural insurance schemes in Burundi, Guinea Bissau and Ghana, it is argued that rural pre-payment schemes are financially viable. They raise additional funding; maintain free services at the point of use, share risk; and create benefits for the community as a whole. Most respondents viewed the system positively and thought it accessible, with some reservation regarding availability of drugs and quality of care. Participation was found to be almost universal, and a study in Ghana found that most households (98\%) were willing to pay to cover dependants because health insurance is perceived as “solidarity to deal with the risk of illness”. Willingness to pay was, however, conditional on proximity of the facilities and acceptable quality.

According to Abel-Smith and Dua, potential benefits of community financing in developing countries are: to attract surplus household resources to the health sector; to redirect household resources from the private sector to services with greater impact on health; to increase utilisation; to ensure that health services are acceptable and responsive to the community’s priorities; and to mobilise contributions from the self-employed\textsuperscript{79}. They have achieved good results in extending primary care at low cost to rural areas in China, Thailand and Indonesia. However, a recent review of 82 schemes indicated that improving efficiency was a secondary objective to raising revenue\textsuperscript{76}.

One drawback of such schemes is regional inequity, since richer communities are likely to raise more resources and attract support from other sources. The schemes can also exacerbate existing inequalities within the communities, especially where contribution is flat-rate and unaffordable for some groups\textsuperscript{69} and the poor are insufficiently protected\textsuperscript{80}.

In a review of developing countries’ experiences it was argued that community financing has been successful mainly for revolving drug funds\textsuperscript{30}, often promoted by development agencies or governments. In principle, community financing is difficult to sustain through community efforts because of unstable revenue flows. Mobilising the necessary external subsidies has proved a challenge. The essential infrastructure usually needs external financing. Pre-payment schemes are influenced by market prices, and are easily mismanaged due to lack of technical skills. Political support, investment in training, and technical and institutional support by government enhances the viability of such
schemes. Pre-payment schemes are difficult to implement in rural areas due to widespread poverty and seasonality of income.

**Tax-based health financing: Beveridge model**

The final model of health care financing is from general taxation. Often financing and provision are vertically integrated ("integrated" model in the OECD classification), with the funding bodies owning health facilities and directly employing staff rather than contracting independent providers. However, the tax-based model can involve contracting with competing private or public providers.

Central or local authorities collect income-related contributions and manage revenue. Tax-based financing, like social insurance, aims to secure universal coverage and equity of access, while achieving redistributitional effects. Lower transaction costs translate into lower overall expenditure on health care compared to social insurance. Demand is rationed not through price, but by availability of services (non-price rationing).

Barr points that state provision in the social sector can be justified not simply by equity, but also on efficiency grounds as "it does things which private markets for technical reasons either would not do at all, or would do inefficiently". However, tax-based public health care systems have often been maintained for ideological rather than economic considerations, as in Central and Eastern Europe before 1989.

The tax-based model depends on the willingness of governments to devote resources to health care and is susceptible to pressures from other sectors. Although tax-based systems have the advantage of covering the whole population, such systems are often underfunded and of poor quality because of low tax revenue and the low priority of the health sector in budgetary allocation.

The main forms of the tax-based model are national health systems such as the British NHS and the Semashko systems in Central and Eastern Europe before 1989. Superficially, these two systems are similar. Both the former socialist systems and the West European welfare states purport to provide a comprehensive package of health care. However, they are underpinned by fundamentally different value systems. In Western Europe, universal welfare provision is based on social consensus and democratic representation, while in the former socialist states, collective rights to social provision were used as a means for social control by totalitarian regimes.
Experience with tax-based model

Taxation-based health financing has a long tradition in Europe: existing in Denmark, Spain, Greece, Ireland, Italy, Portugal, UK and France (for public hospitals). It is the principal health financing source in Denmark, Portugal and, until recently, in Central and Eastern Europe. Government financing often co-exists with private or compulsory insurance funding.

The tax-based model does not always fully integrate financing and provision. In recent years, West European countries with government monopolies in financing and ownership (UK, Finland, Sweden) have experimented with purchaser-provider split, contracting, and introduction of “quasi-independent but still publicly operated provider institutions” to stimulate competition, and improve efficiency and quality of care.

Saltman and Von Otter suggest a greater use of market solutions such as competition in Western European countries “which have traditionally relied on regulation and planning”, simultaneously with a process of strengthening of governmental regulation in health sector (“planned markets”). The regulation needed in a planned market is of a different nature to that in a centralised public system.

Despite the lower overall cost of the tax-based model, most Central and Eastern European countries (including Bulgaria) have opted for a Bismarckian model. One commonly cited reason is the apparent inability to bring sufficient resources into the health care system. The experience of the UK is used to argue that a health system financed almost exclusively (80-90%) from national taxation is at risk of becoming underfunded. Another is a concern about transparency, with suspicion that tax revenues will be diverted to other sectors, such as defence. A separate social insurance fund is considered less susceptible to such treatment.

There are, however, some doubts as to the necessity of a radical financing reform. Better resource allocation, mobilisation of resources from non-governmental sources; and improved management could be sufficient in the short term. Arguably, with declining public budgets, growing demand, improved efficiency of the existing model could release adequate resources while enhancing equity.

In the early 1990s, in Bulgaria, incremental introduction of a market based model was viewed as more suitable given the low tax revenues, and lack of managerial and regulatory skills. Reforms were largely on the supply side, such as contracting out
auxiliary services and some clinical services; granting autonomous status to some facilities; decentralisation of decision-making to municipalities; performance-related pay for providers, and free choice of "family physician". These reforms remained patchy, failed to bring visible improvements in access to health care, and led to intensified political pressure for a more radical solution, such as social insurance. Options to mobilise resources through strengthening of tax collection remained unexplored.

Summary

This chapter presented a short description of each financing model, with their specific strengths and weaknesses. It was emphasised that in most cases, health systems are mixed, containing elements from different models.

It is now well-recognised that the choice of model for health care financing depends on a mixture of interacting factors, such as economic, political and historical context, dominant societal values (individual and collectivist), and the “weights assigned to different social objectives such as equity, efficiency or the merits of individual freedom versus collectivism”. In the context of Central and Eastern Europe, implementation of new health financing models has sought to increase revenue, ensuring a basic level of health services for the whole population, while improving transparency and accountability.

Chapters 4 to 11 will examine, in turn, potential reform strategies, societal values, and ability and willingness to pay, followed by a concluding discussion of the feasibility of different financing models in the circumstances of Bulgaria (chapter 12).
CHAPTER 3. AIMS AND OBJECTIVES OF THE RESEARCH. METHODOLOGY

AIMS AND OBJECTIVES OF THE RESEARCH

Aims

This thesis aims to examine critically potential mechanisms for sustainable and affordable financing of the health care system in Bulgaria, by identifying and exploring the financial implications of each option, its congruence with societal values, public preferences, the existing institutional framework, and the Bulgarian political and economic context.

Objectives

The aim will be achieved by meeting several objectives:

I. To examine the features of several methods of health care financing and the experience with their implementation worldwide. To develop a theoretical framework for analysis of reform of health financing.

II. To describe the main determinants of demand for health care in Bulgaria:
   ◆ Patterns of health and disease
   ◆ Patterns of illness behaviour and its determinants

III. To assess the ability of the population to pay for health care, by measuring:
   ◆ Size and structure of out-of-pocket expenditure on health care
   ◆ Size and characteristics of informal out-of-pocket payments (under-the-counter payments etc.)
   ◆ Determinants of the pattern of formal and informal out-of-pocket expenditure
   ◆ Affordability of health expenditure

IV. Analysis of willingness of the population to pay for health care
   ◆ Willingness to pay, in general, under the existing model (tax plus formal and informal out-of-pocket payments) and its determinants
   ◆ Willingness to pay for a compulsory health insurance scheme
• Willingness to pay for voluntary insurance
• Willingness to pay informal payments

V. To discuss the applicability of different options in the circumstances of Bulgaria and to identify key issues that need to be addressed in any future implementation of health financing reform.

Hypotheses

The approach taken in this thesis is inductive, seeking to reach conclusions through examination of empirical evidence. The relative absence of existing research on health care financing in Bulgaria makes it difficult to formulate specific hypotheses a priori. However, on the basis of evidence from elsewhere and knowledge of the social and cultural context in Bulgaria, several observations are possible. These can be used to generate some tentative testable hypotheses.

♦ The health needs and demands of the population will vary according to definable socio-demographic factors.
♦ The existing system is less equitable than is generally thought.
♦ Different models of health care financing will appeal differentially to particular groups.
♦ The elderly and those on low income who have been most affected by the transition may not welcome further change of any sort.
♦ A move to social insurance may be unpopular because of concerns about regular payments where incomes are irregular, and where there is potential corruption and unfamiliarity with the concept.
♦ If opting out is permitted, the well-off may opt for voluntary insurance and undermine the principle of risk pooling.
♦ The better off may prefer an occupationally linked scheme to a general public insurance fund.
♦ There will be support for a policy that formalises the existing pattern of informal payment.
Thus, while the overall thesis is exploratory, there are certain a priori considerations that can be addressed specifically so as to ensure that important and relevant issues are included.

**METHODOLOGY**

This chapter will present the methodology used in the thesis. Several methods have been employed, each targeting a specific aspect of the research questions and collecting a different type of information. The aim has been to triangulate\(^b\) multifaceted data, allowing for a comprehensive analysis of the possible options for health care financing.

The intention of this work is to draw conclusions from primary data obtained through a mix of quantitative and qualitative research methods. Official statistical sources and existing research\(^c\) provide little secondary data on the non-medical aspects of the health sector in Bulgaria. This is seen in the gaps in tables of health indicators published by international organisations\(^d\) after 1990. Data are often of low validity due to a lack of systematic collation of administrative records and policy-makers' failure to recognise the need for such research. Some key issues relating to health financing, such as out-of-pocket health care expenditure or users' attitudes, are relatively unexplored in Central and Eastern Europe\(^e\). Empirical studies that do exist in Bulgaria could not readily be used in this thesis as they have had inconsistent objectives and designs. The one exception is the 1995/6 World Bank Bulgarian Living Standards Measurement Study\(^f\), but analysing this data set and using it as a reference point is beyond the scope of this thesis, due to its different approach to measuring health status and income.

**Stages of research and analysis**

The research was conducted at several stages, summarised in **Figure 3.1**. First, a theoretical framework was developed. Second, review of literature on the context of reform in Bulgaria and on the strengths and weaknesses of different financing models was undertaken. Third, qualitative (in-depth interviews, focus groups, and situation analysis) and quantitative methods (a survey) were conducted, to gather empirical data.

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\(^b\) Triangulation is a multi-method approach employing several techniques for data collection in different combinations, supplementing each other

\(^c\) Health care-related data are collected and analysed by the National Centre of Health Information affiliated with the Ministry of Health; and by the Central Statistical Office

\(^d\) e.g. the World Bank Development Indicators database and in the WHO Health for All database
relevant to the various financing options. Finally, evidence from each of these sources was brought together and used to explore the implications of different options for health care financing. Each stage relied on findings from the previous one, with the exception of stages B and C, which were conducted in parallel. Development of research instruments and planning the study design will be outlined while describing the research methods. Below, each stage will be described in turn. All questionnaires used are enclosed in the Appendix.

Figure 3.1. Stages of research

Stage A: DEVELOPMENT OF A THEORETICAL FRAMEWORK
- Review of health financing models
- Identifying key dimensions of research
- Study design

Stage B: QUALITATIVE COMPONENT
- Identify & clarify topics
- Explore stakeholders’ willingness to pay, attitudes & values
- Interpret meanings, relationships and contexts
- Test research design and instrument
- Generate new ideas
Methods: in-depth interviews, focus groups, documentary analysis

Stage C: QUANTITATIVE COMPONENT
- Measure users ability and willingness to pay for health care
- Analyse health status, health care expenditure, illness behaviour.
- Measure demographic variables.
- Generalise findings to a larger population
Methods: survey

Stage D: DATA ANALYSIS

Stage E: DISCUSSION
Options for health financing in Bulgaria. Issues to be addressed
Stage A: Development of a theoretical framework

This stage sought to provide the theoretical basis of the subsequent research by means of the following steps:

1. Locating various options for reform within the body of research evidence on the effects of particular approaches worldwide. Thus, a critical overview of the experience with different models of health care financing was conducted, identifying the strengths and weaknesses of each method. A framework for analysis was selected, based on a literature review (chapters 2 and 3).

2. The research objectives were operationalised to a few key dimensions. The suitability of each method was studied in terms of:
   - Socio-economic, political and demographic profile of Bulgaria
   - Health system characteristics and reform
   - Patterns of illness and health services utilisation
   - Ability to pay
   - Cultural sensitivity: values, beliefs and attitudes
   - Willingness to pay

The socio-economic, political and demographic profile and the characteristics of the system were explored primarily by documentary analysis. The empirical research then explored patterns of illness; utilisation of care; ability to pay; willingness to pay for health care and a range of underlying values, thus describing the population's perspective of health care financing. The performance of the health care system, including its economic performance, is beyond the scope of this thesis.

Each dimension was studied through answering a series of specific questions (Table 3.1), outlined briefly below.
Table 3.1. Dimensions of research, methods, and specific research questions

<table>
<thead>
<tr>
<th>METHODS</th>
<th>RESEARCH QUESTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Socio-economic, political and demographic profile of Bulgaria</strong></td>
<td></td>
</tr>
<tr>
<td>Documentary analysis</td>
<td>Analysis of political, economic and demographic context in Bulgaria</td>
</tr>
<tr>
<td>Literature review</td>
<td>Compatibility with financing models</td>
</tr>
<tr>
<td><strong>Health system characteristics and reform</strong></td>
<td></td>
</tr>
<tr>
<td>Key informant interviews</td>
<td>History, trends, structure, institutions, actors, reform</td>
</tr>
<tr>
<td>Documentary analysis</td>
<td>Precondition for certain financing models</td>
</tr>
<tr>
<td>Literature review</td>
<td>Administrative costs and institutional capacity</td>
</tr>
<tr>
<td></td>
<td>Finance reform: issues, obstacles, support, consensus among stakeholders, priority</td>
</tr>
<tr>
<td><strong>Patterns of illness and health services utilisation</strong></td>
<td></td>
</tr>
<tr>
<td>Household survey</td>
<td>Self reported health: level and determinants</td>
</tr>
<tr>
<td>In-depth interviews</td>
<td>Chronic limiting illness: level and determinants</td>
</tr>
<tr>
<td>Focus groups</td>
<td>Illness in past year: level and determinants</td>
</tr>
<tr>
<td></td>
<td>Utilisation: level and determinants</td>
</tr>
<tr>
<td></td>
<td>Patterns of utilisation</td>
</tr>
<tr>
<td><strong>Ability to pay</strong></td>
<td></td>
</tr>
<tr>
<td>Household survey</td>
<td>Level of health care expenditure (in primary/secondary care)</td>
</tr>
<tr>
<td>In-depth interviews</td>
<td>Characteristics of health care expenditure: structure (drugs, treatment, food, transport, informal payments, gifts); status: formal/informal; public/private</td>
</tr>
<tr>
<td>Focus groups</td>
<td>Determinants of health expenditure</td>
</tr>
<tr>
<td></td>
<td>Health expenditure expressed as a % of monthly income</td>
</tr>
<tr>
<td></td>
<td>Affordability of payment (last consultation)</td>
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<tr>
<td></td>
<td>Coping strategies (from current income/reserves)</td>
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<td></td>
<td>Informal payments</td>
</tr>
<tr>
<td><strong>Cultural sensitivity: values, beliefs and attitudes</strong></td>
<td></td>
</tr>
<tr>
<td>Household survey</td>
<td>Values underlying the attitude towards financing schemes: role of the state; solidarity; collective or individualistic; value of health expenditures</td>
</tr>
<tr>
<td>In-depth interviews</td>
<td>Attitude to existing and to alternative financing methods: transparency; implementation complexity; affordability; general suitability; effect on utilisation; coverage; equity; incentives; accountability; compatibility with traditions, values, and with existing institutions and health system; acceptable by the public</td>
</tr>
<tr>
<td>Focus groups</td>
<td></td>
</tr>
<tr>
<td><strong>Willingness to pay</strong></td>
<td></td>
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<tr>
<td>Household survey</td>
<td>Willingness to pay: level and determinants</td>
</tr>
<tr>
<td>In-depth interviews</td>
<td>Willingness to pay and expenditure</td>
</tr>
<tr>
<td>Focus groups</td>
<td>Willingness to pay under existing or proposed arrangements</td>
</tr>
<tr>
<td></td>
<td>Willingness to pay under particular circumstances (type of service, payment scheme, to whom/where/when/how)</td>
</tr>
<tr>
<td></td>
<td>Attitudes and preference for a financing model and determinants</td>
</tr>
</tbody>
</table>
Socio-economic, political and demographic profile of Bulgaria

Health sector financing is intrinsically related to the state of the economy, and subject to economic, political and institutional pressures. Oreskovic\(^9\) argues that the health care system is “...not autonomous but relies upon the society’s financial, legal, administrative and other support”. Thus, the thesis first examines the economic and political conditions in Bulgaria, its history, demography and health profile as preconditions for introduction of particular health financing options. The detailed country profile is based on documentary analysis (appendix 1).

The restructuring of health care financing is a profoundly political process affecting all groups in Bulgarian society. It is important to assess the political feasibility of reform, support from stakeholders, local capacity for governance and potential strategies for achieving consensus. Thus, between 1989 and 1997 it proved difficult to reach consensus on key social sector reforms, including health financing reform, due to their sensitivity, politicisation, and the underdeveloped framework for political dialogue. A detailed analysis of political feasibility of each financing option is, however, beyond the scope of this work.

Health system characteristics and reform

The choice of any future financing system will reflect many factors, including the existing health sector structure, history, long-term policy trends, and views of key stakeholders\(^7\). For example, the Czech Republic and Poland have, in the past, had occupational sickness funds (“Bismarck system”), with farmers in Poland who owned land privately being ineligible for state-provided health care until 1972\(^8\)\(^8\). This is quite different from the situation in Bulgaria as discussed in chapter 4 and in appendix 2.

Pre-conditions for successful implementation of any new financing mechanism include low administrative costs and adequate capacity for implementation, specifically the presence of adequate infrastructure, information systems, technical and managerial staff, and audit procedures. Normand and Weber\(^8\)\(^9\) consider the existence of a legislative framework, trained administrators, and mechanisms for collecting contributions to be key to implementation of large-scale social insurance systems. This would require a further analysis.
**Patterns of illness and health services utilisation**

Analysis of need and demand for health care and their determinants are important in assessing the requirements for funding the health care system, and to anticipate potential consequences of particular financing mechanisms on socio-economic inequalities. If significant numbers of people report high levels of illness and low utilisation, this would suggest a failure of the existing health care system that must be addressed by new financing mechanisms. The main data source is a population survey (chapters 5 and 6).

**Ability to pay**

A sustainable and equitable system for health care financing should reflect the population’s ability to pay for health care. Thus, price-setting and the methods for revenue collection should be sensitive to local conditions, otherwise the sustainability of the scheme may be undermined through low revenue collection\(^90\)\(^{39}\). If expenditure is linked to service utilisation, some users may be deterred in their use of services. Ability to pay is examined by means of a survey focusing on the scale of formal and informal health care expenditure (chapter 8). The socio-economic determinants of ability to pay were explored to identify which groups would lose, and which gain, under current and alternative financing models. Affordability of health expenditure was first examined ‘objectively’ as a proportion of monthly family income then, by asking people directly whether it was affordable. Timing, predictability and other characteristics of informal payments were examined in detail (chapter 7).

The subjective dimension of ability to pay was also addressed by qualitative methods, exploring the circumstances under which payments were deemed affordable and the strategies used for coping with unplanned expenses, in the absence of insurance.

**Cultural sensitivity: values, beliefs and attitudes**

A recent WHO analysis of European health reform\(^7\) stresses the importance of societal values as part of the context for health reform, “the legal, administrative, and physical structure of the dominant value system, defining how the power and resources are allocated”\(^91\). The diversity of culture, values and traditions in Europe have led to adoption of many different health reform strategies in the 1990s.
In this thesis the methods for health care financing were assessed in terms of their compatibility with dominant societal values, norms, culture and ideological paradigms, by means of in-depth interviews, and to some extent, a survey. The main axes of analysis were interrelated: values (collective-individual responsibility for health, solidarity-competition, social risk-security); role of the state and private sphere; principles of operation (transparency, accountability) and broader societal values. This framework is based on the “core” values suggested by the above mentioned publication:

- **health care orientation**: Is health seen as a collective, socially valued good or a private good? Are there traditions of solidarity? While the relationship is not absolute, the shape of health care financing systems tends to reflect underlying societal values. Preference for a national insurance system based on universal entitlement is indicative of solidarity and collective risk-sharing values being prevalent at societal level. In contrast, a system based on voluntary insurance and out-of-pocket payments is more consistent with a culture which places most of the responsibility for health on the individual.

- **role of the state, private institutions and citizens**: What is seen as the appropriate balance between the state and the citizens’ responsibility for health? Ideological pressures for reform occur in the context of broader societal movements for democratisation and rethinking the role of the state. For example, political values have played an important role in shaping the private insurance arrangements in the Netherlands. However, the situation in Central and Eastern Europe may be rather different from Western Europe, as shown by Rose and Makkai, in that the political affiliation (on left-right scale) and other specificities of the national culture have little power to explain welfare values (e.g. the attitudes for and against state provision of welfare) in nine Central and Eastern European countries. The same authors argue that welfare values are central to understanding Central and Eastern European societies.

- **accountability in health care**: How are financial, political, legal, professional, ethical aspects of accountability understood?

- **broader societal values**: perception of social justice, social security: There are indications that the decline in the welfare of the population, combined with an extreme income polarisation, may undermine earlier social consensus behind the reforms. In Bulgaria, the social dimension of the political transition and its impact on stability and...
social consensus was unexplored until recently. High levels of ill health and premature mortality combined with diminished population resources for health care are likely to create a sense of social insecurity.

**Willingness to pay**

Both willingness and ability to pay characterise demand and are often studied together. There is debate about whether willingness and ability to pay for health care can be clearly distinguished. Willingness to pay is often measured with the ability to pay implying that if individuals pay user fees or informal payments, they are able to do so. Such an approach may overestimate the ability to pay as, for many, it is a “necessity to pay”. This does not necessarily indicate ability to pay from disposable income, and can involve incurring significant financial and social costs, with borrowing or sale of assets leading to long-term strain on household resources. Delcheva argues that high direct user spending is indicative of poverty rather than of higher willingness to pay. Abel-Smith and Dua, writing about developing countries, note that the need for health care rarely coincides with ability to pay, reflecting vertical inequity. Importantly, people may be willing to pay for what they perceive as a need, and not for professionally determined needs. Thus, in this study, ability and willingness to pay will be examined separately.

Two commonly used approaches to measuring willingness to pay are outlined by Russell et al. The first involves projecting health care utilisation and expenditure based on historical data. This method is inappropriate in a situation of previously free services and ignores the fact that willingness to pay is context-specific and influenced by non-price factors such as type of service. The second method ('contingent valuation') is to ask directly about willingness to pay for a particular service, assuming no previous experience of paying for health care. In this case of a “hypothetical market” respondents suggest prices on the basis of their individual circumstances, ability to pay and expectations for service rather than on past experience.

Contingent valuation appears better suited to Bulgaria in the absence of historical data or a tradition of market for health services in the recent past. The survey sought to examine whether people are willing to pay at all for health care, its socio-economic determinants, and values attached to certain common types of services. The in-depth interviews and
focus groups aimed to add depth to the survey responses, and identify circumstances under which people are willing, and actually choose, to pay for health care.

Burrows and Brown\textsuperscript{95} note that willingness to pay studies might place high demands on respondents. In a short interview, respondents have to evaluate complex scenarios of foregone current consumption at the expense of improved health status in the future, and comparison of the initial risk level with a level reduced by payment. In the context of Bulgaria, respondents' unfamiliarity with prices of public goods may preclude giving adequate answers. However, in this study, willingness to pay was found to vary intuitively with a range of socio-demographic variables so it is likely that it is a true reflection of personal preferences\textsuperscript{93} (chapter 10).

**Stage B: Qualitative component**

*Qualitative methods: overview of features*

The qualitative methods used in this research were in-depth interviews with stakeholders (users, physicians, key informants), focus groups, and documentary analysis. The interviews and focus groups aimed to identify and clarify the topics to be further examined in the survey, generate new ideas and test the research instrument before application to a large sample. Qualitative methods were essential in studying attitudes and values. After the survey, qualitative techniques were again used to interpret the observations, explain some unexpected results, explore relationships between variables, and place in context the survey results. In addition, documentary analysis and informal interviews, although not explanatory in themselves, contributed to a better understanding of different aspects of the research problem and supported the use of other methods.

This section will briefly summarise the features common to qualitative methods, which make them suitable in this research, and each method will then be discussed in detail.

I. **Suitability for inductive research:** Patton\textsuperscript{96} notes the ability of qualitative research to use specific observations to identify general patterns ("inductive logic"), searching for new patterns, categories or issues, guided by broad questions and "goal-free", without imposing pre-existing expectations. In contrast, a survey is deductive as its measures are pre-determined by the researcher. The grounded theory school
emphasises that qualitative analysis is data-derived and useful for studying relatively unexplored phenomena\textsuperscript{97}, which is the case here.

II. Opportunity for in-depth analysis and generation of new directions: Through qualitative research, detailed data about a small number of cases could be studied in depth, focusing on selected issues. Data collection is a flexible, dynamic and interactive process, unconstrained by pre-determined standardised categories of analysis and enabling new ideas and directions to emerge\textsuperscript{96}. These methods can generate new hypotheses to be tested, while a survey could generate data to test them. Responses which seem automatic could be further clarified.

III. Creating bridges to quantitative research: In qualitative research, the field work has a developing character and provides an input to subsequent research stages. The research design is not pre-determined and is gradually elaborated. In a survey, data are classified in previously defined categories and no change is possible. In the current research, feedback from the field was invaluable in modifying response categories in the survey and in improving the overall study design.

IV. Suitable for understanding phenomena: Qualitative research is concerned primarily with understanding the meanings of events and attitudes in depth, rather than measuring them. It cannot establish a causal relationship between variables, but can clarify the nature of the relationships. In this research qualitative techniques were applied to little understood and sensitive issues, such as under-the-counter payments, where use of more structured methods could have been problematic.

V. Providing personalised data: Qualitative research enables exploration of motivations, values and attitudes and provides an “impressionistic interpretation” of data\textsuperscript{98}. While a survey is useful in searching for common outcomes and its results can be generalised, qualitative data explains individual variances\textsuperscript{96}. Qualitative research studies the culture and behaviour of people from the point of view of those studied\textsuperscript{99} and discloses the “real meaning” of issues for them\textsuperscript{100}. The aim is to understand the behaviour and motivation behind their answers (the “respondent’s world”) and to capture the interviewee’s own framework of meanings and interpretations while trying not to impose any limiting a priori categorisation and assumptions\textsuperscript{101}\textsuperscript{102}. This process enables respondents to express their experience in their own terms and

\textsuperscript{*} “Grounded theory ... is a qualitative research method that uses a systematic set of procedures
language and gives them scope for creativity\textsuperscript{101}. It is this sensitivity towards ‘subjective’ views of the stakeholders which makes the qualitative research relevant for this research.

VI. Suitable for studying phenomena in transition: Qualitative methods are useful in times of transition and reform, to understand the dynamics of the phenomena and to analyse the context in which attitudes are modified. Open-ended questions can capture changing events\textsuperscript{96} in ways that may be more difficult for quantitative surveys.

VII. Providing a holistic perspective: Qualitative research provides a comprehensive and holistic understanding\textsuperscript{99} of the social settings in which research is carried out, integrating actions, events, actors and context. It creates an overall picture of the respondent’s personality in capturing non-verbal information such as gestures, facial expressions, physical movements, which can be invaluable for interpreting answers.

\textit{Initial informal interviews with stakeholders}

An in-depth interview is defined as a “conversation in which the researcher encourages the respondent to relate, in their own terms, experience and attitudes that are relevant to the research problem”\textsuperscript{103}. This study started with a small number of preliminary informal and unstructured interviews. The format of the interviews was closely monitored, despite the lack of a formal interview schedule. Burgess\textsuperscript{100} points out that even the completely unstructured interview has a controlled, if very flexible, framework. Respondents were selected to include physicians, frequent users, and medical administrators. They were approached by recommendation from colleagues, from social or professional networks, or from people with high professional authority. Respondents from a range of backgrounds and perspectives were interviewed to avoid bias.

These interviews served as a pilot for subsequent semi-structured interviews, facilitating improvement of the study design. They identified key criteria for sampling for the semi-structured interviews, tested provisional themes to be further explored through more structured methods and focused the research area. Apart from gaining insights on views of main stakeholders and collecting background information on the health care financing context, unstructured interviewing also elucidated new dimensions, enhancing the “breadth of the data”\textsuperscript{104}.

\textsuperscript{101} Strauss & Corbin, 68
Unstructured interviews were especially appropriate to test sensitivity of issues such as informal payments, and the stigma attached to them, as well as willingness to pay for previously free services. The respondents' reactions to wording of questions and probes were observed. In order to remove the initial barriers and establish rapport, respondents were informed about the nature of the research and how their co-operation would help.

**In-depth semi-structured interviews**

In-depth semi-structured interviews were the main method for qualitative data collection in this research. The key features of the semi-structured interviews are shown in Box 3.1.

<table>
<thead>
<tr>
<th>Interview type</th>
<th>Face-to-face, semi-structured interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents</td>
<td>Users who have been ill in the last 6 months</td>
</tr>
<tr>
<td></td>
<td>Health personnel (physicians, a dentist and a nurse)</td>
</tr>
<tr>
<td>Sample size</td>
<td>58 interviews (25 health professionals, 33 patients)</td>
</tr>
<tr>
<td>Sampling procedure</td>
<td>Purposeful, according to specified criteria</td>
</tr>
<tr>
<td>Settings</td>
<td>Sofia-city, Varna, Bourgas and Pleven</td>
</tr>
<tr>
<td>Topics</td>
<td>Views on existing and new health care financing options, values, beliefs, willingness and self-perceived ability to pay, health care expenditure and experience of services utilisation</td>
</tr>
<tr>
<td>Aims</td>
<td>To collect data on prevalent attitudes among stakeholders (patients and physicians) towards health financing options</td>
</tr>
<tr>
<td></td>
<td>To assess general atmosphere for finance reform</td>
</tr>
<tr>
<td></td>
<td>To generate new ideas and directions of research</td>
</tr>
<tr>
<td></td>
<td>To test and improve the accessibility of the questionnaire and to identify issues not covered in the survey questionnaire</td>
</tr>
</tbody>
</table>

**Sample**

A total of 58 semi-structured interviews were held. 44 were conducted in Sofia, of which 19 were with health professionals and 25 with patients. Seven interviews were conducted in Bourgas, and seven in Varna, both cities located on the Black Sea coast. In each city, three physicians and four patients were interviewed.

The majority of health personnel interviewed were physicians, with the exception of one nurse and one dentist. A wide range of specialities were represented, including cardiology, paediatrics, obstetrics and gynaecology, internal medicine, general practice, surgery, radiology, oncology, anaesthesiology, dermatology, urology, neurology, and dentistry. Ten had a postgraduate degree.
The sample of health professionals was stratified according to sex and level of health facility (Table 3.2). 13 men and 11 women were interviewed. Of these, five males and four females were working at polyclinics or other primary care facilities. Seven had managerial functions such as head of surgery or specialised consultation room, and of those, one was head of a department (ward) at the leading obstetric hospital in Sofia and another a medical director of polyclinics. Income was not a sampling criteria. 11 physicians determined their income as insufficient for normal existence, ten indicated that their income covers only basic needs, and three respondents deemed their income sufficient for a good standard of living.

Table 3.2. Sample of health professionals

<table>
<thead>
<tr>
<th>Gender</th>
<th>Facility</th>
<th>Primary care</th>
<th>Secondary care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>5</td>
<td>8 (4-MR)*</td>
<td>13</td>
</tr>
<tr>
<td>Women</td>
<td>4 (3-MR)*</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>15</td>
<td>24</td>
</tr>
</tbody>
</table>

Notes: One physician currently owns private company. *designates the share of those who have certain managerial responsibilities (MR), such as head of ward, surgery or consultation room.

The main criteria for including patients was whether they had had contact with state facilities in the six months preceding the interview. All fulfilled this requirement. 20 (61%) respondents reported having used facilities several times, while the rest used services only once or twice. The majority of respondents (n=27; 82%) described their health status as good or rather good.

Patients were sampled purposively using a recruitment questionnaire, to ensure a mix according to sex, age, income group and presence of chronic disease (Table 3.3). Eight (24%) patients reported to have income sufficient for a good standard of living, seven (21%) reported that their income is insufficient for normal existence, 18 (55%) said that their income is sufficient only for basic needs. 15 respondents’ income was below the national average, and 7 above it. Locating respondents with high income, suitable according to the other criteria and willing to be interviewed, proved very difficult.

Occupations varied widely, the majority being employees. Of those working, 12 respondents were employed in a state company and 13 in the private sector. The majority of respondents (25) had university education, 4 had general secondary education, and 4 - vocational training or secondary specialised education. Although those with higher education are over-represented, in Bulgaria income often is not
correlated with educational attainment. It was decided that income is a more important factor to stratify the sample. Other factors that may have caused the overrepresentation of those with higher education are that they were more willing to be interviewed and more articulate.

Table 3.3. Sample of patients

<table>
<thead>
<tr>
<th></th>
<th>Age group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18-35</td>
<td>36-55</td>
</tr>
<tr>
<td>Higher</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Lower</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>[incl. 1 chronic]</td>
<td>[incl. 2 chronic]</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Age group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18-35</td>
<td>36-55</td>
</tr>
<tr>
<td>Higher</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Lower</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>[incl. 1 chronic]</td>
<td>[incl. 2 Chronic]</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>

The interview: technique and organisation

Semi-structured interviews share many features with unstructured interviews, such as the possibility for free responses and some discretion by the interviewer about the pace of the interview, wording and order of questions. They have the particular advantage of providing the context for the quantitative research and of identifying the topics to be further tested.

"In contrast to the large sample surveys with their anonymous interview situation, small-scale studies present better opportunities to do justice to the variety of cultural and social peculiarities of population segments." 

Semi-structured interviews are generally considered more time consuming, but cheaper than surveys. Thus, in this study, in-depth interviewing provided an opportunity for relatively low-cost validation of some survey results.

A clear, simple interview guide was developed based on earlier unstructured interviewing, containing a detailed list of headings, key questions, probes and standard instructions. The guide sought to ensure that the main topics were covered systematically, although in a free order, and comparable data was obtained by the participating interviewers. The aim was to ask mostly open-ended, neutral, sensitised and clear questions. Wording of questions dealing with sensitive issues...
payments, coping strategies) was carefully examined and advised by experts from Gallup and the Center for the Study of Democracy who are experienced in work commissioned by the World Bank and UNDP.

The interviewers were allowed to modify the guide slightly, explain questions and vary the amount of time spent on each topic. Whyte\textsuperscript{106} points that although the semi-structured (or non-directive) interview offers much freedom, it is structured in terms of the research problem and this structure channels the flow of the interview. As recommended, the direction and depth of the interview and topics covered were carefully monitored by the interviewer with a designated amount of “block time” for each topic\textsuperscript{100}. Respondents were given the opportunity to express their views in an atmosphere of free communication relating to the respondent’s experience, while ensuring that the relevant information was obtained. The interview guide used open-ended questions extensively in order to avoid imposing answers. Foddy\textsuperscript{107} argues that closed questions present respondents with arbitrarily limited alternatives, exclude important options and create a temptation for automatic answers. These questions served to define and test appropriate response categories for the survey instrument, which was structured along similar lines. They also revealed whether respondents avoided answering certain questions because they did not know the answer, did not want to share it, or misunderstood the question. The extensive use of open-ended questions required a detailed briefing of interviewers about what constitutes a sufficient answer, and involved complex and lengthy coding.

The duration of the interviews was between an hour and an hour and a half as recommended for a single contact with a respondent\textsuperscript{108}, although some respondents continued the interview for two hours, on their own initiative. The interviews were performed mainly at respondents’ or interviewers’ homes, with some, at work places.

Different interview schedules were developed for health professionals and for patients. The interviews were conducted within a six week period (April-May 97) to ensure that changes in the environment would not affect opinions\textsuperscript{100}. During this period there were no major events in the health sector such as enactment of new legislation, crises, governmental campaigns, or major media debates.

It is recognised that interviewing skills are a decisive ingredient for in-depth interviews. There is an extensive literature addressing interviewing techniques and ways to create confidence and establish rapport where the topics are sensitive. Five researchers (three in
the capital, including myself; two in the countryside) all with substantial previous experience as qualitative interviewers took part. A one-day training session was conducted prior to the interviews, involving mainly working through the questionnaires, discussion of potential problematic areas, rehearsing different scenarios and practising techniques such as probing. After the first few interviews, regular meetings to monitor interviewers’ performance and to brief the interviewers on changes of the instruments were held.

Interview data were recorded using a tape-recorder, despite some reservations that the formality introduced by tape-recording could provoke unnatural responses. However, the results of several pilot interviews showed that recording did not seem to impede answers, as long as there was an initial establishment of trust, and a clear explanation was given as to why tape-recording was important. During the actual field work there were no refusals to be taped. Contemporaneous notes were also taken for back-up.

All interviews were transcribed in Bulgarian. The transcription process proved to be time-consuming and resources precluded its translation into English. Hence it was not possible, as had been intended, to use software packages for qualitative data analysis. However, an initial index of key themes was created to facilitate further analysis.

**Focus groups**

Focus groups were used in conjunction with the semi-structured interviews. The key features of the focus groups are shown in Box 3.2.

<table>
<thead>
<tr>
<th><strong>Box 3.2 Focus group discussions: summary</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview type</strong></td>
</tr>
<tr>
<td><strong>Respondents</strong></td>
</tr>
<tr>
<td><strong>Sample size</strong></td>
</tr>
<tr>
<td><strong>Sampling procedure</strong></td>
</tr>
<tr>
<td><strong>Settings</strong></td>
</tr>
<tr>
<td><strong>Topics</strong></td>
</tr>
<tr>
<td><strong>Aims</strong></td>
</tr>
</tbody>
</table>
**Sample**

Six focus groups were held prior to the household survey in order to produce insight into users' views and attitudes, set problems into context and stimulate vision. Each group was defined by topic and by membership. Participants were selected according to predetermined criteria relevant to the topic to be discussed, such as sharing of common experience, similar professional background or relation to the health sector, being “good observers” or well informed. All participants completed a recruitment questionnaire to determine their suitability. The groups included individuals of varying ages and incomes, but were relatively homogenous in terms of education, social class and place of residence.

In Sofia, two groups contained physicians and three contained members of the public who had recent experience as users of health services. One focus group with users and one with physicians was conducted in Pleven, in the Lovech region. These settings were selected purposefully. Sofia is the capital, containing one eighth of the population, with a very diverse composition due to migration from the countryside. Facilities are highly centralised and there are few geographical barriers to access to health care. The Lovech region in Northern Bulgaria is the third biggest region with very different economic indicators from Sofia and a smaller urban population. Pleven is the second largest town in the region, which has a range of health establishments, including the second biggest Higher Medical Institute in Bulgaria with a teaching hospital within it. Some regional differences in financing of the health care and public perception were expected.

Each focus group consisted of 6-8 participants, one moderator and one person responsible for technical support and organisation. The composition of participants followed roughly similar lines to the sample used for in-depth interviews. The groups were composed according to sex, income status, age, and chronic illnesses (Table 3.4). When recruiting, priority was given to participants who had visited health professionals in a state or private health care facility in the past six months. 16 had visited a state health facility and 8 people had visited a private facility. 7 people had visited both. 5 respondents had not visited facilities in the past six months, but 3 reported having a chronic illness.

All but 4 of the participants (22) were white collar employees. A nurse participated in her capacity as a health services user because of her child’s illness. 8 respondents had a
university degree or further qualifications, 8 had graduated from vocational or technical college, and 5 had secondary general education. Only three of the participants lived in a small town or village.

Table 3.4. Composition of focus groups - patients

<table>
<thead>
<tr>
<th></th>
<th>Men/women</th>
<th>Lower/higher income</th>
<th>Below above 40</th>
<th>Chronic diseases</th>
<th>Total particip.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group one (Sofia)</td>
<td>3+3</td>
<td>3+3</td>
<td>3+3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Group two (Sofia)</td>
<td>3+5</td>
<td>7+1</td>
<td>4+4</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Group three (Pleven)</td>
<td>2+6</td>
<td>5+3</td>
<td>4+4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>8+14</td>
<td>15+7</td>
<td>11+11</td>
<td>10</td>
<td>22</td>
</tr>
</tbody>
</table>

Note: Respondents were assigned to higher income group if their income was equal or above the average salary for Bulgaria, and thus the distinction lower/higher income group is relative.

24 physicians took part in the focus group discussions, among whom two were dentists. The physicians’ sample was stratified according to sex, age, income status, and primary or secondary care facility (Table 3.5). Effort was made also to ensure that some of the participants had managerial responsibilities, similarly to the in-depth interviews. A wide range of specialities was included.

Table 3.5. Composition of focus groups - physicians

<table>
<thead>
<tr>
<th></th>
<th>Men/women</th>
<th>Below 40 / above 40</th>
<th>Lower/higher income</th>
<th>Primary/secondary-level facility</th>
<th>Managerial position</th>
<th>Total particip.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 (Sofia)</td>
<td>2+6</td>
<td>3+5</td>
<td>5+3</td>
<td>4+4</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Group 2 (Sofia)</td>
<td>4+4</td>
<td>4+4</td>
<td>6+2</td>
<td>4+4</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Group 3 (Pleven)</td>
<td>6+2</td>
<td>4+4</td>
<td>4+4</td>
<td>4+4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>12+12</td>
<td>11+13</td>
<td>15+9</td>
<td>12+12</td>
<td>9</td>
<td>24</td>
</tr>
</tbody>
</table>

Note: Respondents were assigned to higher income group if their income was equal or above the average salary for Bulgaria, and thus the distinction lower/higher income group is relative.

The focus group method: technique and organisation

The term ‘focus group’ is introduced by Merton et al.\textsuperscript{109}, and is defined as “systematic questioning of several individuals simultaneously in formal and informal settings”\textsuperscript{101}. The unit of analysis is the group and the method allows inferences to be made only about the group and not about individuals\textsuperscript{99}. The focus group method was used in this research to stimulate discussion, in which the dynamics of issues could be explored, competing views and arguments expressed, and means of achieving consensus or divergence demonstrated.
Among the advantages of the method is that it is cost-effective (receiving extensive information within a short period of time at least cost); explores beliefs, ideas, opinions expressed in a community; identifies new issues; and tests questions’ wording\textsuperscript{99}. Group discussions resemble natural communication, and some people felt more comfortable than when interviewed alone. Goodman et al\textsuperscript{110} suggests that in a focus group, opinions are most likely to be prompted through collective argument and sense of anonymity within the group. Potential difficulties include less control over the flow of discussion; no information about the frequency of distribution of opinions; results that are harder to analyse compared to individual interviewing; and the participants may influence each other inappropriately. Fontana\textsuperscript{101} notes that focus groups are stimulating for respondents, aid recall, and collect data over and above individual responses, but in some cases can be dominated by strong personalities. There was also a danger of expressing only those views that could be stated publicly\textsuperscript{100} or comply with the majority opinion. The moderators in this study have largely prevented such situations from happening.

The focus group guides (for physicians and for users) were structured similarly to the in-depth interviews, but much more concise and flexible. These sought to collect comparable data between groups, in terms of topics covered, and within a group, providing sufficient depth of discussion and equal participation. In view of the short time available (2-2.5 hours average length) and the need to involve all participants, only the most salient issues were discussed. Although some of the issues were anticipated to be sensitive and hamper the discussions, possibly requiring changes in wording and topics\textsuperscript{99,101}, this was not the case in practice.

The focus groups involved extensive planning, organisation and careful recruitment. Moderation and management of the group dynamics required specialised skills. Two moderators with a proven record were invited to run the first two sessions, while the rest were run by me. All discussions were tape-recorded and fully transcribed in Bulgarian.

**Documentary analysis**

The key features of the documentary analysis are shown in Box 3.3.
Box 3.3 Documentary analysis: summary

<table>
<thead>
<tr>
<th>Type of research</th>
<th>Documentary analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sources</td>
<td>Official documents of Ministry of Health, labour unions, insurance companies etc. and media coverage in 1993-99</td>
</tr>
<tr>
<td>Sampling procedure</td>
<td>Exhaustive for documents on health financing Selective for documents related indirectly</td>
</tr>
<tr>
<td>Topics</td>
<td>Health insurance debate; views on the current health care financing and attitudes towards change</td>
</tr>
<tr>
<td>Aims</td>
<td>To find evidence (direct or indirect) for the political feasibility and cultural &amp; social sensitivity of finance schemes To identify issues not covered in the survey questionnaire</td>
</tr>
</tbody>
</table>

Documentary analysis: sampling, procedures and analysis

Documentary analysis, or content analysis as its variation\(^{104}\), is a “...research technique for making replicable and valid inferences from data to their context”\(^{111}\). Documentary analysis examines the content, as well as the context of documents (written or non-specified purpose of the documents; institutional, social and cultural aspects), their intended and implied audiences and the author’s interest\(^{112}\). Documentary analysis, as with observation, is indirect and non-reactive as the nature of the researched material does not change.

The documentary analysis method is more descriptive and exploratory than other methods and has been used here as a supplementary tool. Its main purpose was to triangulate with other data in a multi-method approach. The method proved to be valuable in its own right in generating new leads, uncovering implicit themes, and thus enriching the research agenda. An initial documentary analysis also served to focus the research questions by identifying key issues on the finance reform agenda, assessing the importance attributed to them by the main actors, and providing insights on the impact of the political and economic climate, and of societal values, on shaping reform of health financing. It was also productive during data collection and analysis in providing contextual references. The method provided evidence as to which finance mechanisms are more likely to be accepted by different groups and institutions, and what is the balance of opinions between stakeholders (experts, professionals, government, media, companies, labour unions etc). This could be further extended to a detailed policy analysis of the health financing reforms in Bulgaria, exploring the inter-relationships between content, context and actors, which was outside the scope of this research.
Collection and systematic analysis of relevant documents was applied first to the period 1993-1996, but subsequently extended contemporaneously until 1998. There were few relevant documents and these appeared at irregular intervals and were difficult to obtain. Most were written for purposes other than research. Identification of documents focusing on health financing issues is believed to have been almost exhaustive. Also included are documents referring to this issue by their implicit content. Table 3.6 presents the two frameworks for documentary analysis used in this thesis.

The documentary analysis proved to be relatively complex, time-consuming, with limited explanatory power, and potentially susceptible to bias in collection and analysis of the documents. Official sources often reflect distorted, politically correct positions, although if this distortion is captured, it could be an important observation in its own right.

Table 3.6. Theoretical frameworks for documentary analysis

<table>
<thead>
<tr>
<th>Stages:</th>
<th>Analytical topics (not exhaustive list):</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Defining the research question: what data?</td>
<td>How are documents written?</td>
</tr>
<tr>
<td>• Sampling strategy and screening</td>
<td>How are they read?</td>
</tr>
<tr>
<td>• Selection of a recording unit: word/phrase constituting a semantic unit/theme/character/paragraphs/whole items</td>
<td>Who writes them?</td>
</tr>
<tr>
<td>• Counting of the units and comparison</td>
<td>Who reads them?</td>
</tr>
<tr>
<td>• Constructing categories for analysis: exhaustive/mutually exclusive/operationalised</td>
<td>For what purposes?</td>
</tr>
<tr>
<td>• Testing the coding in a text, reliability</td>
<td>On what occasions?</td>
</tr>
<tr>
<td>• Analysis</td>
<td>With what outcomes?</td>
</tr>
<tr>
<td></td>
<td>What is recorded?</td>
</tr>
<tr>
<td></td>
<td>What is omitted?</td>
</tr>
<tr>
<td></td>
<td>What does the writer take for granted about the reader?</td>
</tr>
<tr>
<td></td>
<td>What do the readers need to know?</td>
</tr>
</tbody>
</table>

**Interviews with key informants**

The key features of the interviews with key informants are shown in Box 3.4.

**Box 3.4 Key informant interviews: summary**

| Interview type | Face-to-face, short semi-structured interviews |
| Respondents | Policy-makers: MoH officials, MPs, administrators, experts |
| Sample size | 23 interviews |
| Sampling procedure | Purposeful, according to specified criteria |
| Settings | Sofia and Pleven |
| Topics | Views on health care financing reform: political climate, infrastructure, obstacles, opportunities, and threads |
| Aims | To collect data on stakeholders and define main types of view on finance reform process and content and to assess political atmosphere for health financing reform |
Sample

Selection of key informants involved identifying persons possessing specialised knowledge relevant to the research, who are "typical". This follows the approach taken by Tremblay\(^{14}\), in which key informants were selected with regard to their role and position in society rather than randomly, in terms of age, sex, or residence.

The key informants in this research were identified through snowball sampling, on the basis of information from the informal and in-depth interviewing, from documentary information and media accounts. Initially, a list of potential key informants was created based on “expert opinions”\(^{15}\), then, a number of respondents were selected and interviewed using a restricted framework of questions with highly focused objectives. The criteria for selection were those suggested by Tremblay\(^{14}\): a) formal role in the society ensuring access to relevant information; b) knowledge of relevant information; c) willingness to co-operate; d) communicability; e) relative impartiality. Maier\(^{103}\) emphasises that key informants should not only have a special position in the community, but should represent the opinions, experiences and problems of a group rather than of an individual. Several key respondents interviewed did not have official positions in government or the professional community, but were recommended as “informal leaders”\(^{115}\).

Interviews were conducted with 23 policy-makers or stakeholders in Sofia, Pleven and Varna (Table 3.7). All respondents were able to provide valuable comments about issues concerning their communities or particular groups in society.

Interviews were semi-structured, but shorter than the other in-depth interviews. Some of the respondents were “elite members of the community” and top-level policy-makers, who were unable to spare more than half an hour, thus focusing only on the most important topics. It was, however, possible to adopt a more flexible approach, leaving scope for respondents to introduce new topics, or to change the direction of the interview, according to their own interests. The interviews needed careful preparation, especially when establishing the first contact. Best results were achieved when the key informants were approached through a person of similar authority or their immediate subordinate.

\(^{1}\) 'typical': 1. serving as a type, symbolic; 2. having or showing the characteristics, qualities of a kind, class, or a group so fully as to be a representative example; 3. of or belonging to a type or representative example, characteristic (Webster’s dictionary)
All interviews were tape-recorded, with only one refusal by a Ministry of Health official in a regional branch.

Table 3.7. Sample of key informants

<table>
<thead>
<tr>
<th>Position</th>
<th>Job/ position/ other circumstances</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members of Parliament</td>
<td>Commission for Health care and Sport, representing the main political parties in the Parliament, Sofia</td>
<td>3</td>
</tr>
<tr>
<td>The Head of the Bulgarian Physicians' Union</td>
<td>Professional association, Sofia</td>
<td>1</td>
</tr>
<tr>
<td>Director and deputy director</td>
<td>The Centre for Public Health, Ministry of Health, Sofia</td>
<td>2</td>
</tr>
<tr>
<td>Programme manager</td>
<td>The WB resident mission, Sofia</td>
<td>1</td>
</tr>
<tr>
<td>Physicians and a nurse</td>
<td>Actively involved in labour union activities, Sofia</td>
<td>2</td>
</tr>
<tr>
<td>Physicians</td>
<td>Involved in consultation on policy documents, Sofia</td>
<td>3</td>
</tr>
<tr>
<td>Physician/ director</td>
<td>Private insurance association, Sofia</td>
<td>1</td>
</tr>
<tr>
<td>NGO</td>
<td>Bulgarian Women's Union, Association of the Disabled Students, Sofia</td>
<td>2</td>
</tr>
<tr>
<td>NGO (state run)</td>
<td>Agency for International Aid, Sofia</td>
<td>1</td>
</tr>
<tr>
<td>Medical director</td>
<td>Elite state facility, Sofia</td>
<td>1</td>
</tr>
<tr>
<td>Medical directors</td>
<td>State sector and private, Varna</td>
<td>2</td>
</tr>
<tr>
<td>Economic directors</td>
<td>Polyclinic and of Higher Medical University, Pleven</td>
<td>2</td>
</tr>
<tr>
<td>Deputy dean</td>
<td>Higher Medical University, Pleven</td>
<td>1</td>
</tr>
<tr>
<td>MoH official</td>
<td>Regional office of MoH, Pleven</td>
<td>1</td>
</tr>
</tbody>
</table>

Data from the key informants were used only as background information and were not integrated with the rest of the analysis, mainly because the response rate among officials from the Ministry of Health and other governmental institutions was extremely low (one interview of eight approached). Thus, many key decision makers in health care financing reform were not represented. The low response rate probably reflects the timing of the interviews (just after parliamentary elections in April 1997), when major changes in the previous social sector policies were in the pipeline, but not yet announced, and many officials were unwilling to express views that could contradict later policies. Paradoxically, in this post-election situation, users, physicians and key informants who did respond were much more willing than expected to discuss existing policies.
Stage C: Quantitative component

Quantitative methods: overview of features

The quantitative element of the research sought to collect data using a larger sample; generalise findings to a larger population; and identify groups that justify in-depth study. The method used was a representative survey supplemented, when appropriate, by official statistical data. This section will summarise the features of the quantitative methods.

Quantitative research has the advantage of providing standardised data that can be used as a baseline for future comparisons. The survey collects data on the research topic among a larger sample and thus obtains generalisable and comparable results.

In a fully-structured interview schedule, unlike semi-structured interviews, questions cannot be discussed, rephrased, and re-ordered. There is an unnatural communication as the interviewer is just posing a set of questions for the respondent to answer. The questions are pre-established, with a limited set of response categories. Some authors suggest that the respondent plays a subordinate role and the interviewer is in control of the situation. The pace of the interview is controlled and the questionnaire is followed in a standard manner in stimulus-response format, with no deviation from the wording and a neutral role for the interviewer.

Among the limitations of the quantitative method are potential sampling biases and non-sampling errors, such as response bias (misreporting due to misunderstanding of the questions' wording or questions having different meanings in different cultures), and poor recall; and contextual bias caused by the interviewer’s gender or presence of others. The interpretation of variables can be distorted when operationalised in a survey and there might be difficulties in addressing sensitive topics. Slight changes in the wording or in the order in which questions are asked may lead to different or superficial responses, reducing reliability.
Survey

The survey was the main source of comprehensive and manageable data (Box 3.5).

<table>
<thead>
<tr>
<th>Box 3.5 Survey: summary</th>
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<tbody>
<tr>
<td><strong>Interview type</strong></td>
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<tr>
<td><strong>Respondents</strong></td>
</tr>
<tr>
<td><strong>Sample size</strong></td>
</tr>
<tr>
<td><strong>Sampling procedure</strong></td>
</tr>
<tr>
<td><strong>Settings</strong></td>
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<tr>
<td><strong>Topics</strong></td>
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<td><strong>Aim</strong></td>
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Sample

The national survey of 1,550 Bulgarian households (1,550 principal and 3,204 additional respondents) sought to be representative of the population of Bulgaria aged above 18. The sampling frame was the electoral register. A two-stage random cluster sampling procedure was used. The clusters are the electoral sections in Bulgaria, which are the primary population groupings used in elections. The number of people registered in each section is between 200 and 800. The sample was drawn from the Central Register (computer centre) from the register prepared for the Parliamentary elections of 19 April 1997.

In the first stage of the sampling procedure, 200 clusters (electoral sections) were randomly selected with probability to be selected corresponding to size. In the second stage, 11 respondents were randomly selected in each cluster, among whom 8 respondents were to be interviewed (8 respondents in 200 clusters plus 600 in reserve). The planned sample consisted of 1,600 respondents (8 x 200). In 387 of cases (18%) interviewers had to use reserves within a cluster. The reasons for non-response were mostly respondent’s long absence from home (business trip, military service, emigration etc), incorrect or changed address, or severe disability. Only in 48 cases was substitution made because the respondent refused to be interviewed. The response rate was 97% of the planned sample (1,600), due to the large reserve pool.
Although the survey used an existing and validated sampling frame obtained by the Central Statistical Office in Sofia and the overall sample was relatively large, the small size of certain groups reduced the power to detect significant differences. Furthermore, although a quite close match, the sample was not entirely representative of the Bulgarian population. Ethnic minorities appear to be under-represented although this is complicated by what is believed to be their under-registration in the census. Women and pensioners were over-represented as were, to a lesser extent, the divorced, although their numbers were likely to have risen since 1992 (Table 3.8). With these limitations, however, the sample is a fairly accurate representation of the Bulgarian population, as far as can be assessed from published data. The average of 3.1 persons per household was comparable to the official figure of 2.8.

Table 3.8. Characteristics of sample and of the Bulgarian population

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Sample (1997)</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>42.7%</td>
<td>48.9% (1996)</td>
</tr>
<tr>
<td>Female</td>
<td>57.3%</td>
<td>51.1% (1996)</td>
</tr>
<tr>
<td>Age 20-39</td>
<td>32.4%</td>
<td>36.6% (1996)</td>
</tr>
<tr>
<td>Age 40-59</td>
<td>34.3%</td>
<td>35.0% (1996)</td>
</tr>
<tr>
<td>Age 60+</td>
<td>31.1%</td>
<td>28.5% (1996)</td>
</tr>
<tr>
<td>Married</td>
<td>68.5%</td>
<td>73.9% (1992)</td>
</tr>
<tr>
<td>Divorced/separated/widowed</td>
<td>18.1%</td>
<td>15.1% (1992)</td>
</tr>
<tr>
<td>Single</td>
<td>13.3%</td>
<td>11.0% (1992)</td>
</tr>
<tr>
<td>Pensioners</td>
<td>37.1%</td>
<td>29.1 (1996)</td>
</tr>
<tr>
<td>Urban population</td>
<td>69.4%</td>
<td>67.6% (1996)</td>
</tr>
<tr>
<td>Rural population (1993)</td>
<td>30.6%</td>
<td>32.4% (1996)</td>
</tr>
<tr>
<td>Ethnic Turks/Bulgaro-Muslims</td>
<td>7.4%</td>
<td>8.3% (1992); other estimates: 9-10%</td>
</tr>
<tr>
<td>Roma population</td>
<td>3.2%</td>
<td>2.6% (1992); other estimates: 3-5%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>12.8%</td>
<td>13.7% (1997)</td>
</tr>
</tbody>
</table>


Survey: design and organisation

The survey involved face-to-face interviews using a structured questionnaire. The first versions of the questionnaire (1996) drew on existing instruments such as the World Bank Living Standard Measurement Survey (LSMS), the English Health Survey and several smaller surveys; on previous knowledge and tentative exploration of new directions. At the beginning of 1997, the questionnaire was constantly modified to reflect insights from the qualitative interviews and focus groups. The questionnaire was updated again, in line
with observations from pilot interviews conducted three weeks before the start of the fieldwork.

Face-to-face interview is the option most commonly practised in Bulgaria, having the lowest refusal rate compared to self-administered and postal questionnaires. The interviewers read the questions and the response options to the respondents and recorded the answers on a standardised schedule according to a coding scheme. Maier\(^{103}\) maintains that the "survey design should ensure that the same questions are asked of all respondents in exactly the same way." Theoretically, it is assumed that if questions are phrased correctly, all respondents will understand them in the same way\(^{107}\). In practice, more detailed explanation was required by some elderly people or those with low education.

The main respondent in each household provided information at both individual level (health expenditure, willingness to pay, attitudes, and individual experience of treatment), and about the household as a whole (income, assets). The main research unit was the individual due to the lack of a sampling frame of households in Bulgaria, although their experience could be placed in the context of household circumstances. Thus, monthly household income was used as an explanatory variable because the household is usually assumed to pool resources and act as a simple decision-making unit. Household income is not simply a sum of its members incomes, but has added value and can offset expenditure by mutual help and informal exchange. As in the 1995/6 Bulgarian LSMS, household was defined as "all people who partake of the incomes and share the expenses of the household; live in the same home; and have not been absent from it in the last three months"\(^{87}\). Several families living together permanently in the same home constitute a household if they have a common budget. Nevertheless, Seely et al.\(^{116}\) argue that to understand decision-making, allocation of resources, coping strategies and power relations within the household, the focus should be on the individual rather than on the household.

Once the main respondent was interviewed, all other household members were identified and interviewed using a short supplementary questionnaire focusing on individual experience. Interviewing all household members often required more than one, an average of two, visits by interviewers. In each household, up to three attempts to interview the main respondent were planned. If a household member was absent or unable to respond due to poor health, old age, or illiteracy, another was asked to supply information on their
behalf. In some cases, the proxy reporting improved the accuracy of data obtained\textsuperscript{117}. The importance of recording who reported on whom in the household was stressed during interviewers' training.

Other studies use self-completion forms for individuals above 18 (the Health Survey) or entirely proxy reporting where one respondent provides information for the rest of the household, thus revealing the group’s perception of the individual problem and collective coping strategy\textsuperscript{105} (1995 Bulgaria LSMS). The possibility of using such approaches to reduce costs and improve data accuracy was considered, but qualitative research suggested a risk of producing unreliable and incomplete data.

Responses to the questionnaire were based on recall. Although the diary method (respondents recording daily health problems, expenditures etc.) may be more accurate\textsuperscript{117}, infrequent events (hospital use) would be underrepresented\textsuperscript{117}. Recall bias may occur as severe symptoms are remembered longer than mild ones and infrequent physician consultations more than frequent ones\textsuperscript{105}. Cannell et al.\textsuperscript{108} report that people’s ability to remember stays in hospital was related to the length of time since their discharge, the length of their stay, the level of threat of the illness and whether or not they had surgery. Grootaert and Cheung\textsuperscript{117} note that ‘important biases can result if one derives spending patterns from short survey periods’, due to the influence of socio-demographic characteristics, seasonal income and expenditure patterns, although these effects tend to be neutralised in larger samples.

Although many studies use a recall period of two weeks, in order to capture a sufficient number of cases it was decided to use four weeks for outpatient care and one year for episodes of hospital care. The four week recall period was determined on the basis of a small telephone survey to establish the level of illness and consultations in the previous month ('Have you, or anybody in your household been ill in the past month? If yes, did you go to a doctor?'). 30 people were selected at random from the telephone directory in Sofia and contacted over the telephone, with one refusal. 13 respondents reported acute or chronic illness in the past month in their household, with 9 consulting a physician. Of the rest, 5 had been ill in the last three months, all of whom saw a doctor. Thus, 18 out of 30 people had experienced illness recently, and could be further interviewed about health expenditure. This suggested that an illness recall period of four weeks was adequate.

The principle of anonymity was maintained because the survey questionnaire collected personal data on income, assets and expenditure. Respondents were differentiated by a
coding system. It was essential to gain the respondent’s confidence in the beginning and explain the need for their co-operation. This was stressed to interviewers and practised during training.

The questionnaire was prepared initially in English, subsequently translated into Bulgarian, then independently translated back into English and compared with the original. It was adapted in parallel with the qualitative research. Careful wording of the questions was essential, given the sensitivity of the issues, and it was piloted extensively in the in-depth interviews.

The survey was conducted May 10th-31st 1997, in what could be considered as a relatively favourable atmosphere in Bulgaria. The economic situation had stabilised after the crisis of January-February 1997, and a currency board had been established under the terms of an IMF loan. The survey was carried out in the aftermath of the Parliamentary elections, when the political climate had stabilised. In addition, there were no major health care reform debates, which could have influenced public opinion, around the time of the survey. However, reported past health expenditure and income, as well as estimates of ability to pay in relation to income and wages, should be treated with some caution due to the previously high level of inflation and unstable currency.

The survey was conducted in collaboration with Vitosha Research, a leading social research agency in Bulgaria. Only two other agencies had the capacity and previous experience in undertaking large-scale household surveys (Balkan British Social Surveys - Gallup, the Institute of Sociology). Vitosha Research, the social research wing of the Center for the Study of Democracy in Sofia was selected on the basis of their well established national network of interviewers, record for accuracy in data collection, and competitive rates. The responsibilities of the agency, as defined in the contract, were provision of the sample, printing of questionnaires, interviewing (one or more visits), logistics (travel expenses for interviewers etc.) and data entry. Some assistance was also provided with coding of open-ended questions, and with organisational aspects of the training, piloting, and fieldwork supervision. They were not involved in the design, translation or adaptation of the survey instrument, in interviewer training, or in data analysis. My active involvement, to address emerging issues, was required at all stages of the survey.

Vitosha Research's national interviewer network consisted of 28 regional teams corresponding to former district centres, each headed by an experienced supervisor. The
supervisor was responsible for interviewing, resolving specific issues during the field work and providing feedback to the headquarters of Vitosha research in Sofia. All interviewers had significant experience in survey interviewing. In preparation for the field work, a one-day training session for supervisors was held in May 1997, they were then responsible for training interviewers in their area. Although the training was intended mainly for supervisors, many interviewers also attended. At the training session, the survey methodology, specific characteristics of the questionnaire, sampling and other matters related to field work, were discussed. The training was conducted by myself, in collaboration with the field work manager from Vitosha research. All interviewers were provided with written instructions and show-cards. During the field work the supervisors were instructed to give no more than two clusters to each interviewer in order to prevent fatigue and hurried interviews.

**Questionnaire**

The survey collected data on a range of variables related to ability and willingness to pay for health care, lifestyle, health status, household income and socio-economic status, health services utilisation, total expenditure for health care (including informal payments), and attitudes to possible means of financing. The questionnaire consisted of several sections which will be reviewed briefly below:

The **household description** ("roster", section A) employed by the Living Standards Measurement Studies has been simplified, as Bulgarian households are generally smaller and of simpler composition than, for example, households in sub-Saharan Africa. The roster included questions on identification of the respondent within the family, their sex, age, education, marital status, occupation and health status, and the total number of household members. There were also several questions regarding intra-household decision-making patterns. The analysis relies mainly on socio-demographic characteristics of the respondent, and except for income, does not incorporate household-level data.

The section on **health status** (section B) addresses the general self-reported health of the respondent in the past 12 months, presence of a limiting long-standing health problem, and number of episodes of illness in the past year. The last episode of illness was fully described, recording the timing of its occurrence, type of disease, and patterns of illness behaviour. Each consultation in the course of the last illness was described in terms of
type of facility or staff visited, and medication taken. This section explored whether some demand, for either services or drugs, has been deterred, and why. The last consultation was explored in detail: the user’s choices (of public/private facility, of physician, of place); actions of the providers (interventions, time spent); and user satisfaction with different elements of the service. In this section, some life-style factors were explored (smoking and drinking), as well as some attitudes (to staff income).

In Bulgarian, terms such as "illness", "health problem", "episode of illness", "consultation" and "treatment" are often synonyms or translated to the same word. Thus, more descriptive phrases had to be used, inevitably leading to lengthier questions.

Section C sought to describe the expenditure for health care and ability to pay. Health expenditure is defined as everything spent on health care including payment for services (formal and informal), travel, medication, consumables, procedures, food, nursing services and hospital admission. Informal payments are defined as transactions (cash, gift, gratuity) between a patient and a health care professional for services or items that are officially free of charge in state health facilities.

The survey sought to estimate the overall cost of the last illness episode involving contact with health professionals, in the public and private sector. This includes direct payments for services (both formal and informal), travel costs, loss of time, reduced wages, practical difficulties, stress and missed opportunities. Respondents were asked to give a monetary equivalent to gifts they had made, or activities they had to forgo. The lack of reliable statistics in Bulgaria have so far limited analyses mostly to governmental expenditure. Existing data from official sources and other surveys was used for comparison and for validation of survey results. The survey instrument alone could not capture all these type of costs (non-monetary gratuities, favours, exchange of services, of information, of contacts), requiring use of qualitative methods.

Questions on health expenditure in the current survey are asked individually for precision but support between members and collective decision-making are assumed. Cumper\textsuperscript{118} points to the difficulties in measuring health care received by the households, because a “household is generally a kind of social unit within which contractual relationships like those between buyer and seller do not apply”. Cumper\textsuperscript{118} also distinguishes between direct expenditure on health care, and other activities indirectly benefiting health. Expenditure outside the health care system is not considered here.
Demand for private services was also explored. Given that treatment in the public sector is also likely to incur costs, factors such as quick access to services, choice, or perceived high quality may shape the decision to seek private care. However, qualitative research is essential to establish whether people seek private services to receive luxury extras, or because treatment is unavailable to them in the public sector.

The survey also collects data on loss of wages due to the last treatment, and the opportunity costs of time, especially when leading to a loss of income. These dimensions are difficult to quantify in Bulgarian circumstances. Most employees are paid on a monthly basis, the procedure for calculating sick leave is complex and opaque, and some loss of time to illness can go unreported, meaning that the response is likely to be unreliable. Whether a medical certificate had been issued was used as a proxy measure to estimate loss of income.

The survey also attempts to measure the scale, size and some characteristics of informal payments. Informal payments are examined not only in the context of other expenditure for health care for the last treatment, but also for any occasion in the past ('ever'). Measuring informal payments in a survey is complicated when gifts (home-produced in rural areas), in-kind gratuities or exchange of services are involved. Over-emphasising the monetary equivalents of payment could distort the picture, ignoring complex relationships between patient and physician and the social status of the medical profession. Qualitative techniques tended to yield more information on the nature of informal payments.

Willingness to pay (section D) is broadly defined as the amount (in real terms or as a percentage of income) that people are prepared to spend for health care (if at all), under different scenarios such as fee-for-service, compulsory insurance and tax. These are measured through a series of direct and indirect questions.

There were difficulties with the design of the questions on willingness to pay due to the novelty of the issue and its sensitivity. It was expected that this section might have a lower response rate, although this did not prove to be the case. Abel-Smith and Rawal reported that respondents did not hesitate to answer questions about willingness to pay in a situation of free health services in Tanzania. Still, the questionnaire poses a hypothetical choice. If official charges or social insurance are implemented or more openly discussed, the attitudes expressed may be contrasting. The structured format of the interview could not capture completely the spectrum of beliefs and attitudes among
the public. Thus, the in-depth interviews and focus groups were intended to capture more subtle nuances. Open-ended questions were used as one method to measure willingness to pay for particular services. Respondents were asked how much they would pay for a range of services, including out-patient consultation, operation for appendicitis, a one day stay in hospital, childbirth, attendance by a physician and full insurance. During the preliminary data collection, it was observed that many respondents, having paid out-of-pocket user fees or fee-for-service private care, were aware of approximate prices of health services.

In the first version of the questionnaire, respondents were presented with several scenarios, simplified descriptions of several financing models, followed by questions about that model, and, at the end, were asked to compare all of the models. After some in-depth interviews this was modified, when it became clear that the results would be unreliable, because the information was insufficient to give respondents a clear idea about the model. For example the practice of health care insurance funds, part of a historical tradition in the Czech Republic, is less familiar in Bulgaria. It was very difficult to provide short and simple, but adequate, scenarios describing financing arrangements. At the same time purely open-ended questions were inappropriate since the respondents were unfamiliar with the alternative options for health care financing.

The final version of the questionnaire was based on defining the generic characteristics and principles underlying each finance method and assessing them in turn. This approach explores under what combination of conditions people are most willing to pay (type of scheme, health facility or treatment, timing of payment; institution (or person) to whom payment is made etc.). Further analysis will show which methods for health financing are close to this “ideal type”. Validation with secondary data was done whenever possible. In order to avoid bias through respondents giving “socially acceptable” answers; avoiding extremes in the response scales; or simply choosing the last option heard; value statements to be rated were read in a different order to each respondent (a “rotation” technique).

One of the main aims of the survey is to measure socio-economic status, income in particular (section E) and then use it as an independent variable to explain ability and willingness to pay. Measuring income in transitional economies is difficult and requires a combination of approaches. One approach recommended by the World Bank, and used in the LSMS, is to measure consumption and compare it with income. Abel-Smith and
Rawal\textsuperscript{36} found that in Tanzania questions on average weekly expenditure was a more valid measure than questions on annual income, which was difficult to estimate.

Rose and Makkai\textsuperscript{91} report that due to high inflation in the CEE countries, many economic transactions are non-monetized, “cash-in-hand”, or through use of political contracts. Therefore, monetary income does not give a full picture of the households’ resources in maintaining their standard of living.

There are many difficulties in measuring consumption, however, such as assessment of non-monetary assets and informal exchange of services and goods between households. There is a section on consumption, with detailed break-down of expenditure on food, tax, rents etc. Non-monetary and in-kind income, capital assets, and savings were all recorded. In order to provide a benchmark, the supervisors were asked to record the prices of the food products listed in the consumption section at two shops and one market locally. This direction was not further explored in the analysis. However, any charges or premiums for health care are likely to be paid out of cash income in a future finance model.

This research seeks to determine income by several means. Firstly, income is recorded by directly asking respondents for the size and structure of their household income. McIntyre considers household, rather than individual, income to be a better indicator of how individuals live “in a nearly universal two-earner culture”\textsuperscript{119}. Secondly, respondents were asked to select the group (given 16 income brackets), in which the income of their household falls. Thirdly, they were asked to assess the financial situation of their household in the past month. The self-perceived financial status is a subjective measure, but it could underpin household choices and thus willingness to pay.

The survey intended to estimate socio-economic score drawing on ESOMAR indicators\textsuperscript{120} and the World Bank’s Living Standards Measurement Studies\textsuperscript{90} techniques in order to include consumption, assets, lifestyle and other proxy measures. However, taking account of household reserves in assessing well-being is beyond the scope of this research. Estimating the weights for each indicator towards household resources and valuing of assets could be further studied.

Thus, in this study, ability to cope financially with illness might be underestimated, as households often can mobilise additional resources from extended family or social networks. Informal support appears to be an important coping mechanism in Bulgaria.
a representative survey\textsuperscript{121}, 85\% of respondents stated that they, or other members of their household, have helped friends or relatives. Although, only a very few cases (1\%), were paid for it, 55\% of cases received help in exchange. However, in Bulgaria, selling assets to add to disposable income is not always possible (as in the case of land) or easy, due to a small market for second-hand goods, thus overestimating the overall ability to pay. For this reason, although this study collects information on assets, only monetary income will be included in the analysis.

There was a marked unwillingness to answer questions relating to personal income, or assets, especially in urban areas. When asked to assess their personal financial situation, there was an ambiguity as the personal standard of living was perceived as relatively good for Bulgaria, but not in comparison with the western standard of living.

**Quality control**

Several control procedures were applied to verify the accuracy of the questionnaires. During the field work, each supervisor cross-checked about 25\% of interviews (total of 300 of sample) with the respondents, verifying that the interview took place and key questions. Furthermore, interviews by the same and by other interviewers were compared.

Most problems involved incomplete data or technical errors, many of which were corrected subsequently. Among the reported reasons for data gaps were difficulties in finding respondents at home in the villages due to seasonal agricultural work; people in villages or with primary education only, not understanding the questions; inability to recall the exact circumstances of past illness and incurred expenditure; or the interview being too long.

After the interview schedules were returned to the main office of Vitosha research in Sofia, a detailed consistency check on all interviews was performed by a team of experienced supervisors and myself, before data entry. The check addressed whether the instructions in the questionnaire (filters etc.) were followed correctly, whether there was a logical match between some related questions, and checks of data accuracy when it was possible to do so e.g. size of settlement and coding of the open-ended questions. Consistency of answers was assessed by comparing answers to similar questions, or by asking different questions about the same event. In many cases, technical errors could be corrected, for example,
data on the size and type of settlement, and place of residence, could be checked and corrected.

**Stage D: Data analysis**

**Qualitative analysis**

The qualitative data analysis relied on the grounded theory approach\textsuperscript{97}. It is applicable to this research for the following reasons: a) it is inductively derived from the data and does not rely on pre-existing theory; b) it is aimed at less known phenomena; c) it is a rigorous method for analysis of qualitative data.

During transcription and the first reading, a memo was created. This listed initial themes, ideas, impressions, rough groups of themes and logic emerging from the text, as well as especially typical or key phrases. A list of preliminary broad categories and themes to be further explored in the analysis was compiled, based on the first memo, previous research evidence (from Bulgaria and elsewhere), informal interviews, documentary analysis and intuitive observations. The qualitative data was relatively structured due to the need to maintain a close link with the survey data. Some broadly defined categories were established in advance, but most were purely data-derived. The analysis sought to confirm the pre-determined categories in the data. This list was used as the starting point in the analysis.

The next analytical stage involved open coding and refining the initial list of general categories to include more precise categories, which involved assigning conceptual labels to data having common characteristics and representing "a class of objects or events"\textsuperscript{122}. The concepts describing similar phenomena were then grouped into more encompassing categories (Level 1) and their characteristics and dimensions developed into more detailed categories grouped under them (Level 2) (Table 3.9). Identification of a category was based on clear criteria, to distinguish from others\textsuperscript{122}. Each broad category has key words which were used to define the second-level categories. Most categories were inclusive where more than one category could be assigned to one data unit. Thus the more general category included: attitudes to the Bulgarian health care system, and to the health care reforms; attitudes to the tax-based model and experience at health facility level; attitudes to informal payments; attitudes to alternative financial models such as legal user fees, voluntary insurance, and compulsory social insurance; and finally,
willingness to pay, in general, and under particular health financing models. The attitudes
towards certain phenomenon (health financing) and the actual behaviour (experience at
facility level) have been assigned to separate categories to allow comparison between
attitudes and actions. Constant verification against primary data was needed.

Given the large volume of collected material and the broad spectrum of topics covered,
selective coding was applied. Initially a broad focus was identified, without excluding
alternative directions of analysis. After the categorisation was complete, a core category
(central phenomenon to be studied) was selected and placed in the centre of the analysis.
A few key categories closely related to the core category (the preference for a financing
option) were further refined through creation of sub-categories, their links with the core
category explored, and secondary themes organised around them. Key relationships
(causality, consistency, opposition, explanation) between major categories were
explored. Such main themes were, for example, actual experience of payment,
frequency of illness and use of services. Other categories were integrated around the
core category in order to avoid data fragmentation.

When analysing the preference for a health financing model as a core category, two
procedures were followed (Figure 3.2). In the first (axial coding), rather than asking
respondents to choose directly between financing models which were not entirely
familiar to them, their views were tested on certain characteristics such as affordability,
method of payment under a particular model, institutions involved, and administrative
arrangements. Preferred characteristics were clustered and superimposed to establish
preference for a model (e.g. respondents whose combination of answers suggested
features of a national insurance scheme). A related procedure was to establish preference
for a model in terms of particular dimensions (e.g. best model in terms of transparency).
Once it was found that a certain feature of a model was deemed to be universally
important (e.g. accountability), it was explored for each of the other models. Inevitably,
certain models may be rated high on transparency but low on, for example, affordability.
However, this made it possible to draw conclusions on awareness of, and preference for,
each model.

A second way to establish overall preference for a financing model is to ask directly.
Thus, respondents had to make decisions on balance of the above assessment of the
characteristics of each method. Therefore, the first approach compared dimensions of
financing options, and the second, overall models.
The analysis sought to distinguish between a phenomenon, its causes, the context, processes, actions and events, their consequences, strategies, and relationships. Maintaining the link between data and their context during the analysis was seen as particularly important, as contexts can explain actions and their implications. The analysis started with a range of initially generated categories and returned to data in order to confirm and verify categories ('holistic' approach).

**Figure 3.2. Analytical procedures**

The main axis of analysis was comparison of the perceptions of physicians and patients. A secondary axis was a comparison of different groups of patients (e.g. income groups, groups with contrasting values). Most data were collected in Sofia, not allowing for a meaningful comparison with the countryside. Due to the unfamiliarity (and in some cases, sensitivity) of the topics, there is a need for a more investigative approach, including analysis of logic, language, and particular circumstances. This was beyond the scope of this analysis.

The data analysis followed a clear plan and the main steps, research questions and techniques used were documented. The techniques used were asking questions, focusing on key words or 'typical' interviews, free association; and comparing phenomena and incidents described by the respondents, as suggested in the literature. The patterns of relationships between data were explored. Using bigger data units (events, stories rather than words or phrases) was more meaningful given the large size of data. In many cases,
frequencies of cases in each category, and of links between categories, were also estimated, in order to identify prevalence and variations within the data.

Coding was first produced on hard copy, then the most typical data units within each category were imported into a spreadsheet, allowing for easy comparison. Each excerpt was indexed with the interview code to allow an easy link with the original interview context. In coding, simple generic abbreviations were used for the first level categories, more descriptive ones for the second-level categories.

**Quantitative analysis**

Survey data were analysed, firstly by exploring univariate distributions of key variables, and secondly by multivariate regression analysis to identify significant relationships (Figure 3.3). Explanatory socio-demographic variables were selected on the basis of their importance in other studies. Age, income, and education seem to be predictive of a wide range of attitudes and behaviours in Bulgaria, while the size of household is not of the same importance as it is in some developing countries with large household sizes. The dependent variables depend on the particular question being asked and include measures such as self-reported illness, health services utilisation, ability to pay, attitudes and beliefs, and willingness to pay. Such analysis seeks to describe the 'user perspective': the likelihood of different socio-economic groups to be ill and to receive treatment, affordability of services, and preference for health care financing schemes.

**Figure 3.3.** Model for analysis of ability and willingness to pay

![Diagram showing independent variables and dependent variables with financing options as users' perspective](image-url)
<table>
<thead>
<tr>
<th>1st LEVEL CAT-S: General attitudes to the Bulgarian health care system</th>
<th>2nd LEVEL CAT-S</th>
<th>Criteria for assigning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengths and weaknesses</td>
<td>‘Objective’ assessment: respondent as an observer (positive/ negative; optimistic/ pessimistic)</td>
<td></td>
</tr>
<tr>
<td>User and medical staff satisfaction</td>
<td>‘Subjective’ assessment: respondent as a participant (client/provider)</td>
<td></td>
</tr>
<tr>
<td>Inheritance &amp; reform</td>
<td>Got worse/better; reform is slow/quick; changes</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>Interest/actual knowledge; active/passive; sources</td>
<td></td>
</tr>
<tr>
<td>Physicians’ motivation</td>
<td>Factors; shift: before/ after 1989</td>
<td></td>
</tr>
<tr>
<td>Physicians’ social status</td>
<td>Factors; shift: before/ after 1989 (prestige?)</td>
<td></td>
</tr>
<tr>
<td>Stakeholders’ contribution (politicians, experts, physicians, users)</td>
<td>Trying to do their best / not enough</td>
<td></td>
</tr>
<tr>
<td>Health sector in relation to other sectors (wider economy/ politics/ ecology/ manufacturing/services/ business)</td>
<td>Relationship (linear/ consensus). Comparison of salaries/ importance (for public, policy-makers) / prestige/ user willingness to pay</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1st LEVEL CAT-S: General attitudes to health care reform</th>
<th>2nd LEVEL CAT-S</th>
<th>Criteria for assigning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of reform direction</td>
<td>Interest/ knowledge of main views; active/passive; sources</td>
<td></td>
</tr>
<tr>
<td>Stakeholders in reform</td>
<td>Who: administrators, politicians, doctors, public</td>
<td></td>
</tr>
<tr>
<td>Opposition to reform</td>
<td>By whom/ how</td>
<td></td>
</tr>
<tr>
<td>Political consensus</td>
<td>Politics &amp; health reform; consensus (possible/not); predominant sides/views; collective action of physicians (positive / negative)</td>
<td></td>
</tr>
<tr>
<td>Learning from experience</td>
<td>Keep national characteristics/ lessons from EU/ other systems</td>
<td></td>
</tr>
<tr>
<td>Scenario: respondent as policy maker</td>
<td>Necessary reform steps</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1st LEVEL CAT-S: Attitudes to tax-based model (TBM)</th>
<th>2nd LEVEL CAT-S</th>
<th>Criteria for assigning</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBM: understanding of principle</td>
<td>Budgetary; state control and allocation of resources; payroll tax</td>
<td></td>
</tr>
<tr>
<td>TBM: “Free”-“paid” health care</td>
<td>Understanding the principle (“free” only at the point of use); state-provided/ fully private; contradictions (free at the point of use-conditional on UCP/fees)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Values (should be done) / practicality (could be done)</td>
<td></td>
</tr>
<tr>
<td>TBM: spending on health care</td>
<td>Health care budget: in/sufficient; source of revenue; diversified for separate health facilities</td>
<td></td>
</tr>
<tr>
<td>TBM: winners and losers</td>
<td>Physicians/ users (disadvantaged etc.)</td>
<td></td>
</tr>
<tr>
<td>TBM: fairness</td>
<td>Inequitable treatment (in polyclinics/hospitals)</td>
<td></td>
</tr>
<tr>
<td>TBM: impact on quality of services</td>
<td>Quality of services, staff incentives; supplies</td>
<td></td>
</tr>
<tr>
<td>TBM: overall assessment</td>
<td>Strengths and weaknesses; need for reform: why? by whom? (un)realistic</td>
<td></td>
</tr>
</tbody>
</table>

### 1st LEVEL CAT-S: Experience at health facility level (HF)

<table>
<thead>
<tr>
<th>2nd LEVEL CAT-S</th>
<th>Criteria for assigning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall impressions</strong></td>
<td>Financing, motivation, attitude; problems in obtaining &amp; delivering services; quality;</td>
</tr>
<tr>
<td><strong>Self-financing practices</strong></td>
<td>Extrabudgetary revenues from fees: drugs, materials, food, admission and UCP; resources to collect fees/ manage fees</td>
</tr>
<tr>
<td><strong>Financial independence of facilities:</strong> managerial savings; bigger budget</td>
<td></td>
</tr>
<tr>
<td><strong>Motivation and behaviour of physicians</strong></td>
<td>Actual/ideal; determinants; incentives</td>
</tr>
<tr>
<td><strong>Physicians' income</strong></td>
<td>Salary in/sufficient (in comparison)</td>
</tr>
<tr>
<td>Options for additional income (UCP, private sector) in Sofia, small towns/villages; type of health facility; type of service</td>
<td></td>
</tr>
<tr>
<td><strong>Scenario: a typical visit</strong></td>
<td>What/how/why/when/how easy</td>
</tr>
<tr>
<td><strong>Health awareness</strong></td>
<td>Education; culture; value of health</td>
</tr>
<tr>
<td><strong>Discrimination between users</strong></td>
<td>Based on income/ network membership</td>
</tr>
<tr>
<td><strong>Quality/ success of treatment</strong></td>
<td>Determinants: monetary/non-monetary: income/ /social status; expected service, other relation</td>
</tr>
<tr>
<td><strong>Patients' empowerment</strong></td>
<td>Options if (dis)satisfied (arguments, complaint); actions and consequences</td>
</tr>
<tr>
<td><strong>User expenditure for last visit</strong></td>
<td>Size and type (drugs/ travel, gifts)</td>
</tr>
<tr>
<td><strong>Affordability:</strong> from salary, savings, loans etc.</td>
<td></td>
</tr>
</tbody>
</table>

### 1st LEVEL CAT-S: Attitudes to informal payments (IP: user fees and under-the-counter payments)

<table>
<thead>
<tr>
<th>2nd LEVEL CAT-S</th>
<th>Criteria for assigning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IP: understanding of principle</strong></td>
<td>Knowledge/understanding (how many?)</td>
</tr>
<tr>
<td><strong>IP: characteristics</strong></td>
<td>Size, type, meaning, timing, way of giving, in/voluntary, counterparts, beneficiaries</td>
</tr>
<tr>
<td><strong>IP: functions</strong></td>
<td>Gratitude, request, politeness</td>
</tr>
<tr>
<td><strong>IP: WTP</strong></td>
<td>Circumstances (for what/how), determinants</td>
</tr>
<tr>
<td><strong>IP: determinants</strong></td>
<td>Income status of users</td>
</tr>
<tr>
<td><strong>IP: prevalence</strong></td>
<td>How common? Culturally determined, tradition, economic reaction</td>
</tr>
<tr>
<td><strong>IP: attitudes</strong></td>
<td>Acceptability (in what cases?)</td>
</tr>
<tr>
<td><strong>IP: before and after 1989</strong></td>
<td>Changes in size/ type/ meaning / timing etc.</td>
</tr>
<tr>
<td><strong>IP: impact</strong></td>
<td>For physician income / for patient</td>
</tr>
<tr>
<td><strong>IP: actual experience</strong></td>
<td>Last visit/ever given; money/gifts; circumstances (for what; how); size, type; future action</td>
</tr>
<tr>
<td>IP: policy options</td>
<td>Ban / legalise-fact / regulate / ignore (pros and cons)</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------------------------------</td>
</tr>
</tbody>
</table>

**1ST LEVEL CAT-S: Attitudes to compulsory social insurance (CHI)**

<table>
<thead>
<tr>
<th>2ND LEVEL CAT-S</th>
<th>Criteria for assigning</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS: understanding of principle</td>
<td>Knowledge/understanding; people/ state responsibility</td>
</tr>
<tr>
<td>HIS: size of premium</td>
<td>Affordable % of monthly income</td>
</tr>
<tr>
<td>HIS: trust</td>
<td>Dis/trust; in stability/control/ revenue management</td>
</tr>
<tr>
<td>HIS: differentiation of contribution</td>
<td>Un/equal for different groups</td>
</tr>
<tr>
<td>HIS: collection and handling of funds</td>
<td>Who? Government/ municipalities/ MoH/ NGOs/ co-operatives/ private organisations; investment of funds, procedures for (democratic; delegation, control)</td>
</tr>
<tr>
<td>HIS: use of funds</td>
<td>Health care only; social security; social benefits, etc.</td>
</tr>
<tr>
<td>HIS: unused contributions</td>
<td>Health care only; use for dependents, withdraw etc.</td>
</tr>
<tr>
<td>HIS: level of funds</td>
<td>National/ regional/ municipal/ professional/ enterprise</td>
</tr>
<tr>
<td>HIS: single/ multiple funds</td>
<td>Centralised, single HIF/ multiple funds; competition</td>
</tr>
<tr>
<td>HIS: membership</td>
<td>Compulsory/ voluntary; choice of fund; exclusion / inclusion of the rich</td>
</tr>
<tr>
<td>HIS/VI: preference for a company</td>
<td>State /private /joint ownership /co-operative; Bulgarian / foreign / joint venture/ other</td>
</tr>
<tr>
<td>HIS: overall assessment</td>
<td>Strengths and weaknesses</td>
</tr>
</tbody>
</table>

**1ST LEVEL CAT-S: Attitudes to legalised user fees (UF)**

<table>
<thead>
<tr>
<th>2ND LEVEL CAT-S</th>
<th>Criteria for assigning</th>
</tr>
</thead>
<tbody>
<tr>
<td>UF: understanding of principle</td>
<td>Knowledge/understanding</td>
</tr>
<tr>
<td>UF: potential impact</td>
<td>For patients/ health facilities/ health care</td>
</tr>
<tr>
<td>UF: spending of revenue</td>
<td>Bonuses for staff/ drugs/ supplying equipment</td>
</tr>
<tr>
<td>UF: differentiation among patients</td>
<td>Equity (vertical and horizontal); differentiation: in needs, income, education, age, ethnicity</td>
</tr>
<tr>
<td>UF: patients' contribution</td>
<td>Who to be covered entirely/partially by the state? Higher prices/ tax for the better-off; to pay percentage of their treatment, sponsorship, donations</td>
</tr>
<tr>
<td>UF: exemption procedure</td>
<td>Individualised (feasible / desirable )</td>
</tr>
<tr>
<td>UF: target groups of exemptions</td>
<td>Higher: frequent users; wealthier Lower: elderly, disabled, young; with chronic conditions, children, people with merits to society Special cases: smokers; alcoholics, criminals etc.</td>
</tr>
<tr>
<td>Priority treatment in state facilities</td>
<td>Groups as above/ those paying directly/ solidarity</td>
</tr>
</tbody>
</table>
### 1st Level CAT-S: Attitudes to private sector (PS): fee-for-service payment and voluntary health insurance (VHI)

<table>
<thead>
<tr>
<th>2nd Level CAT-S</th>
<th>Criteria for assigning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding of principle</td>
<td>Payment for what (for specific illnesses), when, to whom (insurers/ hospitals), employer's contribution; other types of insurance: life or care insurance</td>
</tr>
<tr>
<td>PS: attitudes</td>
<td>Strengths/ weaknesses of private sector, suitability; choice state/private: price, time, attitude</td>
</tr>
<tr>
<td>PS: differentiation among patients</td>
<td>Equity (vertical and horizontal); different payment according to need, income, education, age, ethnicity</td>
</tr>
<tr>
<td>Public-private mix: attitudes</td>
<td>Attitudes, functioning in parallel</td>
</tr>
<tr>
<td>Private sector regulation</td>
<td>By whom (state, medical profession); to what extent?</td>
</tr>
<tr>
<td>Patients: private sector experience</td>
<td>Visits; level of fees; attitude; future choices; physicians: starting private practice: risks, benefits</td>
</tr>
<tr>
<td>VHI: willingness to get insured</td>
<td>Now/ in future; motivation; Trust in state/private; Bulgarian/foreign insurer</td>
</tr>
</tbody>
</table>

### 1st Level CAT-S: Willingness to pay (WTP)

<table>
<thead>
<tr>
<th>2nd Level CAT-S</th>
<th>Criteria for assigning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothetical choices: illness of respondent/ child/close relative/ relative in hospital or chronically ill</td>
<td>Decisions on actions / type of facility (hospital)/ type (private)/ use of contacts/ fees/ gratuities/ insurance/ direct payment to physician</td>
</tr>
<tr>
<td>WTP: prioritising of factors</td>
<td>Factors influencing WTP</td>
</tr>
<tr>
<td>WTP in hypothetical situations</td>
<td>Illness of respondent/relative; admission to hospital, chronic, dental</td>
</tr>
<tr>
<td>WTP: for child or close relative's treatment</td>
<td>Scenarios: pharmaceuticals/ materials/ consultation/ bed/ food; pay to whom: directly to doctor, to administration of health facility, to intermediary; when: single/monthly/each visit % of costs; in the end / beginning / during the treatment</td>
</tr>
<tr>
<td>WTP for ecology</td>
<td>WTP (earmarked tax, for ecologically clean products)</td>
</tr>
</tbody>
</table>

### 1st Level CAT-S: Preference for a health financing model

<table>
<thead>
<tr>
<th>2nd Level CAT-S</th>
<th>Criteria for assigning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred model: rating on a range of characteristics</td>
<td>Transparency; complexity of implementation; acceptability for the public; providing guarantees, trust, flexibility, choice, control</td>
</tr>
<tr>
<td>Financing options: overall suitability for Bulgaria</td>
<td>Suitability/ reservations. Best results - users/doctors</td>
</tr>
<tr>
<td>Preferred way of payment</td>
<td>To physician/ administration/ HI company/ HI fund/ To state institution/ other</td>
</tr>
<tr>
<td>Preferred model: for respondent/ frequent users/ infrequent users/ pensioners</td>
<td>User fee for each consultation/ monthly sum/ 3-5% from all expenses</td>
</tr>
</tbody>
</table>
Methodological limitations

This study is subject to a number of broad methodological limitations.

- Existing data in Bulgaria is scarce, partial and unreliable, thus making it difficult to validate the results of this study.

- Although the questionnaire draws on existing research instruments such as the World Bank Living Standard Measurement Survey, the UK Health survey and the GHS, it has been significantly modified to suit the requirements of this research and adapt it to Bulgarian circumstances. Thus, it is not fully standardised.

- Difficulties in measuring income, purchasing power and expenditure are common to studies of transitional economies due to fluctuations in wages and prices, large informal economy, and general underreporting of income (especially among wealthier self-employed and private owners). Using monetary income as a predictor variable in the analysis may have limited the explanatory strength of the research.

- The survey, while taking into account household characteristics, is essentially focused on individuals, their experience of health and illness, expenditure and attitudes. Although all household members were interviewed, data proved to be incomplete due to logistic difficulties in having to make too many visits, or being unable to obtain coherent answers. Thus, only data from the main respondent’s interviews have been analysed.

- Some limitations in measuring illness and utilisation may have occurred. Blaxter notes that population studies can underrepresent serious illness, as those who are ill are less likely to be interviewed (incapacity, being in hospital). Acute, chronic illness, and treatment episodes were difficult to distinguish due to translation problems.

- Data from the qualitative study indicate the scale and nature of the issues, particularly where the issues are sensitive or unfamiliar, but cannot be generalised.

Despite these limitations, this study provides new essential information immediately relevant to health care reform in Bulgaria, which is presented in chapters 4-11. The next chapter will examine critically the directions, process and challenges facing the reform of health care financing in Bulgaria, based on primary and secondary sources.
CHAPTER 4. HEALTH CARE REFORM IN BULGARIA
(1989-1999): A CRITICAL ANALYSIS

Introduction

This chapter will examine critically the process of health care reform in Bulgaria, exploring the challenges faced and intrinsic contradictions. The main elements of reform were described in appendix 2, here they are analysed in the light of the data collected as part of the research.

The current chapter draws on two types of sources: first, on documentary analysis of Bulgarian and international papers, official publications, media accounts, and press interviews between 1993 and 1999; and second, on in-depth interviews conducted with stakeholders in 1997.

Results

Contradictions in the Bulgarian health care system in the late 1990s

The Bulgarian health system is still, in theory, based on the Semashko model, established in 1944-1989. Despite some important achievements, reform efforts have failed to restructure significantly provision and financing of the health sector and to dismantle the Soviet model of health care and its institutions. In the absence of coherent reform and legislation, two processes have developed. Firstly, the health system has lost many of the positive features of the inherited model. Secondly, under external and internal pressures, the health care system has adjusted to the market environment. However, these changes have led to a number of contradictions between the rhetoric and the reality (Table 4.1).

The most fundamental achievement of the socialist health care system, contributing to its popular support, was that it provided universal coverage for the population. The extensive social provision, and the sense of security it created, made the system politically legitimate. The 1991 Bulgarian Constitution and the Law for Public Health, amended in 1991, reconfirmed the rights of all citizens to a comprehensive package of health services, free at the point of use. Legalisation of private health care enabled people to seek higher quality care while retaining access to the public system.
Despite this commitment, in reality, universal entitlement was unsustainable. There was a discrepancy between the entitlement to free health care and ability of the state to meet the expenditure. The tax-based model could not raise sufficient revenue in the 1990s, due to economic recession and inefficient tax collection related to a growing shadow economy. The underfunding had catastrophic consequences for the health system. Shortages of essential drugs, lack of basic maintenance and low salaries, led to substantial reliance on extra-budgetary resources to prevent the collapse of the system. The spontaneous introduction of user fees, legalised in 1997, and the growth of under-the-counter payments introduced cost sharing mechanisms into the system. Although fees were intended to cover only elective or luxury services, in many cases they undermined equitable access to state-provided health care. These developments meant that the formal right of citizens to universal and free medical care, guaranteed in the Constitution, could not be exercised.

Table 4.1. Contradictions in the health care system in Bulgaria in the late 1990s

<table>
<thead>
<tr>
<th>Official claims</th>
<th>Reality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal access based on need</td>
<td>Access based on ability to pay</td>
</tr>
<tr>
<td>Tax-based model, services free at the point of use</td>
<td>Use of extra-budgetary financing sources: user fees, under-the-counter payments</td>
</tr>
<tr>
<td>Balance of supply and demand</td>
<td>Declining and inadequate supply</td>
</tr>
<tr>
<td></td>
<td>Rising demand (high-income groups)</td>
</tr>
<tr>
<td></td>
<td>Falling demand (low income groups)</td>
</tr>
<tr>
<td>Centralised planning &amp; control by the state</td>
<td>De-centralisation, but inadequate co-ordination between center and regions</td>
</tr>
<tr>
<td>Regions accountable to central level</td>
<td>Minimal central control over standards</td>
</tr>
<tr>
<td>Horizontal and vertical collaboration between institutions; and between clinical practice and research</td>
<td>Weakened collaboration</td>
</tr>
<tr>
<td>Emphasis on primary care and prevention through polyclinics</td>
<td>Reduced coverage due to shortages</td>
</tr>
<tr>
<td>Feeling of security</td>
<td>Insecurity</td>
</tr>
</tbody>
</table>

While, formally, access to health care is based on need, in reality, in the 1990s, user payments have undermined access to public care, which has been increasingly dependent on the ability of the users to pay. Safety nets for the low-income groups were greatly
reduced, with negative consequences for equity. The policy objective of maintaining equal access to free health services in an atmosphere of falling budgets led to deterioration in the quality of services, drug shortages and waiting lists. In effect, except for emergency health care, no guarantees could be given that health services would be received free at the point of use, causing insecurity among users.

The Semashko system claimed to achieve a balance of supply and demand through centralised planning. Although health care costs have increased due to the import of expensive technologies, wide use of brand pharmaceuticals, and capital investments, supply continued to decline. Demand fell among lower income groups and rose among the richest sections.

Another set of contradictions in the Bulgarian health care system related to the role of the state. As elsewhere in CEE, health care reform has involved a re-definition of the role of the state and re-thinking of the balance between collective and individual rights. Bulgaria, like Slovenia and Estonia, constitutionally guarantees the right to collectively provided health care to a larger extent than does the constitution of the Czech Republic, which is most notable in extending individual responsibility72. In Poland, there has been a particular emphasis on maintaining equal access for the population during transition, through a variety of entitlements and state guarantees ('health security')72 88.

Bulgaria and the Czech Republic agree on the necessity of state functions such as emergency services, public health measures, a package of basic health care, registration of pharmaceuticals, control of medical technology, and health education124. However, there are differences in the degree of intervention they justify. In the Czech Republic, state control is more residual, limited both through large-scale privatisation of facilities and privatisation of responsibility for one’s health. Quality is monitored by professional organisations rather than the state.

Theoretically, in Bulgaria, the state still retains a broader spectrum of inherited functions, including centralised financing, provision, planning, control and leadership in the health sector. In reality, the state monopoly in provision and financing of health services was curtailed under political pressure, although this process has been less radical in Bulgaria than in the Czech Republic72. The resulting de-centralisation weakened state planning and reduced the possibilities for co-operation between units. One of the managerial weaknesses of the health care system in the 1990s is a lack of clear lines of
accountability. Residual state control over the private sector is mainly through licensing and taxation, and much less in price setting and quality standards.

Despite recent claims for renewed commitment to strengthening of primary health care, the situation worsened due to resource allocation favouring hospitals, lack of political support among stakeholders, and opposition from physicians' organisations.

The feeling of security related to the health care system was eroded by cost sharing, corruption, shortages and the creation of a two-tiered system. In surveys of public perceptions before 1989 the health care system was viewed as regulated, reliable and fair. A 1997 survey showed widespread feelings of economic insecurity, fears of unemployment, crime, and political instability, and pessimistic views of the future, 60% being dissatisfied with their standard of living and social status. Access to health care was seen as determined by economic factors such as the ability to pay. Thus, 90% of respondents were convinced that a poor person would not receive high-quality treatment. 43% stated that they cannot afford to buy the medicines they need and 80% thought that, in case of serious illness, they would not be able to pay for their treatment. Another source of insecurity among users is the poor information regarding health sector reform and lack of opportunities for involvement.

In summary, the health care system in Bulgaria in the late 1990s, although still based on the Semashko model, has developed a range of negative features as a by-product of reform in other spheres of the economy.

**Pressure for reform and reform pre-conditions**

During the communist era, housing and health care were classified as services within the state budget and as such they had low priority. As discussed in the introduction to this thesis, after 1989, health sector reform was de-prioritised since it was assumed that revitalisation of the economy would lead to immediate improvements in the health system. Against a background of radical reforms in other sectors of the economy in 1990-1997, health care reforms were less visible to the public and to health care professionals. This resulted in external and internal pressures to accelerate reform.

Among the external pressures for reform were the general economic recession and the macroeconomic restructuring leading to declining government revenue at central and local level. The health care budget in 1996 was 35% and in 1997, 50% of the 1990
Health care budgets were inadequate in the face of the need for capital investments to sustain deteriorating buildings, infrastructure and equipment; demand for new treatments and import of advanced technologies. Shortages of consumables were especially acute. Although, until the collapse in 1996, the health care system appeared relatively stable (compared to the massive collapse in agriculture and industry), the subsequent crisis made more dynamic reform of health care a pressing issue. The extent of the demographic and health problems of the population also exerted pressure for a response.

There was also pressure from users to speed the pace of reform, in the face of the expansion of unregulated user fees. Income fell as a result of currency devaluation, unemployment; falling living standards; and exhaustion of reserves; and users became increasingly unable to pay out-of-pocket. Thus many users came to see reform as highly desirable. Attention was focused by media accounts and public debate deploiring the growth of user fees in the absence of insurance.

The negative attitudes towards the current health care system were illustrated by a representative survey conducted in April 1995 among those aged 15+. The majority (64%) of respondents assessed the state of the health care system as bad or very bad. The situation in the health sector was viewed to be better only than that of agriculture and manufacturing and worse than in culture and education. In the interviews undertaken for this thesis, virtually all respondents shared the opinion that the health care system is in an extremely poor state, in terms of material conditions, supply of pharmaceuticals and overall quality of care.

Another set of pressures came from within the health care system. The poor motivation of staff reflected poor working conditions and salaries (even when compared to the rest of the public sector); lack of incentives for performance or opportunities to earn additional income; and slow reform. Support for reform among health personnel was generally widespread, but with some variation by type of facilities, settings, and type of staff (Figure 4.1). The expressed commitment to financing reform is stronger among physicians in the capital and in larger (teaching) hospitals and among privately practising physicians. The incentives for change were lower for health administrators, due to fears of losing their jobs, and among the auxiliary staff who did not envisage gain from further reform.
Physicians, through the Bulgarian Physicians' Union and other organisations of medical staff, exercised strong pressure for reform and opposed the low priority given to health care reform compared to macro-economic policy.

From their perspective, the major issues in reform are raising the status and income of medical staff, by means of the introduction of a health insurance system and further privatisation of in-patient health facilities. In general, health insurance is often seen as a tool to achieve higher living standards for medical staff\(^5\). Compulsory insurance was perceived as the perfect solution, achieving simultaneously higher income for professional staff, obligatory patient participation, more budgetary resources, and improved quality. The increase in physicians' income and performance-related payments were also seen by patients as a means to improve incentives and clinical autonomy, and thus, the functioning of the system. Physicians' organisations are also insistent that under a national health insurance system, payment to staff should be fee-for-service, or in any case, linked to performance.

**Aims and objectives**

Despite some important achievements, health care reform in Bulgaria failed to provide sustainable and affordable health care for the population. One reason is that the reform strategies were contradictory, with no clear logic. The objectives and priorities were not explicitly formulated. No strategic programme was formulated prior to December 1995.
In contrast, adherence to a set of clear and comprehensive policy objectives was a
decisive factor in the ability to implement health sector reform in the Czech Republic\textsuperscript{127}.

According to Borissov and Rathwell\textsuperscript{133} the main reform objectives in Bulgaria were:

1. Legalisation of private practice
2. Reform of health care management and financing (decentralisation and health insurance)
3. Incorporation of new values into the health care system:
   a) Rights and freedoms (pluralism, competition, information, choice and quality)
   b) Shared responsibility for health (accountability under a health insurance system)
   c) Priority setting
   d) Efficiency
   e) A Health for All strategy

In practice, the focus of reform developments was on objectives 1-2 (mainly
decentralisation), and on 3e) (two Health for All strategies were prepared: in 1995 and
1999). The actual implementation of these objectives has faced significant political and
administrative difficulties. Other objectives were primary care reform and hospital
restructuring.

Ensuring accessible health care for the population in circumstances of a reduced budget
for health care was not seen as a priority. The reform objectives, as well as the actual
developments, indicate a limited role for user groups (appendix 2). Most changes
benefitted, directly or indirectly, medical staff, particularly physicians.

Disagreement on specific policy priorities in Bulgaria and their frequent modification
blocked the reform process. Successive governments were unwilling to engage in long-
term and potentially complex health care reform, with little continuity. Dialogue
between institutions and stakeholders was difficult due to an underdeveloped political
culture and inability to accommodate competing interests. There was no consensus on
the existing system and what should be retained. Well-targeted and balanced reform
objectives could have created a more broadly acceptable process. There are many
possible strategies for health care reform and there is a need to negotiate policy options
between stakeholders to create a "new social contract"\textsuperscript{128} or "social pact"\textsuperscript{129}, rather than
one imposed by government.
Reform process

The pace of health care reforms varied significantly across countries in Central and Eastern Europe. It was determined by state priorities, political climate, overall dynamics of transition, and support by stakeholders. In Bulgaria, the reforms have been slower than elsewhere in CEE, notably the Czech Republic and Hungary, which implemented radical reforms through “shock therapy”\(^{130}\). Poland also adhered to a strategy of gradual accumulation of small-scale measures before a comprehensive re-structuring.

Health care reform began immediately after 1989, benefiting from a series of favourable circumstances: public enthusiasm and willingness for change of the new political leaders and society. It would have been easier to promote the need for health care reform before the consequences of the severe economic crises. However, these circumstances were not exploited and the opportunity missed to gain speed in the initial stages of transition.

Health care reform in Bulgaria has been slow and incremental. Policy-making and introduction of legislation often lagged behind actual developments. Reform often relied on decrees and regulations by the government instead of primary legislation. Reform of financing has been particularly event-driven. This approach reflected the predominant gradualist strategy of the overall transition process.

The evolutionary changes in the early transition were perceived as strengthening control and facilitating a gradual re-shaping of public opinion. In the absence of any continuity between new and pre-1944 economic mechanisms, the majority of the population found it difficult to accept new rules overnight, with, for example, new market-oriented relations in the health care system such as private or public health insurance, or large-scale privatisation.

More radical strategies for health care reform (“shock therapy”) were not feasible in Bulgaria, for political reasons. Successive short-lived and politically weak governments were not prepared or willing to take responsibility for comprehensive and rapid change. The slow pace was often justified on the grounds that urgent macro-economic problems had to be solved first. Instead of drafting new, potentially unpopular laws, the existing legislation was adjusted through decrees and regulations. Reforms were also delayed due to lack of consensus on main policy strategies between political parties, interest groups and public, and due to politicisation of the reform proposals. Proposals to accelerate reforms failed to achieve electoral support when put forward by unpopular leaders. It
was also argued that too rapid or radical re-structuring might cause confusion and a sense of insecurity.

In Poland, it has also been argued that reforms should be evolutionary by necessity and that improvements cannot be achieved through revolution. The rationale was that some positive features of the inherited system must be identified and sustained. There was also opposition against hasty, populist reforms compared to those based on research evidence. The slow pace of reform created uncertainty about the objectives of reform and threatened achievements. This research from Bulgaria indicates that the stakeholders’ main disappointment with health care reform arose from the slow pace and lack of focus in the light of rapidly deteriorating conditions in the health sector. A more dynamic strategy could have gained support among the public, health professionals and administrators. However, high public dissatisfaction with the persisting problems of the health sector did not automatically lead to acceptance of radical reforms.

Following the introduction of a currency board in 1997, the economy eventually started to grow. Consensus was achieved only after 1997, when three key laws were voted on by the Parliament (more than in 1990-1997). Conditions now appear favourable for reform. It is arguable that a more dynamic approach could raise health care reform on the public agenda.

Reform content and implementation

This section will analyse some of the more important reform achievements. By 1995, it was recognised by consultants to the PHARE health insurance project that the reform of health care has made little progress. A mission of experts from the WHO, FAO, UNICEF and others stated that:

"The health sector in Bulgaria is in a state of total confusion, lack of direction, lack of reform and the situation will even become worse in the next months to come."

The same mission noted, as a major problem, the inability of the Ministry of Health to provide adequate health care and drugs, exacerbated by the lower purchasing power of the population.

Legalisation of the private sector in health care (1991)

The legalisation of the private health sector in Bulgaria was promoted by professional organisations of medical staff, and supported by the public. As private practice was
prominent until 1944, and existed in some form until the 1970s, there was a feeling that development of the private sector built on existing traditions. In the views of users, the private sector introduced free choice in the system, reduced inefficiencies and preferential treatment observed in the state sector and ensured fair payment to physicians on a fee-for-service basis. The private sector was seen to provide high-quality services, or services unavailable in the state sector, and to ensure a better attitude by staff. In the context of transition, market mechanisms in health care were perceived as fully legitimate and reflecting the logic of macro-economic reform and privatisation in other spheres of society. Implementation was easy because the objectives were clear and easily understandable for all sections of society.

The private out-patient sector grew rapidly, relying largely on out-of-pocket payments, with some companies contracting on behalf of their employees. The low purchasing ability of consumers and oversupply of facilities resulted in competition for customers and lower prices. The generally affordable prices increased demand across the income spectrum. Nevertheless, the absence of insurance or other reimbursement mechanisms limited the potential client base. The concentration of private sector facilities in urban areas also limited their use. The emergence of a private in-patient sector was deterred by lack of insurance coverage (national insurance system or voluntary insurance) and the generally slow privatisation in other sectors of the economy. The potential for long-term private investment in infrastructure has not been fulfilled due to political instability and lack of credit systems.

Some problems have resulted from duplication or shortage of certain services. The private market was demand-driven, with no user protection or regulation. Users have lacked information to make an informed choice. The lack of clear rules has created some tensions between staff practising in public and private facilities. In addition the deteriorating conditions in the public health establishments led to fears that a two-tier system might be established, raising concerns about equity.

The taxation system and restrictions on trade were major barriers to expansion of the private pharmaceutical sector, with some enterprises paying more than 75% of their profits in tax. There are no tax exemptions for small private producers. On the other hand, state control over quality and prices of the pharmaceuticals was insufficient.
The role of the state

The content of the Bulgarian reform, although not explicitly stated, was related to redefinition of the state's responsibilities. As explained earlier, in the Czech Republic, state ownership was limited through large-scale privatisation and by stressing individuals' responsibility for their health. In Poland, state authority was extensively decentralised to regional level. In Bulgaria the monopoly role of the state in provision and financing was curtailed though privatisation, although only in the outpatient sector, and decentralisation of administrative powers. The introduction of user fees and other alternative financial sources has reduced the reliance on budgetary transfers from the state, increasing the autonomy of health facilities. The state regulatory functions of setting quality standards and planning services, were reduced by bureaucratic inertia and lack of leadership.

In Bulgaria, administrative de-centralisation is a relatively new concept, in contrast to Poland and the Czech Republic, which retained more de-centralised economies during the communist era. Responsibility for health care financing and provision has, formally, been delegated to municipalities, but these authorities were handicapped by retention of central control over policies, and inadequate budgets. Despite a commitment by some governments, political opposition to decentralisation is strong. In 1995, de-centralisation was reversed and regional branches of the Ministry of Health introduced, citing a need to implement uniform health policies. This state involvement in management of municipal facilities threatened the motivation for reform among administrators and professionals in communities where the process of de-centralisation was already working successfully. De-centralisation of health care financing and provision to the municipalities, weakened co-operation and accountability from regional to central level. Among the problems of decentralisation is that, in the municipalities, there is a shortage of staff with skills in financing and managing health care.

The degree of state involvement in financing reform is now under discussion. In the first stages of the reform, the predominant role of the state has been unchallenged. The Health Insurance Law envisages that the health insurance fund will be accountable directly to Parliament, which will lead to dismantling of the state monopoly in provision and in financing. The state is, however, unlikely to cover some fund deficits and contribute on behalf of some groups in the population, or act to alleviate possible negative effects on equity.
Sustaining the role of the state in an underdeveloped market can be justified for efficiency reasons⁹, as it is the only provider that could secure provision of curative services at this stage, given the low level of privatisation. In addition, the inherited system, characterised by extensive state involvement, retains considerable political support because of its underlying egalitarian principles and paternalism. A rapid shift to virtually unregulated markets and large-scale private provision may cause a withdrawal of support by the elderly and low-income groups, and may compromise the reform process. Commitment to radical reform of the health care system is opposed because of fears that it could threaten the principle of equity, even though equity (in the Bulgarian context), can be seen as maintenance of comprehensive coverage and equal access at the expense of quality of services.

Managerial reforms

Another set of reform policies that were formulated later in the 1990s, aimed to address the issue of rational management of existing resources, with the aim of achieving self-reliance⁹. In Bulgaria, an increase in budget resources was considered to be more important than their efficient allocation. Nevertheless, health care funding is dependent on economic recovery. In the absence of legislation on broader principles of reform and in the face of chronic underfunding, more cost-effective management of scarce resources emerged as a feasible option for reform in the short term⁸⁴. Furthermore, managerial improvement can be achieved even in the current tax-based model.

The main sources of inefficiency in the health care system are the oversupply and duplication of services and facilities, and staff imbalance and misallocation. However, incentives for applying managerial approaches are missing. There is no formal training of health managers or health economists. Some medical directors of hospitals are trained in social medicine, but many have no managerial experience at all. The newly established positions of ‘economic directors’, subordinate to that of the medical director, are mostly filled by accountants who have limited authority and responsibility. In 1995, a decree of the Ministry of Health eliminated the position of economic director in facilities with less than 500 beds, and generally weakened their powers. Even when managers are in place, they have little discretion in the allocation of budgetary resources.

⁹ According to an IMF assessment, the Czech Republic government was comparatively successful in promoting measures of self-reliance during the health reforms
according to needs and are legally prevented from restructuring the pattern of staffing. Managers cannot close beds and have limited scope to curtail costs to improve efficiency. At central level, the inefficient middle-level bureaucratic apparatus, inherited from before 1989, has undermined efforts to bring about far-reaching reforms.

Little has been done in the area of resource allocation after the collapse of the central planning model. The facilities' budgets are determined according to an annual application made by the medical director based on the number of people covered by the facility and, since 1995, the number of admissions, instead of number of beds. Recent measures to allocate hospital budgets according to volume of work rather than per unit of input have not taken into account the incentives for artificially generated activities. Also, facilities that achieve savings are in danger of receiving a smaller budget the next year. The health budgets of the municipalities do not reflect the demographic and social profile of the population.

One of the first steps in establishing financial independence for health facilities was the introduction, in a 1994 government decree, of a system for contracting-out auxiliary services, such as food, pharmaceutical supplies, and utilities. Each facility (mainly hospitals) selects suppliers from competing providers and contracts-out at the beginning of each budget year. The system faced difficulties due to the fact that purchasers (facilities) were underfunded and budgets were often delayed and undermined by inflation. Most public health care institutions were left in debt with unpaid bills for pharmaceuticals, heating, and electricity. There was also scope for corruption.

Two pilot projects of a "contract system", or type of internal market within the existing budgetary system, sought to create competition among providers and to achieve savings. Municipalities, acting as purchasers, would contract health care establishments to deliver certain volumes and types of clinical activities. These attempts were handicapped by the lack of expertise to supervise contracting at local levels. Another problem was involvement in local management of the regional offices of the Ministry of Health, which reduced the autonomy of purchasers.

Primary health care reorganisation

In 1994-95 the socialist government attempted a series of primary care reforms. A documentary analysis of announcements by Ministry of Health experts in early 1995 illustrates that, although some of the policies are consistent with the existing tax-based
system, lack of trust and political support undermined their implementation. It is a typical example of mismatch between the efforts of the Ministry of Health and public perceptions, or in other words, between rhetoric and reality.

In February 1995, at a press conference on the health reforms development, the Health Secretary Dr. Mimi Vitkova characterised the Ministry of Health as “poorly structured and non-working” and announced the creation of 28 district structures for health care to enhance management and the implementation of national policies. This was popularly seen as a backlash, following the de-centralisation of power envisaged by the Local Self-Government and Local Administration Act of 1992, as the Ministry of Health searched for mechanisms to regain control over municipally owned facilities. Another initiative aimed to reduce the number of distributors of pharmaceuticals, to control price differences between pharmaceuticals, and to introduce ceiling prices for drugs. It was also suggested that hospital budgets should be determined on the basis of volume of work and not on size or other base units. These messages were interpreted in different ways by stakeholders outside the Ministry of Health (Table 4.2).

Another initiative introduced in primary health care in 1994-5, was to strengthen prevention, health education and health promotion and most importantly, in 1995, free annual choice of "family physician" by patients attending state polyclinics. These measures aimed to empower users and create incentives for physicians and were implemented within the existing institutional network of primary care facilities. In addition, training of GPs began, with the intention to replace the extensive specialist staff in polyclinics with well trained generalists who could maintain close contact with their patients, administer preventive measures and act as gate-keepers in order to reduce overconsumption in secondary care. These efforts to regulate primary care have been perceived as actually curtailing the users’ access to higher levels of care and reducing the clinical freedom of physicians.
Table 4.2. Socialist government agenda (1995) and the reaction of other stakeholders

<table>
<thead>
<tr>
<th>Official objectives of the MoH</th>
<th>MoH policies as perceived by other stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishment of 28 district MoH offices to implement national policies</td>
<td>⇒ Reversed de-centralisation</td>
</tr>
<tr>
<td>Selection of ‘personal’ physician</td>
<td>⇒ Curtailing of user choice of secondary care; reducing clinical autonomy</td>
</tr>
<tr>
<td>User charges for voluntary referrals</td>
<td>⇒ Reduced number of medical directors. Position closed in facilities with less than 500 beds</td>
</tr>
<tr>
<td>Prevention of wastage</td>
<td>⇒ Suppression of the private sector and reintroduction of monopoly</td>
</tr>
<tr>
<td>Control of prices of pharmaceuticals and retail in favour of users</td>
<td>⇒ Suppression and possibly ban of private practice altogether</td>
</tr>
<tr>
<td>Potential ban of physicians' practice in both state and private sector</td>
<td>⇒ Potential cuts in hospital budgets</td>
</tr>
<tr>
<td>Allocation of hospital budgets according to the volume of work</td>
<td></td>
</tr>
</tbody>
</table>

As mentioned in appendix 2, in an attempt to improve incentives, a performance-related component was added to the salaries of primary care physicians. The index took into account qualifications and number of patients registered, but not quality and complexity of the services rendered. However, the highest possible payment only marginally improved physicians' total incomes. In addition, few patients exercised a choice of physician or, if they did, chose at random. The deteriorating infrastructure and shortages of basic supplies in the health system lowered staff motivation and limited greatly the potential for professional satisfaction, leading to poorer quality services. Some actors in the reform process, not least health professionals, believed that patient satisfaction was a non-issue in the public sector, ridden by shortages, where ensuring any access was key. It was often assumed that patient choice could only exist in the private sector. Primary care reforms were viewed as a distraction from more important areas.

**Reform of the health care financing system: trends and expectations**

This section will examine developments in health care financing reform and influencing factors.

Government spending on health care declined dramatically in the late 1980s and early 1990s due to various factors in the wider economy associated with transition.
Other factors were the unfavourable health situation of the population and competing government priorities. During the transition, new employment patterns emerged, e.g. growth of the informal and the illegal economy and unemployment led to a shrinking tax-base and decrease in official tax revenue. The fall in living standards was paralleled by a process of alienation of social and family networks which reduced the ability of households to cover basic needs with their own resources.

In Bulgaria, as elsewhere in Central and Eastern Europe, the government response to economic crisis has been mainly to diversify sources of revenues (to include insurance and cost recovery techniques) and to cut recurrent and capital health expenditure. Delays in health sector reform have been justified by the economic crises and the resulting near impossibility of increasing expenditure on health. The conventional view in Bulgaria designates revitalisation of the economy as a pre-requisite for reform of health sector funding. Contrary to expectations, the economic liberalisation programmes did not lead to an immediate improvement in social welfare. Policies mitigating the effects of restructuring had to be employed.

"Improvements in living standards in the rich economies have often been the direct result of social intervention rather than of simple economic growth...The thesis that the rich countries have achieved high levels of basic capabilities simply because they are rich is, to say the least, an oversimplification."

The rapid ageing of the population and a gradually worsening health status since the 1970s increased the burden on the health system. The pharmaceutical trade was liberalised and pharmaceutical prices were adjusted towards world prices. New, expensive medical technologies became available in Bulgaria. Another factor constraining the budget was the lack of capital investment, leaving obsolete infrastructure. Costs increased further due to duplication of public services, overtreatment and high referral rates to specialists, as well as managerial and administrative inefficiencies. As explained earlier, there were also considerable pressures for increases in the remuneration of medical staff. The use of cost sharing raised patients’ expectations in relation to quality of care. There were also pressures for cost savings from donor agencies. As a result, the health care budget was overburdened and the system experienced shortages.

The weaknesses of the tax-based model began to be discussed openly. The tax-based finance model could not raise sufficient revenue and therefore, additional extra-budgetary
resources (user fees, under-the-counter payments) were required to compensate for shortages. The state could not guarantee citizens' rights to health care because of inefficient tax collection and a diminishing tax base. Tax evasion is at its highest among the self-employed, employees of private firms, and those employed in the growing shadow economy. Consequently, most tax has been collected among state employees who generally have a lower income. The tax-based model was also considered inappropriate because of its centralised and unaccountable management.

Another set of issues facing the tax-based model is that the structure and allocation of state spending on health is opaque. It is not clear what proportion of general income tax is dedicated to health and what to other parts of the public sector; or how the budget is allocated between different elements of the health system, with little relationship to health needs and utilisation at local level\textsuperscript{84}. Low accountability is a major reason why compulsory health insurance, with individual contributions earmarked for health care, came to be seen as a desirable alternative.

The discrepancy between reduced budget resources for health care and upward pressure on expenditure, together with the problems associated with the tax-based model, made reform of health care financing extremely important. It became clear that a radical reform, and not simply cosmetic change, was required. Yet reform of funding was not considered a priority before 1997. A Draft Health Insurance Law, envisaging a compulsory social insurance system, was approved by the government, professional organisations, labour unions, a range of political parties, and the foreign consultants to the EU PHARE project\textsuperscript{8}, and submitted to the Parliament in 1993. The Draft Law was briefly debated, but withdrawn in 1995 by the newly-elected socialist government, which intended to prepare it's own proposal. For the government, creation of a health insurance system was not a priority\textsuperscript{h}. Work was commissioned on an alternative proposal.

In the course of 1992-1997, a number of proposals were prepared by different groups. Some were submitted to the Parliamentary Commission. None succeeded in achieving consensus, which was symptomatic of the fragmentation of stakeholders' interests. Developments from 1993-1997 suggest that health financing re-structuring has not been a priority for successive governments. The pressure for change was coming mainly from

\h \textsuperscript{h} "but it is not forgotten", Anon. Team of Experts from the Ministry of Health Care Announced its Intentions. 24 Chasa, March 1995
professional representatives, labour unions, and research institutes. Particularly among physicians, financing reform was considered to be key\textsuperscript{137}. The voluntary organisations of users have remained aside from these discussions. In the view of foreign consultants to the PHARE projects, the reform of health financing was hampered mainly by political obstacles\textsuperscript{84}. At the end of 1997, a Draft Law on Health Insurance was submitted to Parliament, passing through the first reading and, after some delay, enacted in June 1998 by the new democratic government.

Despite economic stabilisation and the generally favourable conditions introduced by the currency board, government experts recognised that implementation of health insurance, without adequate expertise and research, was too ambitious a task. However, some stakeholders pressed for rapid implementation, building administrative capacity and managerial skills in the process. This attitude was largely due to fear of political backlash.

The timetable for implementation was adjusted, insurance contributions will start to be collected in 2000, full operations starting from January 2001. Although some training of staff and strengthening of administrative capacity began in 1998, there have been few preparatory information campaigns or public discussions. The full implications of a compulsory health insurance scheme for Bulgaria have not been systematically evaluated and its suitability, in many cases, taken for granted by the stakeholders, despite the reservations of some experts.

Another issue was the cost of implementation of a national health insurance system and the need for complex administrative arrangements. It is recognised that detailed preparatory work is essential to build equity and efficiency into the system\textsuperscript{15,89,28}. Among the requirements for compulsory insurance are: adjustment of the tax-system, investment in infrastructure, training, information systems, establishing exemption procedures and criteria for estimation of fair insurance premiums in circumstances where underreporting is likely: farmers\textsuperscript{136}, private sector employees etc. The system is unlikely to produce savings in its early years or to be sustainable without the state covering some of the deficits.

Several issues concerning a health insurance system have not been resolved. The National Framework Contract will be reviewed annually by Parliament, determining the basic package and prices. On the basis of this contract, the National Health Insurance
Fund will purchase services from providers. The Contract will also provide general guidelines for payment of health facilities and physicians, but there will be an option for negotiation between purchasers and providers at local level\textsuperscript{139}. There are no safeguards against cost escalation and inclusion of more services, under pressure from physicians’ lobbies.

Insurance contributions will run in parallel with social security and disability insurance and be offset by a decline in existing insurance contributions\textsuperscript{140}. Potentially, this could lead to duplication and an increase in administrative costs. People will also pay additional contributions for dependants, and it has not been made clear whether households where there is only one earner, or there are many dependants, will be able to pay.

Although not always in the framework of a public dialogue, several major issues have dominated the debate in relation to health financing, which will be further outlined.

**Compulsory health insurance is the best solution for Bulgaria**

One of the assumptions commonly made is that a compulsory health insurance system is the only possible method for financing the Bulgarian health care system. No rational assessment of alternatives to the current tax-based model has been undertaken. A PHARE project aimed to accelerate preparation for an insurance system through research and capacity building, but was suspended for several years. Practically no research on sustainability of health insurance or on users' views was commissioned.

A health insurance system has been recommended for Bulgaria on the basis of its implementation in other countries in transition. Almost all CEE countries have sought to obtain additional financial resources through income-related insurance premiums in a universal health insurance system\textsuperscript{72}. Bulgaria was among the last to embark on transforming its tax-based system.

Among other reasons for advocating social insurance was the guarantee of universal coverage, equity, safety nets, services free at the point of use, lack of socially undesirable two-tier treatments and egalitarian principles. In CEE, financing schemes that have received most electoral support have typically been social insurance schemes (Czech Republic) or schemes with a spectrum of entitlements (Poland), in both cases covering the whole population. Public financing remained the preferred way of financing access to basic health care in many OECD countries, despite a more recent emphasis on
voluntary coverage. Until 1945, in Bulgaria there was a strong polarisation of wealth and an established market for private health care, which made the equity principle very important for older people. There was public pressure for social insurance from social groups who felt insecurity most acutely.

Problems with health insurance have not been addressed. The rapid introduction of a health insurance system in the Czech Republic is thought to have been facilitated by the strong traditions in the inter-war period. In Bulgaria, as shown earlier, there was little experience with sickness funds pre-1944. Little attention has been paid to the potential impact on a health insurance system, of a shrinking tax-base, tax evasion and other problems related to the growing informal economy, which have reduced the revenue of the existing tax based system.

Although the Health Insurance Law has been in place since 1998, there is still no agreement on the health services to be covered. Although some authors thought a "basic package" of services likely in Bulgaria, it is increasingly clear that public and health professionals expect an almost comprehensive range of services, obvious exceptions being cosmetic surgery or other optional services.

The implications for employment of a social insurance system are well known among experts, but rarely discussed in the mass media or at public forums. Compulsory insurance based on payrolls is deemed to increase the cost of labour and thus affect adversely the competitiveness of the economy. It may also increase evasion, if only because of the burden it poses on employers and employees, who will share the expenses:

"Countries such as Bulgaria and Poland, for which payroll taxation without health insurance already tops 50% of net wages, need to seriously evaluate the benefits of further payroll tax increases to fund health services."

Recently, it was decided to deduct health insurance premiums from the overall social insurance tax, but this is difficult to implement and the share of social insurance tax remains relatively high.

The delays in enactment of the Health Insurance Law and its subsequent implementation reflect changing attitudes among stakeholders, from enthusiasm to caution. However, according to some Bulgaria experts, it is still widely believed that the problems of the health care system stem largely from its tax-based financing, and thus introduction of a health insurance system will solve most of them. In the view of these authors, the
existing model offers scope for financial and managerial transformations and adjustment to the new economic environment. Davidov (a Bulgarian expert on health financing) provides a clear analysis of the myths surrounding health insurance, and examines the pros and cons of its implementation in Bulgaria (Table 4.3).

Table 4.3. Health insurance system (HIS) in Bulgaria: myths and arguments

*Source: Davidov B. Bulgarian health insurance system: some pros and cons. Social Medicine 1996; 3: 38-41*

<table>
<thead>
<tr>
<th>MYTHS RELATED TO HIS</th>
<th>COUNTER-ARGUMENTS</th>
</tr>
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<tbody>
<tr>
<td>It will increase substantially the existing resources for health care</td>
<td>⇒ May lead to tax evasion, fall in incomes, increase in consumer prices</td>
</tr>
<tr>
<td>It will increase sharply the salaries of medical staff</td>
<td>⇒ Salaries (also under HIS) are determined through political process</td>
</tr>
<tr>
<td>It will entail payment of the physicians work according to volume and quality</td>
<td>⇒ Difficult to implement in practice</td>
</tr>
<tr>
<td>The improved incomes of staff will lead to disappearance of informal payments</td>
<td>⇒ Despite higher income, it is likely to stay to a certain extent</td>
</tr>
<tr>
<td>More types of health services will be free</td>
<td>⇒ Provision of a package of services is publicly agreed; higher contributions will pay for more comprehensive package</td>
</tr>
<tr>
<td>Health facilities will have much more resources</td>
<td>⇒ Health facilities will receive resources according to the volume of services provided</td>
</tr>
<tr>
<td>It involves innovative forms of health system organisation (e.g. capitation)</td>
<td>⇒ Certain organisational practices can exist under tax-based model or HIS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROS OF HIS</th>
<th>CONS OF HIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>It will increase the information available and responsibility of the individual</td>
<td>Large volume of information: volume of money and health activities for each insured (apr. 8.5 million)</td>
</tr>
<tr>
<td>Involves an objective procedure for allocation of funds to health facilities related to the work performed</td>
<td>Radical restructuring of large part of existing documents and its handling</td>
</tr>
<tr>
<td>Physicians' work will be controlled</td>
<td>Even if the system is perfect, more time loss for users (paperwork etc.)</td>
</tr>
<tr>
<td>The health care budget will be determined according to objective criteria</td>
<td>More administrative staff in health care and higher administrative costs</td>
</tr>
<tr>
<td>There will be control of the patient's flows</td>
<td></td>
</tr>
<tr>
<td>The state participation will be reduced and community participation increased</td>
<td></td>
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</table>

In this analysis, the problems associated with the introduction of health insurance are mainly related to its cost (high burden on income, increase in consumer prices, cost of
administration etc.), but low effect (similar overall resources for health; low impact on physicians' remuneration etc.). Lessons from Hungary, Czech Republic and Slovakia who experience cost explosions, have not been publicized.\textsuperscript{135}

As argued elsewhere,\textsuperscript{135} payroll-based contributions in CEE have supplemented, rather than replaced, central government budgets. In Hungary, Croatia, and the Czech Republic, the share of general tax revenue is expanding in order to sustain the system and reduce the cost of labour. The intended effects, also feasible under the existing model (increased health care resources, new mechanisms for staff payment, organisational change), are compatible with the current system and can be implemented more efficiently under it.\textsuperscript{141} Another issue is that many necessary reform steps have yet to be taken, awaiting full implementation of the health insurance system, which, in reality, they could have facilitated. In contrast to the lack of attention to the drawbacks of social insurance, the benefits (transparency, contributions explicitly linked to entitlement, more information for users) have received considerable attention.

**Share of GDP for health should be increased**

A growing concern in the media is the steadily diminishing share of GDP spent on health care in the face of pressure from other sectors such as heavy industry, energy and defence. This figure has become highly visible and politicised. Real health care expenditure in Bulgaria declined between 1990-1993, but was partially restored after 1994 in line with general economic recovery. Maintaining expenditure on health care was seen as evidence of state commitment to a public system, although the health system was systematically underfunded in the final years of the Semashko system. Increasing the share of GDP spent on health became an objective in its own right. What was rarely recognised was that transfer of additional resources would not solve the long-term problems of the health system.

A comparative World Bank study found pressures to increase expenditure on health care before full economic recovery in all CEE countries. This may have been a result of public expectations of maintaining universal access and comprehensive coverage, while at the same time achieving Western-style standards of care, despite the income gap with the West.\textsuperscript{135}
Payment of physicians

A related issue that was a focus of public debate was payment of physicians. In the previously mentioned public opinion survey, respondents were asked also to state what they considered to be fair income for a range of professions. Physicians came third, after members of the cabinet and MPs. The Bulgarian Physicians' Union and other professional bodies pressed for an increase in remuneration and a change in the payment system, preferring fee-for-service or capitation rather than salaries. It has been argued that there is a need to introduce temporary arrangements for payments to staff to reflect workload differentials, prior to the establishment of an insurance system. Health professionals could be thus stimulated to improve their performance and participate more actively in the reforms. Changes in payment methods coupled with free choice of physician were thought to improve incentives. There was relatively little debate, however, on alternative performance-related payment, such as the points system in the Czech Republic, and physicians' bonuses in Poland. Drawbacks, such as incentives for overtreatment and cost-escalation, or the need for payment ceilings, reducing the list of procedures covered or introduction of co-payments, have not been discussed.

Research on assessment of workload has been commissioned by the Ministry of Health to serve as a basis for indexation of physicians' salaries. The system was implemented in 1995, but did not improve incomes significantly. Professional organisations' focus on incentive structures has been viewed negatively by other stakeholders as "commercialisation" of the profession.

User fees

Issues surrounding user fees were also discussed. In the absence of a legal basis, alternative financing sources, such as semi-official user-fees, started appearing in 1994 in separate health establishments, at different times and, often, were not announced in advance. In 1996-7 semi-official user-fees ("donations") for a large range of items existed at all levels but were not officially acknowledged before 1997. This step-wise implementation made it difficult to create an agenda for public discussion.

Parallel existence of private practice

A related issue, the cause of heated discussions in 1995-1996, was the parallel existence of private practice. The Ministry of Health opposed this and made proposals for
separating the sectors. According to some views\textsuperscript{43}, parallel public and private practice is an "intermediary form" which does not stimulate competition and creates disincentives, although it can bring money to the public establishments (when a private physician pays rent to a state facility) and reduces the financial risk for private practitioners. Given the limited private sector in outpatient care and virtual lack of insurance, these plans involved great risks for physicians who chose to leave the public sector. It was equivalent to a curtailment of the private sector and made the then government extremely unpopular. Similarly, attempts at regulation of "after-hours practice" and other forms of physicians' practice were perceived as threatening to clinical autonomy.

**Major weaknesses and obstacles to health care reform: a summary**

Bulgarian health care reforms faced many obstacles, but the basic reform strategies also contained many weaknesses.

Politically, promises of health care reforms often were seen as critical to the electoral success of governments. However, most governments were short-lived and few had the required widespread political support and leadership needed to begin high-risk radical reform. Only two governments engaged in health sector reform in the period 1989-1998 (the Socialist Party in 1994-5 and the Democratic Party in 1997) and promoted more visible reform initiatives. The 1994-95 reforms in primary care failed because of opposition from the majority of stakeholders. Another obstacle was populism and politicisation of the health reform debate. For example, despite user fees already being familiar, the government avoided addressing the uncomfortable facts.

A number of economic factors hampered the pace and scope of the health reforms. Among those were the severe economic recession, insufficient investment in reform and limited international aid for health care in the early 1990s.

The reforms were also weakened by unclear aims and a lack of continuity between interchanging sets of objectives. Public or professional consensus had not been achieved prior to 1997. Legislation was inadequate. Conditions for investment in the private sector were adverse. The slow pace and lack of focus amidst deteriorating conditions in the health system led to disillusionment among stakeholders.

There is an implicit understanding that a universal health insurance system is the way forward in the long-term. This is based not on research, but on the views of health professionals, drawing on examples from other CEE countries. There has been little
information for public health professionals on the requirements for an insurance system. The same was true for co-payments, which have been introduced gradually, without public debate. Stakeholders often sought to discuss more understandable issues such as the share of health expenditure in the budget. There has been an implicit understanding that there is a trade-off between improved efficiency and maintenance of equity. Equity has been seen as a state responsibility, efficiency associated mostly with the private sector.

In summary, among the important achievements of the health system reform in the 1990s are: 1) universal access to public health care formally preserved, most services free at the point of use; 2) a legalised private sector; 3) re-establishment of professional bodies; 4) devolution to municipalities of significant responsibilities for financing and provision of health care; 5) weakening of ownership, control and planning by central government; 6) geographical access to health care largely maintained; 7) speeding up of reforms after 1997, in particular implementation of a health insurance system.

There are, however, some inherited or newly emerging negative characteristics ('failings'133) of the health care system: 1) financial collapse of the system and dependence on foreign aid and emergency measures; 2) increased role of semi-official cost-sharing and informal payments; 3) increased inequity of access and treatment; 4) inefficiency caused by continuing orientation towards curative services; and overutilisation of hospital sector133; 5) poor quality of health services; 6) low formal remuneration of staff and low motivation leading to a 'dehumanised' relationship between physicians and patients133; 7) low impact of primary care and prevention; 8) bureaucratic management and inflexible planning; 9) low accountability and unresponsiveness to users133; 10) little collaboration between institutions.

**Future challenges for health care reform**

At the end of the 1990s, almost a decade after the democratic transition, policy-makers in Bulgaria face a number of challenges, some of which will be discussed briefly.

One of the most important challenges is achievement of a transparent reform strategy and agreed objectives. While broad policy documents and legislation exist, detailed administrative guidelines are needed to support implementation. Regular monitoring is needed because of the rapidly changing economic circumstances. It is essential that the
reform direction is compatible with societal values, the national context, and traditions'. Given the increasing differences among CEE countries, reform strategies have to be country-specific or, at least, a cautious evaluation of imported reform options is required.

Another challenge for the current government will be its ability to involve more actors in policy-making process. While the Bulgarian Physicians' Union has been a major stakeholder in the health reform process, other interest groups, NGOs and patients' representations have yet to participate. This would ensure a balance of interests and empower all parties to take part in reshaping health reform, with realistic expectations.

The success of health care reform depends not only on the political climate, but also on good policy design and administrative skills. Preparatory work before implementation of the new financing system, such as information campaigns and capacity building, is important. It is difficult, expensive and unpopular to reverse a health finance system already in place. Experience from other countries in transition shows that success of radical reform depends very much on the preceding public discourse. Introduction of a health insurance system characterised by complicated rules and exemptions, in the absence of adequate debate, could limit understanding of the reform process and undermine user compliance. There is a distinct lack of information campaigns and open discussion among stakeholders. The media could be used more effectively both to publicise reform activities and as a forum for public debate. Some investment in information technology, trained staff and administrative infrastructure required for the health insurance system has already started, but in the view of some stakeholders, the complexity of the arrangements has been underestimated.

Another challenge is to recognise the reform priorities and related implementation difficulties. The democratic government elected in 1997 and donors, such as the PHARE program, have focused on finance-side restructuring, specifically on the introduction of compulsory insurance as a key aspect of reform. The health insurance system is expected to supply extra-budgetary resources, be sustainable, provide accountability and transparency, improve quality of care and ensure broad coverage. During the process of economic recovery, the system is deemed able to provide equitable access to a core "basket of services". Complex issues, which have not been adequately addressed, include cost-control and sustainability of the system, definition of a basic package of services and ensuring compliance, given the large underground economy. Budgetary
funds might be needed to cover any financial deficit caused by high exemption rates and inadequately costed premiums; or to pay premiums for low-income groups or other disadvantaged groups. The professional organisations are given an important role in negotiating volumes and quality of health services, which might escalate costs. It is likely that the health insurance system will solve some existing problems and cause others, but there has been no public discussion of these issues, so creating unrealistic expectations. The Law for Health Insurance does not answer these questions and the implementation that began in 1999 is likely to face serious challenges.

The Ministry of Health and its institutes have failed to promote discussion on a number of issues, considered uncomfortable until now. Despite the presence in recent years of under-the-counter payments and user fees, there is neither coherent policy nor public debate on these issues.

Implementation of reform is also contingent on new legislation. As shown in this chapter, legislation has too often lagged behind action, handicapped by political obstacles.

Policy-makers face another challenge, namely that independent research should underpin patterns of further health reform in Bulgaria. Knowledge of important aspects of reform has, until recently, been scarce and anecdotal. With decentralisation since 1992, the reform has suffered a shortage of trained managerial and administrative staff, clearly some investment in this direction is required.

Willingness of the central government to recognise these challenges, and to formulate respective policies, will be critical for the success of health system reform in Bulgaria.

**Conclusion: implications for a health financing system**

This analysis demonstrates that, prior to 1997, reform in Bulgaria was slow and inconsistent. Failure to enact essential legislation before this time was a product of political adversity and lack of dialogue between stakeholders. It has also been shown, in appendix 2 and here, that reforms have been blocked mainly by failed political consensus, resistance to change and lack of open debate rather than poorly designed policies. Other factors include pressure for universal coverage combined with high expectation for improved quality of care.

An important lesson from the experience of health care reforms in Bulgaria is that public co-operation is essential to ensure the success of reform. Many reform initiatives (e.g.
choice of primary care physician) failed to achieve their objectives because many users simply showed no interest. The expansion of informal payments in an atmosphere of deteriorating quality of care and low morale indicates patients’ preference to bypass inefficient official channels (chapter 7).

Currently, compulsory health insurance seems the only politically feasible option for health financing. The expectations of public and professionals are for the reinstatement of universal access, and provision of a comprehensive package of high-quality services in exchange for payment of monthly insurance contributions. Clearly, this expectation is unrealistic. Some cuts seem likely in the benefits package covered by insurance as is the use of co-payments, at least in the short-run. Public debate on these issues prior to 1999 has been almost non-existent.

Since the accession to office of the Union of Democratic Forces government in 1997, fundamental legislation has been passed, reform strategies clarified, and the health care reforms gathered speed. Although agreement has been reached on the broad principles of reform, and the government enjoys support from the large majority of the population, it is notable that the policy-making process continues to fail to take account of public views and attitudes. In contrast with physicians' organisations, NGOs and other users groups have had much less impact on reform. It has been anticipated that forthcoming implementation of compulsory health insurance will challenge the existing infrastructure, administrative capacity and skills. However, there is much less recognition of the need to garner public support.

Currently, there is little systematic research into patients' needs and perspectives, such as levels of health, health seeking behaviour, patterns of utilisation, formal and informal health care expenditure, and willingness to pay. In the next chapters (5 to 11) some of these issues will be explored in the light of data collected in the present study, supplemented, where appropriate, by relevant secondary sources.
CHAPTER 5. PATTERNS OF HEALTH AND ILLNESS BEHAVIOUR IN BULGARIA

HEALTH AND DISEASE

Introduction

Data on the state of health and inequalities of health are important in the context of health financing reform in Bulgaria for several reasons. Firstly, provision of health care should reflect the pattern of health needs in the population and the demand for health services. The need and demand for health care will also indicate the requirements to be met by a health financing system and the scale of government and private expenditure. Secondly, inequalities in health are almost universal and often there is a mismatch between the health needs and access to care, those in most need receiving least. The design of the system can either increase or decrease the mismatch. Thirdly, if those with poor health are likely also to have low income and be less able to contribute financially, such an analysis will give an indication of the possible strategies, such as exemptions, that are needed.

This chapter will explore levels of self-perceived health, long standing illness, and reported illness episodes in Bulgaria, in relation to a range of socio-economic variables. The data are derived from the household survey described in chapter 3.

Self-reported health

Introduction

This section will focus on the levels of general health in Bulgaria, based on the current survey, international comparisons will be provided when possible.

'Self-reported health' is used as a basic measure of general health for the population. There is no single, all embracing measure of overall health. However, self-reported health has been used widely as a method for general health assessment in several different contexts. Self-reported health has been justified within a broader definition of health not only as a physiological state, but also as a social construct.
"Self-reported health reflects the person's integrated perception of health, including biological, psychological and social dimensions, not possible to be measured externally. On the contrary, self-reported chronic diseases and impairments reflect mainly medical dimensions of health, which could be also verified. Therefore, subjective assessments of global health could be even more sensitive in health monitoring than external measures of health."\textsuperscript{146}

Subjectively reported health measures typically show larger socio-economic gradients than objective measures of health\textsuperscript{123}.

Collection of data on self-reported health is relatively simple and inexpensive, and can provide comparable data over time periods and across countries. Self-reported health is used extensively in comparative studies of health and its socio-economic determinants in developed countries\textsuperscript{147, 148}, although response scales are not always standardised across countries, thus limiting comparability.

Self-reported health status is a 'subjective' assessment and may differ from externally measured health status. However, because of differences in clinical judgement and the meaning attributed to different symptoms such measures also can be problematic. Self-reported health status is, however, a decisive factor for seeking health care. Thus, self-reported health status may be better suited to measure burden of disease\textsuperscript{149}. Self-reported health measures have been widely used to predict expenditure while controlling for demographic factors\textsuperscript{150}, or to assess utilisation costs\textsuperscript{151}.

Self-reported health has been found to predict health service utilisation in selected settings. In a study from Finland, self-reported health was found to be a strong predictor of utilisation among working age population\textsuperscript{146}.

Importantly, poor or fair self-reported health is predictive of mortality when standardised for socio-demographic variables\textsuperscript{152, 153}. Self-reported health, standardised by age, sex and social status, has been shown to be a stronger predictor of mortality in middle-aged populations than self-reported chronic illness\textsuperscript{146}.

For these reasons, self-reported health is increasingly recommended as a global indicator of health status in clinical practice\textsuperscript{154} and for comparison of levels of health among specific population groups\textsuperscript{155, 156}. Self-reported health has also been found to be predictive of functional ability over 1 to 6 years\textsuperscript{153} and of cognitive abilities among the elderly\textsuperscript{157}.

The validity and reliability of self-reported health have been examined extensively. A study from Finland found that self-reported health remained relatively stable over a one
year period, when about 60% of the respondents assessed their self-reported health using the same response category, or selected an adjoining category\textsuperscript{146}. Self-reported health was also found to be a valid predictor of the number of physician contacts. Another study found that reports of self-reported health correlated closely with judgements based on medical records\textsuperscript{158}.

Conversely, it has often been argued that the concept of 'good health' is determined by ethnic stereotypes\textsuperscript{159}, culture, traditions or psychological factors such as interpretation of symptoms etc. What is meant by good health may differ across social groups or sub-cultures\textsuperscript{160}, or according to age and experience\textsuperscript{123}. Ethnic groups living in the same settings may have very different patterns of reporting general health\textsuperscript{161} 162. In Sweden, certain foreign-born groups were significantly more likely to report limiting long-term illness, controlling for socio-economic and lifestyle variables\textsuperscript{162}. Thus, caution is required in making international comparisons.

**Levels of self-reported health in Bulgaria**

In the current survey, 24% of men and 28% of women described their overall health status in the past year (1996-97) as less than 'good/rather good' ('good/rather good' being the two best states of health on the scale). About a third of the respondents reported either 'good' or 'rather good' health status, the proportion among men being slightly higher (76% of men and 72% of women).

**Previous data from Bulgaria**

The only recent comparable data from Bulgaria are from a national representative survey conducted in 1996 (sample size n=1,180)\textsuperscript{163}. The questions on health status in both surveys are equivalent, although the response categories are slightly different (Table 5.1). Textual differences, overrepresentation of the 26-40 age group and underrepresentation of those over 50, may have contributed to higher reporting of better health status, compared to the current survey.
Table 5.1. Self-reported ('subjective') health status: data comparison

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>How would you describe your health status over the past 12 months on the whole?</td>
<td>How would you assess your health in general?</td>
<td>Scale</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Very good / Good</td>
</tr>
<tr>
<td>Scale</td>
<td>%</td>
<td>Satisfactory</td>
<td>30%</td>
</tr>
<tr>
<td>Good</td>
<td>47%</td>
<td>Bad / Very bad</td>
<td>15%</td>
</tr>
<tr>
<td>Rather good</td>
<td>27%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rather bad / Bad</td>
<td>26%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Placing Bulgaria in an international context

In the present survey, the 'good' and 'rather good' categories were combined in order to estimate the share of those with 'less than good health' (74%). Although it is necessary to be cautious in view of the possibility of different interpretations of responses in different languages and difference in response scales, at 26%, the prevalence of less than good self-reported health in Bulgaria appears comparable to that reported for Sweden in the 1990s (23%), Hungary (21%), and lower than Iceland (32%), and the Czech Republic (39%)\(^{164}\).

A comparison of industrialised countries found that several northern European countries had lower prevalence (about 20%) of reporting 'less than good' general health, while Finland, Canada, UK, and US had prevalence ranging between 32% and 40%\(^{160}\). A 1988 survey across all EU countries found that 65% reported good/very good general health (74% respectively for Bulgaria in current survey). However, there are significant fluctuations in self-perceived health across Europe (the percentage reporting health as very good/good was lowest in Portugal - 44%, and highest in Denmark and Ireland)\(^{48}\).

The Health Survey for England (1996) provides cross-sectional population data on self-reported health status\(^{165}\) (Table 5.2). As in the Bulgarian survey, it did not cover individuals living in an institution, many of whom are disabled. Despite the slightly different response categories, it is clear that more people in the UK sample assess their own health positively (any of the positive categories). 76% assessed their health as 'very good' or 'good', which is about the same as in the Bulgarian data if the 'good' and 'rather good' categories are combined (74%). Similarly, 71% of respondents in the UK Health and Lifestyle Survey (1984-5), defined their health as at least good\(^{123}\). 26% of the Bulgarian sample assess their health as rather bad or bad, compared to only 5% of the Health Survey for England sample, who stated that their health was 'bad' or 'very bad'.

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These differences could be a result of the lack of intermediate response category such as 'fair' in the current survey and inclusion of the 16-18 age group in the UK sample. In both surveys, men reported slightly better general health than women (Bulgaria: 'good/rather good' health: 76% of men and 72% of women; UK: 'very good/good': 77% of men and 76% of women).

Table 5.2. Measures of general health in the Health Survey For England 1996 and current survey in Bulgaria

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale</td>
<td>% (18+)</td>
</tr>
<tr>
<td>BUL: How would you describe your health status over the past 12 months on the whole? HSE: How is your health in general?</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>47%</td>
</tr>
<tr>
<td>Rather good</td>
<td>27%</td>
</tr>
<tr>
<td>Rather bad / Bad</td>
<td>26%</td>
</tr>
</tbody>
</table>

BUL/HSE: Do you have any long-standing (chronic) illness, disability, or infirmity? By long standing I mean anything that has troubled you over a period of time or that is likely to affect you over a period of time?

| Yes | 51% | Yes | 43% |

BUL: Does this illness or disability (illnesses of disabilities) bother you in any way in your day-to-day life? (Limiting long-standing illness)

HSE: Does this illness or disability limit your activities in any way?

| Yes | 42% | Yes | 26% |

BUL: When was the last time that you have experienced illness? (recent illness)

HSE: During those two weeks (ending yesterday) did you have to cut down on any of the things you usually do...because of illness or injury? (acute illness)

| Last 4 weeks | 26% | Last 2 weeks | 17% |

According to the WHO Health for All database\textsuperscript{166}, 62% of those over 15 (68% of men and 56% of women) in a representative health interview survey in Bulgaria (1996) assessed their own health as 'good or very good' (74% respectively for Bulgaria: current survey). This is the highest value of those data available for countries of Central and Eastern Europe and comparable to Western European levels. In the Czech Republic this figure was 46% (1996), in Russia – 21% (1996) (31% in 1996\textsuperscript{167}), 55% in Romania (1994) and in Poland (1990) (60% 'very good' in 1994\textsuperscript{168}). Comparison of these data with the current survey is difficult because the full response scale is not known. Also, the current survey covers only people above 18, if the 15-18 age-group (3.8% of population in 1996) is taken into account, the share of those reporting very good or good health is likely to grow.
Inequalities in self-reported health in Bulgaria

The second step in analysing health care needs and demand is to understand how levels of health vary within the population.

The distribution of those reporting less than good health by various socio-economic variables is similar for men and women (Figure 5.1). There is an almost linear relationship between reporting ‘poor’/ ‘very poor’ health and age. There is also a strong relationship with income. In the lowest income quartile, the proportion of those reporting ‘poor’ or ‘very poor’ health is 2.5 to 3 times higher than the highest income quartile. A similar association is apparent for ‘poor’/‘very poor’ self-reported health and subjectively-assessed financial situation, but for women there is a larger differential between reporting health in the lower and higher levels of the scale. Three times more respondents who completed only primary education reported less than good health compared to the other educational levels, but the increment between secondary and higher education is small. Married men and divorced or separated women reported worse health status than others.

Analysis was done by means of logistic regression. It is necessary to adjust for age when examining other variables, because of the very strong association between self-reported health and age. For both men and women, self-reported health status was significantly associated with age (Table 5.3). The odds of reporting poor health increased progressively with age. Men above 70 were 15 times and women above 70, 16 times more likely to report ill health than those below 40. There is an apparent trend with income, but this did not reach statistical significance, however, financial hardship is strongly predictive of self-reported health, especially among women. Those describing their financial situation as very poor being 11 times more likely to report less than good health (for men the odds ratio is significant, but much lower at 2.91). Education was a significant predictor of self-reported health in the age-adjusted model among men and women, those with primary education being more than twice more likely to report poor health. Women living in rural areas had significantly higher odds of reporting poor health.
Figure 5.1. Percentage reported poor/rather poor health

- **Age**
  - <39: 0%
  - 40-49: 10%
  - 50-59: 20%
  - 60-69: 30%
  - >70: 40%

- **Income quartile**
  - Highest: 50%
  - 2: 40%
  - 3: 30%
  - 4: 20%

- **Education**
  - Higher: 10%
  - Secondary: 20%
  - Primary: 30%

- **Financial situation**
  - Very good: 0%
  - Good: 10%
  - Neither good nor bad: 20%
  - Rather poor: 30%
  - Very poor: 40%

- **Marital status**
  - Married: 30%
  - Single: 10%
  - Divorced/separated: 20%

- Men ■
- Women □
Table 5.3. Predictor of poor/ very poor self-reported health

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>% (n) reported poor health status</th>
<th>Odds ratio (95% CI) (Age-adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>7.6% (18)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>14.5% (18)</td>
<td><strong>2.08 (1.04-4.15)</strong></td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>22.4% (22)</td>
<td><strong>3.54 (1.80-6.95)</strong></td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>43.7% (45)</td>
<td><strong>9.48 (5.11-17.60)</strong></td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>55.7% (54)</td>
<td><strong>15.35 (8.21-28.69)</strong></td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (&gt;160,000)</td>
<td>11.9% (19)</td>
<td>1.00</td>
</tr>
<tr>
<td>(Leva)</td>
<td>II (100,000-160,000)</td>
<td>20.6% (27)</td>
<td>1.43 (0.73-2.80)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>29.4% (47)</td>
<td>1.40 (0.73-2.68)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>36.9% (59)</td>
<td>1.86 (0.97-3.58)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>13.6% (12)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>14.6% (48)</td>
<td>1.25 (0.61-2.56)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>40.0% (98)</td>
<td><strong>2.19 (1.08-4.48)</strong></td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>14.5% (8)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>14.6% (27)</td>
<td>0.93 (0.37-2.34)</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>20.2% (43)</td>
<td>1.09 (0.45-2.65)</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>39.0% (76)</td>
<td><strong>2.91 (1.22-6.95)</strong></td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>26.5% (129)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>10.2% (11)</td>
<td>1.20 (0.50-2.88)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>27.7% (18)</td>
<td>0.70 (0.37-1.34)</td>
</tr>
<tr>
<td>Settlement</td>
<td>City</td>
<td>19.6% (53)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>27.0% (105)</td>
<td>1.00 (0.65-1.52)</td>
</tr>
<tr>
<td><strong>WOMEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>8.5% (25)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>17.4% (27)</td>
<td><strong>2.27 (1.27-4.07)</strong></td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>29.9% (46)</td>
<td><strong>4.58 (2.68-7.83)</strong></td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>45.3% (62)</td>
<td><strong>8.89 (5.23-15.11)</strong></td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>60% (87)</td>
<td><strong>16.14 (9.52-27.35)</strong></td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (&gt;160,000)</td>
<td>16.5% (30)</td>
<td>1.00</td>
</tr>
<tr>
<td>(Leva)</td>
<td>II (100,000-160,000)</td>
<td>15.6% (26)</td>
<td>0.71 (0.39-1.30)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>28.8% (60)</td>
<td>1.22 (0.71-2.10)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>42.6% (112)</td>
<td>1.50 (0.88-2.55)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>12.7% (22)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>16.7% (58)</td>
<td>1.39 (0.80-2.42)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>46% (168)</td>
<td><strong>2.84 (1.65-4.88)</strong></td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>5.2% (3)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>18.3% (46)</td>
<td><strong>4.17 (1.21-14.40)</strong></td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>29.1% (90)</td>
<td><strong>5.45 (1.61-18.49)</strong></td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>42% (103)</td>
<td><strong>10.96 (3.22-37.23)</strong></td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>25.3% (145)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>8.2% (8)</td>
<td>0.69 (0.30-1.58)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>44.2% (95)</td>
<td>1.06 (0.72-1.56)</td>
</tr>
<tr>
<td>Settlement</td>
<td>City</td>
<td>21.1% (81)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>33.2% (167)</td>
<td>1.37 (0.97-1.92)</td>
</tr>
</tbody>
</table>

Note: significant values will be indicated in bold throughout the thesis
Previous data from Bulgaria

The general determinants of self-reported health are consistent with other work in Bulgaria. The earlier Bulgarian survey from 1996 examined a slightly different measure, self-assessed health outlook (categorised as “optimistic” or “pessimistic”). This was associated with sex, age, education and place of settlement. Men, those with higher education, younger (under 50), working, and living in the cities, tended to report a better health outlook than the others. Smokers reported a more positive outlook but this could be explained by confounding other measures. Lower-educated, the unemployed, and pensioners were more likely to be ‘pessimistic’ about their health. There was some relationship between health outlook and income, but it was less direct. Although the question was slightly different, these findings are generally in line with the current survey. However, it also raises the issue of psychosocial conditions, which were not examined in the present survey. Personal insecurity, social exclusion and socio-economic distress lead to low self-confidence and self-esteem, with implications for self-reported health.

Inequalities in self-assessed general health in Bulgaria were found in a representative survey from 1985\textsuperscript{169}, although those data were recorded by medical staff. Although those data were not adjusted for age, there is an apparent association of self-reported health with education, income and occupation. Better educated and wealthy respondents reporting better health than others. Other commentators on those results noted that the correlations of health status with income and education are complex, and hold only for the lowest social categories\textsuperscript{170}.

Placing Bulgaria in an international context

Most research has found differences in self-reported health between different socio-economic groups, although both the nature and scale of the relationship varies. In the present survey in Bulgaria, self-reported health is significantly associated with age, self-assessed financial situation and educational attainment, differentials being much steeper among women. As in the current study, evidence from many countries shows that women report worse general health than men\textsuperscript{166}. A comparative study of the United States, Jamaica, Malaysia, and Bangladesh shows inequalities in self-reported health between men and women in all age groups, persisting when adjusted for socio-demographic status\textsuperscript{171}. There are some
important exceptions. A study from the Czech Republic compares the self-reported health of a sample of wives and husbands living together. Although the post-communist transition placed relatively greater strain on women (higher unemployment, lower earnings, more domestic tasks etc.), no significant difference between genders was observed in terms of self-reported health. This may be a result of matching of men and women, but it is likely that the gender inequality in the Czech Republic is still lower than in the US, where a similar study was carried out. Similarly, the prevalence of poor self-rated health was higher among women in a Russian study, but not when fully adjusted for other covariates.

The Bulgarian data suggest a significant relationship between self-reported health and education. Similarly, a comparative study of a range of industrialised countries shows that reporting of 'less than good' general health is more common among those with lower education, taken as an indicator of socio-economic status, in all countries included. Variations in self-reported health, and a range of other health problems according to socio-economic status, have been found to be larger in the US, Italy, and Canada, particularly among men, and smaller in the UK, Norway, and Sweden. Elsewhere, having low education was associated with worse health, often exacerbated in old age. Higher education was positively associated with self-reported health, but other mediating variables were household income, parents' education, smoking behaviour, and social relations. An American study of people over 50 found that the probability of reporting less than good health was associated with education, morbidity, and health care utilisation.

Mackenbach et al. report that in most countries in their study (Norway, Netherlands, Sweden, Italy, France, UK, Denmark and Finland), those with lower secondary or less education had odds ratio of almost two or higher for reporting less-than-good general health. In Bulgaria the odds ratios for men reporting ill health were 2.19 for men and 2.84 for women with only primary education compared to those with higher education. Differences in the education scale and problems of definition make comparison problematic, but essentially, the trend was confirmed that those at the bottom of the educational scale report significantly worse health than others.

The current study found no impact of marital status on the probability of reporting poor health. Marital status has been found to have an impact on self-reported health in Russia, with the widowed more likely to report poor general health. Lone mothers have
reported worse health status than those parents living as couples, adjusted for socio-economic status.\textsuperscript{177} This study also confirms the finding that self-reported health is associated with income, broadly understood as command over financial resources. Thus, Doorslaer at al. demonstrated inequalities in self-reported health in relation to income in nine developed countries, the lowest income groups consistently most likely to report poor health. Income related inequalities were lowest in Sweden and East Germany and highest in the United States and Britain, although the differences were not statistically significant.\textsuperscript{21} Similarly, a study from the two parts of formerly divided Germany reports significant differences in the social pattern of self-reported health. Inequalities in self-reported health were much greater in the western part, where the poorest income groups were about twice as likely to report 'less than good' health status than those in high income groups. In the eastern part, the difference was not significant.\textsuperscript{178} A similar study, but only in the western part of Germany, found that respondents below the poverty line reported significantly more poor self-assessed health than those in the high income groups, the association being stronger among men.\textsuperscript{178} In contrast to the above, a review of self-reported health in the LSMS and other World Bank-supported studies\textsuperscript{149}, showed that, paradoxically, in most low income countries covered, the richest population quintile report worse health than the poorest, despite being likely to score better on objective measures. The most favoured explanation is that the poor have lower expectations. In this context, Bulgaria falls in the same category as developed countries. The importance of education and financial situation (indicating living standards) in explaining self-reported health in Bulgaria is also confirmed in the Health Survey for England (1996). There, age-adjusted self-reported general health is strongly predicted by Social Class\textsuperscript{i} of the head of household, with 87% of men and of women in Social Class I reporting 'good' or 'very good' health, compared to 67% of men and 65% of women in Class V.\textsuperscript{165} The odds of people in Social Class V reporting less than good health were 3.33 times those in Social Class I. As in the Bulgarian survey, there is a negative association between self-reported health and age.

\textsuperscript{i} Social class is commonly used as a summary measure of standard of living and command over resources. It is based on occupation (or previous occupation) or on husband's occupation in the case of married women.
In the UK Health and Lifestyle Survey, respondents with lower income were more likely to report fair or poor health at all ages\textsuperscript{123}. For example, 36% of men in social class V reported less than good health, compared with 12% of men in class I. Among men aged 40-59, those in social classes I/II were 1.73 times as likely to be in good overall health as men in classes IV/V.

Analysis of the British General Household Survey for 1991-2, found that occupational class is the strongest predictor of ill-health for men and long-term illness for women, even for those retired and regardless of current employment status\textsuperscript{179}.

Although self-rated financial status is the strongest socio-economic determinant of self-reported health in Bulgaria, as in other economies in transition, monetary income alone proves to be a poor measure. Thus, in the Czech Republic, apart from individual income, economic hardship, occupation status, some psycho-social factors, consumption and lifestyle were also found to be significantly associated with self-reported health\textsuperscript{181}. In Russia, a recent national cross-sectional study reports that material deprivation, education, control over life and a lack of informal support networks were strongly associated with poor, or worse than average, self-rated health\textsuperscript{167}. Similarly, a US study shows that those living in states with lowest levels of social capital are significantly more likely to report "fair" or "poor" health\textsuperscript{180}. In agreement with these findings, in the Bulgarian study, the odds of women with poor financial status (subjective measure including access to informal resources) having poor health were much higher. Some explanations for these inequalities in self-reported health will be suggested in the discussion, later in this chapter.

**Validity**

Self-reported health status is used extensively throughout the analysis as an independent variable and therefore it is important to ensure its validity. The main question (‘How would you describe your overall health status over the past 12 months?’) was located at the start of the section on health status (Section B: B1). A control question was placed in the introductory description of household characteristics (A2-71, ‘household roster’). When reaching the main question during the interview, the interviewers were instructed to go back and check whether the response was consistent with the control question, and if not, to establish the ‘real answer’. In 4% of cases (n=61), there was discrepancy in
responses to the two questions, but only 1% (n=18), gave answers at the opposite extremes of the scale. More importantly, in each response category the discrepancy is only less than 1%. The second question on self-reported health status was taken as the "true result" due to the fact that it is more distinctive within the questionnaire, more time was spent on it and less automatic responses could be expected.

**Summary**

In summary, self-reported health is strongly influenced by age, financial hardship and education. Financial hardship has been used as a proxy measure for income due to the large informal economy, reliance on non-monetary financial resources and exchanges with social networks, and underreporting of self-stated income in Bulgaria and transitional economies in general. As Table 5.4 shows, self-reported financial situation only partially correlates with reported income. This result is consistent with studies from Russia and the Czech Republic\(^{167} 181\) which used subjective measures of financial resources such as material deprivation, and in both cases found them to be significant predictors of self-reported health.

**Table 5.4. Matrix of correlation between selected socio-economic variables**

<table>
<thead>
<tr>
<th></th>
<th>Age group</th>
<th>Education</th>
<th>Marital status quartile situation</th>
<th>Income quartile</th>
<th>Financial settlement</th>
<th>Settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>1.00</td>
<td>0.38</td>
<td>0.10</td>
<td>0.37</td>
<td>0.16</td>
<td>0.19</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td>1.00</td>
<td>0.01</td>
<td>0.44</td>
<td>0.49</td>
<td>0.33</td>
</tr>
<tr>
<td>Marital status</td>
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<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income quartile</td>
<td>0.37</td>
<td>0.44</td>
<td>0.16</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial situation</td>
<td>0.16</td>
<td>0.27</td>
<td>0.01</td>
<td>0.49</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Settlement</td>
<td>0.19</td>
<td>0.33</td>
<td>0.03</td>
<td>0.19</td>
<td>0.02</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>WOMEN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>1.00</td>
<td>0.45</td>
<td>0.32</td>
<td>0.41</td>
<td>0.17</td>
<td>0.17</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td>1.00</td>
<td>0.17</td>
<td>0.46</td>
<td>0.30</td>
<td>0.29</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.32</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income quartile</td>
<td>0.41</td>
<td>0.46</td>
<td>0.30</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial situation</td>
<td>0.17</td>
<td>0.29</td>
<td>0.17</td>
<td>0.40</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Settlement</td>
<td>0.17</td>
<td>0.40</td>
<td>0.05</td>
<td>0.26</td>
<td>0.09</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Long-standing illness in Bulgaria

Introduction

The following analysis will focus on the scale and socio-economic determinants of limiting long-standing illness. Limiting long-standing illness has been used in the General Household Survey and, was introduced in the Health Survey For England in 1996. Here, it will be used because it is a more sensitive measure of ill health and individual discomfort in everyday life compared to long standing illness. The latter may involve health problems that are less serious, and thus overestimate the prevalence of illness (see section on relationship between different measures of general health).

Levels of long-standing illness in Bulgaria

About half of the sample in the Bulgarian survey had at least one long-standing illness or disability (49% of men and 53% of women). Of those who reported a long-term illness, 80% of men and 82% of women were restricted by it in their everyday life. Therefore, 39% of men and 43% of women from the whole sample reported a limiting long-standing illness.

In comparison, in the Health Survey for England (1996), 43% of men and of women reported having any long-standing illness (the wording of the question being the same). 25% of men and 27% of women reported having a limiting long-standing illness. The corresponding figures for limiting long-standing illness in the Bulgarian survey were much higher: 39% of men and 43% of women.

Data on experience of long-standing illness, disease or disability from 5 countries showed that the prevalence (as a percentage in total population) ranged between 28% (the Netherlands) and 41% (Finland) with the highest rates in Bulgaria (Figure 5.2).
Inequalities in limiting long-standing illness in Bulgaria

The social determinants of illness were assessed using *limiting* long-standing illness as a dependent variable, due to its larger impact on the respondents’ activities. The determinants of limiting long-standing illness were similar to those for self-reported health. It was significantly predicted by age in both sexes (Table 5.5). For both men and women, primary education and poor self-assessed financial situations were significant predictors of reporting of limiting long-standing illness in the age adjusted model. For women, the relationship with financial situation was more marked. For men, those in the lowest income group were almost twice as likely to report illness compared to the highest income group. Single women were significantly less likely to report long-standing illness. As with self-reported health, perceived financial hardship was a stronger determinant of illness. The relationship was especially strong among women.

The association between economic variables and long standing illness is likely to be bidirectional, with poverty predisposing to ill health as well as long standing illness and disability predisposing to poverty. This must be borne in mind when interpreting the results.

As in the current survey, in the Health Survey for England (1996) limiting long-standing illness had a marked association with age. The probability of reporting a long-standing illness was one and a half times higher in Social Class V, compared to Social Class I.\(^{165}\)
<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>% (n) reported limiting chronic illness</th>
<th>Odds ratio (95% CI) (Age-adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>18.5% (44)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>36.3% (45)</td>
<td>2.51 (1.54-4.10)</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>42.9% (42)</td>
<td>3.31 (1.97-5.54)</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>56.3% (58)</td>
<td>5.68 (3.42-9.45)</td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>71.1% (69)</td>
<td>10.86 (6.28-18.79)</td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (&gt;160,000)</td>
<td>27.7% (44)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>II (100,000-160,000)</td>
<td>33.6% (44)</td>
<td>1.07 (0.63-1.83)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>46.9% (75)</td>
<td>1.37 (0.82-2.29)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>54.4% (87)</td>
<td>1.82 (1.08-3.08)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>29.5% (26)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>29.9% (98)</td>
<td>1.16 (0.67-1.99)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>55.1% (135)</td>
<td>1.79 (1.01-3.17)</td>
</tr>
<tr>
<td>Financial situation</td>
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<td>25.5% (14)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>27.0% (50)</td>
<td>1.01 (0.48-2.09)</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>41.8% (89)</td>
<td>1.74 (0.85-3.55)</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>52.3% (102)</td>
<td>2.65 (1.29-5.42)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>43.1% (210)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>19.4% (21)</td>
<td>0.86 (0.46-1.61)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>43.1% (28)</td>
<td>0.72 (0.40-1.28)</td>
</tr>
<tr>
<td>Settlement</td>
<td>City</td>
<td>32.8% (89)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>43.7% (170)</td>
<td>1.22 (0.85-1.73)</td>
</tr>
<tr>
<td><strong>WOMEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>20.4% (60)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>35.5% (55)</td>
<td>2.15 (1.39-3.31)</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>50.0% (77)</td>
<td>3.90 (2.55-5.96)</td>
</tr>
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<td></td>
<td>60-69</td>
<td>65.7% (90)</td>
<td>7.47 (4.75-11.74)</td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>69.7% (101)</td>
<td>8.95 (5.69-14.09)</td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (&gt;160,000)</td>
<td>34.1% (62)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>II (100,000-160,000)</td>
<td>36.5% (61)</td>
<td>0.92 (0.57-1.46)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>43.8% (91)</td>
<td>0.97 (0.62-1.53)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>54.8% (144)</td>
<td>1.06 (0.67-1.67)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>32.9% (57)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>31.6% (110)</td>
<td>0.92 (0.61-1.40)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>59.5% (217)</td>
<td>1.55 (1.00-2.39)</td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>20.7% (12)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>35.3% (89)</td>
<td>2.17 (1.05-4.48)</td>
</tr>
<tr>
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<td>Rather poor</td>
<td>46.6% (144)</td>
<td>2.60 (1.28-5.31)</td>
</tr>
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<td></td>
<td>Very poor</td>
<td>52.7% (129)</td>
<td>3.51 (1.70-7.23)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>42.2% (242)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>13.3% (13)</td>
<td>0.42 (0.22-0.80)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>60.0% (129)</td>
<td>1.11 (0.77-1.60)</td>
</tr>
<tr>
<td>Settlement</td>
<td>City</td>
<td>40.2% (154)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>45.7% (230)</td>
<td>0.95 (0.70-1.28)</td>
</tr>
</tbody>
</table>
In the UK, low income has been consistently associated with poorer health, particularly for chronic illness and limiting illness in middle age\textsuperscript{170}. The odds ratio were similar to those found in the current survey for self-reported health and income, and education.

In data from Western Europe, there were small cross-country differences in the odds of reporting long-standing illness by educational group, but in general, people with lower education reported more long-term disabilities\textsuperscript{160}.

Comparison with two reviews of developed countries in Western Europe\textsuperscript{160} \textsuperscript{176} shows that, in Bulgaria, the scale of variation in long-standing illness by education, is high. Especially among men, the odds ratios of reporting a long-standing health problem by education were among the highest values in the West (in Sweden and Italy). The odds ratios for women in Bulgaria were among the lowest.

Limiting chronic illness used in the Bulgarian survey corresponds closely with a measure used in a study from Germany looking at the proportions of respondents who were 'considerably' hindered in their everyday routines due to health\textsuperscript{178}. In general, men and women in the eastern part of Germany reported that they were less restricted by health problems than those in the western part. In the eastern part, men in the lowest income groups ('below or near the poverty line'), were significantly more likely to be restricted in their daily life than those in the higher income quartiles. In the western part, poorer men and women were significantly more likely to be restricted than richer ones, but the relationship is stronger for men (men: OR=3.23; women: OR=1.83). In the current study, among men, the gradient is steeper for age, income, education; and for women, it is steeper for financial hardship.

A study limited to western Germany found that both men and women below the poverty line were hindered in daily activities compared to wealthier groups\textsuperscript{178}, with men reporting higher levels of disability.

**Summary**

The levels of long standing illness and limiting long standing illness in Bulgaria appear very high compared to the West. Some definitional and textual variations may have contributed to this difference. The old, poor, less educated, and single (women only) are significantly more likely to report limiting long-standing illness.
The socio-economic determinants of limiting long-standing illness are similar to the West, but with generally higher odds ratios. As with self-reported health, financial hardship appears to be a better predictor of limiting long standing illness than income.
Episodes of illness in Bulgaria

Results

51% of men and 61% of women reported at least one episode of illness in the past year (May 1996-May 1997).

The most recent episode of illness was identified in order to estimate the expenditure incurred for this particular episode, as well as the ability of the individual to pay (chapter 8). 17% of men and 24% of women had been ill in the 4 weeks prior to the survey (April/May 1997). 61% of men and 60% of women reported an illness occurring more than four weeks earlier. 23% of men and 16% of women could not recall an illness or did not respond to the question and these respondents were excluded from subsequent analysis of utilisation patterns and health expenditure. As expected, most illnesses recalled had occurred since 1996.

The pattern of reporting illness is different from other health measures, and among men and women (Figure 5.3). There is much less variation between socio-economic categories than is the case with self-reported health. The probability of reporting at least one illness in the past year generally increased with age, although the increase among women was less dramatic. Rather more women than men under 39 reported an illness in the preceding year, although this can be explained partly by the additional burden of gynaecological or obstetric causes. Higher income is associated with fewer episodes of illness among men, but for women there is no apparent relationship with income. As in the case of self-reported health, financial hardship shows a clearer association with reporting illness than with income. Reporting illness is more common among people with higher education.
Figure 5.3. Percentage reporting at least one illness in previous year

**Age**

- < 39
- 40-49
- 50-59
- 60-69
- > 70

**Income quartile**

- Highest
- 2
- 3
- 4

**Education**

- Higher
- Secondary
- Primary

**Financial situation**

- Very good/good
- Neither good/nor bad
- Rather poor
- Very poor

**Marital status**

- Married
- Single
- Divorced/separated

*Men*  *Women*
Once again, it was necessary to adjust for age when examining the impact of other variables, due to the strongly significant association of age and illness reporting (Table 5.6). The generally weaker relationship with socio-economic variables is confirmed. There is a tendency for the least well educated to report fewer illnesses, despite their rather worse self-reported health, although this is significant only for women. Women with higher education were twice as likely to report at least one illness. In the univariate analysis, fewer single men reported episodes of illness, but there was no difference among women. However, any differences disappear after adjusting for age in the multivariate analysis. Although income is not significant, financial deprivation is a significant predictor, among women, for reporting illness in the past year.

The levels of illness in the current survey (17% of men and 24% of women, 1997) are higher than those registered by the World Bank 1995 Bulgaria Integrated Household Survey (BIHS) where 12% of men and 8% of women reported an illness over a four week recall period. Given the similarity of the samples and research instruments, it seems that there is an increase in levels of reporting of illness between 1995 and 1997, when the current survey was conducted. The BIHS also found a link between illness reporting and income, especially for the lowest income quintile, which is similar to the 1997 study.182

The rate of sickness in the past four weeks can also be compared to the ‘acute sickness’ measure in the Health Survey for England, where 15% of men and 19% of women had acute sickness in the past two weeks185. Thus, the figures reported in Bulgaria appear lower than could be expected, given the longer recall period of four weeks.

The level of illness reporting (in past four weeks) seems somewhat high compared to previous data from Bulgaria. It is also higher than, for example, the rate in Kyrgyzstan where in a 1994 survey183, only 12% reported illness in the past four weeks; but lower than in the Health Survey for England (1996). Again, differences in terminology and recall periods make comparisons problematic.

**Summary**

For men, only age is significantly associated with illness reporting, while for women, age, education and financial situation are significant. The distribution of illness among socio-economic groups is more uniform compared to the other health measures.
Table 5.6. Predictor of reporting of illness (at least one illness in past year)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>% reported at least one illness</th>
<th>Odds ratio (95% CI) (Age-adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>41.2% (98)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>53.2% (66)</td>
<td><strong>1.63</strong> (1.05-2.52)</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>52% (51)</td>
<td>1.55 (0.97-2.49)</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>58.3% (60)</td>
<td><strong>1.99</strong> (1.25-3.19)</td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>60.8% (59)</td>
<td><strong>2.22</strong> (1.37-3.59)</td>
</tr>
<tr>
<td>Income quartile (Leva)</td>
<td>I (&gt;160,000)</td>
<td>50.3% (80)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>II (100,000-160,000)</td>
<td>44.3% (58)</td>
<td>0.73 (0.45-1.17)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>50% (80)</td>
<td>0.81 (0.50-1.29)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>61.9% (99)</td>
<td>1.34 (0.83-2.17)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>56.8% (50)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>47.6% (156)</td>
<td>0.72 (0.44-1.16)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>52.2% (128)</td>
<td>0.66 (0.39-1.11)</td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>41.8% (23)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>44.3% (82)</td>
<td>1.06 (0.57-1.96)</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>54.5% (116)</td>
<td>1.54 (0.84-2.84)</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>55.4 (108)</td>
<td>1.57 (0.85-2.90)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>52% (253)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>42.6% (46)</td>
<td>1.07 (0.65-1.77)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>53.8% (35)</td>
<td>0.98 (0.58-1.67)</td>
</tr>
<tr>
<td>Settlement</td>
<td>City</td>
<td>49.4% (134)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>51.4% (200)</td>
<td>0.99 (0.72-1.37)</td>
</tr>
<tr>
<td><strong>WOMEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>57.1% (168)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>58.7% (91)</td>
<td>1.07 (0.72-1.58)</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>59.7% (92)</td>
<td>1.11 (0.75-1.65)</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>65.7% (90)</td>
<td>1.44 (0.94-2.19)</td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>66.9% (97)</td>
<td><strong>1.52</strong> (1.00-2.30)</td>
</tr>
<tr>
<td>Income quartile (Leva)</td>
<td>I (&gt;160,000)</td>
<td>61.5% (112)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>II (100,000-160,000)</td>
<td>57.5% (96)</td>
<td>0.82 (0.53-1.26)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>63% (131)</td>
<td>0.97 (0.63-1.47)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>60.8% (160)</td>
<td>0.81 (0.53-1.24)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>66.5% (115)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>60.9% (212)</td>
<td>0.76 (0.52-1.12)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>58.1% (212)</td>
<td><strong>0.49</strong> (0.32-0.76)</td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>51.7% (30)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>56% (141)</td>
<td>1.17 (0.66-2.08)</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>69.9% (216)</td>
<td><strong>2.04</strong> (1.15-3.63)</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>57.6% (141)</td>
<td>1.19 (0.67-2.12)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>59.5% (341)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>61.2% (60)</td>
<td>1.24 (0.77-2.00)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>64.2% (138)</td>
<td>1.03 (0.72-1.47)</td>
</tr>
<tr>
<td>Settlement</td>
<td>City</td>
<td>65.0% (249)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>57.7% (290)</td>
<td>0.67 (0.51-0.89)</td>
</tr>
</tbody>
</table>
Relationship between different measures of general health

This section will examine briefly the relationships between the health measures employed in this survey. These measures will be compared with each other and their further use in the analysis will be clarified.

As described earlier, in the current survey several measures were used to examine the health status of the sample: 'self-reported health status', 'chronic illness', 'chronic limiting illness', 'number of illnesses in past year' and 'last episode of illness'. 'Self-reported health status' referred to a general assessment of overall health status, 'number of illnesses in past year' specified a time frame of 12 months prior to the survey, and 'last episode of illness' shortened the recall period to the last 4 weeks.

Most health measures are closely interrelated. As self-reported health is central to the subsequent analysis, only its relationship with the other health measures will be explored. There is a clear relationship between reporting of poor health status and having a limiting chronic illness, and between poor health status and number of illnesses in the past year (Table 5.7). Of those reporting poor/ rather poor health, 94% have a chronic illness, 88% have a long-standing illness limiting their activities, and 77% had at least one illness in the preceding year. Having limiting long-standing illness had the strongest impact on reporting of poor or very poor health (56%), and reporting illness, the least (36%).

This result is comparable to the Health Survey for England (1996) finding that adults with limiting long-standing illness tend to report bad/very bad health at a much higher rate than those who have non-limiting longstanding illness or no longstanding illness at all\(^{186}\). Limiting illness has more impact on daily activities and is potentially more serious. In a survey from Finland, 96% of men and 95% of women with poor or fairly poor self-reported health reported a chronic illness\(^{186}\).

'Last episode of illness' was also related to reporting poor health, with the proportion of respondents reporting poor health being twice as high among those who were ill in the past 4 weeks as for those who were ill more than 4 weeks ago (53%).

The health measures were also compared in terms of their variance by selected socio-economic variables (Table 5.7). All three variables behave in a similar way. Among men and women older age is significantly predictive of worse self-reported health, reporting of chronic limiting illness and illness in past year. For women, self-perceived financial situation is a significant predictor of all health measures. Another factor significantly
related to all health measures for both sexes is education. In the Health Survey for England (1996) the determinants of the general health measures were also very similar, with women, older people, and people in the lowest social classes having a higher probability of reporting poor health.

It is notable that reported illness has a slightly different pattern. This could be explained partly by the longer recall period (one year), while the other measures reflect current health. Blaxter emphasises that self-reported health and illness reflect a different aspect of health\(^\text{23}\). Many respondents define their own health as generally good, yet at the same time report having illness symptoms.

The overall assessment of health status (‘self-reported health status’) will be used mainly as an explanatory variable in the subsequent analysis. Firstly, as discussed earlier in this chapter, self-reported health is used widely in other studies and its use here will allow for international comparisons. Secondly, it is more clearly and consistently associated with socio-demographic characteristics than the other two measures. Limiting long-standing illness will be used as an explanatory variable in some specific cases estimating the burden of disease and expenditure. Reported illness will be used mainly in exploring incurred health care expenditure.

### Table 5.7. Relationship between self-reported health and other health measures

<table>
<thead>
<tr>
<th></th>
<th>Good/Rather good</th>
<th>Bad/Rather bad</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Row %</td>
</tr>
<tr>
<td><strong>Chronic illness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>732</td>
<td>97.0</td>
</tr>
<tr>
<td>Yes</td>
<td>409</td>
<td>51.6</td>
</tr>
<tr>
<td><strong>Limiting chronic illness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>857</td>
<td>94.8</td>
</tr>
<tr>
<td>Yes</td>
<td>284</td>
<td>44.2</td>
</tr>
<tr>
<td><strong>At least one illness in past year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>582</td>
<td>86.4</td>
</tr>
<tr>
<td>Yes</td>
<td>559</td>
<td>64.0</td>
</tr>
<tr>
<td><strong>Last ill in past 4 weeks</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>150</td>
<td>47.0</td>
</tr>
<tr>
<td><strong>Last ill more than 4 weeks ago</strong></td>
<td>721</td>
<td>77.2</td>
</tr>
</tbody>
</table>
Table 5.8. Predictor of probability of reporting poor health status (comparison of measures)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Odds ratio (95% CI; Age adjusted rates)</th>
<th>Self reported health</th>
<th>Limiting chronic illness</th>
<th>Illness episodes - past year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td><strong>2.08</strong></td>
<td><strong>2.51</strong></td>
<td><strong>1.63</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td><strong>3.54</strong></td>
<td><strong>3.31</strong></td>
<td><strong>1.55</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td><strong>9.48</strong></td>
<td><strong>5.68</strong></td>
<td><strong>1.99</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td><strong>15.35</strong></td>
<td><strong>10.86</strong></td>
<td><strong>2.22</strong></td>
<td></td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (&gt;160,000)</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>(Leva)</td>
<td>II (100,000-160,000)</td>
<td>1.43</td>
<td>1.07</td>
<td>0.73</td>
<td></td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>1.40</td>
<td>1.37</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>1.86</td>
<td><strong>1.82</strong></td>
<td>1.34</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>1.25</td>
<td>1.16</td>
<td>0.72</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td><strong>2.19</strong></td>
<td><strong>1.79</strong></td>
<td>0.66</td>
<td></td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>0.93</td>
<td>1.01</td>
<td>1.06</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>1.09</td>
<td>1.74</td>
<td>1.54</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td><strong>2.91</strong></td>
<td><strong>2.65</strong></td>
<td>1.57</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>1.20</td>
<td>0.86</td>
<td>1.07</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Divorced/ widowed</td>
<td>0.70</td>
<td>0.72</td>
<td>0.98</td>
<td></td>
</tr>
<tr>
<td>Settlement</td>
<td>City</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>1.00</td>
<td>1.22</td>
<td>0.99</td>
<td></td>
</tr>
<tr>
<td><strong>WOMEN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td><strong>2.27</strong></td>
<td><strong>2.15</strong></td>
<td>1.07</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td><strong>4.58</strong></td>
<td><strong>3.90</strong></td>
<td>1.11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td><strong>8.89</strong></td>
<td><strong>7.47</strong></td>
<td>1.44</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td><strong>16.14</strong></td>
<td><strong>8.95</strong></td>
<td><strong>1.52</strong></td>
<td></td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (&gt;160,000)</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
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</tr>
<tr>
<td>(Leva)</td>
<td>II (100,000-160,000)</td>
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<td>0.92</td>
<td>0.82</td>
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<td>0.92</td>
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<td>1.00</td>
<td>1.00</td>
<td></td>
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</tr>
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<td><strong>2.60</strong></td>
<td><strong>2.04</strong></td>
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<td><strong>3.51</strong></td>
<td><strong>1.19</strong></td>
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<td>1.11</td>
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<td>1.00</td>
<td>1.00</td>
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<td>Rural</td>
<td>1.37</td>
<td>0.95</td>
<td>0.67</td>
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</tbody>
</table>
Figure 5.4a. Measures of health in relation to some socio-demographic variables (men)

- **Age group (reference category = <39)**
  - Odds ratio: 40-49, 50-59, 60-69, >70

- **Income (reference category = 1st quartile-lowest)**
  - Odds ratio: 1st quartile, 2nd quartile, 3rd quartile, 4th quartile

- **Education (reference category = higher)**
  - Odds ratio: Secondary, Primary

- **Financial situation (reference category = good/very good)**
  - Odds ratio: Intermediate, Rather poor, Very poor

- **Marital status (reference category = married)**
  - Odds ratio: Single, Divorced/widowed
Figure 5.4b. Measures of health in relation to some socio-demographic variables (women)

- **Age group (reference category = <39)**
  - Odds ratio
  - Age groups: 40-49, 50-59, 60-69, >70

- **Income (reference category = 1st quartile-lowest)**
  - Odds ratio
  - Income quartiles: 1st, 2nd, 3rd, 4th

- **Education (reference category = higher)**
  - Odds ratio
  - Education levels: Secondary, Primary

- **Financial situation (reference category = good/very good)**
  - Odds ratio
  - Financial situations: Intermediate, Rather poor, Very poor

- **Marital status (reference category = married)**
  - Odds ratio
  - Marital status: Single, Divorced/widowed
Discussion

This section looked at the levels of self-reported health, limiting long standing illness and occurrence of illness in the past year, and the associations of those measures with some socio-economic characteristics. The implications of these results for the health financing reform will be discussed, but first it is necessary to recall the survey's methodological limitations.

As noted above, self-reported health may be criticized as being subjective, but it has been shown to be a good predictor of mortality\(^{184}\): those reporting poor health having a death rate 2-3 times higher than those reporting their health as poor over a nine year period. It is also more closely associated with subsequent use of medical services than are variables based on defined medical conditions\(^ {185}\). The non-response bias could elevate the overall prevalence of poor self-reported health if those in good health or with no chronic illnesses are more difficult to contact. Conversely, as the survey excluded those in institutional care; severely disabled; very poor; or without a permanent address; prevalence data may under-estimate poor health, although the extent of institutional care for adults in Bulgaria is very small.

Despite difficulties in comparing levels of self-reported health across countries, the overall levels of self-reported health appear, surprisingly, to be somewhat similar to those in Western Europe\(^ {148}\). The share of those who reported 'less than good health' in the Bulgarian sample was closer to northern European levels, although lower than those of Finland, Canada, UK, and US\(^ {160} \, 164\). The proportion reporting 'good/rather good health', in the Bulgarian survey comes close to the corresponding figure in the Health Survey for England (1996), and to the UK Health and Lifestyle Survey (1984-5)\(^ {123}\).

Evidence from elsewhere shows that women report worse general health than men\(^ {166} \, 171\). In the Bulgarian study, the gap between the self-reported health of men and women is very small. Similarly, studies from the Czech Republic and from Russia report no significant difference between men and women in self-reported health\(^ {181} \, 167\).

Although the levels of poor self-reported health seem generally lower than expected, it is not uniformly distributed in the population. The main importance of this study is the information that it provides on the social stratification of health in Bulgaria. Financial hardship stands out as a particularly strong predictor of less than good health among women. Women who describe themselves as very poor are eleven times more likely than
those who are in a good or very good position, to report poor or very poor health
Education is significantly associated with reporting less than good health among men,
and especially among women. The observation that women who completed only primary
education have worse self-reported health status may be because those completing only
primary education contain a relatively high proportion with physical disabilities or who
had chronic illnesses in childhood. Girls with such disabilities may have been
disproportionately disadvantaged in educational terms. The odds of reporting poor health
increase as income falls, but do not reach significance.
As indicated earlier, in contrast to the situation in developed countries, monetary income
appears to be less consistent a predictor of health in Bulgaria than self-assessed financial
situation. The link between self-reported health and income is recognised to be more
complex in developing and middle-income countries. Apart from potential
misreporting of income, the specificity of the post-communist social structure may play a
role. In the communist society, access to scarce goods (including high-quality health
care), was determined by affiliation to the structures of power. After 1989, access to
luxury goods (including health care) started increasingly to be based on individual merit
and earned income, similar to the West. This process has been slow, and in 1997, when
the survey was carried out, inherited privileges, membership of particular social
networks, or possession of particular assets remain much more indicative of social status.
This shows that socio-economic indicators used in the West, such as income or social
class, are not readily applicable. In the case of Bulgaria, the use of self-rated financial
situation (used as a proxy for income) proves to have a discriminating power, and is
strongly correlated with self-reported health. An additional problem is that income has
not been adjusted for the size of household. Studies from Russia and from the Czech
Republic also emphasised the predictive strength of subjective assessment of
financial status, such as ‘material deprivation’ and ‘economic hardship’. Given the
importance of financial hardship in explaining socio-economic health inequalities, it will
be used in conjunction with income and other measures of wealth, in the subsequent
analysis of affordability.
The strong socio-economic gradient of self-reported health in Bulgaria is consistent with
patterns of health inequalities observed in Western Europe. Education seems to
have an independent strong relationship with health which is found also in this
survey. The odds ratio of people with only primary education to report less-than-good
health compared to those in the higher educational groups is comparable to that in Western Europe. In other countries, age-adjusted self-reported general health is found to be strongly associated with the social class of the head of household (Health Survey for England, Health and Lifestyle Survey, British General Household Survey for 1991-2). Social class is a construct based on occupation and indicative of income and overall resources of the household. For comparative purposes it could be operationalised in Bulgaria to include education and financial situation which, in combination, largely determined the social position of individuals in Bulgaria. These tend to be strong predictors of poor/very poor health in the current survey. According to Blaxter, not just income, but also the ability to command resources is a very important predictor of health. This is confirmed in this survey, with the link between financial hardship and self-reported health.

The findings for Bulgaria suggest that the aggregate determinants of self-reported health are more evenly distributed across socio-economic groups among men than women. This result contradicts the findings from other surveys from industrialised countries, which show that inequalities in health among women are greater than among men, although the Health Survey for England (1996) showed that the odds of poor general health were higher for women for several health measures. In contrast to the situation with self-reported health, the overall prevalence of limiting long-standing illness and disability in Bulgaria is much higher than that in the West. The social pattern of limiting long-standing illness is similar to self-reported health, but the gradient is less steep. When adjusted for age, measures relating to socio-economic status (education, income - for men, financial hardship) are strongly significant predictors of limiting illness. Among women, socio-economic inequalities are larger than among men, but income is not a significant determinant of health. Comparison with an international review shows that the differences in long-standing health problems by education among men in the Bulgarian survey are very high compared with Western Europe. Again the Bulgarian data show that, although income does appear to explain variations among men, financial situation is a more powerful explanatory variable.

The association of illness reporting with age is weaker than for the other measures, which is consistent with findings from other surveys. Education and financial situation are significant only among women. There is a tendency for the least well educated to report
fewer illnesses despite their rather worse self-reported health, although this is only significant for women. The UK finding that women tend to report more illness symptoms in the past month is also found in this study, but the relationship with income is not explicit. Among men, higher income is associated with less illness but the converse is true among women. The latter would be consistent with findings from elsewhere that better educated respondents, and those with greater experience of using services, are more likely to report illnesses.

All three measures used: self-reported health, limiting long-standing illness and reported illness episodes, are interrelated. Those reporting poor/ rather poor health are also likely to have a limiting chronic illness or to report illness occurring in the preceding year. Such close relationship between measures of general health is found elsewhere.

Both self-reported health and limiting long-standing illness show similar socio-economic gradients. However, socio-economic status correlates poorly with what the individual defines as an illness. This last measure reflects the occurrence of an illness and triggers the decision to seek care and shows much less age and socio-economic variability. The large variations in self-reported health are translated into relatively small differences in reporting an illness, e.g. those over 70+ were 16 times more likely to report poor health, but only twice as likely to report illness. Reporting good health, but also having suffered an illness, is not an uncommon scenario, because self-reported health is a subjective experience of health, while illness implies objective symptoms, which can be subjected to health care intervention. Thus, reported illness is a much less sensitive reflection of socio-economic differences than is self-reported health and the latter will be used as an explanatory variable in the subsequent analysis of willingness and ability to pay.

The scale of the inequalities in health, especially among women, is surprising given the efforts of the state in the recent past (pre-1989) to equalise social conditions and access to health care. Explanations could be sought in the widening socio-economic inequalities in the decade after the political transition of 1989, with wealth polarisation and marginalisation of people with low educational attainment and resources as a consequence of the decline in living standards. Unfortunately, with a few exceptions such as Hungary there is little historical data with which to compare Bulgaria in terms of present inequalities in health and, in most countries, there is almost no information on the current situation that could be used to monitor future trends. Interestingly, in 1997, the socio-economic variations in self-reported health and long-standing illness were
larger in the western rather than in the eastern part of Germany\textsuperscript{178}. The presence of a steep socio-economic gradient in health in Bulgaria is contrary to the assumption that equality enforced by the state during communism still holds.

The situation with regard to major risk factors is conflicting\textsuperscript{192-193}. Until relatively recently, smoking has been uncommon among women and few women drink heavily. Smoking among men varies little according to socio-economic variables and heavy drinking is most common among the better off. With the exception of the present survey, there is almost no data on health attitudes and health-related behaviour by socio-economic groups.

There is growing evidence pointing to psychosocial factors to explain variations in health\textsuperscript{167 181}. Among the factors contributing to a worse perception of health status are the breakdown of universal social provision systems during the transition, expansion of the private sector in services previously guaranteed by the state, and weakening informal support mechanisms.

Another factor suggested by Mackenbach et al. is that higher social mobility might contribute to higher inequalities in health. Bulgaria has had relatively low social mobility, almost universal property ownership and inherited resources. The accelerated social and labour mobility in the 1990s, may have contributed to the rise in social inequalities in general.

The higher differential of health among women is difficult to explain. Women suffered disproportionately more from the break down of state support mechanisms, especially those related to child rearing. Unemployment among women is higher, they are generally poorer and usually are significantly more involved in housework. These problems have been exacerbated during the transition.

However, there are several issues which require further attention. Identifying differences in levels of health need in population is highly sensitive to the measure used. It is also likely that in some poorer sections of society, poorer people may feel that their health is not good, but are unwilling to define themselves as ill and seek care. The characteristics of this group will be explored further in the following section.

Data on health status have important implications for health system financing and should be taken into account when assessing the applicability of health financing options from elsewhere. Several conclusions can be drawn. First, the current demographic and health
status of the population poses serious challenges for the design of a sustainable and equitable health financing scheme.

Second, the levels of self-reported health in Bulgaria are generally comparable to those in the West, but the levels of limiting long standing illness are significantly higher. This is likely to indicate a greater need for health care and prevention, and thus more financial resources are needed to sustain the system at a time when health care spending has contracted dramatically.

Third, the results presented above also suggest that significant social inequalities in health are present in Bulgaria, the pattern of health inequalities being similar to those observed in the West. Moreover, the scale of the inequalities in health in Bulgaria is comparable to the highest values observed in the West, and may be even higher for women. The odds ratios for inequalities among women are above what is observed in other CEE studies and, especially for financial hardship, seem extremely high. The groups who are most likely to suffer ill health are the old, those experiencing financial hardship or deprivation (especially women), and those with only primary education. These groups are also likely to be disadvantaged in terms of their position in the labour market, to rely on less support from informal networks, and therefore their ability to cope with ill health will be lower.

Fourth, the weaker correlation between ill health and income requires rethinking of the financing structure of the health care system. A possible introduction of co-payments in conjunction with compulsory insurance, with exemptions based on income only, means that those who are both less healthy and less able to contribute to a scheme, will be at particular disadvantage. This may deter some of the 'necessary utilisation' and ultimately, increase the burden of disease.

ILLNESS BEHAVIOUR

Introduction

Having established differences in levels of need within the population, this section will seek to examine how they translate into utilisation. Firstly, it will explore current levels and patterns of illness behaviour among those using health care. Then it will look at the characteristics of groups who report low or no use of services. Finally, the reasons for this behaviour will be discussed.
In the context of the present study, it is essential to establish levels of health care utilisation and their socio-economic determinants. Identifying barriers to receiving health care in general, and among specific population groups who are likely to be constrained in their access to health care, is essential for the design of an equitable health financing scheme. Such data could facilitate understanding the need and demand for health services and the financing arrangements required to meet this demand.

**Results**

*Characteristics of health services users*

The first step is to establish who are the ‘users’ of health services, specifically how consultation rates vary within population.

The most recent consultation with a health professional was identified. Overall 17% of men and 24% of women visited a health professional in the preceding four weeks, and 59% of men and 53% of women had their consultation between January and April 1997. *Table 5.9* presents the variation in consulting rates among those who reported using health services in the four weeks preceding the survey.

There are few differentials between groups (especially among women) in the rate of consulting. The exception is the oldest, who reported more consultations. Men in the lowest income quartile or in a very poor financial situation reported about twice as many consultations as those in the top two quartiles or with a very good financial situation. Among women, there is much less variation by income. Also, quite expectedly, respondents reporting poor health status, chronic illness, or those who had at least one illness in the past year consulted a health professional much more than the others. The utilisation rate among men who are divorced, separated or widowed was much higher than among single or married men. In general, apart from age, there was much less variation in relation to socio-economic characteristics among women.
<table>
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<tr>
<th>Variable</th>
<th>Category</th>
<th>Consulted in previous 4 weeks (April-May 1997)</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td>MEN</td>
</tr>
<tr>
<td>Age group</td>
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<td>10.9%</td>
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<td>16.1%</td>
</tr>
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<td></td>
<td>50-59</td>
<td>19.4%</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>23.3%</td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>32.0%</td>
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<tr>
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<td>III (60,000-99,000)</td>
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<tr>
<td></td>
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<td>Higher</td>
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</tr>
<tr>
<td></td>
<td>Secondary</td>
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</tr>
<tr>
<td></td>
<td>Primary</td>
<td>22.0%</td>
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<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>18.2%</td>
</tr>
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<td></td>
<td>Neither good nor bad</td>
<td>13.0%</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>16.0%</td>
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<td>26.7%</td>
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<td></td>
<td>Single</td>
<td>13.0%</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>32.3%</td>
</tr>
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<td>Settlement</td>
<td>City</td>
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</tr>
<tr>
<td></td>
<td>Rural</td>
<td>17.5%</td>
</tr>
<tr>
<td>Self-reported health</td>
<td>Good/Rather good</td>
<td>9.3%</td>
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<tr>
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<td>Bad/Rather bad</td>
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<td></td>
<td>Yes</td>
<td>34.0%</td>
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<tr>
<td>At least one illness</td>
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</tr>
<tr>
<td></td>
<td>Yes</td>
<td>30.5%</td>
</tr>
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**Probability of consulting in case of illness**

This section will first examine how probability of consulting a health professional, given that one feels ill, varies within the population, i.e. are there inequalities in seeking care after adjustment for illness?

The subsequent analysis centres only on those who reported ever being ill. Those who reported visiting a health professional in the preceding 4 weeks (18% of men and 24% of women), in April/May 1997, give rise to numbers too small for a reliable analysis of determinants of utilisation. One possibility is maximise the recall period, i.e. to include also those whose consultation was more than 4 weeks ago (56% of men and 58% of women), but this introduces the possibility of recall bias. To accommodate such issues, the subsequent analysis will focus on those reporting illness and visiting health professionals in January-May 1997. A composite variable (taking into account two control questions on timing of utilisation) was created, comprising all those who have
been ill and visited a doctor in the period January-May 1997. This provided sufficient numbers and minimised recall bias.

The probability of consulting with a health professional can be examined by means of multivariate regression (Table 5.10). Consultation during a recent illness (in past 4 weeks) and in the period January-May 1997 were used as dependent variables.

Older age was strongly associated with higher consultation rates in the past 4 weeks for men and women. When adjusted for age, men in the lowest income quartile were twice as likely as those in the top income quartile to consult. Women in 'less than very good' financial situations were significantly more likely to visit a physician. Divorced or separated men were 2.5 times more likely to consult a physician than those who are married. For both men and women, poor self-reported health was a strongly significant predictor of consulting with a health professional in past 4 weeks. Men in rural areas were less likely to have consulted in that period.

The analysis was repeated, focusing on the probability of consulting during an illness occurring in January-April 1997 (last illness). Here, the variations are even smaller, with only age and self-reported health having significant impact on probability of consulting. However, financial hardship remained a significant predictor of consulting. Although more people reported visiting health professionals, the potential for response bias is slightly higher, thus making conclusions difficult. This suggests that the distribution of utilisation rates is relatively equal. However, the best educated and the wealthiest are more likely to report an illness and this seems to mean that they are also more likely to use services.

It should be noted that 23% of respondents described their health as poor/very poor, yet did not report any illness in the preceding year. This might mean that those respondents do not define themselves as ill and therefore do not seek medical care. It could be hypothesised that this group is consciously restricting their access to health care. It is interesting to see how this group compares to the overall sample. Compared to the general sample, people reporting poor health and no illness are mostly in the older age groups, in the lower income quartiles, with only primary education, assess themselves as financially constrained, and live in rural areas. The small numbers (n=92; 6% of all sample) prevent a meaningful analysis of the variations of utilisation by socio-economic status specifically for this group.
**Non-users of health services**

This section will look closely at the socio-economic characteristics of those who did not consult a health professional in different circumstances. These could be people who were ill but nevertheless did not consult a doctor (at any time or in the past 4 weeks), and those who stated that they have never been ill or have never visited a doctor.

Of those who reported ever being ill, overall 26% of men and 28% of women did not consult a doctor. When looking at the consultation rates of those who reported ever been ill, it appears that men in the age groups 40-70 consulted less than those over 70. For women, the exact opposite pattern emerges, women over 70 being less likely to consult. Of those over 70, 20% more women than men did not consult a health professional. There is no discernible variation of non-utilisation rates by income, financial hardship and education in both men and women.

Among the respondents who were ill in the preceding 4 weeks, 29% of men and 33% of women reported not seeing a health professional regarding their illness. Due to the smaller numbers in this group, it is difficult to draw firm conclusions, but non-utilisation rates are similar. The difference is that here, a higher proportion of men and women below 40, with only primary education, in the lowest income quartile, with worse financial situations, married, or living in rural areas (for men), or with good/very good health, refrained from consulting when ill in the last 4 weeks.

The distribution of those who reported illness (no time-period specified) but did not consult, by socio-economic status, appears more equal than the distribution of those with illness in the past 4 weeks. One reason could be that inequality of utilisation is rising. Some utilisation might have also reduced in recent years, with the non-utilisation rate between 1996 and 1997 increasing from 21% to 33% for men and from 17% to 33% for women. However, a fall in utilisation cannot be established conclusively on the basis of the current cross-sectional survey and further research is needed.

Those who reported illness (in the past 4 weeks or earlier) could be compared to the general socio-economic distribution in the sample in order to establish the profile of those who were ill, but did not seek medical help. Men of working age (18-70) and women over 70 consult less (if ill) than expected. There is not an explicit relationship of utilisation with income, financial hardship, education. Men and women with good/very good health utilise health services much less, which is intuitive. It should not be
overlooked that 34% of men and 41% of women experiencing illness in the past 4 weeks (15% and 22% respectively among those 'ever ill') and reporting poor/very poor health, did not consult a health professional. The reasons will be explored later in this chapter.

The characteristics of those stating that they have never had illness (23% of men, 16% of women) or visited a physician on any occasion (26% of men, 18% of women) are shown in (Table 5.11a/b).
Table 5.10. Predictor of probability of consulting a health professional for last illness

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Odds ratio (95% CI), Age-adjusted</th>
<th>Probability of consulting in last 4 weeks</th>
<th>Probability of consulting in Jan-May 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MEN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
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<tr>
<td></td>
<td>40-49</td>
<td>1.63</td>
<td>0.85-3.12</td>
<td>1.20</td>
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<tr>
<td></td>
<td>50-59</td>
<td>2.02</td>
<td>1.03-3.96</td>
<td>1.40</td>
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<tr>
<td></td>
<td>60-69</td>
<td>2.61</td>
<td>1.37-4.94</td>
<td>1.49</td>
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<td></td>
<td>&gt;70</td>
<td>3.24</td>
<td>1.76-5.95</td>
<td>2.40</td>
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<td>Income quartile</td>
<td>I (&gt;160,000)</td>
<td>1.00</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>II (100,000-160,000)</td>
<td>1.31</td>
<td>0.65-2.64</td>
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Table 5.11a. Socio-demographic profile of people not using health services (men)

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<th>% ill (past 4 weeks), not consulted</th>
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<th>% no consultation ever</th>
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### Table 5.11b. Socio-demographic profile of people not using health services (women)

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<td>40.6</td>
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Reasons for non-utilisation

Of the respondents who did not consult a health professional during their most recent illness, a quarter (26% of men and 28% of women) felt that they should have done so and another quarter (25% of men and 26% of women) were unsure (Figure 5.5).

Furthermore, respondents who were ill but did not consult a health professional (men: n=134; women: n=207), were asked what was the main reason, among several listed reasons, not to do so. The main reasons for not seeking medical help despite being ill were: illness not perceived as serious (46% of men and 39% of women), self-treatment (27% of men and women), followed by unaffordability of treatment (9% of men and 10% of women). Nevertheless, self-treatment may be a cheaper substitute for formal medical treatment and thus represent a more affordable option than the formal treatment.

Figure 5.5. Scheme of decisions for consulting a health professional for last illness
As shown in the above scheme, those who did not consult because of affordability include 16% of those who thought they should have consulted, or were unsure. This share grows when estimated only among those who were positive that they should have consulted, with 20% of men and 24% of women feeling they should have sought help but could not afford it (second and first most important reason respectively). Among those who could not afford to consult a physician, 58% of men and 70% of women stated that they should have done so. Conversely, people who did not consult a health professional for other reasons, such as lack of time, were less inclined to think that they should have done so. This analysis is limited by the small number of people in each category, but there are indications that unaffordability is a factor that deters some necessary demand and creates obstacles to access (Table 5.12).

Table 5.12. Characteristics of those who did not consult because of affordability

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<td>45%</td>
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<td>91% (29)</td>
<td>64%</td>
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</table>

Comparison with other data

In a survey from Bulgaria (1995) 69% of respondents reported to have consulted a physician in the state sector and 22% in the private sector, at least once over the past year (1994)\(^{126}\). A previously mentioned 1996 survey in Bulgaria found that 22% of the sample had an outpatient consultation in the past two months\(^{163}\). Given these findings, the level of utilisation in the current study appears high (21% consulted in past 4 weeks and 55% consulted between January and April 1997). However, comparison should be cautious because of different recall periods and level of health services consulted.

In the 1995 survey, 19% of the sample felt that they needed a consultation in the three months preceding the survey, but had to refrain from it\(^{126}\). The three main reasons given for not consulting were self-treatment (28%), no time (9%), lack of money (8%). These results are in line with the findings of this survey.
In contrast to the current survey, the World Bank 1995 Bulgaria Integrated Household Survey found a steeper income gradient among those who did not consult a physician for an illness occurring in the preceding four weeks\textsuperscript{182}. This may have resulted from a difference in the income categories and it was not indicated whether these results are significant. The overall proportion of those seeking care in case of illness was similar in both surveys (61% in the BIHS and 68% in the current survey).

The utilisation rates in the current survey are lower than in some Western countries. A survey from Germany in 1991-92 (representative of the population aged 25-69) covering both eastern and western parts, found that 43% of men and 54% of women consulted a physician in private practice in the past 4 weeks\textsuperscript{194}. These are twice the Bulgarian rates in the past four weeks (18% of men and 24% of women). However, the utilisation rates in the current study are comparable to those in Finland where 24% of men and 29% of women consulted a physician in the past four weeks\textsuperscript{146}.

A recent review of data from the World Bank Living Standards Measurement Surveys and UNDP Demographic and Health surveys in a range of developing countries shows, predictably, that the poor were less likely than the rich to report health problems or receive health services if ill\textsuperscript{149}. In Bulgaria, socio-economic differentials in utilisation appear comparatively less pronounced, despite the high social cost of transition.

Patterns of deterred utilisation in this study are similar to those found by a 1995 survey from Bulgaria, in which 40% needed a consultation but decided to forgo it mainly because of preference for self-treatment, and 8% because of financial difficulties\textsuperscript{126}. However, qualitative data on utilisation patterns presented in the next chapter suggest that in many cases, self-treatment is used as a coping strategy where formal treatment is perceived to be unaffordable.

**Discussion**

The overall impression is that health care utilisation remained relatively egalitarian at the time of the survey, although this is less so for women. The probability of consulting a health professional is determined largely by age and self-reported health. However, some inequalities exist among women, where economic hardship is an important determinant of utilisation, with women in a less than very good financial situation being more likely to consult than the others.
Different socio-economic groups display similar utilisation rates, although those with higher education and more resources are more likely to report illness. Once a person has reported an illness, then all groups are equally likely to consult, except the very old. The net effect is that the wealthier and better educated consult slightly more.

The finding of the current survey that utilisation (in past 4 weeks) is relatively equally distributed or only slightly higher among more disadvantaged groups, is surprising given that access to the health system has been increasingly associated with significant out-of-pocket payments and less available support from social security institutions and social networks. This could be explained by the poor and less educated having generally worse health than the rich and thus being forced to use services at whatever cost. These groups may also seek treatment in low-cost and low-quality care state facilities requiring minimal or no user payments. The strategies for obtaining treatment of different groups will be explored in the next chapter.

**Summary**

In this chapter it has been shown that the oldest, the poorest and the least well educated are most likely to report poor health and long standing limiting illness, but less likely to report illness. The socio-economic gradients in utilisation are less steep.

Significantly, there were more inequalities among women, both in health and in consulting a health professional. In both cases, financial hardship is a strongly significant predictor. As explained earlier, this may be due to the more vulnerable position of women during the transition, having disproportionately more responsibilities for child-rearing, household maintenance, and at the same time fewer financial resources than men. It is likely that in the next years of macro-economic stabilisation and before the re-design of the health financing system in 2000-01, the socio-economic inequalities in health and utilisation will widen, and more people will be facing financial barriers to health service utilisation.
CHAPTER 6. PATTERNS OF HEALTH CARE UTILISATION
AND PATIENTS' PERSPECTIVE OF CARE

Introduction

In reforming the health care financing system in Bulgaria, it is important to understand patterns and determinants of health services utilisation, as well as the public perception of the health care provided. Such data are essential if funding is to be allocated equitably and appropriate incentives are to be introduced. So far these issues have rarely been addressed in research in Bulgaria.

This chapter will first examine health care utilisation strategies and access to health services in relation to socio-demographic characteristics. Levels and determinants of utilisation of primary care and state hospitals, as well as the private sector, will be considered in turn. Finally, users' experiences, motivation to seek health care, and satisfaction with services will be explored. The analysis will focus mainly on respondents who recalled an illness.

As described in appendix 2, primary health care level in Bulgaria is provided mainly through polyclinics and health posts. In polyclinics, services are provided by district physicians, who under the older system had broadly similar functions to GPs, and by a small range of narrow specialists, usually internists, gynaecologists, and paediatricians. Secondary care is in hospitals, categorised as university, emergency, city, district, and occupational hospitals.

Patterns of utilisation

Data from the population survey

Patterns of utilisation at first point of contact

When looking at the patterns of utilisation, it is important to include people who recall a contact with a health facility, in relation to their last illness or previously. Thus in this section the analysis is limited to two types of respondents: first, to those who reported having been ill and who sought medical help during their last illness; and second, to those who consulted for a previous illness. The latter group was included to provide
sufficient numbers for the analysis. Illness is self-reported by the respondent. The number of consultations in the last illness, by gender, is shown on Figure 6.1.

Figure 6.1. Number of consultations reported in relation to the last illness by sex

As shown in chapter 5, respondents with less than good self-reported health were more likely to consult a health professional during their last illness. Similarly, those with good self-reported health had usually made one or two visits (mean number of visits: 2 for men; 2.1 for women), while those with poor health had one to three visits (mean: 2.8 for men; 2.4 for women). The impact of limiting chronic illness on the number of consultations is more apparent (ill: mean 1.3 visits for men and 1.4 for women; healthy: 2.4 and 2.3 respectively).

Utilisation patterns by men and women in the course of their last illness appear generally similar (Figure 6.2a/b). Most typically, the first point of contact was at primary care level, such as district physicians (broadly equivalent to GPs) or polyclinic specialists. Women visited GPs slightly more often than men (37% of men and 45% of women), while attendance of polyclinic specialists was equal (23%). Less than a fifth (18% of men and 14% of women) initially consulted a hospital specialist. Men tended to call emergency services slightly more often than women (13% of men, 8% of women).

Following the first contact, the utilisation patterns of men and women appeared somewhat different. Men tended to be referred (or chose to consult) more quickly from primary to secondary health care, with 49% of men and 61% of women having a second consultation at primary care level. At their second visit, men consulted mostly hospital specialists, while women typically turned to polyclinic specialists.
Following the second visit the same utilisation pattern was displayed, with more women than men staying at primary care level. At the third visit, for example, about a half of men were contacting hospital specialists compared to less than a third of women. Among those who reported more than three visits (maximum of six), consulting at primary care facilities or not consulting at all was more common among women than men.

In summary, the direction of patient flows is, as expected, from primary to secondary care, although women made the transition to secondary care more slowly than men. A very small percentage of respondents visited nurses, pharmacists or midwives during the course of their illness.
Figure 6.2a. Scheme of utilisation patterns for last illness (men)

**FIRST VISIT**

- **Ill ever:** 100% (n=509)
  - **≥ 1 visits:** 92% (n=468)
  - **0 visits:** 8% (n=41)

**SECOND VISIT**

- **GP-polyclinics:** 37% (n=173)
  - **Specialist - polyclinics:** 23% (n=106)
  - **Hospital:** 18% (n=81)
  - **Call emergency:** 13% (n=59)
  - **Other:** 10% (n=45)

- **Hospital:** 87% (n=41)
  - **GP-polyclinics:** 9% (n=4)
  - **Other:** 4% (n=2)

- **Hospital:** 30% (n=16)
  - **Specialist - polyclinics:** 65% (n=35)
  - **GP-polyclinics:** 39% (n=29)
  - **Other:** 20% (n=15)

- **Hospital:** 20% (n=15)
  - **Specialist - polyclinics:** 35% (n=26)
  - **GP-polyclinics:** 39% (n=29)
  - **Other:** 6% (n=4)

- **Other:** 6% (n=4)
Figure 6.2b. Scheme of utilisation patterns for last illness (women)

**FIRST VISIT**

- Ill ever: 100% (n=744)
- ≥ 1 visits: 90% (n=672)
- 0 visits: 10% (n=72)

**SECOND VISIT**

- GP-polyclinics: 45% (n=300)
- Specialist - polyclinics 23% (n=155)

- Hospital: 14% (n=94)
- Call emergency: 8% (n=51)
- Other: 10% (n=39)

- Hospital: 39% (n=15)
- Specialist - polyclinics 28% (n=11)
- GP-polyclinics: 18% (n=7)
- Other: 15% (n=6)

- Hospital: 90% (n=47)
- Specialist - polyclinics: 6% (n=3)
- Other: 4% (n=2)

- GP-polyclinics: 59% (n=85)
- Specialist - polyclinics 29% (n=41)
- Hospital: 10% (n=15)
- Other: 2% (n=3)
Urban - rural difference in access

The utilisation patterns in urban and rural areas were explored separately to identify different patterns of access. As shown in the previous chapter, overall, the probability of consulting a health profession did not vary between urban and rural areas when the longer period of analysis was used. This could, however, conceal differences in the pathways to care. The situation in Sofia, the cities and towns is relatively similar, but very different to that in villages. For people living in villages, health centres were usually the first point of contact with the health care system (41% of men and 51% of women), while in larger settlements, people tended to go initially to the state polyclinics (Figure 6.3).

Respondents living in Sofia, compared to those living in smaller settlements, appeared to have better access to teaching hospitals or other prestigious facilities providing highly specialised tertiary care; to the private sector; or to home visits by physicians. Home visits are defined as those taking place in the home of either the patient or the physician. Women living in Sofia reported three times fewer home visits than those in the villages. Among men the opposite pattern is observed, with a limited use of emergency services outside Sofia. Potential explanations for this pattern may be that women in villages are generally more proactive in obtaining health care (chapter 5), or as shown in qualitative research, lack trust in emergency services in Sofia.

The differences in patterns of use are much less than could be expected from official statistics based on medical records. These indicate significant and long-term urban-rural disparity in utilisation at all levels of health service. Thus, ambulatory consultations in villages represent only 16% of the total in 1996. The official data also suggest that rural population uses hospital in-patient care (all types of hospitals) disproportionately less relative to its size. The present findings are, however, broadly consistent with the direction, if not the magnitude, of the official statistics.
There is a reason to believe that, contrary to official claims, urban-rural disparities in pathways to care have existed since the 1970s\textsuperscript{169}. After 1967, the number of medical auxiliary posts in villages headed by feldschers increased, while other forms of service provision declined, and almost half of village residents received treatment from a feldscher. Efforts by the communist government to close the gap included development of village polyclinics, subsidised public transportation, and compulsory service in villages for newly graduating physicians. Other factors generally facilitating access to health care are the generally short distances to towns and good availability of transportation before 1990. The authors conclude that, despite these policies, inequalities have persisted. Inadequate organisational structure of the health care system and low quality of health services in the villages burdened out-patient facilities and hospitals in the district and regional centres, while the use of rural facilities and home visits declined. Similarly, a study by Gallup, commissioned by the World Bank, found that in many smaller communities, there was not only lack of choice of specialist services, but also of basic facilities, and in many cases rural residents had to travel to the nearest town to obtain even an out-patient consultation\textsuperscript{196}.

Cross-country comparisons in utilisation patterns are difficult because they are ultimately dependent on the specifics of the health care system. A national study from Kyrgyzstan
found that, in urban settings, visits to polyclinics and dispensaries were the most common option (70%), while in rural areas visits to the doctors' office and to rural hospitals were equally important (26% - polyclinics; 23% - doctors' office; 17% rural hospital).

In the current survey, more than two-thirds of consultations during the last illness took place in the settlement where the respondent lived (73% of men and 80% of women). Only a small proportion of the visits took place more than 50 km away from their home. 18% of men and 15% of women visited a facility up to 50 km away from their home. 7% of men and 4% of women visited a facility up to 25 km away from their home. 4% of men and 2% of women visited a facility up to 50 km away from their home. Only a small proportion of the visits took place more than 50 km away, or even abroad (7% of men and 4% of women). This might suggest that geographical access is not a huge barrier to access. However, while in the 1970s and 1980s, rural residents' use of higher quality health services (usually in urban settings) was associated mainly with inconvenience and loss of time, in the 1990s problems are increasingly related to high cost of transportation and accommodation. This needs to be explored in further research.

**Socio-economic differences in access**

The current study shows that, in Bulgaria, there are no explicit socio-economic disparities in primary and secondary level utilisation for a first contact during the last illness (Figure 6.4). Some inequalities between men and women in access to facilities other than state polyclinics, and city and district hospitals were recorded. Women were less likely to use university hospitals, occupational health facilities and the private sector than men.

This is confirmed by the World Bank 1995 Bulgaria Integrated Household Survey, where the pattern of service use is very similar across income groups, despite the difference in overall level of utilisation. Primary health care in the public sector is most commonly used, followed by public hospitals, and the private sector. However, given the higher level of illness of the poorest groups demonstrated in chapter 5, they may have a disproportionately low access to secondary care, compared to their need.

Similarly, an analysis of data from the World Bank Living Standards Measurement Studies and the USAID-funded Demographic and Health Surveys in less developed countries concludes that in the public sector there is no uniform pattern of utilisation of different levels of care by the rich and the poor. Thus, while in Mongolia the poorest section tended to use to a larger extent primary level facilities, the rich prefer higher-level facilities. In Madagascar and elsewhere, the opposite pattern was observed. The
pattern of utilisation was thus dependent on the existing country-specific "institutional configuration".

Figure 6.4. Utilisation patterns by self-perceived financial situation (first contact)

Choice of health care provider

Regarding their last consultation, 39% of men and 45% of women chose to consult a physician at their local polyclinic or health centre. This is the physician who acts as an equivalent of a GP, with whom they are registered and where they are meant to go first. 19% of men and 15% of women consulted a physician in an emergency situation or were not able to exercise choice. The third most common response for men was referral from a health professional (13%), while for women it was the choice of a known or trusted physician who is familiar with the health needs of the household (14%). Clearly, the majority (71% of men and 70% of women) used the formal referral procedures. Still slightly below a third (29% of men and 30% of women) preferred to consult a physician they know well; one recommended by family and social networks; or found through other unofficial channels, suggesting lack of trust in the official system.

Description of last contact

The last consultation most commonly included physical examination (71% of men and 69% of women). More than half of the respondents had an interview with the physician (54% of men and 60% of women); or were prescribed medication (53% of men and 55%
of women). 33% of men and of women reported having their blood pressure measured, and 23% of men and 19% of women had post-treatment check-ups. 18% of men and women had a blood, or other laboratory test. 16% of men and 14% of women reported having a preventive check-up.

Typically, at the last consultation with physician up to four types of service were obtained. The most common combinations of services were physical examination and interview (44%); physical examination and prescribing of medication (43%); and interview and prescribing of medication (37%). Men reported receiving more types of service during their last consultation than women, except those of older age.

A 1995 national representative survey also registered what procedures were performed during a visit to a health facility. Similar to the current study, physical examination is most common (34%), followed by some form of treatment or procedures (20%); and tests (9%). Issuing a medical certificate was reported by only 2%.

**Hospital utilisation**

**Data from the population survey**

**Levels of hospital utilisation**

For hospital utilisation a slightly longer recall period (past 12 months) was used to ensure a sufficient number of hospital users.

9% of men and women have stayed at least overnight in hospital in the year preceding the survey (13% and 10% respectively of those who reported ever being ill). On average, after three extreme and thus less credible scores were removed, men reported spending a mean of 14 days and women, 15 days in hospital. The modal value for both men and women was 10 days and the median, 10 days for men and 11 days for women. In comparison, the average length of hospital stay for Bulgaria from official data in 1997 was 12.9 days.

**Characteristics of hospital users**

It is important to see who was actually admitted to hospital regardless of whether they reported an illness (Table 6.1). Men who are reportedly unhealthy, poor, only primary educated, married, or living in villages; and women in poor health reported higher hospital utilisation than others.
A similar pattern is evident among those who recalled an illness. Men aged 50-59 and women under 39 reported more hospital stays than other age groups (Figure 6.5). In all age groups, with the exception of those under 39, women reported fewer hospital stays than men. Generally better self-perceived financial situation or income are indicative of lower utilisation of the hospital sector, although among women the relationship is less explicit. Men with only primary education and women with higher education reported more hospital stays. Divorced and separated men reported fewer hospital stays. A relationship between hospital attendance and place of settlement is less clear, men in villages reported the highest percentage of hospital stays, women in villages reported the least.

Table 6.1. Characteristics of people reporting hospital attendance in May 1996-97 (whole sample)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>% been in hospital in previous one year (May 1996-97) (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEN</td>
<td>WOMEN</td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39 5.5% (13)</td>
<td>10.5% (31)</td>
</tr>
<tr>
<td></td>
<td>40-49 10.5% (13)</td>
<td>7.1% (11)</td>
</tr>
<tr>
<td></td>
<td>50-59 13.3% (13)</td>
<td>6.5% (10)</td>
</tr>
<tr>
<td></td>
<td>60-69 10.7% (11)</td>
<td>9.5% (13)</td>
</tr>
<tr>
<td></td>
<td>&gt;70 12.4% (12)</td>
<td>6.9% (10)</td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (&gt;160,000) 7.5% (12)</td>
<td>9.9% (18)</td>
</tr>
<tr>
<td>(Leva)</td>
<td>II (100,000-160,000) 9.9% (13)</td>
<td>5.4% (9)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000) 9.4% (15)</td>
<td>8.7% (18)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000) 12.5% (20)</td>
<td>9.5% (25)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher 8.0% (7)</td>
<td>10.4% (18)</td>
</tr>
<tr>
<td></td>
<td>Secondary 8.8% (29)</td>
<td>7.8% (27)</td>
</tr>
<tr>
<td></td>
<td>Primary 10.6% (26)</td>
<td>8.2% (30)</td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good 5.5% (3)</td>
<td>8.6% (5)</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad 8.6% (16)</td>
<td>4.8% (12)</td>
</tr>
<tr>
<td></td>
<td>Rather poor 9.4% (20)</td>
<td>10.4% (32)</td>
</tr>
<tr>
<td></td>
<td>Very poor 11.8% (23)</td>
<td>9.8% (24)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married 10.1% (49)</td>
<td>8.4% (48)</td>
</tr>
<tr>
<td></td>
<td>Single 8.3% (9)</td>
<td>9.2% (9)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated 6.2% (4)</td>
<td>8.4% (18)</td>
</tr>
<tr>
<td>Settlement</td>
<td>Sofia 7.1% (5)</td>
<td>9.5% (13)</td>
</tr>
<tr>
<td></td>
<td>City 9.5% (19)</td>
<td>7.7% (19)</td>
</tr>
<tr>
<td></td>
<td>Town 7.7% (14)</td>
<td>11.4% (27)</td>
</tr>
<tr>
<td></td>
<td>Village 11.6% (24)</td>
<td>6.0% (16)</td>
</tr>
<tr>
<td>Self-reported health</td>
<td>Good/Rather good 5.8% (29)</td>
<td>6.9% (44)</td>
</tr>
<tr>
<td></td>
<td>Bad/Rather bad 20.9% (33)</td>
<td>12.5% (31)</td>
</tr>
</tbody>
</table>
Figure 6.5. Percentage reporting hospital stay by selected socio-demographic variables

Valid cases: men 489; women 726
Private sector utilisation

Data from the population survey

Levels and determinants of private sector utilisation

Of those who have ever been ill, 13% of men and 19% of women have ever attended a private physician (respectively 10% and 16% of whole sample). 23% of men and 28% of women have visited a private dentist. This difference reflects a rapid privatisation of dental services and acute shortages of materials in the state sector. Results from this and other studies show that consulting a private physician is often perceived as luxury, while a visit to a private dentist is viewed as a necessity.

The state sector still has a predominant role in the provision of health services. However, 6% of men and 7% of women reported that their last consultation was in the private sector.

Analysis of socio-demographic determinants of private sector use is limited by the very few cases. In addition, reporting may have been complicated by difficulty in distinguishing between private and state services due to the common juxtaposition of private and state services (arrangements for sharing consultation rooms, equipment).

There was a higher proportion of private services users among those under 50, with higher income, better self-perceived financial status, and more advanced educational attainment than in the other categories. Being married seems to be inversely associated with private care, while type of settlement and self-reported health does not seem to make a difference.

Other studies from Bulgaria confirm a relatively low use of the private sector. In a national study conducted in 1995, 22% of respondents (or members of their households) reported a visit to a private medical facility in the preceding year (12% once or twice and 10% more than three times). 78% sought free consultation in a state facility. Delcheva estimates the share of official payments for private services to be in the range of 4-6% of overall health expenditure in 1993-97, and may even fall to 1-3% if informal payments are deducted.

The link between private sector utilisation and socio-economic status observed in studies from developing countries is not clear cut. Although the richest sections use the
private sector most, they often make extensive use of certain elements of the public sector. This appears to be the case in Bulgaria. The World Bank 1995 Bulgaria Integrated Household Survey shows that the poorest quintile rarely uses the private sector (less than 5% of all consultations), unlike the wealthiest (13% of all consultations in the richest quintile). At the same time, the rich also use public health care more extensively than the poorest.

**Reasons for seeking health care**

By placing these findings in the context of the qualitative data, it is possible to explore the motivation behind decisions on utilisation.

An overwhelming majority of respondents (over two-thirds) thought that people consult when they already have medical problems ("when something is wrong with their health" [user]). It was a widely shared opinion that people decide to seek care from a health professional only after they have exhausted self-treatment strategies and these have failed ("when they can't cope using home treatment only" [user]). Self-treatment most often includes use of traditional remedies (herbs, potions), drugs recommended by friends and relatives or in publications; alternative medicine; faith-healers, etc. Most are used at home.

Another motive to seek health care is an emergency (persistent complaints, severe physical discomfort, or appearance of new symptoms indicating complications). Decision to use services can also be motivated by subjectively perceived (and not actual) health problems. A strong theme is that qualified medical help is sought too late ("when the condition becomes critical" [physician]).

"...usually in Bulgaria we consult a physician, when we really feel seriously ill, and see that we can't heal ourselves with traditional or ordinary medicines." [user]

Thus, from the point of view of respondents, timely utilisation is deterred because they try to cope using their own resources, do not trust the system, or lack awareness of what is important. Values and beliefs can also affect the utilisation decisions and will be further explored in chapters 9 and 10.

The value of health promotion is clearly recognised by most respondents, but virtually all perceived that the extent of health promotion activities had deteriorated (especially during transition), although a few respondents also expected improvement in the future. Two respondents noted, however, that preventive services for children are an exception,
as they are still functioning, and achieving good coverage. One physician pointed to peoples’ active interest in prevention against re-emerging diseases such as tuberculosis, sexually transmitted diseases, or “new” diseases such as HIV/AIDS.

Many people attributed this decline to the state’s failure to place an emphasis on such activities as well as low awareness among the population. Thus, several respondents argued that, in the absence of expression of popular demand, the state should take a lead.

“Until recently, we called patients for preventive check-ups, there were dispensaries, and yearly examinations—all this was dropped 6-7 years ago when the reforms started. Prophylaxis does not exist because.. it is not about the immediate survival of the system. There should be a national or state organisation to set strategic aims.” [physician]

The issue of overutilisation was raised spontaneously. Several respondents thought older people, in particular pensioners, overused the public sector. In contrast people of working age, in regular employment, with families dependent on them, were seen as least likely to consult.

“Some people like check-ups and go to health facilities without having a particular illness... Others—not children and pensioners—people who work, ignore their symptoms... in order to survive. They come late, when they can’t work anymore...” [physician]

In general, many people felt that utilisation has decreased in recent years. The main reasons are perceived to be deterioration of the system, low health awareness and financial barriers to access to health services. This is further discussed in chapter 10 in relation to the willingness to pay for health care.

“The problem is that the Bulgarian is either afraid of the outcome, ignores his health, lacks health culture, lacks means, and thus, comes later and later. In the 4 years I have worked in oncology, the advanced cancers have increased by 50%.” [physician]

Patterns of health services utilisation: scenarios

Respondents were presented with several scenarios and asked to describe their probable actions. The scenarios included illness of the respondent; illness of their child or a close relative; hospital admission; and dental treatment.

There appear to be three alternative strategies commonly used for initial contact with the health care system in the case of illness of the respondent: a visit to the state sector through regular channels (half of users, 4 physicians), visit to a private facility (slightly below half of users, no physicians), or a visit to either sector facilitated by a “connection” (most physicians) (Figure 6.6).
The situation is rather different for first contact in relation to a child or relative's illness. Patients were more likely to use private sector or public emergency services. More users were willing to try and find a connection before accessing the formal system. Almost all physicians would turn directly to a colleague.

Although most users first access the formal state sector, typically their local polyclinics, for a subsequent visit a connection is most often sought to help find a suitable physician or facility in either the public or private sector.

Almost all respondents preferred to use connections at certain points in their treatment. Fewer people seek a connection to enter the system, while many more declare a willingness to resort to one if they subsequently face difficulties. It was a widely shared view that seeking connections is normal practice. A connection is usually used to:

a. collect information (identify the best or most suitable physician, facility, or type of treatment in the public or private sector);

b. ensure access to it;

c. ensure high quality of care, quick service, or a good attitude;

d. provide information on availability and price of drugs.

For example, word of mouth is still the main route to certain private physicians. Illness of a child or family members, or a more serious illness, is more likely to trigger the decision to seek connections, in both the public and private sector. Clearly, the purpose
of connections is very similar to that of informal payments (chapter 7), and in effect is often an alternative strategy to obtain high quality care at a reasonable cost. A less commonly mentioned reason to use connections is to obtain a free service.

"I would use connections because an acquaintance will always pay more attention and will give everything from themselves. It has happened to me." [user]

"What we face daily is: an acquaintance of an acquaintance of an acquaintance - simply nepotism.... Or since the relations are not always so strong, something like a word of mouth. This is the usual system in 80% of the cases, 10% use the standard way, and another 10%, I am not sure." [physician]

The main distinction seems to be between people who first attend the health facilities in their area, and those who seek contacts and friends’ recommendations to visit other levels or the private sector. The perception is that there is no need for connections at the primary care level, as access is relatively straightforward. Lack of trust in the system appears to be the central issue and main reason for using informal referral procedures. This applies equally to the private sector.

"Nobody searches for connections for the polyclinics, but mostly for hospitals, for admission, finding a bed, for some specific medical tests involving waiting." [physician]

"If you want to receive a decent service you have to go to a private consultation room, but even this is not enough. From my experience, you have to be recommended by a friend or relative. A large part of the private physicians and dentists... don't work well." [user]

It is important to establish that the patients understand the official procedures in the health care system and do not face information barriers. The principles of access to primary health care and referral channels seem relatively clear for most patients and physicians, although several physicians thought that the system is overbureaucratic and confusing for patients. However, in many cases, despite familiarity with the system, patients prefer to skip formal channels ("people decide that they have to be seen by a professor, regardless of his workload..." [physician]). One area that raises particular concern, especially among physicians, is a perceived misuse of home visits, thus diverting resources from more urgent cases.

"...there is a huge confusion as to whether to call a physician at home and when to go directly to the facility." [physician]

These findings are strongly supported by a 1996 qualitative study commissioned by the World Bank on utilisation patterns in smaller communities, which were not well represented in the current qualitative research. Its findings are very similar:
predominant use of polyclinics rather than hospitals and a preference for home treatment (half of respondents, particularly women) because of poor conditions in health facilities and loss of time. The older generation used traditional medicine extensively, and went to health facilities only if no improvement was achieved, while for children, qualified medical help was sought from the start (as in the current study). A quarter of all respondents were willing to consult a health professional only “as a last resort”. Only births, abortions and prenatal check-ups always took place in health facilities.

Patient satisfaction

Data from the population survey

Satisfaction with the last contact

The satisfaction with the health care received during the last consultation was relatively high. The highest possible rating was the modal value for all indicators: waiting time, length of consultation, attitude of staff, outcome of treatment, confidentiality, cost of treatment, overall level of service, hygiene, availability of equipment and pharmaceuticals.

Among those respondents who reported consulting a health professional during their last illness, the overall satisfaction with the last visit has been estimated, taking all indicators into account. About half were satisfied (49% of men and 48% of women) and 40% of men and 37% of women were ‘rather satisfied’ with the visit. 8% of men and 12% of women were neither satisfied nor dissatisfied and 3% of men and of women were dissatisfied.

Virtually all respondents who had their last consultation in the private sector were satisfied (73%), or rather satisfied (25%), the corresponding figure in the public sector being 47% and 39%. Patients’ trust in physicians also appears to be strongly associated with their satisfaction with treatment197. Those who consulted health professionals they knew well, or ones recommended through family and social networks, indicated a higher level of satisfaction with the service received.

Although dissatisfaction with care appears relatively low, the aggregated assessment conceals the weight of each indicator. For 17% of men and 21% of women, the costs accompanying their last consultation caused some dissatisfaction. This is by far the most
important factor causing dissatisfaction, followed by waiting times, perceived as a problem by 10% of men and of women (Figure 6.7).

Figure 6.7. Satisfaction with last contact

<table>
<thead>
<tr>
<th>% satisfied/ rather satisfied for their last consultation</th>
<th>% dissatisfied/ rather dissatisfied for their last consultation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONFIDENTIALITY</td>
<td>COST OF TREATMENT</td>
</tr>
<tr>
<td>LENGTH OF CONSULTATION</td>
<td>WAITING TIME</td>
</tr>
<tr>
<td>OVERALL LEVEL OF SERVICE</td>
<td>APPARATUS, MEDICINES</td>
</tr>
<tr>
<td>ATTITUDE OF STAFF</td>
<td>OUTCOME OF TREATMENT</td>
</tr>
<tr>
<td>HYGIENE</td>
<td>OVERALL LEVEL OF SERVICE</td>
</tr>
<tr>
<td>OUTCOME OF TREATMENT</td>
<td>CONFIDENTIALITY</td>
</tr>
<tr>
<td>APPARATUS, MEDICINES</td>
<td></td>
</tr>
<tr>
<td>WAITING TIME</td>
<td></td>
</tr>
<tr>
<td>COST OF TREATMENT</td>
<td></td>
</tr>
</tbody>
</table>

The overall high level of satisfaction could be explained by the fact that most visits were at primary care facilities where the costs are generally lower, and the treatment process more straightforward.

The results of the current survey can be compared to a 1996 survey from Bulgaria targeting specifically newly introduced "family physicians", previously district physicians. Despite the slightly different response scale, the results appear similar (Table 6.2). 88% of the 1997 sample and 91% of the 1996 sample were satisfied to a certain degree with the service received at primary care level. The level of dissatisfaction was very low.
Table 6.2. Patients’ satisfaction: health status: data comparison

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall satisfaction from last consultation: primary health care (estimate)</td>
<td>As a whole, are you satisfied with your personal doctor (GP)?</td>
</tr>
<tr>
<td><strong>Scale</strong></td>
<td><strong>%</strong></td>
</tr>
<tr>
<td>Satisfied</td>
<td>49 %</td>
</tr>
<tr>
<td>Rather satisfied</td>
<td>38 %</td>
</tr>
<tr>
<td>Neither yes, nor not</td>
<td>11 %</td>
</tr>
<tr>
<td>Rather dissatisfied</td>
<td>3 %</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>0.3 %</td>
</tr>
</tbody>
</table>

* two stage random national sample (n=1180) ** two stage random sample of 25 municipalities (excluding Sofia) covered by a primary health care project (n=1966)

**Data from the qualitative research**

**Patient satisfaction with health care system**

A dramatically different picture emerges when satisfaction with the overall health care system in Bulgaria, rather than with the last consultation only, is explored. In the qualitative study all respondents shared the opinion that the health care system is in a very poor state. Among the expressions used were: "very poor", "tragic", "collapse", “in a miserable state”, “critical”, “desperate”, “unsatisfactory”, “underfunded”. The widely-shared view was that the decline was a direct result of the socio-economic crisis during transition, exacerbated by a lack of health care reform. The state of the health care system was thought to reflect the circumstances in the wider economy. Several users thought that health care is virtually unchanged since the transition, with current conditions just as bad as they were before. Only one physician thought that the situation in the health sector has improved.

"After the start of reforms, Bulgarian health care resembles the health care from the last century. It is in a highly unfavourable situation... for the patients." [user]

"There is no guarantee that you will be treated, that a correct diagnosis will be given, that this will really happen for free..." [user]

"I don’t know whether in the new history of Bulgaria health care has ever been in a worse state than now. And this is logical because the economy is in a collapse, but a health care is always a reflection of the economic situation... it’s natural." [physician]

The main problems are thought to be financial deficiencies; shortages and low quality of pharmaceuticals; careless attitudes by staff (“an icy attitude” [physician]); outdated equipment and technologies; dilapidated buildings and infrastructure; poor in-patient
living conditions; poor hygiene and hospital food. One physician viewed the procedures in the health facilities as another problem. Most of those negative characteristics worsened during the 1990s transition, with deterioration in overall quality of care and high cost of essential pharmaceuticals seen as especially problematic.

"The health care is in a collapse and it is very difficult to provide qualified treatment. Use of connections, relatives is a necessity. Before 1989 there was also a lot to be improved, but there weren't shortages of pharmaceuticals and equipment." [physician]

"Unfortunately, year after year, it is getting worse. We are simply shocked by the prices of pharmaceuticals which are unaffordable for a large part of the patients..." [user]

Several patients and slightly fewer physicians noted problematic issues around lack of training and the inattentive attitude of physicians. The failure adequately to reward staff was seen as having an impact on the ethical relationship between patients and physicians. However, some users felt that the physicians do what they can, given the scarce resources.

"After the economic reforms... most physicians are not interested to pay the necessary attention to their patients, especially if they are above 50-60 years old..." [user]

The grave state of health care and the lack of reform visible to the public may have contributed to a general sense of confusion and insecurity among users, and pessimism among health professionals. A failure to reform the health sector is perceived to be a major cause of these problems.

"It is definitely worse than before because the synchronisation, discipline, the social provision, are disrupted. The resources are not sufficient." [physician]

"The state policy is not focused, no health care initiatives are undertaken, no clearly determined budgetary resources are allocated as before. Because of the changes a misbalance and total confusion occurred." [user]

"I'm not sure whether the question is only about money. A structure is destroyed, new is created without building on the advantages of the old one..." [user]

Most difficulties reported by respondents are financial, affecting the conditions in health facilities. All patients shared the view that, in health facilities, the situation is very poor, extremely difficult, "disastrous", "it's a miracle the system survives", "scarcity", "enormous problems", "disgrace", "horrible", "total destruction". The main perceived reasons were the lack of reform and insufficient public spending. This is equally true for urban "key" tertiary hospitals that are considered elite in term of highly-specialised care provided (the National Centre for Oncology, the Higher Medical Institute, 'Pirogov',
'Tsaritsa Joanna', Hospital for Infectious Diseases, and National Gynaecological Obstetrics Centre; in Sofia). The 'Governmental Hospital' is the only exception mentioned. Although all patients assessed the situation at health facilities as very poor, five physicians found the financial status of their facilities to be relatively acceptable ("at least the salaries are not delayed"; "thanks to the director... we haven't had to ask patients to pay for food or beds").

The other aspect of the reduced budget is the expansion of user fees, especially in relation to hospital stay. Several patients felt that this is not right because the state claims to provide free health care, but in effect the resources allocated are minimal. Many people felt that the situation is extremely bad if patients are asked to pay for everything, even for the most basic things, such as syringes, aspirin, surgical gloves, cotton, gauze, bandage, oxygen, and even anaesthetics or urgent medication at hospitals. Several physicians stated that they have tried to find supplies themselves, using sponsors or connections in order to treat patients.

"At present the situation in Bulgaria is desperate, people are forced to pay for each service. We say we have free health care, but in practice it is not free, because even if you ask for clean sheets in the hospital, you have to pay the hospital attendants" [user]

"It is already required from the patients when admitted to a health facility, to bring any medicines, materials, food... This is a tragedy for our health care" [user]

"The budget provided by the state is sufficient for about 30-40 operations per year, and we perform over 150. We find external money through donations, private patients" [physician]

"The hospital management is forced to ask patients to buy some pharmaceuticals, gloves in order to operate. But sometimes unplanned medicines are needed and we discuss financial matters with the patient - this gives opportunity for corruption." [physician]

Respondents were asked to outline the difficulties faced by patients and physicians when using health services. In relation to problems of access, three predominant sets of problems were equally common. The first type of problems related to bureaucracy, confusing referral channels, chaotic procedures, administrative difficulties, and a lack of real choice of physician. A second was waiting times at clinics, although people with more time to spare (pensioners, unemployed) were thought to be less affected by this. A third set of issues relate to affordability. Half of physicians stressed affordability of pharmaceuticals as a main deterrent. These factors are interrelated. From the patient's
perspective, the problems faced by physicians were similar to the problems in the health care system in general.

"Total disorganisation in medical facilities. There are no personal physicians, no one knows your health status... Everywhere there are enormous crowds of people." [user]

"In the state hospital too much time is lost. For people who work, it is impossible to wait 4-5 hours for their turn. The second thing is that unfortunately there are few good doctors, and they are the most burdened with patients. Of course, it is even more difficult to find the prescribed medicines, and to pay for them..." [user]

"First the thought that they have to pay. If one goes to the polyclinic he would not be paid attention, definitely, but sent from room to room. If he goes to hospital, will wait for hours, and if he wants to consult a specialist, has to go to a paid consultation." [user]

Several respondents (mainly physicians) thought that primary care at polyclinics is still relatively easily accessible, and users do not face serious difficulties in consulting a physician there.

These results are in line with other quantitative data on satisfaction in Bulgaria. As mentioned in chapter 4, a representative survey (15+) conducted in 1995 registered high levels of dissatisfaction with the health care system\textsuperscript{126}. In that survey two-thirds of respondents (64\%) described the situation in the health care system as bad or very bad, and worse than other sectors. The most acutely felt problems were loss of time (69\%), shortage of pharmaceuticals and supplies (66\%), nepotism (66\%), indifferent attitude (62\%), bureaucracy (60\%), poor hygiene (60\%), and corruption (54\%).

In the earlier mentioned World Bank study covering several small towns and villages, most respondents also assessed the quality of health care to have deteriorated in recent years. The symptoms were the unfriendly attitude of physicians towards patients, very poor conditions in health facilities, and a reduction in preventive services. Hospitals lacked clean bed linen, adequate heating, food, and supplies of pharmaceuticals, forcing patients to supply them themselves\textsuperscript{196}. Explanations for the poor financial situation in health facilities were sought in the general poverty of the population and the country.

User satisfaction was not considered an issue before 1989 and thus research is scarce. Still, a public opinion survey from 1988 shows surprisingly low satisfaction with the system. Only 4\% of respondents living in Sofia; 5\% in the cities (district centers), 7\% in towns and 14\% of village dwellers thought polyclinic health services to be very good\textsuperscript{169}. In earlier research, the health care system and the social sector provision as a whole, were viewed as reliable, although not of high quality\textsuperscript{198}. 

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These results also can be compared to recent data from a 1996 Eurobarometer survey across EU Member States (15+; about 1,000 per country), which addresses the overall level of satisfaction with the health care system. The level of satisfaction with the last treatment episode in Bulgaria appears higher than the EU average (Table 6.3). Although the results are not directly comparable, qualitative research showed that satisfaction with the overall health care system in Bulgaria is much lower than in the EU.

Table 6.3. Patients' satisfaction: health status: data comparison with the West

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall satisfaction (from last consultation)</strong></td>
<td>In general, would you say you were very satisfied...with the way health care runs in (your country)?</td>
</tr>
<tr>
<td>Scale</td>
<td>%</td>
</tr>
<tr>
<td>Satisfied</td>
<td>49 %</td>
</tr>
<tr>
<td>Rather satisfied</td>
<td>38 %</td>
</tr>
<tr>
<td>Neither yes, nor not</td>
<td>11 %</td>
</tr>
<tr>
<td>Rather dissatisfied</td>
<td>3 %</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>0.3 %</td>
</tr>
</tbody>
</table>

* Estimate based on 7 indicators of quality  
** Direct question on overall level of service

Discussion

This chapter provides extensive information on the pathways to care followed by Bulgarians who fall ill, charting not just where, but how, they move through the system. It showed that, while there are few socio-demographic differences in overall access to care, the nature of that care does differ. Somewhat intuitively, those living in villages are more likely to access health centres and less likely to access hospitals than their counterparts in cities. This is consistent with extensive research on patient flows in other countries.

There are also variations in the use of health care by age and gender but, in general, the differences are also intuitive, reflecting the common illnesses at each age. Differences according to financial situation are small.

Following the initial consultation, there are, however, differences in subsequent referral. It is not clear whether this reflects the conditions involved and this would require further exploration.

Use of health care emerges as very much a last resort for many people, happening only after they have exhausted other options (self-treatment, alternative therapies). Once the decision to enter the system is made, behaviour is determined by the nature of the condition and circumstances of the patient. For what could be described as "ordinary"
situations, the formal system is commonly used. There is, however, a range of "special" situations, in which other strategies, in particular "connections", giving informal payments, or use of emergency care are used.

In part, these strategies reflect concerns about the quality of the system and its referral channels. Two quite divergent views emerge, depending on whether respondents are considering their most recent contact with the system, or were judging the overall system. In the former case, satisfaction is high. In the latter it is not.

In summary, the system for accessing care in Bulgaria appears to be functioning tolerably well at a superficial level but under the surface there are some major weaknesses.
CHAPTER 7. INFORMAL PAYMENTS FOR HEALTH CARE IN BULGARIA

Introduction

In the decade following the political changes in 1989, Bulgaria retained a state owned health system funded from general government revenue, based on the Soviet “Semashko” model. Throughout this period, the mismatch between the level of government spending on health and the demands on the health care system have been among the largest in Central and Eastern Europe. The funding deficit has been covered through a combination of one-off financial inputs by the government, foreign aid, and an increased reliance on extra-budgetary sources, mainly out-of-pocket payments by users. These payments were mainly of two types: semi-official user fees and “under the counter” payments.

Before 1989, informal payments were officially banned by the communist authorities, although this was not strictly enforced. During the transition, successive governments have avoided taking a view on informal payments, leading to a situation where a variety of user payments ("donations") have acquired semi-legal status. Selected user fees collected at health facility level were formalised with the Decree for the Conditions and Routine for Payment for Health Care of Patient's Choice in December 1997. No official policy regarding under-the-counter payments has been formulated, although the prevailing attitude appears to be one of tolerance as long as the size of the “gift” does not distort attitudes of staff or lead to abuse.

Formulation of an explicit and coherent policy towards informal payment is essential for further implementation of financial reform, but this should be based on research of the scale and nature of informal user payments. In the context of the current thesis, understanding of informal payments is important for several reasons. Firstly, private health expenditure often has a large informal component which is rarely taken into account by official bodies in less developed countries. Measuring informal payments will reveal the extent of private expenditure and the true funding requirements to sustain the health care system without posing a large burden on users. Secondly, knowledge of socio-economic variation in these payments will provide data on potential inequities which have to be addressed in reform. Thirdly, informal payments are likely to affect the
clinical behaviour of medical staff, creating perverse incentives and, potentially, low motivation for reform. Finally, informal payments are indicative of the size of the informal economy with implications for the shrinking tax base and the funding required to sustain the health care system.

Economic literature in this general area has addressed mainly informal transactions in the private sector or corruption in the state sector. Research on informal exchanges in the health sector, especially in Central and Eastern Europe, is scarce. Consequently, the concept of informal payments and methodological approaches for their investigation are less developed.

This chapter will attempt to define the scale of informal payments in the health sector in Bulgaria in the context of other research from Bulgaria, and elsewhere. It draws on both quantitative data on informal payments, derived from the survey, and an in-depth perspective based on qualitative research. To conclude, implications for policy will be discussed.

**Informal payments: definitions**

To begin with, it is necessary to define a range of terms that will be used in the remainder of the thesis. These include corruption, formal and informal economy; and user fees and under the counter payments. As will be shown, the superficially attractive linkage between, on the one hand, the formal economy and user fees and, on the other, the informal economy and under-the-counter payments, is not straightforward.

The OECD defines the informal economy as "all activities which occur outside the normal administrative and regulatory framework" or "output of production units not registered with fiscal or social security authorities". These definitions thus include the informal income of physicians and informal expenditure by patients in the Bulgarian health sector, as neither is recorded.

The informal sector in health care, as in the wider economy, is not tied to formal premises, does not rely on easily measurable inputs, and often involves collaboration within the family or social network. Among factors recognised to facilitate an informal economy are a heavy tax burden, restrictive state regulation and weak enforcement. In the case of Bulgarian health care, lack of incentives, low working hours in the state sector, and permissive public attitudes are also likely to stimulate involvement in informal exchanges.
The issue of informal payments is linked to that of corruption. This has been defined in a series of studies in public hospitals across several Latin American countries, commissioned by the Inter American Development Bank. There, corruption is defined as "use of public office for private gains", including large- and small-scale managerial mismanagement and self-benefit, as well as "user corruption, in which staff solicit payments which are formally unnecessary or alter decisions to favour specific clients". The current work will focus on the concept of "user corruption".

The pilot study undertaken during development of the survey instrument showed that the pattern of informal spending in Bulgaria is complex. Under-the-counter payments coexist with a range of semi-official user fees for pharmaceuticals, materials, food, nursing services etc. Several criteria are used here to distinguish between the two types of payment. The first criteria is 'who benefits from the payments?' suggested by Ensor and Savelyeva. In the case of under-the-counter payments, individual medical staff mostly benefit, whereas in the case of user fees, it is the health facility, and ultimately the patient who receives treatment that is otherwise unavailable. The second criteria is 'what is the payment made for?' While under-the-counter payments buy a service, user fees cover expenses related to treatment. Thirdly, under-the-counter payments are illicit and a clear-cut case of corruption. In contrast, user fees can be viewed more positively as a result of shortages and as a disguised cost-sharing instrument necessary to sustain services during transition. However, in some situations, under-the-counter payments may be formalised sufficiently to blur the divisions.

In practice, in Bulgaria, both types of payment fall in the category of informal payments. At the time of the survey (April/May 1997) user fees were semi-official, implemented chaotically in some health facilities, with no uniform policies. In practice it proved difficult to distinguish between under-the-counter payments and user fees. Users may be unaware of what the payment is for or who benefits from it. They may not get a receipt. Also, under-the-counter payments, especially when in-kind, may be motivated by a genuine desire to express gratitude to staff.

In the subsequent analysis these two types of payment will be distinguished as far as possible. Under-the-counter payments have received much less attention than user fees and therefore the former will be examined in more detail in the analysis.

In previous research in Bulgaria, under-the-counter payments were defined as "monetary transactions" between a patient and a health care professional for services that are
officially free of charge in state health facilities." In the current study this definition was extended to include *in-kind* as well as *cash* payments.

Under-the-counter payments can also be differentiated on the basis of their timing. According to guidelines from the Bulgarian Physician's Union, *ex ante* payments are considered to be under-the-counter and thus unethical; while *ex post* payments or gifts are viewed as a legitimate way to express gratitude. In practice, however, such a distinction is artificial, because, as the current study shows, one episode of illness often requires a series of encounters with medical staff and payment may be given at any time during treatment. Even if given after the completion of the treatment, the under-the-counter payment may reflect an expectation of future benefits, or be requested by staff.

The size of payment and whether it has been requested by the physician are factors useful in distinguishing between those informal payments that have negative connotations and those that reflect true patient gratitude. Thus, some authors have defined under-the-table payments as "payments made to medical staff or institutions that are not officially required, but are either expected or demanded by providers." The picture is further complicated by an existing "after-hours practice": informal private consultations with state-employed physicians paid on mutually agreed terms, often taking place outside health facilities. Although less common since the legalisation of the private sector, these are motivated by opportunities to earn untaxed income and by convenience for both the patient and physician.

This chapter will examine the scale and characteristics of informal payments in the health sector, the situations where they occur, their determinants and other underlying issues. As in previous chapters, data are derived from two sources: a representative household survey of 1547 people, semi-structured interviews with 58 respondents (25 physicians, 33 patients); and 6 focus groups, all conducted in 1997. The following sections will first describe the results from the household survey and then explore these findings in more detail by reference to the responses of those interviewed in the qualitative component of the research. Not all topics have been addressed to the same extent in both the quantitative and qualitative research and thus some sections are based only on one type of data. The views of the users and physicians will be examined in parallel.
The scale and nature of informal payments in Bulgaria

Data from the population survey

The scale of informal payments in Bulgaria

Respondents were asked whether they have ever paid, or given a gift, for a range of services at a state health facility. Informal payments appeared to be a relatively familiar phenomenon, 19% of men and 22% of women having paid or given a gift for at least one of a list of services at a state health facility. Gifts were more common than cash payments, 15% of men and 19% of women reporting they have ever given a gift for at least one type of service compared to 8% of men and of women who reported ever making a cash payment.

The survey also asked about informal payments made in relation to the last consultation. Overall, of those who have ever been ill, 14% of men and of women paid informally for their last consultation. However, many consultations took place in primary health care facilities where, in general, informal payments are less common.

Given the sensitivity of asking direct questions on informal payments, a control question was also used. Respondents were asked whether they have ever paid in a set of circumstances identified through preliminary research as most associated with payment. 21% of men and 27% of women have paid for at least one of the listed reasons, which is comparable to the response to the direct question (19% of men and 22% of women). A Kappa test indicated significant concordance, with values of 0.54 for men and 0.52 for women.
Monetary value of informal payments

Figure 7.1 shows the distribution of cash payments and the monetary value of gifts. Cash payments typically have a higher monetary value, with a median of 3,000 Leva ($1=1,538 Leva, May 1997) for men and 4,000 Leva for women. Gifts appear to be of lower value, with a median value of 1,000 Leva. However, the values were highly skewed.

The effects of rapid inflation make a meaningful comparison of payments with income difficult. To minimise the problem, comparison was confined to the period March to May 1997. This coincided with both the survey and a period of unusual financial stability. As a result of previous inflation, these figures are therefore higher than those reported in the previous paragraph, which relate mainly to payments between 1995 and 1997.

The median for cash payments in March-May 1997 is 5,500 for men and 10,000 for women; and for gifts, 2,000 and 2,750. Median cash payments represent 4% and 8% of the average monthly salary (March-May 1997) for men and women respectively; and 19% and 34% of the minimum monthly salary for the same period. Gifts appear more affordable, being 2% of the average monthly salary and 7% and 9% of the minimum salary (March-May 1997) for men and women respectively.

Of those who have paid in cash, the highest proportion of respondents thought that the sum was about right (40% of men and 36% of women) while about a third thought that it was high in relation to the service (33% of men and 27% of women). Among those who gave gifts, the situation was very different. Again, the majority (42% of men and 60% of women) thought that the gift corresponded to the service, but 33% of men and 14% of women thought that it was low, only a very small percentage thinking that it was high.
Figure 7.1. Type of informal payments made (in Leva)

Structure of informal payments

The types of service paid for, by means of cash or gift, are listed below (Table 7.1). Most of the payments were made for physical examinations, operations and pharmaceuticals. Men were most likely to pay, or give a gift, for operations, while women were most likely to pay for examinations. This probably reflects different utilisation patterns.
Table 7.1. Informal payment / gift by type of service/ item (ever)

<table>
<thead>
<tr>
<th>Type of service paid for:</th>
<th>% selected this option</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>men</td>
<td>women</td>
</tr>
<tr>
<td>Operation (to physician)</td>
<td>6.7%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Examination (to physician)</td>
<td>6.4%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>3.6%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Other</td>
<td>3.2%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Nursing services</td>
<td>2.7%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Tests (to physician)</td>
<td>2.3%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Medical certificate (to physician)</td>
<td>1.7%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Hospital admission</td>
<td>1.4%</td>
<td>2.0%</td>
</tr>
<tr>
<td><strong>Cash payment</strong> for at least one of the above**</td>
<td>7.6%</td>
<td>8.0%</td>
</tr>
<tr>
<td><strong>Gift</strong> for at least one of the above**</td>
<td>15.3%</td>
<td>18.6%</td>
</tr>
<tr>
<td><strong>Cash payment or gift</strong> for at least one of the above**</td>
<td>18.6%</td>
<td>22.0%</td>
</tr>
</tbody>
</table>

In relation to the last consultation, the largest single item of payment was a gift for staff services, followed by expenses for tests and procedures and cash payments to staff (Table 7.2). It is clear that under-the-counter payments to staff represent a large part of the overall spending related to the last consultation (14% of men and of women), but slightly less when excluding those visits in the private sector (11% of men and of women). As will be shown later in this chapter, a private consultation does not exclude the giving of additional gifts or payments personally to the physician.

Table 7.2. Informal payment / gift by type of service/ item (last consultation)

<table>
<thead>
<tr>
<th>Paid informally for:</th>
<th>% selected this option</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>men</td>
<td>women</td>
</tr>
<tr>
<td>Staff service: Gifts, donations</td>
<td>9.4%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Tests, procedures</td>
<td>6.1%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Staff service: Cash payment</td>
<td>4.9%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Food/bed linen</td>
<td>1.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Nursing services</td>
<td>1.0%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Hospital admission</td>
<td>1.0%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Staff service: Services, gratuities</td>
<td>0.8%</td>
<td>1.7%</td>
</tr>
<tr>
<td>At least one payment for <strong>staff service</strong> (state)</td>
<td>14.1%</td>
<td>13.8%</td>
</tr>
<tr>
<td>At least one payment for <strong>staff service</strong> (private)</td>
<td>11.1%</td>
<td>10.6%</td>
</tr>
<tr>
<td>At least one of the <strong>above payments</strong></td>
<td>17.6%</td>
<td>16.4%</td>
</tr>
</tbody>
</table>

Expenditure for drugs (68% of men and 72% of women) is not considered here due to difficulties in distinguishing payments made appropriately at a pharmacy for items not covered by the official health system.
Timing of payment

Figure 7.2 shows that gifts and cash payments are given at different points during the course of treatment. While two-thirds of gifts are given after the treatment, cash payments are most commonly given before or during treatment. Although a link between type of payment (cash or in-kind) and timing of payment (before, during or after treatment) clearly emerges, the use of *ex-post* and *ex-ante*, recommended by the Bulgarian Physician's Union to define under-the-counter payments, is not unambiguously applicable.

**Figure 7.2. Timing of informal payments**

*Data from the qualitative research*

The scale of informal payments in Bulgaria

Given the sensitivity of the subject, several strategies were employed to assess the scale of informal payments. Three types of questions have been asked. The first was whether state facilities receive some income in addition to the budget allocated from the state or municipality. This sought to capture the unprompted reaction of respondents to extrabudgetary income, either formal or informal. The second directly asked respondents whether they have ever given a gift at a health facility. Thirdly, they were asked to give an overall assessment of the scale of informal transactions in the health care system. These questions will be considered in turn.

Potential for extra-budgetary income for health facilities was thought to range from external aid, through user fees to under-the-counter payments. For the majority of users, the most visible additional income was foreign aid, sponsorship and donations made by individuals, charities and private businesses in Bulgaria. Such sources were considered
to benefit only a few facilities. Several respondents pointed to inputs from the commercial sector, for example commissions on contracts with pharmaceutical companies; revenue from renting rooms and equipment in state facilities for private practices; or municipal subsidies.

It was generally felt, however, that the additional revenue to the health facilities is insignificant. Although it might be providing some emergency help to specific facilities, such financing was seen as insufficient ("a drop in the sea", "miserable", "does not play an essential role").

Six respondents stated, without being prompted, that informal payments are a source of additional resources for the health facilities. Among those mentioned were payments for pharmaceuticals; payments related to hospital stay ("payment as if in a hotel"): for bed linen, food, drugs; for elective surgery, and examinations. However, at this stage many respondents used the word "donation", which may assume three different meanings in Bulgarian. These are foreign aid, or informal payments to staff, or more recently, to designate user fees ("compulsory donation" [user]) after this term was used in an amendment to a decree generally aimed at commercial activities, but which thus provided a partial basis for "donations" in the health sector.

At this point respondents began to distinguish spontaneously between under-the-counter payment and user fees on the basis of who benefits from them ("income of a health facility and income of professionals are two different things" [user]). Then attention was focused only on informal payments with clear distinction between user fees and under-the-counter payments.

The interview then sought to underline the personal experience of respondents. Given that, in Bulgaria, as in other economies in transition, many economic transactions during the early transition period were in-kind or as barters, it is predictable that many informal payments will be non-cash. Indeed, informal payments appeared to be much more common than appeared from the survey, almost all respondents (including physicians) having given presents in recent years. About a quarter of patients reported paying informally in cash at state health facilities, although in some cases in what appears to be quasi-private circumstances. A similarly high level of reporting in-kind payments was observed among physicians, who despite using "contacts" to obtain services for themselves, often felt obliged to give something after the treatment. All physicians recall receiving in-kind presents, but all denied receiving monetary payments.
Monetary payments to staff appeared sensitive elsewhere, and their existence tends to be admitted only in private. However, the physicians were relatively more confident than users in discussing informal payments.

Users were asked to give an overall assessment of the situation and, specifically, their perception of the extent of informal payments in the health sector as a whole. This question allowed respondents to express opinions, without having to refer directly to their personal experience. Physicians were not asked this question because pilot interviews showed that discussion of informal payments was too problematic and complex.

Twenty-two patients acknowledged the existence of informal payments in the health sector, with ten strongly in favour. Another nine respondents had heard about such payments, or suspected that they existed. Only two respondents denied knowing about such payments.

Six respondents stated that informal payments were universal practice and an "unwritten law", while eight said that, although they are not yet universal, they have increased recently. Nine viewed informal payments as common practice in well-defined cases: among those who can afford it; for certain services (operations, childbirth); among certain specialities; and in isolated facilities or areas of the country. In only six cases, respondents stated that informal payments are isolated and insignificant.

This suggests that informal payments are familiar to most people. Even at this stage, with almost no prompting, respondents were able to identify some characteristics of informal payments and their components (user fees and under-the-counter payments). Under-the-counter payments can be in any form and secondly, they benefit staff directly.

Giving gifts appeared to be universal.

**Type of informal payments**

As informal payments, especially non-monetary ones, are widespread, it is important to examine the type and size of presents that are given.

Table 7.3 summarises which presents are viewed as typical, unusual, or especially large, as well as the types of presents given or received personally by users and physicians. It is immediately obvious that virtually the same types of gifts are perceived as typical by both users and health professionals. Typical informal payments fell into four categories: first, chocolates, flowers, bottles of cheap alcohol and coffee or a combination (usually
two items); second, food products (eggs, meat, fruits etc); third, treats or consumer goods and finally, monetary payments. 'Treat' means a one-off provision of food or drinks, an invitation to the patient’s village or small town; stays in hotels; dinner parties etc. It was reported that more home-made food products (raw or processed) are offered in the countryside. Gifts such as raw pork or lamb or calf’s head and home made grape brandy (rakia) were reported to have been more common before 1989. There was some mismatch regarding the cash payments, with patients more inclined to believe that payment of large sums is common, while physicians reported that any cash payments are typically small. The table also shows that the cash payment in convertible currency that is typically requested for in-patient care, is regarded as very large.

Unusual gifts were asked about in order to probe the limits of what is acceptable as an informal payment. They included home grown fruits, cheap kitsch objects, or expensive but inappropriate gifts. A case was recalled where a surgical team was invited by a cancer patient, on the eve of her operation, to a dinner party at which a lamb was roasted (the respondent found out about this case when sharing a hospital room with the patient).

The presents that are reported as given or received by respondents coincide with what presents are viewed as typical. This is consistent with data from the population survey. Evidence for larger gifts and cash payments was mainly indirect, i.e. not related to the personal experience of the respondent, but to that of a close relative, friend or colleague. Such circumstantial data, although less precise, is likely to indicate the occurrence of some larger payments.

In some cases, the informal payment implied a continuous relationship between patient and physician beyond the particular episode of illness. This may be an informal exchange of services, where the patient offers, at some point in the future, to provide access to high-demand goods or services, such as car repairs, to facilitate sponsorship for attendance of the physician at a conference, or to recommend the physician to other patients.

"For me, it is offensive for a physician to receive such 'presents', rather than one great gratitude. In the future if he, in his turn, needs something, he will be helped" [user]

There were also several cases where physicians whose main job is in the state sector redirected patients from the state facility to their private practice, where they have to pay for the treatment. In practice, this means that services to which the patients are entitled, for the provision of which the physicians are paid salaries, might be delayed or refused,
to the disadvantage of the patient. Patients who nevertheless complied viewed this as a form of inappropriate payment. This a more subtle form of corruption.

Respondents were more willing to respond to impersonal questions rather than those concerning personal experience. It is notable that respondents with higher income were more likely and more willing to report monetary payments, suggesting greater familiarity with them.

These results set the boundaries of informal payments, showing what is viewed as typical. Although common, informal payments are small and large gifts are relatively rare. The next step, reported later in this chapter, is to see whether these gifts are affordable and what is their impact on treatment.
Table 7.3. Type of informal payments made by patients and received by physicians

<table>
<thead>
<tr>
<th>PATIENTS</th>
<th>Unusual</th>
<th>Especially large</th>
<th>Given personally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chocolates (box)</td>
<td>Dinner party with roasted lamb</td>
<td>$100-200 asked for childbirth</td>
<td>Chocolates / cake</td>
</tr>
<tr>
<td>Flowers</td>
<td>Wine set made of crystal</td>
<td>Large sums (before 1989)</td>
<td>Flowers</td>
</tr>
<tr>
<td>Alcohol (locally produced)</td>
<td>Night dress (to surgeon)</td>
<td>100-200,000 Lv for operations</td>
<td>Alcohol: cognac, whisky</td>
</tr>
<tr>
<td>Coffee</td>
<td>Artificial flowers</td>
<td>$1,000 requested</td>
<td>Consumer goods, decorative items, souvenirs</td>
</tr>
<tr>
<td>Whisky</td>
<td>Knitted a tea cloth</td>
<td>Dinner party with roasted lamb</td>
<td>Money: from 5,000 Leva- to 200 DM</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>Food products: from eggs to whole roasted lamb/pig</td>
<td>Sums several times patients' salary for a single service</td>
<td>In survey: given for the last consultation (by frequency)</td>
</tr>
<tr>
<td>Cakes, biscuits</td>
<td>Small sums as a &quot;treat&quot;</td>
<td>In currency and in leva (in thousands)</td>
<td>Goods: Chocolates, cake</td>
</tr>
<tr>
<td>Food products: from eggs to whole roasted lamb/pig</td>
<td>Luxury goods: perfumes etc.</td>
<td>Sums requested before operation, childbirth: requested: ($ 500 for Caesarian section)</td>
<td>Alcohol (purchased)</td>
</tr>
<tr>
<td>Small sums as a &quot;treat&quot;</td>
<td>Large sums of money</td>
<td>$10,000 for operation</td>
<td>Coffee</td>
</tr>
<tr>
<td>Luxury goods: perfumes etc.</td>
<td>Redirection to the physician’s private practice</td>
<td>Sums requested in USD or DM</td>
<td>Flowers</td>
</tr>
<tr>
<td>Large sums of money</td>
<td>Willingness to provide equivalent service to physician when needed</td>
<td>40 DM and $20 paid for operation</td>
<td>Eggs, milk, cheese</td>
</tr>
<tr>
<td>Redirection to the physician’s private practice</td>
<td></td>
<td>500-1,000$</td>
<td>Meat &amp; meat products</td>
</tr>
<tr>
<td>Willingness to provide equivalent service to physician when needed</td>
<td></td>
<td>100-200,000 Lv</td>
<td>Alcohol (home produced)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40,000 Lv for operation of gall-bladder</td>
<td>Fruits, vegetables, home-made jars/ tins with food</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,000 for operation of a mole, in a teaching hospital</td>
<td>Services: carpentry, car-repair, plumbing, electrical, intermediary</td>
</tr>
</tbody>
</table>

---

1 This classification is determined by the respondents themselves, when asked to name the most typical, unusual etc. present they have given or received.
<table>
<thead>
<tr>
<th>Typically</th>
<th>Unusual</th>
<th>Especially large</th>
<th>Received personally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chocolates</td>
<td>Pumpkin</td>
<td>Several thousand (some time ago)</td>
<td>Chocolates</td>
</tr>
<tr>
<td>Alcohol (brand and local)</td>
<td>Bag of almost decayed pears</td>
<td>$100 or 200 DM - for childbirth</td>
<td>Alcohol</td>
</tr>
<tr>
<td>Coffee</td>
<td>Kitsch objects</td>
<td>100,000 Lv for operation at a teaching hospital</td>
<td>Coffee</td>
</tr>
<tr>
<td>Flowers</td>
<td>TV set</td>
<td>IVF - 200-300,000 Lv</td>
<td>Flowers</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>Set of clothing pegs</td>
<td>Objects: Golden necklace, a lamb, a golden</td>
<td>Perfumes</td>
</tr>
<tr>
<td>Luxury goods: perfumes, high-quality</td>
<td>Cornelian cherry</td>
<td>statue of a child, a car</td>
<td></td>
</tr>
<tr>
<td>pens</td>
<td>Slippers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small monetary: 5,000-20,000 lv</td>
<td>Vase bought at street stalls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(generally for the whole team)</td>
<td>5 apples</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food products: raw pork / lamb,</td>
<td>Calf’s head</td>
<td></td>
<td></td>
</tr>
<tr>
<td>home made grape brandy (rakia)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cake</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treats: dinner parties, trips to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the patient’s village, stays in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hotels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange of services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Settings for informal payments**

Informal payments appear much more common in some settings rather than others. There is a widely shared view that cash or gifts were almost ubiquitous for operations and childbirth, thus benefiting the specialities involved. The general rule seems to be that more and larger payments, especially in cash, are made for interventions, easily definable procedures, more complex types of treatments or those giving immediate relief. In “dramatic” cases, patients were more likely to resort to presents.

“For the more craftsmanship specialities – surgery, urology, ophthalmology, obstetrics and gynaecology... the patient is more inclined to think about financial reimbursement, and the doctors themselves are accustomed to set a price on their labour...” [physician]

“In order the operation to be performed, one has to pay in advance. I know that they would not operate if they know you can’t pay” [user]

Informal payments appear more common in hospitals and specialist or elite facilities, although in several cases user fees were requested at primary care facilities. Some groups of doctors were viewed as more prone to being involved in informal transactions, especially cash payments. The users were viewed as more willing to pay informally to be treated by physicians with higher formal qualifications (e.g. a professor) or by well-known specialists: “old sharks with titles” [physician]; “the “superstars”, “those well-known in their area” [user]. Also, physicians with longer experience are likely to benefit more. Similarly, in Poland, informal payments benefit senior physicians to a larger extent, who, as a result, are less motivated to accept reform\textsuperscript{168}. In Hungary, specialists, such as obstetricians and surgeons, were reported to be paid more often\textsuperscript{206}.

“It is also very important where you work. For example, in ISUL (teaching hospital) I was younger and less experienced. Now I am more experienced, but I work at a primary care unit - here nobody would ever leave... (payment)” [physician]

“For the best doctors, yes... (it is common), but not for the doctors in the polyclinics, nor in villages or small towns or health district doctors.” [physician]

Payments also appear to benefit physicians who are team leaders (e.g. of a surgical team), and not others who have “support” functions, such as anaesthesiologists. Surprisingly, despite the formal payments involved, gifts are often given in the private sector.
Timing of informal payments

The type of informal payments is, in many cases, closely linked to the timing of payment, with gifts usually given after, and monetary sums before or during treatment. Although not always the case, in general the timing of payment (cash or non-cash) was viewed as essential to distinguish between informal payments as a bribe or gratitude. The type of payment (cash or kind) appears to be less important.

Under-the-counter payments, in kind, are typically given at the end of treatment, while monetary payments are given mostly before or during the treatment. The majority of physicians indicated that informal payments are mostly gifts given after treatment, but this view was shared by only a quarter of users. In both groups, a gift after the treatment, especially if successful, was thought to be motivated by a legitimate expression of gratitude. The “success” of the treatment was as judged by the patient or their family.

“Of course, these (gifts) are given after a successfully performed operation or after the successful treatment of the patient... as a kind of gratitude”. [user]

Monetary payments given at the commencement of treatment were perceived as an exception by the physicians, but about half of patients thought that such payments are given before the treatment. Payment (gift or cash) is motivated mainly by two reasons: to ensure a high standard of treatment and a better attitude by staff.

“... if you don ‘t give money, you would not be treated properly. They are given before the treatment, so that the physician will pay you a greater attention”. [user]

In many cases, a monetary payment given prior to treatment does not exclude giving a gift after successful completion of treatment.

“Very often, both before and after. Before, as a guarantee that the treatment will be carried out successfully; and after, then already as a gratitude.” [user]

Both physicians and users viewed the timing of payment and the presence of compulsion among the key factors in distinguishing between a bribe and a sign of gratitude.

“There is a difference between a present, when you are grateful for being cured, and give something ‘from the heart’, just to recognise the effort. The other case is when they (physicians) force you, i.e. for them to take any action, you have to pay. For
example, an abortion now costs 100,000 Leva, paid in advance, otherwise nobody would do it” [user]

“If given after the treatment, they are within the normal, as a gratitude, but if given before the treatment, this is a bribe” [physician]

“Depends. If it is like gratitude, it is given after completion of the treatment. When it is required, it is given in advance” [physician]

It is more difficult to distinguish between under-the-counter payments and user fees. User fees can be either monetary (where patients pay at the facility, such as for admission) or in-kind payment (where patients bring their own pharmaceuticals etc). They could be paid at any time of treatment, with the exception of hospital admission charges.

“If their operation is forthcoming, the patient is being informed that he has to pay... he is told: 'this money are for consumables.’” [user]

In some cases, respondents are unaware of whether they have paid a formal user fee or an under-the-counter payment. For example, the situation where an abortion costs 100,000 Leva can be interpreted as either that it is common to pay user fees for abortion, or, as the context suggests, that the respondent has in mind an under-the-counter payment to physician. This distinction should be emphasised in future studies.

Reconciling the results from different methods

The findings of the qualitative research are important as a guide to interpreting the results of the survey as they suggest that, despite great care to elicit honest responses, it may have significantly under-estimated the scale of informal payments. The most likely explanation is the difference in the two samples. The survey was conducted among a general population sample with many respondents not reporting a recent illness or consultation. In contrast, all respondents in the qualitative research had had a contact with a health facility in the six months preceding the research and thus were more likely to have knowledge or experience of informal payments. The two different samples were chosen explicitly to be complementary. The survey, with its population base, provides data on the overall burden on the population of informal payments, taking into account the diverse pattern of utilisation of services among different socio-demographic groups. In contrast, the qualitative study enables a much more detailed
examination of those who have used services and, with the data from the survey, can be placed in a population context.

It is also necessary to take into account the different characteristics of the research methods employed (chapter 3). The qualitative research provides in-depth understanding of the nature, meaning and context of informal payments, some of which dimensions may not have been captured by the pre-defined response categories of the survey instrument.

While the data collected by the two types of methods supplement each other, given that the scale of informal payments registered by the survey is lower than those in the in-depth interviews and in other comparable research, the survey data should be considered a lower boundary for the frequency of informal payments.

Comparisons with research related to informal payments in Bulgaria

There are few other data on informal payments in Bulgaria. A nationally representative survey conducted in Bulgaria in 1996 gave results on the scale of informal payments similar to the current one, for most types of services\(^6\) (Table 7.4).

Table 7.4. Informal payments made in health facilities: comparison of results

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service paid for:</strong></td>
<td><strong>Service paid for:</strong></td>
</tr>
<tr>
<td><strong>Recall period: unspecified</strong></td>
<td><strong>Recall period: unspecified</strong></td>
</tr>
<tr>
<td>Examination</td>
<td>Examinations</td>
</tr>
<tr>
<td>Operation</td>
<td>Procedures &amp; operations</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>Free pharmaceuticals</td>
</tr>
<tr>
<td>Nursing services</td>
<td>Other</td>
</tr>
<tr>
<td>Other</td>
<td>Tests</td>
</tr>
<tr>
<td>Tests</td>
<td>Medical certificates</td>
</tr>
<tr>
<td>Hospital admission</td>
<td>Medical certificates</td>
</tr>
<tr>
<td>Medical certificate</td>
<td></td>
</tr>
</tbody>
</table>

That survey also found that, in most service categories, it was the elderly, pensioners, frequent users, and consumers of private care who most often pay under-the-counter\(^6\). The current data largely supports these findings, with the exception of pensioners who were found to be less likely than other groups to pay. Similarly, those who have ever attended a private facility reported twice as many occurrences of under-the-counter payments in state facilities; and those with long-standing illness or illness in the past year, who could be defined as frequent users, reported more such payments.
Further data come from a 1994 survey targeting specifically under-the-counter payments. In this survey 43% of respondents (18+) receiving officially free treatment in state facilities in the previous two years paid a cash sum for some part of it. This is much higher than in the current study (21% in the direct question and 25% in the control question). However, the 1994 sample was pseudo-random and administered only in cities, which might have contributed to the higher recorded rate. In the current survey, significantly fewer payments were recorded in smaller settlements, and the fact that this survey is nationally representative may have produced a more realistic picture.

It is important to see these results within the context of corruption in the public sector in Bulgaria. In a survey by the Center for the Study of Democracy (CSD), 86% of respondents thought it impossible to obtain an adequate health service without giving bribes. A study conducted by MBMD (a Bulgarian research agency) in 1998 found that 51% of respondents viewed corruption as widespread in the health sector, exceeded only by the customs, legal system, and police. 68% of people were willing to pay a bribe to receive officially free health services. According to a study by Vitosha Research (part of CSD) in 1999, physicians are ranked immediately after customs officers in terms of corruption. Need for "connections" was the third most common problem related to health care (66% of respondents over 15 in a nationally representative survey in April 1995), with corruption being further down the scale (54% of respondents).

A paper reviewing evidence on out-of-pocket payments in Bulgaria, showed that the share of out-of-pocket payments increased from 9% to 21% between 1992 and 1997, of these, the highest share is for medication, followed by informal payments, and charges in public and private facilities. The paper demonstrated that the revenue from user fees was very low (under 1% in 1998), while 51% of respondents have paid without a receipt for a doctor or dentist, a quarter paying often (1999 survey). Of those who used the private sector, 74% paid informally, compared to 54% of users of public services. The latter finding, which is also confirmed by the current research, contradicts the view that informal payments are associated mainly with the public sector. The scale and value of informal payments reported by that survey is likely to be an overestimation, because it was carried out only in Sofia, where the payments are higher.
A study from 1992\textsuperscript{121}, used a proxy measure to give a general idea of the size of the phenomenon of informal payments in Bulgaria. 34% of the respondents have used a "connection"\textsuperscript{k} (40% in urban and 17% in rural areas). 14% have used a connection to obtain consumer goods, 12% for medicines and 8% for contact with a doctor. That the use of a connection in relation to health care is ranked immediately after the very broad category of consumer goods suggests that it is a widespread practice. Respondents have most often asked a favour from a friend (55%) or relative (29%). When asked whether it was expensive to use this connection, 66% answered that it was “not at all” expensive, 24% stated “not too much” and 9% - “fairly/ very” expensive. There are no data on the nature or size of such payments (cash or in-kind).

Unregulated relationships between doctors and patients existed before the beginning of the democratic changes, as one among many results of the declining quality of health care system, reduced access, and other "internal dysfunctions". A survey from 1988 found that the patient is likely to receive a better service if he or she is not “just anybody”\textsuperscript{169}.

**Determinants of informal payments**

**Data from the population survey**

**Relationship with income**

It is important to know whether payment for services is related to income (Figure 7.3). More men and women in the highest income quartile pay for almost all services than those with a lower income. At each level of income the pattern of informal spending is similar, with payments most often made for examination, operation and pharmaceuticals. At all levels of income, women were more likely than men to report making informal payments. For men, income differences in the rate of payment for most services are generally small, apart from those for examinations and operations. Among women the contrast is more apparent.

\textsuperscript{k} The wording of the question is: “In the last year or two, have you or anyone in your household gone to someone to get things you couldn’t get in the ordinary way?”
Figure 7.3. Payments for a range of services/items by income quartile

Men

Women

Socio-economic determinants of informal payments

In the following analysis, respondents who could not recall an illness or reportedly ever consulted a health professional were excluded. In a univariate analysis, women reported more under-the-counter payments than men in most socio-economic groups (Figure 7.4). Among men, age did not appear to be a strong determinant of paying
informally although, among women, payments are much more common among those under 50. Men and women over 70 reported the fewest informal payments.

Under-the-counter payments were related to income, with people in the highest income quartile paying twice as often as those in the lowest income quartile. Among women, informal payments were more common among those who perceived their financial situation as good or very good, although among men, the link between subjective financial status and informal payments was less clear-cut. Education appeared to be associated with informal payments for both men and women, those with higher education more than twice as likely as those with only primary education, to report such payments. Single men and divorced or widowed women reported fewer informal payments than others. People living in villages paid least frequently.

No explicit relationship emerged between making informal payments and self-reported health, chronic illness or timing of last illness/consultation. People who reported illness in the preceding 12 months, or consulted a physician in the course of their last illness, reported twice as many occurrences of informal payments as the others.

As age was a determinant of paying informally, at least for women, the socio-economic determinants of informal payments were studied using multiple regression (Table 7.5), with adjustment for age. Income appeared to be a significant predictor for both sexes, although surprisingly, the self-assessed financial situation appears less important. Those in the highest income quartile were 2.5 times as likely to report informal payments, compared to those in the lowest income quartile. For both men and women, higher educational attainment was associated with higher reporting of informal payments. Women who were divorced, widowed or separated were significantly more likely than those who were married, to report informal payment, and single women were significantly less likely to pay. For women, living in a village reduced the probability of informal payment although this was just short of statistical significance.

In summary, the rich, young, better educated, and urban dwellers were the group most likely to make informal payments. Whether in cash, or as a gift, the majority of people paid from their current income. For cash payments, slightly more respondents used sources other than their current income, such as savings. Women were more likely than men to use savings (cash: 26% of men, 31% of women; gift: 11% of men
and 19% of women) suggesting more difficulties when paying informally. Few respondents used other strategies, such as sale of assets, or borrowing.

Figure 7.4. Percentage reported paying informally in state facilities for at least one service

- **Age**
  - < 39
  - 40-49
  - 50-59
  - 60-69
  - > 70

- **Income quartile**
  - Highest
  - 2
  - 3
  - Lowest

- **Education**
  - Higher
  - Secondary
  - Primary

- **Marital status**
  - Married
  - Single
  - Divorced/separated

- **Self-assessed financial situation**
  - Very good/good
  - Neither good/nor bad
  - Rather poor
  - Very poor

- **Settlement**
  - Sofia
  - City
  - Town
  - Village

**Note:** The graphs show the percentage of respondents paying informally for at least one service across different categories such as age, income quartile, education level, marital status, self-assessed financial situation, and settlement.
Table 7.5. Socio-demographic determinants of probability of making informal payments for health care (reference population: those who recalled an illness)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>% (n) paid</th>
<th>Odds ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Age-adjusted</td>
</tr>
<tr>
<td><strong>MEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>18.9% (45)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>20.2% (25)</td>
<td>1.08 (0.63-1.87)</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>19.4% (19)</td>
<td>1.03 (0.57-1.87)</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>18.4% (19)</td>
<td>0.97 (0.54-1.76)</td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>14.4% (14)</td>
<td>0.72 (0.38-1.39)</td>
</tr>
<tr>
<td>Income quartile (Leva)</td>
<td>I (&gt;160,000)</td>
<td>28.3% (45)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>II (100,000-160,000)</td>
<td>14.5% (19)</td>
<td>0.42 (0.23-0.77)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>17.5% (28)</td>
<td>1.52 (0.29-0.92)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>14.4% (23)</td>
<td>0.39 (0.21-0.73)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>30.7% (27)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>17.7% (58)</td>
<td>0.48 (0.28-0.83)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>15.5% (38)</td>
<td>0.42 (0.23-0.77)</td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>23.6% (13)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>18.9% (35)</td>
<td>0.75 (0.36-1.54)</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>23% (49)</td>
<td>0.95 (0.47-1.93)</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>11.8% (23)</td>
<td>0.44 (0.21-0.95)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>19.1% (93)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>19.4% (21)</td>
<td>0.94 (0.50-1.77)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>12.3% (8)</td>
<td>0.62 (0.29-1.36)</td>
</tr>
<tr>
<td>Settlement</td>
<td>City</td>
<td>20.7% (56)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>17.2% (67)</td>
<td>0.82 (0.55-1.23)</td>
</tr>
<tr>
<td>Consulted (last illness)</td>
<td>No</td>
<td>14.2% (19)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>27.2% (102)</td>
<td>2.54 (1.47-4.41)</td>
</tr>
<tr>
<td><strong>WOMEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>25.6% (75)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>28.4% (44)</td>
<td>1.15 (0.74-1.78)</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>16.9% (26)</td>
<td>0.59 (0.36-0.97)</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>22.6% (31)</td>
<td>0.85 (0.53-1.37)</td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>12.4% (18)</td>
<td>0.41 (0.24-0.72)</td>
</tr>
<tr>
<td>Income quartile (Leva)</td>
<td>I (&gt;160,000)</td>
<td>34.6% (63)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>II (100,000-160,000)</td>
<td>22.2% (37)</td>
<td>0.55 (0.34-0.89)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>21.2% (44)</td>
<td>1.52 (0.32-0.83)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>14.8% (39)</td>
<td>0.37 (0.22-0.61)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>32.4% (56)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>25.6% (89)</td>
<td>0.70 (0.46-1.05)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>13.7% (50)</td>
<td>0.35 (0.21-0.57)</td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>28.1% (16)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>26.2% (66)</td>
<td>0.88 (0.46-1.69)</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>23.3% (72)</td>
<td>0.81 (0.42-1.54)</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>15.5% (38)</td>
<td>0.51 (0.26-1.01)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>22.6% (129)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>15.3% (15)</td>
<td>0.46 (0.25-0.85)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>23.7% (51)</td>
<td>1.59 (1.04-2.42)</td>
</tr>
<tr>
<td>Settlement</td>
<td>City</td>
<td>25.9% (99)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>19.1% (96)</td>
<td>0.73 (0.52-1.01)</td>
</tr>
<tr>
<td>Consulted (last illness)</td>
<td>No</td>
<td>19.3% (40)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>28.5% (153)</td>
<td>1.61 (1.08-2.39)</td>
</tr>
</tbody>
</table>
Data from the qualitative research

Relationship with income

The link between informal payments and income was further explored in the qualitative research. One way to examine the link between informal payments and income is to analyse the personal experience of high income users. This group was formed on the basis of reported income and subjective assessment of financial status. The relationship was also explored indirectly, through assessment of all respondents' experiences of discrimination in the health care system.

Although the survey data showed an association between informal payments and income, the qualitative data suggested that the link may not be so clear-cut. All high-income users (8) have paid (cash or gift) for health services at the point of use, apart from one who used only private services. Most gave presents after the treatment and two gave significant sums of money (e.g. DM 200). In another case, the patient was directed to a private facility where he paid for a private consultation:

"...it was in a different form. I went to a paid consultation which was not very necessary, and in this way I paid...I think that the sum I was asked to pay was unjustified" [user]

"A rich man goes to a physician, gets on well with the physician, and probably will pay a lot, regardless of whether the doctor has asked for it or not". [user]

Higher income physicians (with private practice or from elite facilities), when in need of services, tend to give gifts rather than cash payments, or rely on exchanges of services ("I don't pay anything - barter deals").

"Even if I go in private, they would not take money from me. Simply we, the doctors, do not take money from each other." [physician]

The next step was to see whether there is discrimination among patients on the basis of income, social status or ability to give informal payments. In the opinion of the physicians, a higher position in society is not always associated with a greater willingness to give informal payment.

"Among my patients there are prominent people, academics, but they would not consider... The ordinary people are more grateful usually. For example, a gypsy or a driver will leave a much nicer present, will pay respect to your work, while the others will say only 'thanks'" [physician]
Almost all patients (29 out of 33), and the majority of physicians (17 out of 25), believed there to be certain sections of the population which receive better health services than others, in some cases amounting to discrimination. The main reasons for these perceived inequalities fall into several categories: access to private services; access to elite or urban state facilities; ability to pay; or opportunity to use a ‘connection’. The first two reasons are related to privileges inherited from the old system or to formal purchasing of private care. These are less important because they occur only in a few elite facilities.

Advantage on the basis of ability to pay and use of a 'connection' has substituted for the privileges previously enjoyed by people with high positions in the communist hierarchy. This opinion is held by half of users and a larger proportion of physicians. These will be examined in more detail.

“At the time, people who were high in the hierarchy were treated better. After 1990, this hasn’t changed much, but also people with a lot of money appeared. For a good payment, they are treated better in practice” [user]

A widely shared view is that the quality, and ultimately the success, of treatment depends on the individuals' willingness and ability to pay under-the-counter. For people who cannot afford to pay, things can be “critical” (user).

“Definitely there are groups receiving a better service. It’s a public secret that although the health care is free at this stage, for each health service, significant money are given under-the-table, in order to motivate the physician to be more responsive, more attentive, more caring, and thus, to achieve better results of the treatment.” [user]

“This was the case before 1989 and today: those who have more financial means and give ‘under-the-table’ payments to doctors, are then treated much better.” [user]

Treatment of richer patients, even when they do not pay the physician, is generally better. This is due firstly, to their ability to buy drugs and supplies and pay all treatment-related costs; their access to better specialists and facilities; and more attention by staff. The poor are more likely to self-treat or to be offered lower quality substitutes in the pharmacy. The rich benefit from “higher quality service, medicines, and medicine as a whole” [physician]. Secondly, their ability to pay, or expectation of a future service or other benefits for the physician, are deemed essential to receive better treatment.

“The quality depends on the patient’s material status regardless of whether the treatment is paid or not. It determines what medicines will be prescribed. Often it is asked: ‘how are you financially, in order to know what medicines to prescribe’” [user]

“People paying more are treated better and the physicians cannot be blamed for that.” [user]
"...you are sitting in the dental surgery, waiting patiently for your turn and then somebody arrives, who is a mechanic in the auto service, where the physician repairs his car, and naturally, the mechanic will be let in, and you will continue to wait." [user]

"Of course, those who are better-off, able and ready to pay are always welcomed." [physician]

"It is not true that no effort at all is made for people who cannot pay anything. Efforts are made, but not the same as for those who pay." [physician]

Apart from income, under-the-counter payments are also influenced by a range of other factors such as the social status of the patient, their access to key resources, or the physician being recommended through a social network. In many cases, an alternative scenario, when the patient is unable to pay, is to seek ‘connections’. Physicians often find it unacceptable to take money from colleagues, relatives or people recommended by them.

"All things are connected: the financial side, also whether in the future the specialist will need you, and of course, your social status." [user]

"I'm not sure whether even if you are full of money and wait for your turn outside the consultation room and say ‘I’m paying, call the doctor’...I think that you will be served better only if you telephone in advance and a friend sends you.” [user]

Despite the importance of 'connections', financial status sometimes proves more important. Several cases were reported by physicians where close relatives of well-known physicians were not diagnosed in a timely manner, and where a family relationship had no impact. It has become increasingly difficult to obtain treatment through strategies other than informal payment.

"It depends how close the relatives are, it is possible to a certain extent, but I think that one already asks even relatives to pay.” [user]

"It is also difficult for me. My brother had a transplantation, there are problems, and certain things are delayed for months. Because I am a physician, they can't tell me concretely what they want, and for this reason they redirect me.” [physician]

Informal payments and the transition

Data from qualitative research

It could be suggested that informal payments have undergone a change in the 1990s. Although this is a cross sectional study undertaken in 1997, it also provides some data on informal payments in the years preceding the transition.
Before 1989, the communist authorities considered informal payments incompatible with free and equitable health care provision, deflecting resources from the system, and creating a private relationship between the medical profession and users. Although considered ethically wrong and implying commercialisation of the medical profession, informal payments were not considered a criminal offence. Although presents were common, no sanctions were enforced, probably because they were considered to be an additional inexpensive incentive for low-paid medical staff. Similarly, in the 1970s, informal payments started to appear in Poland and Hungary, and were exacerbated in the 1980s as a result of worsening conditions in the health care system. Sanctions by the authorities were nominal and, in Hungary, payments were even considered part of salaries, subject to taxation after 1989.

In Bulgaria, after the transition, there were some spontaneous changes, with user fees based on adapted legislation introduced in some facilities. No consistent policy was formulated in relation to under-the-counter payments.

There is a widespread perception that, since 1989, presents have been given and received more openly, as "something usual". Before 1989 such presents were more understated due to fear of sanctions by authority, even though this did not seem to be based on experience of enforcement.

"...then everything was happening secretly and behind the scenes, but now it is already openly, and nobody forbids nobody anything" [user]

"it was quite strict then". [physician]

In the 1990s, several parallel trends emerged in the type and size of informal payments. The first is that cash payments are viewed as increasingly more frequent, about half of patients and of physicians sharing this view.

"I think that before there was not so much payment under the table. i.e. what was given was some perfumes, chocolates, expensive alcohol – because these were unavailable, but I think that no payment was given as it is done now." [user]

"...what was given were chocolates, drinks or you are invited for dinner at their home... Now I know that significant sums are given, especially for operation or for something serious" [physician]

The second trend was of a perceived increase in the size of both cash payments and the monetary value of gifts. It is possible that the size of the informal payments is not much larger than in the 1980s, but accounts for a higher proportion of the household budget.
Before 1989 presents were thought to be more uniform and with little value, because authorities tended to tolerate affordable 'standard presents'.

"While before doctors were also taking such presents, but they were more modest – boxes of chocolates, something smaller." [user]

In another post-1989 development, in parallel with the increase in the value of gifts and cash payments, an opposing trend was observed, in which there was a reduction in the ability of the population to pay out-of-pocket. Factors suppressing out-of-pocket payments were declining purchasing power of the population; escalating pharmaceutical prices; and a perceived expansion of the informal health sector. For many, even small traditional gifts (flowers, alcohol, chocolate etc.) appear to have become less affordable due to falling living standards. Physicians considered these gifts "trivial", "ordinary" and with only a "symbolic" value, "affordable for the average Bulgarian". Giving bottles of alcohol, for example, was valued less given recent increases in sale of bootlegged alcohol potentially containing harmful substances (a physician reported using donated alcohol as antifreeze in his car). In effect, such gifts did not achieve the intended objective having a low impact on service, and larger gifts were increasingly expected by physicians.

Although these gifts are perceived as tokens of gratitude, in contrast to cash payments, the monetary value of such gifts can be substantial. For some patients, even these common gifts are unaffordable, despite their desire to provide them. Others felt that such presents are quite adequate for the service received. The context is important in that the cost of flowers in urban areas, luxury chocolates and alcohol (mainly imported) have grown disproportionately to incomes. If such gifts are considered as only very basic and almost obligatory expressions of respect by health professionals, their impact on the service is likely to be small. This poses a substantial burden on users, especially when the treatment is prolonged and complex, thus putting pressure on the relationship between patients and physicians. Some physicians considered such payments inadequate both for the patients' and doctors' financial situation:

"They (presents/payments) are definitely large in view of the income of the population and the real value of money at the moment". [user]

"...in the current economic situation, not everybody can afford to buy a bunch of flowers for 2,000 Leva" [user]
"The usual in the past box of chocolates and a bunch or flowers... is now too much for a patient to give. Also, I don't know whether a physician with 20-30$ salary would not prefer a kilogram of cucumbers for example, rather than the flowers..." [physician]

This contradictory evidence could be partly explained by the socio-economic effects of transition. While gifts became less affordable and thus what was given was less attractive, cash payments increasingly were used to achieve a higher impact.

"Simply now the presents are cheaper, smaller, but on the other hand money are given, i.e. there is a differentiation: large sums are paid, plus separately, presents" [user]

After 1989, income polarisation ("social contrasts" [user]) affected the ability of different groups to make informal payments. The resulting discrimination by staff according to ability to pay, led to the creation of two tiers of service.

"Now the means of the different patients are very contrasting compared to a decade ago, when the difference was not so great. Now it is almost a luxury to buy a box of instant coffee and a box of chocolates." [user]

"I think that people were a little bit more attentive before, a little kinder. Now as if the economic crisis has sharpened the aggressive mood in people" [physician]

In the view of patients, an important characteristic of informal payments in the 1990s is the fact that they have become a ubiquitous fact of life.

"Before one could rely on personal contacts, acquaintances, social status etc. while now payments are simply necessary everywhere." [user]

Another important change is that while in the previous system payments were viewed as discretionary, in the 1990s treatment can often be conditional on a preliminary payment. Giving a monetary payment before treatment, especially when requested by the staff as a condition of treatment, constituted the worst possible scenario in the perception of both patients and physicians.

"Once upon a time they were paid in-kind... At the moment I don't think they receive presents, but are offered money. There are doctors who request them themselves" [user]

"At the time money were not given, but now they are. Among some corrupted colleagues, unfortunately it is negotiated in advance" [physician]

According to interviewees, the patient is rarely asked directly to pay for the service. Instead, there is innuendo, labelling with a more serious diagnosis to scare the patient, inadequate or slow service, or other unethical techniques. A respondent recalled a case where she was diagnosed with bronchopneumonia:
"...and the doctor said that she is going to treat me and I have to thank her for the successful treatment... so I felt obliged to bring her a present the next time." [user]

"The mechanism is simple: you are late for work, you have gone to have coffee...and if you had to see 20-30 patients today, you can't. Therefore they will have to pay in order to get to you. The dentists did it...in the state polyclinics there are no appointments for two months ahead, although there is nobody in the waiting room, while the dentists are in their private consultation rooms... This is not a nice way." [physician]

Cash payments or gifts are often expected. Many doctors admitted expecting gifts if the treatment concluded successfully ("many people say only one thanks" [physician]), although only symbolic.

**Placing Bulgaria in an international context**

Evidence on the prevalence and characteristics of informal payments elsewhere is largely anecdotal. Systematically collected data are extremely scarce. Governments have often chosen to ignore the problem due to shortage of health care funds, or because it is "politically problematic". Informal payments have filled some gaps in budget funding, thus reducing the need for official rationing. When addressing issues of corruption, government and donors in many countries have focused on large-scale corruption in the public sector, involving large sums and high-level players, while small-scale corruption, involving small payments made by ordinary people, has often been ignored. The lack of attention to informal payments has been a major obstacle to developing policies in this area. Hungary has been the only former socialist country where informal payments have been officially recognised as a problem and research commissioned.

What evidence exists suggests that informal payments are a not insignificant source of private health care financing (Table 7.6). The World Bank, while emphasising their illegal character, suggests that such payments should be measured, with a view to incorporating them into a system of regulated cost sharing. The World Bank estimated informal payments (for pharmaceuticals and provider services) at 25% of total health costs in Romania, and 20% in Hungary.

The WHO Health Care in Transition reports have examined informal payments in several countries. With the demise of the Semashko system, the reliance on extra-budgetary sources at state health facilities in CEE/FSU has increased, out of pocket user payments varying between 10% (Croatia and the Czech Republic) and 17% of total health expenditure in Hungary.
The reasons why some countries have more informal payments than others have not been systematically explored. The available studies have concentrated on a very few countries.

Generally, the resurgence in informal payments has been explained by shortage of funds in the system, resulting in inadequate salaries and low quality of care. According to the Hungarian Central Statistical Office, gratuities alone were estimated at 11% of total health expenditure (1997). In Poland, informal payments to staff ("envelope payment") constituted 46% of all patient expenditure at hospital. These payments increased physicians' net salaries by 15% and thus constitute a significant source of income. Annually, these payments accounted for more than double the annual salary bill. The introduction of universal health insurance systems, supplemented by private insurance, has offset informal payments in Croatia and the Czech Republic. These estimates should, however, be treated with caution because of problems of definition of informal payments and unclear methodology limiting comparability.

Evidence indicates a wider use of informal payments as a supplementary source of financing in Central Asia. In Kyrgyzstan, the scale of informal payments has increased in recent years, 11% of those consulting a physician reporting payment in 1993, while in 1996, half of patients made such a payment. An earlier survey in Kyrgyzstan from 1994 showed that 8% of those who consulted in the out-patient setting and 25% of all at in-patient facilities have given gifts to staff. 24% of inpatients paid a formal charge for admission, but of those, 62% did not get a receipt. Although most gifts appeared unsolicited, their value can be significant (mean: $13.5). 80% of mothers gave a gift after delivery. 72% of gifts in relation to in-patient care were given before or during the treatment, with only 28% after the treatment, which contrasts with the current study. Informal payments constituted 18% of total payments for hospital inpatient stay.

In Kazakhstan, out of pocket payments are officially only 5% of health expenditure, although other sources suggest that they may have reached 30% in 1996, with significant co-payments for officially free pharmaceuticals, services and hospital admission. Qualitative research has suggested a higher level of informal payments.

In the former socialist countries, informal exchanges were encouraged by the falling prestige and incomes of physicians, widespread corruption in the wider economy and the lack of sanctions. Preliminary results from a survey conducted by the World Bank and the Albanian Center for Economic Research in 1998 showed that, of those who have paid
a bribe, the highest proportion (40%) paid for medical services, to state medical staff. State hospitals were viewed by public officials as the most corrupt institutions after the judiciary, customs and the privatisation agency.\textsuperscript{210}

A study from India in 1993 showed that most users of publicly run maternity homes (89%) and a quarter of those who used private hospitals (24%) paid a bribe. Bribes constituted from 6% to 38% of total hospital expenses.\textsuperscript{208}
Table 7.6. Out of pocket payments/ informal payments in selected countries


<table>
<thead>
<tr>
<th>Country</th>
<th>Out-of-pocket/ Informal payments</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>10% of direct service costs - co-payments</td>
<td>HiT, 1999</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>10% of health financing before health insurance - gratuities and under-the-counter payments</td>
<td>HiT 1994</td>
</tr>
<tr>
<td></td>
<td>11% of total health expenditure - gratuities (1997)</td>
<td>HiT 1999</td>
</tr>
<tr>
<td></td>
<td>20% of total health costs - informal payments</td>
<td>The World Bank, 1993</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>• 30% of total health expenditure - out-pocket for drugs, food, nursing services(1996)</td>
<td>Ensor, 1998</td>
</tr>
<tr>
<td></td>
<td>• A survey by local newspaper, almost all 500 patients paid UCP for service</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 10% of financing in Almaty was covered by user charges (1996)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 5% of total expenditure - out of pocket payment (officially)</td>
<td>HiT, 1999</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>• 10-15% to 20-30% of total health expenditure - out-of-pocket payments (1996)</td>
<td>HiT, 1999</td>
</tr>
<tr>
<td></td>
<td>• a half of those consulted made informal payment for consultation (1996)</td>
<td>Falkingham, 1998/9</td>
</tr>
<tr>
<td></td>
<td>• 8% of outpatients and 25% of in-patients gave gifts to the staff</td>
<td>Abel-Smith and</td>
</tr>
<tr>
<td></td>
<td>• 24% paid formally for admission, but of those 62% did not get a receipt (informal payment)</td>
<td>Falkingham, 1995</td>
</tr>
<tr>
<td></td>
<td>• 18% of total cost of hospital stay - informal</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>• 46% of expenditure per episode of hospital treatment (&quot;envelope payment&quot;)</td>
<td>Chawla et al, 1998 (national household survey 1994)</td>
</tr>
<tr>
<td></td>
<td>• Reported &quot;envelope payments&quot; more than double the average gross salary of a physician</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>25% of total health costs - informal payments</td>
<td>The World Bank, 1993</td>
</tr>
</tbody>
</table>

Data on size of under-the-table payments in Albania were published in a popular weekly magazine211 (Table 7.7). It is evident that the total cost of delivery may equal the average monthly wage in the public sector, while more complex surgical treatments may exceed it by several times. Clearly, for people on low salaries, and pensioners, particularly in
the rural areas, these payments are unaffordable. This may put them at risk of receiving poor quality or delayed services. Doctors justified these rates by their very low remuneration.

Table 7.7. Under-the-counter payments in Albania by setting/ type of service

<table>
<thead>
<tr>
<th>Setting/ type of procedure</th>
<th>Payments (Lek)</th>
<th>$ equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>District hospital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery (payment to the obstetrician)</td>
<td>3,000</td>
<td>20</td>
</tr>
<tr>
<td>Caesarean section</td>
<td>5,000</td>
<td>55</td>
</tr>
<tr>
<td>Delivery (to each of the nurses attending)</td>
<td>500</td>
<td>3.5</td>
</tr>
<tr>
<td>Delivery (to the cleaning lady)</td>
<td>200</td>
<td>1.5</td>
</tr>
<tr>
<td>Delivery (to the gate-keeper)</td>
<td>200</td>
<td>1.5</td>
</tr>
<tr>
<td>Total per delivery</td>
<td></td>
<td>30-60</td>
</tr>
<tr>
<td><strong>Tirana University Hospital Centre</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation for appendicitis</td>
<td>2,000</td>
<td>15</td>
</tr>
<tr>
<td>Operation for prostate enlargement</td>
<td>4,000</td>
<td>25</td>
</tr>
<tr>
<td>Operation for cholecystectomy</td>
<td>15,000</td>
<td>100</td>
</tr>
<tr>
<td>Operation for nephrolithiasis</td>
<td>10,000</td>
<td>70</td>
</tr>
<tr>
<td>Operation on stomach</td>
<td>100-150,000</td>
<td>100</td>
</tr>
<tr>
<td>Cardiac valve replacement</td>
<td>25,000</td>
<td>170</td>
</tr>
<tr>
<td>A valve replacement</td>
<td>100,000</td>
<td>650-700</td>
</tr>
<tr>
<td>Official minimum wage (1997)</td>
<td>4,400</td>
<td>30</td>
</tr>
<tr>
<td>Average monthly wage in the public sector (1997)</td>
<td>9,559</td>
<td>63</td>
</tr>
<tr>
<td>Maximum urban pension (1997)</td>
<td>6,500</td>
<td>43</td>
</tr>
<tr>
<td>Maximum rural pension (1997)</td>
<td>1,248</td>
<td>8.5</td>
</tr>
<tr>
<td>Professor's salary in the University Hospital, Tirana</td>
<td>20,000</td>
<td>135</td>
</tr>
</tbody>
</table>

Rationale for informal payments

Data from the population survey

Reasons for informal payments

Women and men tended to pay in similar situations, with the largest percentage reporting payment because of serious illness (10% of men and 12% of women) or to obtain a consultation with a well-known specialist or at an elite clinic (9% of men and 12% of women) (Table 7.8). Other reasons for rendering payment were gratitude for successful treatment (8% of men, 9% of women), to receive special attention (8% of men, 10% of women), or for services of high standard (8% of men, 11% of women).
Table 7.8. Reasons for payment at state health facilities

<table>
<thead>
<tr>
<th>Type of service paid for:</th>
<th>% selected this option</th>
</tr>
</thead>
<tbody>
<tr>
<td>In case of serious illness</td>
<td>10% 12%</td>
</tr>
<tr>
<td>For consultation with a prominent specialist / clinic</td>
<td>9% 12%</td>
</tr>
<tr>
<td>Because I was satisfied with the successful treatment</td>
<td>8% 9%</td>
</tr>
<tr>
<td>Because the physician paid me special attention</td>
<td>8% 10%</td>
</tr>
<tr>
<td>To receive a high-quality service</td>
<td>8% 11%</td>
</tr>
<tr>
<td>Because my child/person very close to me was ill</td>
<td>7% 9%</td>
</tr>
<tr>
<td>Because the attitude of staff was very good</td>
<td>6% 7%</td>
</tr>
<tr>
<td>Because I knew that I would be treated immediately</td>
<td>6% 7%</td>
</tr>
<tr>
<td>To have access to better equipment / medication</td>
<td>6% 8%</td>
</tr>
<tr>
<td>Because I had enough money</td>
<td>3% 4%</td>
</tr>
<tr>
<td>Because the price was affordable</td>
<td>3% 6%</td>
</tr>
<tr>
<td>To be treated close to my home</td>
<td>2% 4%</td>
</tr>
<tr>
<td>At least one of the above cases</td>
<td>21.1% 27.3%</td>
</tr>
</tbody>
</table>

Data from the qualitative research

Reasons for informal payments

Respondents suggested three different sets of issues underlying informal payments: related to the physician; to the patient; and to the health system organisation.

In relation to physicians, a predominant explanation for the existence of informal payments is the low salaries of medical staff in the state sector, leading to a growing demand for extra payments.

"Due to the impossibility of doctors to live with these salaries, which are given to them by the state" [user]

Physicians' incomes are considered inadequate, thus creating a justification for informal payments. Some respondents thought that physicians receive an inappropriately low salary compared to other occupations, with fees paid even for private treatment.

"A doctor, who is an extremely good specialist, even by western standards, performs complex operations, but is not paid adequately... It is quite normal for him to expect somebody to pay for his work and it is normal for the patient to want to pay, because nobody else could provide the service" [user]

"Complete chaos: poor medical staff, to whom it is unspoken rule to pay in order to receive any service at all, and that is a service of unknown quality." [user]
The payments were sometimes seem as "enforced", or "demanded" by the doctors. Abuse of the dependency relationship between doctor and patient promotes informal payments. In this model, the doctor bears all the responsibility for the payment.

Surprisingly, in many cases the payment is instigated by the patients. In a positive sense, payment may be motivated by "hope for successful treatment", or may seek high-quality service, a better attitude or convenience. Payment is perceived as unproblematic when it is made in good faith, on the patient's own initiative and if it does not cause them financial difficulties ("spontaneous" [user]), but not when users are forced to pay in order to receive adequate treatment. In some cases, they are perceived as low in view of the expected benefit. This was seen as a mechanism for the patient to gain control over their treatment. Payment may also serve to reduce the cost to patients from waiting or suffering204. In other cases, the decision to pay may reflect compliance with traditions and expectation rather than a rational choice.

"People feel more confident sure in their treatment when they pay..." [user]

In this context, respondents thought that such payments are made by wealthier people who can afford it anyway and therefore it is not a problem. The idea that such payments may create expectations for all to pay something and thus exacerbate inequality, was not considered.

"Some people have a lot of money... and think that the attitude (of staff) towards them will be far better if they pay"[user]

The negative side of this could be a patient feeling that payment is necessary to receive adequate treatment.

"These are payments made not so much from good heart, but from fear and ignorance, especially if their illness is a more serious or chronic." [user]

Another set of factors underlying informal payments, perceived by many respondents, stemmed from shortages caused by underfunding, expressed as "poor system of health financing", "ineffective administrative system" [user], "lack of regulation of payment", "disorganised way of financing" [user]; and "unequal access to certain services by patients"[user].

Informal payments for health care are perceived to reflect a pervasive culture of corruption in the wider economy, aggravated by a "lack of law and order in the country"
Use of informal strategies shows lack of trust in the official procedures in the health care system.

Two-thirds of users thought that informal payments are a reaction to economic difficulties rather than a product of culture or tradition. The common view that corruption is culturally determined recently has been challenged elsewhere and is supported in this study.

"Until 1989 it wasn't a tradition. This informal payment appeared as a consequence of the overall collapse of the economy." [user]

"I think that the current financial situation of the state degenerate the relationship between patient and physician." [user]

Despite that, a third of users still viewed informal payments as a deeply rooted tradition, which limit the possibilities of control. It is important to distinguish between giving a gift, which is considered traditional behaviour, and paying cash, which is associated more with present-day corruption.

"It is a tradition to pay respect to a physician (i.e. with a gift), because he is looking after the most precious thing – health. But these additional informal payments, this is not a tradition, they are just imposed by life." [user]

**Winners and losers**

The majority of respondents felt that the medical staff (the doctor who is responsible for the treatment, the team who operate, auxiliary staff) benefit exclusively from informal payments as a direct supplement to their salaries. In an insecure environment, such payments are a "direct" supplement to staff remuneration.

"Of course it benefits the physicians, but we should not be angry with them, because still they are highly qualified specialists, and given that the state cannot pay them, they have to search for other sources" [user]

The personality of the physician and their position are viewed as important determinants as to whether they succumb to participation in such relationships. Doctors who have an opportunity to do so ("have wealthy patients" [user] or are well-known "stars"), are more likely to receive an informal payment.

"Unscrupulous, there are some who take advantage of the situation" "Physicians with the 'right' way of thinking" [user] "Unfortunately physicians are only human..." [user]

"A person who is not well-off very easily could be bought... to do their job better." [physician]
Some respondents recognised that informal payments may benefit both physician and patient. The patient shows attention and respect and receives the same.

"The benefit is for the both sides, there is no argument about that. Nobody would pay, if doesn't know that will receive something back." [user]

A few people also felt that such payments are indirectly beneficial to the health care system as a whole by attracting extra-budgetary funds.

"Such payments are an additional income for the health facility as a whole and I think that it is an input into the overall treatment of the patient" [user]

The role of informal payments

Several important functions of informal payments emerged from the study, derived mainly from patients’ perspectives. The most common is as an expression of gratitude for a successful outcome. Traditionally it involves gifts, services or other non-monetary goods given after completion of treatment and to acknowledge the physicians’ efforts (the word "attention" is used by a patient as synonymous to gift). Even small tokens ("for memory" [user]) could serve this purpose. Gratitude may be for the attention and responsiveness of the physician ("met with understanding from a physician" [user]). Thus, in Kyrgyzstan, according to tradition, small unsolicited gifts are made after delivery (66% in urban; 85% in rural areas)\(^\text{83}\).

"...there are such cases, the patient from gratitude leaves you some money at the end - for the work, or simply, for the sake of their health". [physician]

"something that would please them, show them they are respected, honoured...." [user]

Another function, typically involving cash payments, but also gifts, given before or during the treatment, is to ensure respect from staff and high quality of care in the forthcoming treatment. The first step is to establish communication and attract the attention of apparently unmotivated staff towards the patient's medical problem by means of an informal payment or the promise of one in the future ("getting the physician to remember you"). The next step is to ensure that higher than average quality of care is provided, waiting is avoided and preferential treatment secured. Payment to obtain quick service, to improve the standard of treatment, or secure a good attitude of staff, are common reasons for informal payments elsewhere\(^\text{204, 208}\). Payments by users have been found to be a significant determinant of the type of health care and attention from staff\(^\text{68}\).
In contrast to functions relating to the past or present, informal payments also have an insurance role, guaranteeing a degree of security in case of future illness. This involves gaining the confidence of staff and establishing a long-term relationship. Such a strategy was considered essential in a situation of rapid and unpredictable change in a health sector facing chronic shortages and low standards of care.

“In case of future illness, future problems, to have somebody to contact, somebody to provide a normal treatment” [user]

“Usually the patients are trying to insure themselves, offering them before, and not after the work is done. We are talking about the more serious things...” [physician]

“...some patients have tried to give gifts also before the treatment, but I am a bit superstitious, insist for them to be given at the end, if any.” [physician]

Informal payments also demonstrated the patient’s willingness to contribute to their own treatment, but attitudes to contributions to a formally free health system are discussed further in chapters 9-11.

Attitudes to informal payments

Attitudes to informal payments (qualitative research)

In general, there are several types of reaction to informal payments. Firstly, many patients and physicians considered this practice to be unethical and “not right”, especially concerning cash. In the view of many physicians, under-the-counter payments are often humiliating due to the circumstances surrounding the payment and its often small size or curious nature. The under-the-counter payments, when in cash (“envelopes with money”), tend to be viewed negatively by the majority of respondents, taking such payments is seen as improper behaviour.

“Bulgaria should become a modern country, where all those presents and services do not exist in the health care, and in our life, in general. Everybody to earn their living honestly, and this to determine their attitude to the patient” [user]

"It is ugly when a physician asks for money” [survey sample]

Some patients have even found them distasteful, "shocking" and “inexplicable from a human point of view” (e.g. the previously mentioned story about the dinner party before an operation for cancer). A recurring theme among physicians is that payments or gifts could restrict clinical autonomy, while giving more control to the patient through the creation of a binding relationship.
“Sometimes the patient gives 100-200 Leva, ‘to treat yourself’, and the physician refuses... because these money are not enough, but are binding. Later he could say he gave money to the doctor, yet 200 Leva could only buy a coffee.” [physician]

“Often the price of these under-the-counter services is not set... It diminishes the self-esteem of the physician: to have money slipped into the pocket...he feels bad about it because the sum does not always corresponds to he did, but in many case this is the only way of increasing income. In general, it is unpleasant for both sides.” [physician]

Another group of physicians and patients were tolerant, and viewed under-the-counter payments as a matter of fact and even as a positive gesture towards underpaid, but deserving, medical staff. The fact that physicians are disadvantaged means that they deserve an additional payment. In this respect, payments are often seen as indicative of good manners and politeness. Often the payments were considered “normal”, or “understandable” in the light of the current economic situation.

For some, such practices even amounted to “social justice” in the face of the failure of the state to finance adequately the health care system. Physicians also thought that presents, as a sign of respect, could improve the morale of the profession.

"I think that it is not undignified for neither sides, it is hard work after all..." [physician]

“For the physician to have done his job well is a satisfaction and naturally, he is pleased also to receive a present – this is a sign of respect.” [physician]

A third view is that patients have the right to show their respect by giving presents, as long as they are voluntary and not requested by staff. This is deemed part of the private sphere of human behaviour and not appropriate to regulate.

“If the patient is satisfied I think that he has the right... to buy the physician a Mercedes if he wants” [user]

Small presents and cash sums are deemed acceptable in state facilities but, over a certain threshold, going directly to the private sector is preferred. Patients reported that informal payments have a definite impact on treatment.

Opinions are divided on whether informal payments pose a serious problem (13-no; 19-yes). Some respondents thought that informal payments must not be an important problem, because of the lack of open discussion on the subject. Others viewed informal payments for health care as no more serious than similar unregulated activities in other spheres of society. They were also perceived as a manifestation of the expansion of the private health care sector and an inevitable expansion of cost-sharing.
"It is not a problem, this is the situation at the moment. As profiteering is a temporary problem in the state, this is the same... Even not so serious problem." [user]

"I don't think that it is a serious problem, because in practice an unofficial system for paid health care is functioning. Hardly anybody has illusions that health care in Bulgaria is currently free." [user]

Of those seeing informal payments as problematic, several types of problems were perceived. One is to do with the inequalities it creates, and affordability.

"...not everyone receives the same medical service... actually people who cannot pay, cannot obtain sometimes even the most necessary health care." [user]

"It is becoming a problem, with even the poor starting to feel obliged". [user]

"Of course, in some cases this leads to abuse, and at certain point they may refuse to do something vitally important, if payment is not guaranteed beforehand." [user]

Informal payments also place physicians in a difficult situation, because of the stigma attached ("It is a problem for the doctors as well, because they have to hide" [user]).

Finally, many respondents saw informal payments as reflecting problems inherent in the health care system and posing challenges for it ("the way health care operates currently... is a problem" [user] "...everything should be evaluated, and patients required to pay formally". [user]).

Acceptability of payments in state facilities (survey)

Data from the survey on acceptability of informal payments provide a useful parallel. Respondents were asked to evaluate a series of statements relating to the acceptability of such payment in the state sector.

61% of men and 63% of women felt strongly (highest degree on the scale) that it is unacceptable for physicians in state facilities to receive money from their patients. In marked contrast, a situation in which a patient gives money to a physician in a state health facility following a successful outcome of treatment was unacceptable to only 21% of men and 22% of women, while 38% of men and 36% of women found it perfectly acceptable, and another 28% of men and 30% of women thought it acceptable only sometimes. It is interesting that there is disapproval of the physician who accepts money, but approval of the patient who gives it.

The predominant view was that it is acceptable for patients who are satisfied with their treatment to leave without expressing their gratitude to the physician through payments,
presents, or favours (81% of man and 82% of women). Only 9% of men and of women thought it is unacceptable for a patient, if satisfied, not to give a gift. Similarly, in the in-depth interviews, only a few users and no physicians thought a patient impolite if they leave the facility without giving anything.

The negative reaction to informal payment is stronger where they are requested by the health professional. 58% of men and of women stated that in no circumstance is this acceptable and a further 22% of men and 23% of women deemed it rather unacceptable. 15% of men and 13% of women considered that it is acceptable for a state-employed physician to ask for payment in specific circumstances: shortage of basic resources at health facility (5% of men and women); low salaries of physicians (4% of men and 3% of women). Only 2% of men and 3% of women thought it right to pay for service in a state facility.

These findings indicate that cash or in-kind payments in the state sector, in general, are acceptable, when initiated by the patient, rather than medical staff. There is a strong opposition to requests for payments or other pressures on users to pay.

**Potential responses to informal payments**

**Potential responses to informal payments (qualitative research)**

A set of solutions emerged in relation to informal payments. Many respondents, predominantly physicians felt that informal payments exist because of deficiencies in the health care system in general. In this case, large-scale reform of health care financing is seen as a necessary solution. It was thought that a social insurance system in which, it was assumed, the patient would be provided for and the physician adequately paid, would cause such payments to disappear. Those physicians who benefit most from informal payments are perceived not to have an interest in financing reform and to be an obstacle to it.

"Whoever does reform, should do it quickly, not to complain of obstacles, because this thing (IP) corrupts the health care. Health care was a moral category once." [user]

"This problem could be resolved if the doctor becomes financially independent, i.e. is sufficiently well paid not to succumb to such 'gestures’" [physician]

Another alternative to eliminate payments is to rely on user fees, or other forms of expansion of the private sector, but with part of the payment benefiting the physician directly.
It was also suggested that, as informal payments exist because of the lack of official channels for patients’ contributions, voluntary contributions could be channelled through a range of quasi-private pathways: sponsorship, advertising, contracts with private firms, or donations. Direct community participation has roots in the national culture suppressed by the Semashko system, and more innovative forms should be sought.

"Each hospital has to use non-conventional methods of raising additional resources, which to be collected in a special fund and used for the poor." [physician]

Another preference was for the informal payments to be collected for the whole facility or within teams, and then distributed among medical staff, thus eliminating inequality among specialities.

In another, less common, view expressed by physicians, inequalities in treatment are normal in a market economy and this is not considered a problem:

"Those who pay are served better, as in the whole world - nothing new. Everywhere there are hospitals for rich and for poor. I don’t recommend you go in a hospital for poor abroad. Here, the difference is even smaller." [physician]

**Discussion**

This chapter presented the results from a 1997 study on the scale and characteristics of the informal economy in the health sector in Bulgaria. This topic has not been previously explored by means of representative surveys in Bulgaria, limiting the scope to validate the results.

The level of reporting informal payments is somewhat lower than expected from previous work in Bulgaria. In particular, it is possible that responses were influenced by perceptions of the semi-illicit nature of the informal transactions. Some underreporting may have occurred due to sensitivity of the issues or people being unable to recall how much they have paid in a situation of rapidly changing prices and wages, caused by inflation in the 1990s. Some of the characteristics of informal payments were found in the process of research, which if known at the start would have potentially increased the ability of the questionnaire to distinguish the types of payments made. Although the study of informal payments in a population sample gives an impression of the overall distribution, those who have made informal payments should then be targeted specifically. Despite these limitations the methodology has provided a starting point for further investigation of the informal exchanges in the health care system in Bulgaria.
Informal payments, especially as gifts, are relatively familiar phenomena in Bulgaria. Although in the survey less than a quarter of the sample reported having paid informally in cash or in-kind, the in-depth interviews showed that all respondents had experience with in-kind payments and, for many, cash payments.

Considered in an international context, it is evident that informal payments in Bulgaria appear to be on a smaller scale than those in Hungary\textsuperscript{206}, Poland\textsuperscript{168}, and Central Asia\textsuperscript{204, 209} where research has shown a large informal sector. For many types of services, such as hospital admission, payments are negligible, while in Kyrgyzstan about three quarters paid for hospital admission in 1996\textsuperscript{209}, in Kazakhstan these are reported to be twice the monthly salary\textsuperscript{212}.

In Bulgaria two parallel layers of informal payments were identified (Figure 7.7). The first layer comprises traditional gifts given, on the patients' initiative, as a sign of gratitude after a successful outcome of treatment. These were deemed part of the private sphere of human behaviour and not appropriate to regulate. The second layer are payments (increasingly in cash) for physicians' services, given before or during treatment, often requested by staff, and fees covering treatment-related expenses. While the first type is considered a culturally determined phenomenon, the latter is seen as a product of financial imperfections in the health care system and an economic necessity, rather than tradition. This second group, which are closer to corruption, were opposed by both users and physicians. Cash or in-kind payments in the state sector are considered acceptable only when initiated by the patient, not staff.

**Figure 7.5. Layers of informal payments in Bulgaria (1997)**

The most common reason for making an informal payment is in case of serious illness, for access to well-known specialists or clinics, or as a guarantee of high quality service. Under-the-counter payments, as well as user fees for pharmaceuticals, food, or nursing services, occur more often in in-patient facilities and for more complex treatments, thus
posing a burden to users. This is consistent with the view that corruption is more likely to occur in the public sector, where there are more obstacles to individual choice. People are least likely to have paid for convenient access to services, which reflects a still existing infrastructure. In contrast to the former Soviet Union, where payments in rural areas are predominantly in-kind, in Bulgaria the divide is less pronounced.

The current research demonstrated that the richer and more educated sections are more likely to pay informally. This may suggest that informal payments are flexible and discretionary, reflecting closely the patient's financial status, thus not affecting equity. This could be viewed as an argument for some kind of formalisation and establishing exemption practices. Official user charges have been regressive, however, as patients are required to pay the market cost of drugs and consumables, without taking account of income. Charges for surgical materials and hospital admission, for example, are often at the discretion of the medical staff and, except for the very poor, are not related to income, thereby reinforcing inequity.

There is evidence of the existence of a two-tier system, advantaging people able and willing to pay staff informally, or contribute towards the cost of their treatment. From another perspective, however, informal payments by the wealthy raised the overall expectation of staff, and ultimately may increase the cost for all patients.

Patients' and physicians' attitudes towards gifts are an important barometer. As in other studies, informal payments were perceived to be rooted in socio-economic and institutional factors in the health care system, rather than peculiar to certain personalities. Among these factors are low salaries, with no performance related component, disillusionment with slow health reform, poor organisation of the system, and severe funding shortages.

The qualitative research suggests a possible shift in the size, form and meaning of under-the-counter payments and user fees in the 1990s. Payments are more significant now, increasingly in cash and more often requested, or expected, in the initial stages of the treatment. Under-the-counter payments, however, often take the form of pragmatic gifts, rather than presents serving only aesthetic purposes (flowers, souvenirs). Although gifts may have been common before 1989, inflation and falling living standards have reduced their real value and made even traditional gifts unaffordable for many users.
While increased informal cost-sharing may be seen as a necessary response to the economic crisis in the public sector, the same conditions also affect the individual, lowering standards of living and diminishing their willingness and ability to pay. Although a high proportion of respondents in the survey paid from current income, suggesting affordability, in interviews some patients and physicians expressed the view that even "standard" gifts have become unaffordable.

Several strategies are employed to obtain high quality treatment. Offering payment is one, another is use of a "connection" to ensure preferential access. The effect of personal contact may be enhanced by a gift. Thus, when physicians themselves are ill, typically they rely on professional contacts to obtain health services, perhaps in combination with a gift, but rarely pay in cash.

Despite its relatively limited scope, this evidence on informal payments shows that the principle of comprehensive free coverage, on which the health care system in Bulgaria was based until 1989, has been undermined in the face of growing economic pressures. Informal payments are perceived to be rooted mainly in the lack of incentives for staff and severe shortages in the health care system. Other research suggests that private expenditure has been a growing source of health sector financing, with a large informal component. A widely shared view is that the quality, and ultimately the success, of treatment depends on the individual’s willingness and ability to pay under-the-counter. Informal payments are viewed as creating a two-tier system and have potential for abuse.

This picture of informal payments is likely to influence future health sector financing in several ways. Since December 1997, user fees for certain services such as hotel services, hospital admission charges and consulting directly a specialist, were legalised. The revenue constituted less than 1% of expenditure of municipal health facilities. Although the Decree sets clear rules for exemptions, no evidence that such procedures were implemented was detected in this study. More importantly, this research suggested that sporadic introduction of user fees has not eliminated under-the-counter payments as suggested by some. For example, childbirth is formally exempted from user charges, but is commonly the subject of under-the-counter payment. User fees were often charged not only for luxurious or elective services, but also for basic services.

Contrary to the common western perception, a model based on corruption is oversimplistic. The evidence that informal payments are a sign of gratitude indicates a "culture of gifts", rooted in values and traditions across all income strata in society.
Adopting the framework of contextual factors relating to implementation devised by Leichter, such factors can be considered cultural, and thus not easily amenable to change in the short-term. Instead, strategies are required that take account of them and turn them to advantage.

Informal payments also create numerous perverse incentives. It has been argued that they reduce the efficiency of the system, leading to overspecialisation and use of over-complex procedures. It is argued that they supply revenue for the health sector that the state fails to raise through taxation. Informal payments also encourage health personnel to seek employment in both the private and public sector, creating an incentive to neglect their poorly monitored public commitments for more lucrative private ones. They also inhibit reform: "in a system where both physicians and patients have come to understand the advantages of informal payments, any change therein may require many attitudinal adjustments." On the positive side, unregulated payments in the health care system might have made patients more familiar with the costs of health care.

Informal payments may pose a threat to further reform if payment continues to be made on top of insurance claims. Thus, there is a need to convey the message that it is possible to obtain high-quality service without informal payment.

In view of the planned radical transformation of financing, policy makers face dilemmas in relation to informal payments. Should specific action be taken or will the new financing system make it unnecessary? Despite the existence of a formal private sector and user fees, under-the-counter payments appear to be increasing. Until now the government has chosen to ignore the problem. It is assumed simply that the implementation of a health insurance system will eliminate informal payments. However, implementation of health insurance is unlikely to provide the funds needed to improve salaries to a level adequate to drive out informal payments.

An alternative route is to set some broad rules regarding informal payments, particularly when 'involuntary' or in cash, during the transition to health insurance. Solutions suggested by respondents include introduction of a compulsory health insurance system; or at least a form of insurance; formal redirection of part of the revenue from user fees to staff; and establishment of official, but flexible, channels for voluntary contributions by patients such as sponsorship, advertising, or subscription contracts. Banning informal payments or imposing prohibitive measures is not considered a productive strategy. The
scale of informal payments and whether they are initiated voluntarily by patients are seen as essential in deciding whether to regulate them. If gifts are small and purely symbolic, they should be unregulated as they are an expression of societal values and practices.

The scale of, and trends in, informal payments demonstrated in this study suggest the need to devise an explicit and coherent policy towards informal payment as an essential element for effective implementation of financing reform.
CHAPTER 8. HEALTH EXPENDITURE AND ABILITY TO PAY IN BULGARIA

Introduction

Information on current out-of-pocket expenditure for health care and its affordability is essential to design a sustainable and equitable health sector financing system.

This chapter focuses mainly on the individual’s last consultation with a health professional. It asks how much they paid for the consultation and what form the payments took. It explores how payments vary according to the socio-economic characteristics of the patient. Finally, it moves from what was paid, to whether it was affordable, assessing ability to pay for both the last visit and, with caution, the last episode of illness, by means of self-reports and by comparing actual payments to income.

The chapter draws on both the population survey and the qualitative study. The analysis of the survey data includes only those who have ever consulted a health professional (men n=489 and women n=726). The expenditure analysis focuses only on those who consulted a health professional in the past four weeks (n=329).

Ideally, the cost of an entire episode of illness would be estimated. This is intrinsically problematic. A hospitalisation for elective surgery will involve an initial consultation, referral to hospital, out-patients hospitalisation, and post-discharge follow-up. Although, in this case, the treatment episode can be defined, it may be difficult for the respondent to recall what was involved at each stage. In other cases, the beginning and end of the episode may be much more difficult to define, as is the case for many chronic diseases requiring long-term review. For these reasons, the cost of the last health care contact is the main subject of this chapter.

Health expenditure

Data from the population survey

Level of health expenditure (last contact)

The overall expenditure incurred during the last visit to a health care professional was calculated for those who reported consulting a health professional in the past four weeks
The median expenditure in primary health care facilities (n=207) was 2,000 Leva ($1.3 in May 1997), and in the hospital sector (n=78) it was 1,950 Leva. The distributions were highly skewed, so that the means are respectively 4,072 Leva and 4,496 Leva ($3 in May 1997). The median health expenditure constituted 1.4% of the average salary and 5-6% of the average pension in May 1997. Expressed in terms of the legal minimum, rather than average figures, the median expenditure was 5% of minimum salary and 12% of minimum pension in May 1997.

As previously noted, these figures are an under-estimate of the total cost of an episode of illness and only capture a single (last) attendance. In addition, in-patient episodes, which are relatively infrequently recorded because of the focus on the last attendance, were only rarely captured.

**Type of health expenditure (last contact)**

All respondents who reported ever being ill were asked to describe all expenses related to their last contact with a health professional and the subsequent treatment. The expenses could be divided into several broad groups: travel expenses; expenses for pharmaceuticals (drugs, consumables, herbs); payment for diagnostic tests and other procedures; hospital expenses (including payments for food, bed linen, laundry; nursing/hospital attendant services; hospital admission fee); formal and informal payment to health personnel (monetary payments, gifts, gratuities); as well as loss of income due to absence and other inconvenience.

The most common item of expenditure was medication or herbs (83% of men and 78% of women) (Table 8.1). The second most common payment category was travel expenses (40% of men and women). Payments, gifts and gratuities given to medical staff came third (11% of men and 10% of women). Among the latter, non-monetary gifts were most commonly reported by women (8%) and monetary payments to physicians by men (7% of men). 13% of men and 7% of women reported loss of income due to absence or other inconvenience in relation to the consultation. 5% of men and 9% of women reported paying in relation to hospital stay, and 9% and 4% respectively for tests or other procedures.

13% of men and 15% of women (of those in employment) reported absence from work during their last illness in the past four weeks. The majority of those who were absent from work (87% of men and 84% of women) had been given a medical certificate.
According to the still functioning Code of Labour from 1951 (last amended in 1992), employees absent from work through illness, whose absence has been certified by designated health providers, are paid between 70% and 90% of their regular salary according to the length of their work experience. If the absence exceeds 15 days, the compensation increases by 10% for most groups. In practice, payment is not always made due to shrinking public budgets, forcing people who are ill to take unpaid leave. In general, people in the private sector are reluctant to claim sick leave, due to fears of losing their job. For these reasons, issuing of medical certificates has declined significantly since before 1989.

A central question is whether expenditure varies between different socio-economic groups. Again, self-perceived financial situation was used as it is a more sensitive indicator of well-being than income where under-reporting of income is common.

There was no consistent pattern, with those whose financial situation was either good or bad equally likely to pay in a particular category. The exceptions were for tests and payments and gifts to staff where the wealthy were more likely than the poor to pay (Figure 8.1).

Table 8.1. Health care expenditure by type (last consultation)

<table>
<thead>
<tr>
<th>Paid for:</th>
<th>Men % (n)</th>
<th>Women % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceuticals</td>
<td>73.3 % (88)</td>
<td>70.3 % (147)</td>
</tr>
<tr>
<td>Travel expenses</td>
<td>40 % (48)</td>
<td>39.7 % (83)</td>
</tr>
<tr>
<td>Herbs</td>
<td>9.2 % (11)</td>
<td>7.2 % (15)</td>
</tr>
<tr>
<td>Tests</td>
<td>9.2 % (11)</td>
<td>3.8 % (8)</td>
</tr>
<tr>
<td>Other inconvenience</td>
<td>8.3 % (10)</td>
<td>4.3 % (9)</td>
</tr>
<tr>
<td>Payment to physician</td>
<td>6.7 % (8)</td>
<td>-</td>
</tr>
<tr>
<td>Loss of income</td>
<td>4.2 % (5)</td>
<td>2.9 % (6)</td>
</tr>
<tr>
<td>Gifts, donations to staff</td>
<td>4.2 % (5)</td>
<td>8.1 % (17)</td>
</tr>
<tr>
<td>Other expenditure</td>
<td>2.5 % (3)</td>
<td>1.0 % (2)</td>
</tr>
<tr>
<td>Food/ bed linen</td>
<td>1.7 % (2)</td>
<td>5.3 % (11)</td>
</tr>
<tr>
<td>Nursing services</td>
<td>1.7 % (2)</td>
<td>-</td>
</tr>
<tr>
<td>Hospital admission charge</td>
<td>1.7 % (2)</td>
<td>-</td>
</tr>
<tr>
<td>Services, gratuities for staff</td>
<td>-</td>
<td>1.9 % (4)</td>
</tr>
</tbody>
</table>

Any of the above types of expenditure 85.8 % (103) 82.8 % (173)

None of the above types of expenditure 14.2 % (17) 17.2 % (36)
Determinants of health expenditure

The previous section examined the probability of paying but it is equally important to examine the amount paid and how it varies within the population.

The median health expenditure for the last contact, where this had taken place in the previous 4 weeks, was examined in relation to socio-demographic characteristics (Table 8.2). Primary and secondary care services were examined separately.

Those of working age (below 60) appear to pay more than those in other age groups at a primary health care consultation. Women tend to spend slightly more than men for primary care consultation, while men paid more than women in hospital. In both primary and secondary care, those with poor self-reported health are likely to pay twice as much as those with good health.

Respondents in the lowest income quartile paid the smallest sums for a primary health consultation and the largest sums in hospital settings. Similarly, those assessing themselves as very poor seem to pay much more than the others for secondary health care, but comparable amounts in primary health care. Given the relatively similar patterns of utilisation across income groups described in chapter 6, this suggests an
unequally distributed burden of expenditure. Another explanation might be that the poor access hospital care later in the course of their illness, when complications might have occurred, possibly requiring higher expenditure.

Those with only primary education tended to pay less for both primary and secondary care.

The ability to discern meaningful patterns in the data on payment for secondary care is, however, greatly constrained by the small numbers involved. Statistical tests for significance are performed later in this chapter, in relation to affordability (the share of health expenditure from income).
### Table 8.2. Median and interquartile health expenditure (last contact) by socio-economic characteristics

<table>
<thead>
<tr>
<th>Variable/ Category</th>
<th>Expenditure for primary health care (n=211)</th>
<th>Expenditure for secondary health care (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median (Leva) 25 %ile 75 %ile Valid n</td>
<td>Median (Leva) 25 %ile 75 %ile Valid n</td>
</tr>
<tr>
<td><strong>SEX</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1,600 0 5,250 (69)</td>
<td>2,660 0 8,315 (36)</td>
</tr>
<tr>
<td>Women</td>
<td>2,009 0 5,000 (141)</td>
<td>1,100 0 5,320 (44)</td>
</tr>
<tr>
<td><strong>AGE GROUP</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;39</td>
<td>2,000 0 4,950 (40)</td>
<td>2,660 1000 9,800 (14)</td>
</tr>
<tr>
<td>40-49</td>
<td>3,000 0 6,000 (30)</td>
<td>5,000 0 6,000 (15)</td>
</tr>
<tr>
<td>50-59</td>
<td>2,000 357 5,075 (37)</td>
<td>800 0 4,300 (21)</td>
</tr>
<tr>
<td>60-69</td>
<td>1,800 0 5,000 (53)</td>
<td>2,350 38 12,250 (16)</td>
</tr>
<tr>
<td>&gt;70</td>
<td>1,950 0 5,000 (50)</td>
<td>1,255 0 4,100 (14)</td>
</tr>
<tr>
<td><strong>INCOME QUARTILE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I highest</td>
<td>2,000 0 3,723 (33)</td>
<td>1,400 0 7,490 (16)</td>
</tr>
<tr>
<td>II</td>
<td>3,505 729 10,000 (34)</td>
<td>2,000 825 9,850 (13)</td>
</tr>
<tr>
<td>III</td>
<td>2,100 300 5,000 (46)</td>
<td>1,750 0 5,850 (24)</td>
</tr>
<tr>
<td>IV lowest</td>
<td>1,900 0 5,250 (85)</td>
<td>2,320 0 5,400 (23)</td>
</tr>
<tr>
<td><strong>EDUCATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher</td>
<td>3,500 1,250 9,550 (24)</td>
<td>900 0 12,500 (13)</td>
</tr>
<tr>
<td>Secondary</td>
<td>2,000 0 6,000 (79)</td>
<td>3,000 1000 6,500 (31)</td>
</tr>
<tr>
<td>Primary</td>
<td>1,200 0 4,000 (107)</td>
<td>500 0 5,400 (36)</td>
</tr>
<tr>
<td><strong>FINANCIAL SITUATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very good/good</td>
<td>15 0 4,375 (9)</td>
<td>0 0 0 (1)</td>
</tr>
<tr>
<td>Neither good nor bad</td>
<td>1,900 0 4,375 (52)</td>
<td>2,000 0 5,080 (23)</td>
</tr>
<tr>
<td>Rather poor</td>
<td>2,500 75 6,000 (77)</td>
<td>900 0 7,200 (29)</td>
</tr>
<tr>
<td>Very poor</td>
<td>1,850 0 6,000 (68)</td>
<td>3,300 300 6,000 (26)</td>
</tr>
<tr>
<td><strong>MARRITAL STATUS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>2,400 0 5,300 (139)</td>
<td>1,500 0 5,550 (61)</td>
</tr>
<tr>
<td>Single</td>
<td>1,809 0 8,770 (13)</td>
<td>1,500 850 5,400 (5)</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>1,750 0 4,009 (58)</td>
<td>2,760 600 6,500 (14)</td>
</tr>
<tr>
<td><strong>SETTLEMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sofia</td>
<td>2,000 0 10,000 (19)</td>
<td>2,000 400 6,425 (13)</td>
</tr>
<tr>
<td>City</td>
<td>2,000 300 6,000 (62)</td>
<td>1,500 0 5,020 (21)</td>
</tr>
<tr>
<td>Town</td>
<td>3,300 0 5,588 (49)</td>
<td>1,450 0 10,000 (24)</td>
</tr>
<tr>
<td>Village</td>
<td>1,200 0 3,763 (80)</td>
<td>3,050 300 5,400 (22)</td>
</tr>
<tr>
<td><strong>SELF-REPORTED HEALTH</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good/ Rather good</td>
<td>1,300 0 4,000 (91)</td>
<td>950 0 3,900 (28)</td>
</tr>
<tr>
<td>Bad/ Rather bad</td>
<td>2,560 15 6,000 (119)</td>
<td>2,166 188 8,225 (52)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>2,000 .0 5,000 (210)</td>
<td>1,950 .0 6,300 (80)</td>
</tr>
</tbody>
</table>

**Qualitative data**

Health expenditure related to the last illness was also addressed in the qualitative research. As in the survey, most users (25) reported making at least one type of payment in the course of their last treatment. In contrast, physicians rarely pay for health services
and are generally treated free by colleagues, friends, or other contacts, often in the same facility in which they work. About half of the physicians interviewed stated that their last consultation did not involve expenses, while the others reported some expenses for pharmaceuticals or related to illness of other household members or close relatives.

"I am a physician, I have daily contact with physicians and obtain as a colleague free consultation if I need to." [physician]

"The private dentist where I went did not take money... The treatment was very good, but despite that he refused payment. Thus, my expenses were only for materials." [physician]

Consistent with the survey results, payment for drugs is by far the most common and most expensive component within the overall treatment cost. Patients tend to recall more easily very large one-off expenditures ranging from 18,000 Leva to 50-60,000 Leva ($12-$39) for an episode of illness, rather than small or seasonal expenditure, such as medication for flu in the winter. Direct payment to a health professional was relatively common unlike that found in the survey, although the sums appeared to be much smaller (up to 5,000 Leva - $3 for physician's services). Dental services are a particular case as the cost of services and medical materials is combined, and thus reported expenditure tended to be higher (between 3,000 and 13,000 Leva, $2-8). Reporting of any treatment-related payments, apart from pharmaceutical expenses, was uncommon among the physicians.

**Ability to pay for health care**

Ability to pay was examined in two ways. First, the ratios of health expenditure to income for both last consultation and last illness were calculated. Second, expenditure as a share of monthly household income was compared between socio-economic groups.

Given the difficulties of measuring income in Bulgaria, the survey used three approaches. Respondents were asked directly about different sources of income and these were summed; respondents were asked to select an income category; these two reports of income were compared with expenditure. Self-reported income (in income categories) appeared to be more robust, less sensitive, and with a higher response rate. This measure was used in the subsequent analysis.
Data from the population survey

Ability to pay: estimates

Those in the lowest income brackets pay similar or slightly higher amounts than those with higher incomes (Figure 8.2a/b).

The regressive nature of the payments becomes apparent when health expenditure for the last consultation is expressed as a percentage of household income (Figure 8.3a/b). Poorer groups tended to pay a somewhat higher proportion of their income.

This pattern appears less pronounced where the overall cost of the most recent episode of illness as a share of monthly income is considered (Figure 8.4). However, these data are somewhat problematic as respondents had to estimate the share of health expenses to income during the interview, this may have posed difficulties for some. Thus, a considerably large percentage were unsure of what expenses for the last illness were as a proportion of disposable income of their household (48% of men and 45% of women), and 18% of men and 17% of women reported that expenses were very low or there were no expenses at all.
Figure 8.2a/b. Total health expenditure for last consultation (in Leva) by monthly household income

No. of cases=211

No. of cases=80
Figure 8.3a/b. Total health expenditure for last consultation (as a percentage of monthly household income) by monthly income

No. of cases=211

No. of cases=80
The proportion of income spent on the last contact (past 4 weeks) varied considerably among socio-demographic groups (Table 8.3). Inequalities by sex, age, and income status, appeared more significant than those observed for median expenditure measured in absolute values. For example the median proportion of health expenditure in relation to income among the better off is five times lower (1%) than that for the poorest quartile (5%) for primary and secondary care expenditure. Half of those above 70 spent over 4% of their income at a primary health care consultation, compared to 1% of those below 39, but exactly the opposite was observed for secondary health care.

The self-assessed expenditure as proportion of income for the last episode of illness shows a broadly similar pattern, although the figures tend to be rounded highlighting the limitations of these data noted earlier. Most often reported were payments of 5% or less of the monthly household income during the last episode of illness (11% of men and 12% of women). 8% of men and 9% of women paid 6-10% of the monthly household budget. However, there were some for whom this was higher: 6% of men and of women reported paying 11-20% of their income; 5% of men and 7% of women reported paying 21-50%; and 3% of men and 4% of women reported paying larger percentages (above 50%, including several cases of payments exceeding 100% of income).
Table 8.3. Health expenditure as percentage of income by socio-economic characteristics

<table>
<thead>
<tr>
<th>Variable/Category</th>
<th>% of income spent for last visit</th>
<th>% of income spent for last illness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary (median)</td>
<td>Valid n</td>
</tr>
<tr>
<td><strong>SEX</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>2.6 (68)</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>2.3 (139)</td>
<td></td>
</tr>
<tr>
<td><strong>AGE GROUP</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;39</td>
<td>1.1 (39)</td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>1.7 (30)</td>
<td></td>
</tr>
<tr>
<td>50-59</td>
<td>3.3 (36)</td>
<td></td>
</tr>
<tr>
<td>60-69</td>
<td>2.3 (52)</td>
<td></td>
</tr>
<tr>
<td>&gt;70</td>
<td>4.4 (50)</td>
<td></td>
</tr>
<tr>
<td><strong>INCOME QUARTILE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I highest</td>
<td>1.0 (33)</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>2.7 (34)</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>2.6 (46)</td>
<td></td>
</tr>
<tr>
<td>IV lowest</td>
<td>5.2 (85)</td>
<td></td>
</tr>
<tr>
<td><strong>EDUCATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher</td>
<td>4.0 (23)</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>2.4 (79)</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>2.0 (105)</td>
<td></td>
</tr>
<tr>
<td><strong>FINANCIAL SITUATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very good/good</td>
<td>0.0 (9)</td>
<td></td>
</tr>
<tr>
<td>Neither good nor bad</td>
<td>1.1 (51)</td>
<td></td>
</tr>
<tr>
<td>Rather poor</td>
<td>2.7 (76)</td>
<td></td>
</tr>
<tr>
<td>Very poor</td>
<td>4.0 (67)</td>
<td></td>
</tr>
<tr>
<td><strong>MARITAL STATUS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>1.9 (136)</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>1.1 (13)</td>
<td></td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>3.9 (58)</td>
<td></td>
</tr>
<tr>
<td><strong>SETTLEMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sofia</td>
<td>1.1 (19)</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>2.6 (61)</td>
<td></td>
</tr>
<tr>
<td>Town</td>
<td>4.0 (49)</td>
<td></td>
</tr>
<tr>
<td>Village</td>
<td>1.8 (78)</td>
<td></td>
</tr>
<tr>
<td><strong>SELF-REPORTED HEALTH</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good/ Rather good</td>
<td>1.1 (90)</td>
<td></td>
</tr>
<tr>
<td>Bad/ Rather bad</td>
<td>4.0 (117)</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>2.38</td>
<td>207</td>
</tr>
</tbody>
</table>
Ability to pay: self-perceived

Another indicator of affordability is self-perceived ability to pay. All respondents who contacted a health professional were asked to assess the impact, on their household budget, of total expenditure arising from their last consultation and subsequent treatment. About a third (28% of men and 33% of women) thought that the expenses related to the last visit were too high or rather high. While 24% of those with very poor self-assessed financial situations found the expenses unaffordable, only 6% of those whose situation was very good thought the expenses high.

A similar percentage assessed the expenditure as moderate (31% of men and 32% of women); and 33% of men and 27% of women indicated that expenditure was rather low, insignificant, or there were no expenses involved. 9% of men and 8% of women were unsure how to assess expenses. Again, as mentioned earlier, qualitative research showed that expenses incurred at hospital are seen as most burdensome, although as relatively few respondents (11%) had been to the hospital in the preceding year, the survey provides little information on this expenditure.

Affordability can also be examined from the point of view of trade-offs made in the household, or what was given up to obtain medical treatment. Respondents who reported higher than the median health expenditure tended to spend slightly less on subsistence (food, travel, household maintenance) and leisure (eating out) than those with health expenditure lower than the median. A more detailed analysis in this direction is, however, beyond the scope of this work.

Coping strategies

Respondents were asked how they provided the funds related to their last consultation. In about a half of cases, respondents covered all treatment-related expenses themselves (44% of men and 45% of women). The second most common situation was when other household members made the whole payment (3% of men and 9% of women). Among those who covered about half of the expenses personally, more then two-thirds had the other half covered by members of their household. 4% of men and 3% of women had some part of their expenses covered by the state or municipality, and 2% of men and 1% of women had all their expenses covered this way. It is less common for some of the expenses to be covered by relatives or friends outside the immediate household (1% of men and 3% of women - some expenses; 1% of men and 2% of women - 100% of
expenses). There were only a few cases in which expenses were covered by an employer or other source, none by an insurance company, although 7% of men and 5% of women reported having medical insurance.

When asked in more detail about their last contact, a slightly higher percentage (8% of men and 6% of women) said that they had been reimbursed fully or partially by the state, municipality or employer. 6% of men and 5% of women reported reimbursement of their pharmaceutical bills. 3% of men and 1% of women had some of their expenses covered for medical tests or procedures.

Expenses for the last consultation were paid predominantly from recurrent household income (67% of men and 66% of women). 5% of men and 6% of women made recourse to savings to cover their expenses. Loans (2% of men and of women) or sale of assets (2% of men and 4% of women) were rare. 24% of men and 21% of women said the expenses were insignificant or there were no expenses at all.

Unsurprisingly, there appears to be a relationship between the source of funds for payment and perception of the size of the payment. Respondents who drew on savings tended more often to perceive expenses as being too high or rather high (72%) compared to those who reported paying from their recurrent income (35%).

**Expenditure in relation to service**

Respondents were asked to assess the quality of health service in relation to expenditure incurred. 37% of men and 38% of women thought expenditure was about right in view of the quality of the service. 12% of men and 13% of women thought that expenditure was high in relation to the service provided, and a lower percentage (8% of men and 7% of women) stated that the expenditure was low in relation to the level of service. 26% of men and 21% of women did not incur significant expenses, and 17% of men and 20% of women were unsure. This shows that at least half of the sample felt they obtained value for money.

Examples of a service being delayed or refused due to lack of payment are rare. 92% of men and 88% of women reported that they did not have such an experience during their last treatment. Only 2% of men and 3% of women were certain or suspected that this has happened. In several other cases (2%) treatment was delayed or refused for other reasons. In contrast, the qualitative study showed that ability to pay was considered an important obstacle to access to in-patient health services or reasonable quality of
This discrepancy between survey results and qualitative data may have stemmed from the composition of the sample in the qualitative study. All respondents in that sample had an illness in the preceding six months, many had chronic complaints requiring recent hospital use and thus were more likely to face problems with access.

Affordability of drugs

As shown earlier in this chapter, pharmaceuticals constitute the largest component of health care expenditure related to the last visit. The in-depth interviews demonstrated that expenditure on medication was also deemed the most unaffordable. This section will explore the pattern of drug use and affordability. Prescribed and non-prescribed pharmaceuticals are distinguished in order to trace provider influence and personal decisions.

64% of men and 68% of women reported starting a course of prescribed pharmaceuticals, herbs or other treatment, or undergoing procedures at a health facility; in the initial stages of their last illness. More than a third also practised self-treatment, 35% of men and 41% of women taking at least one type of non-prescribed treatment. Of the total sample, 40% took prescribed medicines while a quarter took both prescribed and non-prescribed drugs. Taking non-prescribed drugs only was less common (12%).

Of those who reported taking prescribed treatment, a large majority took only one prescribed preparation (92% of men and 94% of women); of those who had a non-prescribed treatment, 98% of men and 96% of women used only one type. Taking prescribed medicines was the most common course of action for both men and women (Table 8.4). Herbs were the most common non-prescribed type of treatment. Often, prescribed and non-prescribed medication were taken in combination.
Table 8.4. Numbers taking prescribed and non-prescribed treatment in the beginning of
the last illness

<table>
<thead>
<tr>
<th>Started prescribed treatment</th>
<th>Men % (n)</th>
<th>Women % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescribed medicines</td>
<td>54 % (355)</td>
<td>58 % (515)</td>
</tr>
<tr>
<td>Prescribed procedures</td>
<td>11 % (75)</td>
<td>10 % (84)</td>
</tr>
<tr>
<td>Prescribed other treatment</td>
<td>3 % (19)</td>
<td>3 % (22)</td>
</tr>
<tr>
<td>Prescribed herbs</td>
<td>2 % (16)</td>
<td>2 % (20)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Started non-prescribed treatment</th>
<th>Men % (n)</th>
<th>Women % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-prescribed herbs</td>
<td>16 % (108)</td>
<td>20 % (180)</td>
</tr>
<tr>
<td>Non-prescribed medicines</td>
<td>12 % (80)</td>
<td>15 % (129)</td>
</tr>
<tr>
<td>Non-prescribed procedures</td>
<td>4 % (23)</td>
<td>6 % (50)</td>
</tr>
<tr>
<td>Non-prescribed other</td>
<td>3 % (21)</td>
<td>2 % (19)</td>
</tr>
</tbody>
</table>

| At least one of the above (prescribed/non-prescribed) | 74.9 % (495) | 81.4 % (721) |
| None of the above                                 | 25.1 % (166) | 18.6 % (165) |

It is important to see the socio-demographic characteristics of those who took prescribed
treatment at their last illness (Table 8.5). Clearly there is little difference between men
and women, or between other groups, in use of prescribed or non prescribed drugs. This
contrasts with the Health Survey for England 1996, where in all age groups more women
report taking prescribed medicines\textsuperscript{165}

A failure to complete a course of treatment due to inability to afford continued
medication is an indication of affordability. 16% of men and 19% of women did not
remember well the circumstances of their treatment. Of those who could recall it, 79%
of men and 77% of women reported completing the prescribed treatment, another 13% of
men and 14% of women continuing treatment at the time of the survey. 71% of men and
72% of women finished the recommended course of non-prescribed treatment; and 11%
of men and of women were in the process of treatment. 8% of men (n=33) and 9% of
women (n=55) stopped their prescribed treatment; and 17% of men (34 cases) and 16%
of women (56 cases) stopped the non-prescribed treatment. Of those who stopped
prescribed treatment, less than a third did so because they could not afford the prescribed
pharmaceuticals. For non-prescribed treatment, unaffordability is insignificant as a
reason to stop treatment.

Unaffordability can also be expressed by switching to a less expensive treatment. However, of those who did not complete their first treatment, only a very small
percentage started a new treatment in the course of their last illness (prescribed
treatment: 2% of men and 3% of women; non-prescribed treatment: 3% of men and of women).

Table 8.5. Respondents' utilisation of prescribed and non-prescribed treatments by socio-demographic status

<table>
<thead>
<tr>
<th>Variable/ Category</th>
<th>Started prescribed medicines</th>
<th>n</th>
<th>Started non-prescribed medicines</th>
<th>n</th>
<th>Started prescribed or non-prescribed</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>64.4% (426)</td>
<td></td>
<td>34.5% (228)</td>
<td></td>
<td>74.9% (495)</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>67.6% (599)</td>
<td></td>
<td>41.2% (365)</td>
<td></td>
<td>81.4% (721)</td>
<td></td>
</tr>
<tr>
<td>AGE GROUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;39</td>
<td>62.2% (331)</td>
<td></td>
<td>36.8% (196)</td>
<td></td>
<td>75.6% (402)</td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>65.2% (182)</td>
<td></td>
<td>41.2% (115)</td>
<td></td>
<td>77.8% (217)</td>
<td></td>
</tr>
<tr>
<td>50-59</td>
<td>64.7% (163)</td>
<td></td>
<td>37.7% (95)</td>
<td></td>
<td>77.4% (195)</td>
<td></td>
</tr>
<tr>
<td>60-69</td>
<td>68.8% (165)</td>
<td></td>
<td>37.1% (89)</td>
<td></td>
<td>81.7% (196)</td>
<td></td>
</tr>
<tr>
<td>&gt;70</td>
<td>75.6% (183)</td>
<td></td>
<td>40.1% (97)</td>
<td></td>
<td>84.7% (205)</td>
<td></td>
</tr>
<tr>
<td>INCOME QUARTILE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I (&gt;160,000 Leva)</td>
<td>66.9% (228)</td>
<td></td>
<td>42.5% (145)</td>
<td></td>
<td>82.7% (282)</td>
<td></td>
</tr>
<tr>
<td>II (100,000-160,000 Leva)</td>
<td>63.1% (188)</td>
<td></td>
<td>34.6% (103)</td>
<td></td>
<td>74.5% (222)</td>
<td></td>
</tr>
<tr>
<td>III (60,000-99,000 Leva)</td>
<td>66.6% (245)</td>
<td></td>
<td>37.2% (137)</td>
<td></td>
<td>78.8% (290)</td>
<td></td>
</tr>
<tr>
<td>IV (&lt;60,000 Leva)</td>
<td>69.3% (293)</td>
<td></td>
<td>38.8% (164)</td>
<td></td>
<td>79.2% (335)</td>
<td></td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher</td>
<td>66.7% (174)</td>
<td></td>
<td>44.1% (115)</td>
<td></td>
<td>85.4% (223)</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>65.4% (442)</td>
<td></td>
<td>37.3% (252)</td>
<td></td>
<td>78.1% (528)</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>67% (409)</td>
<td></td>
<td>37% (226)</td>
<td></td>
<td>76.2% (465)</td>
<td></td>
</tr>
<tr>
<td>FINANCIAL SITUATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very good/good</td>
<td>67.3% (76)</td>
<td></td>
<td>36.3% (41)</td>
<td></td>
<td>79.6% (90)</td>
<td></td>
</tr>
<tr>
<td>Neither good nor bad</td>
<td>63.6% (278)</td>
<td></td>
<td>35% (153)</td>
<td></td>
<td>75.7% (331)</td>
<td></td>
</tr>
<tr>
<td>Rather poor</td>
<td>70.3% (367)</td>
<td></td>
<td>40.8% (213)</td>
<td></td>
<td>83.1% (434)</td>
<td></td>
</tr>
<tr>
<td>Very poor</td>
<td>63.9% (281)</td>
<td></td>
<td>39.5% (174)</td>
<td></td>
<td>75.9% (334)</td>
<td></td>
</tr>
<tr>
<td>MARITAL STATUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>66.4% (704)</td>
<td></td>
<td>39.2% (416)</td>
<td></td>
<td>79.1% (838)</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>58.7% (121)</td>
<td></td>
<td>30.1% (62)</td>
<td></td>
<td>70.9% (146)</td>
<td></td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>71.4% (200)</td>
<td></td>
<td>41.1% (115)</td>
<td></td>
<td>82.9% (232)</td>
<td></td>
</tr>
<tr>
<td>SETTLEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sofia</td>
<td>67.1% (139)</td>
<td></td>
<td>33.8% (70)</td>
<td></td>
<td>85.5% (177)</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>63.5% (284)</td>
<td></td>
<td>39.4% (176)</td>
<td></td>
<td>77.6% (347)</td>
<td></td>
</tr>
<tr>
<td>Town</td>
<td>70.4% (293)</td>
<td></td>
<td>42.5% (178)</td>
<td></td>
<td>81.9% (343)</td>
<td></td>
</tr>
<tr>
<td>Village</td>
<td>64.9% (307)</td>
<td></td>
<td>35.7% (169)</td>
<td></td>
<td>73.8% (349)</td>
<td></td>
</tr>
</tbody>
</table>

**Qualitative data**

The affordability of expenditure during the last illness was also examined using qualitative methods.
A third of all patients stated that expenditure during their last illness posed considerable problems, another third thought it somewhat difficult to pay, the rest thought it was not a problem. Among physicians who reported expenditure in their household, half thought it was a serious problem and half a moderate problem, with only one respondent thinking payment was not a problem. Of those 16 users for whom payment was problematic, five had to use savings, or borrow. Most respondents felt they had no choice but to find the money ("unavoidable expenses" [user]).

"It was a problem since two months ago the salaries were not inflation-adjusted" [user]

"It was definitely a problem. I borrowed from friends because... you could earn money but not health." [user] "I had to find the money and actually took from savings." [user]

"My mother had recently a trivial viral infection and the treatment costed about 10,000 Leva, using Bulgarian antibiotics, nothing expensive. These were catastrophic expenses for her, because she is a state employee and her salary is insignificant." [physician]

Six users paid from recurrent income (salary), but nevertheless indicated that this posed a considerable strain on their household budget.

"...it meant diverting part of our income, because from my salary I also buy pharmaceuticals for my mother who is a pensioner and cannot afford it." [user]

"The last time I was ill, I tried to get on with the cheapest pharmaceuticals for flu. I paid from my salary, but afterwards had to limit any other expenses." [user]

"Additional expenses are always a problem... we all pay tax after all." [physician]

Another group of users reported having no problems paying at the time of the illness, but anticipated problems if they were to pay now (at the time of the survey in 1997). Several respondents had relatively high expenses (for minor surgery, dental work, physician's services), typically several months to one year ago, but felt that their circumstances then were better and expenses were more affordable ("I was not unemployed then and could afford it" [user]). Recent rises in the price of pharmaceuticals were perceived as reducing the ability to pay ("now a simple treatment would be about 50% of my income" [user]). A few respondents also felt that, had their illness been serious or chronic requiring continuous treatment or use of antibiotics over a period of time, payment would have been much higher and thus, problematic.

"It was a problem, but I paid from my salary, which is now impossible. Now if I have to have 6 teeth treated, I would prefer to take them out." [physician]
Given that physicians rarely pay for services, they were asked their impressions of affordability of treatment for patients, particularly those from lower socio-economic groups, and their coping strategies.

"...still using reserves, from savings mainly, sometimes borrowing." [physician]

"Some rely on their relatives to help them in case of very serious illnesses, such as cancer; some people sell property, valuables, to find the money." [physician]

"One borrows from relatives and acquaintances when in need. I haven't heard people to sell property to pay for health care as in other countries. Here people think that they have to search for sponsors on TV, before trying to pay themselves." [physician]

"Not sure. It is a well known rule that the Bulgarian spends more than receives. Mostly from saving. Not from salary, which in the state sector are miserable..." [physician]

Although not borne out by the survey, there was a common perception that some 'necessary demand' has been deterred in more serious cases.

"There are many cases, where they can't find the means and are not treated." [physician]

"Unfortunately people do not seek treatment because they don't have money. Most of my patients are pensioners, who have exhausted their savings long time ago, and don't go to facilities, are not admitted to hospital, don't buy the prescribed drugs... tragedy." [physician]

In summary, payments for services of health professionals or for basic lower cost drugs, are perceived as more affordable and usually are covered from recurrent income. Payment for in-patient care; long-term, complex treatment; and imported pharmaceuticals; were commonly deemed unaffordable and difficult to cover even when saving and borrowing strategies are used.

**Discussion**

The aggregate expenditure for the last visit appears not very high in relation to average income as reported in official statistics. It should be noted that official average wage estimates suffer from underreporting of income, and reflect mainly salaries in the state sector. However, expenditure appears more significant when compared to the minimum income, which is less likely to be biased.

Given that more than a third of those using the health care system in their last illness reported two or more visits, as well as the potentially conservative estimates of payment, expenditure may be more burdensome than it appears.
Some inequality is clear, with the poorest sections, those with higher education, and below 70, reporting higher expenditure for health care. This is even though utilisation rates appear relatively equal across socio-economic groups (chapters 5 and 6). Caution is needed when interpreting these results, since the direction of the relationship is not clear. Health expenditure may have been influenced by utilisation patterns, and conversely, the expectation of payment may have influenced decisions whether and where to seek medical care.

There is little comparable data on household spending on health care from representative sampling in Bulgaria, most of the analyses concentrating on public health spending, and estimation of unit cost\textsuperscript{182}. Given the dynamics of economic change between 1995 and 1997, other available data on income and health expenditure from 1995 are not comparable\textsuperscript{126, 182}.

The main source of data on health expenditure is the household budget panel carried out by the National Statistical Institute of Bulgaria every three months\textsuperscript{215}. Based on these data, Delcheva\textsuperscript{94} estimates the mean spending for health care per capita in 1992-1997 to be 3,209 Leva. This figure is comparable to the mean of 3,930 Leva in this study. The monetary component of health care expenditure accounts for between 1.2% and 2.7% of total household expenses in the 1990s. An escalating trend is apparent due to economic liberalisation, increased formal and informal direct cost-sharing in health care, and a decline in the public budget. It is also suggested by the authors that low health expenditure, combined with a high percentage of income spent on food, are indicative of poverty\textsuperscript{94}.

A third of respondents considered payment to be too high, but most managed to pay from their current income. Compared to elsewhere, direct user payments in Bulgaria appear more affordable and less restricting to access. A study from Kyrgyzstan\textsuperscript{183, 209} found the average cost of hospital stay to be higher than the monthly monetary income of the whole household for most respondents. More than two-thirds of respondents, particularly those in rural areas, reported significant difficulty in covering out- or in-patient expenses and had borrowed money or sold assets to pay for health care.

As well as measuring health care expenditure in absolute terms, it is important to see expenditure as a proportion of income. This demonstrates its regressive nature. The results of the current study corroborate a World Bank estimate of household expenditure for health care in Bulgaria, which found that the poor spend less in absolute amounts, but
the share of non-food expenditure is twice that among the richest sections, suggesting unaffordability\textsuperscript{182}.

Another key issue from the above analysis is that there are very few official mechanisms in place for reimbursement of health expenditure, either by state, municipalities, or employers. Support is provided mainly through the immediate household. This may place a significant burden on single-person households, people living alone, families with more than one person unemployed or other socially disadvantaged groups. A World Bank commissioned survey in rural areas of Bulgaria showed that the official entitlement of some groups to full or partial reimbursement of pharmaceutical bills did not work in practice, due to shortages of allocated funds\textsuperscript{186}.

This chapter also demonstrated that pharmaceuticals are the most common item of expenditure. Qualitative research, in particular, showed that these are by far the most unaffordable components of health expenditure. Pharmaceutical and travel expenses are also the most regressive components. This is due to the largely unregulated expansion of private pharmaceutical markets, collapse of manufacturing of cheap local drugs, and lack of strict enforcement of the essential drugs list. In comparison, in a representative 1995 survey, 47% of respondents identified prescribing of excessively expensive drugs as a commonly encountered problem\textsuperscript{126}.

The data collected do not allow conclusive interpretation of drug utilisation patterns. Clearly more women, people with only primary education, and the elderly, practice self-medication with herbal and other traditional remedies, which are most often locally produced and cheaper than prescribed drugs, a large proportion of which are imported. It appears that people often use prescribed and non-prescribed drugs simultaneously rather than as substitutes for each other.

A 1996 qualitative study (by Balkan British Social Surveys Gallup for the World Bank) in rural communities found affordability to be a considerable issue due to the sharp fall in living standards, and also identified an increase of out-of-pocket user payments, even for basic health care\textsuperscript{186}. This, combined with a decline in quality of state free health care and high prices in the private sector, affected the access of the poor. Unaffordability derives from increased prices of drugs, shortages of locally produced drugs, and cuts in drug subsidies for children, the elderly and other low-income users. For people living in villages, access to adequate quality health care has been deterred, due to the combined cost of travel expenses and treatment-related costs.
These results can also be compared with a national representative survey conducted in Bulgaria in April 1995\textsuperscript{126}. In this 1995 survey, 20\% of all respondents refrained from using their prescribed drugs because of their higher price. 32\% of the respondents reported using herbs or other traditional methods, 3\% alternative medicine, and 6\% consulted faith healers. Such wide use of alternative therapies indicates that people increasingly turn away from conventional medicine, and seek cheaper and more affordable solutions, sometimes after other coping strategies fail.

As discussed in this chapter, there is a contradiction between results from the survey and qualitative findings. In the survey, direct payment to the physician appears less common than in the qualitative research. This apparent contradiction may be due to the specificity of research methods employed. All respondents in the qualitative sample are recent users, many are chronic users familiar with in-patient settings where spending is typically higher. In contrast, hospital users are a relatively small share of the survey sample.

This chapter examined health expenditure and its affordability. However, willingness to pay can be also influenced by a range of other factors, such as values, beliefs and attitudes. These will be considered in more detail in the next chapter.
CHAPTER 9. VALUE SYSTEMS IN RELATION TO THE HEALTH CARE IN BULGARIA

Introduction

As described in chapter 4 and appendix 2, the process of health care financing reform has begun already in Bulgaria. New financial arrangements will include the establishment of a mandatory health insurance scheme, possibly supplemented by co-payments at the point of use, and expansion of voluntary insurance. These methods involve a radical shift from non-transparent budget financing to more explicit methods, based on contributions. This reform must address the challenges arising from the long tradition of budgetary health care financing controlled entirely by the state.

This chapter will explore a range of common values and beliefs, such as perceptions of the state’s role, the value of health, and solidarity. These are likely to have an impact on willingness to pay for health care in Bulgaria. The chapter will draw on data from the survey and the qualitative research. The discussion will assess the evidence and summarise implications for research. Throughout the chapter, the analysis includes all respondents, regardless of whether they have reported illness.

Belief systems

Values, beliefs and attitudes are likely to have significant impact on choices that people make and their willingness to pay for health care. It is recognised that a new financing system will have to be compatible with existing values in society. The Semashko model, with universal financing and provision of health care free at the point of use, reflected the prevailing collectivist value system of the time. The concept that people should share the costs of their treatment or provide for themselves, which underlines the current financing reform, is also related to redefinition of the role of the state, with an emphasis on individual responsibility. Here, because of the role of the state as both provider and financier of health services, provision and financing are often essentially interchangeable.
Health as a value

Data from the qualitative research

Traditionally health has been viewed as the highest priority for an individual or family. This is reflected in numerous proverbs ("health is the most precious asset", "you can buy anything, but health", "illness is the biggest poverty", greeting: "with health"); etc. Many respondents use proverbs or old-fashioned language to describe the value of health to them. Before 1989, the Semashko system emphasised health, encouraging health promotion and health education initiatives, although there are no concrete data on individual perceptions of the value of health at that time.

In a representative survey in Bulgaria conducted in 1995, in which respondents were asked to rate a range of attributes, health came top (89%), far ahead of money (58%), luck (42%), peace of mind (33%), or success (17%). The distance between health and other values increased when respondents had to prioritise (adding to 100%), with health by far the most important value (68% health, 11% money and below 6% for the rest).

The current study attempted to examine the value placed on health. Not all physicians were asked this question because of time constraints. Given the traditionally high value attributed to health it was expected that this would be an introductory, rather than informative question. From those who responded, half thought health a very important value with a deep rooted tradition. It was also viewed as a universal human right. Very few thought otherwise ("No, I think education is proverbial for the Bulgarian" [user]). Health was, however, less commonly perceived as an aim in itself, but rather as a means to earn a living or self-fulfilment.

"It is something very valuable for every Bulgarian, because he/she relies only on themselves, ... on their health, to survive... This has been ingrained for centuries." [user]

Only a few respondents linked the idea of good health to the ability to contribute to society ("a healthy society has better productivity" [user]).

It is important to reflect on the meanings behind these statements, many of which are almost automatic, as these may provide clues as to how such values translate into actual behaviour. While many respondents stressed the value placed on health in the abstract, others noted the contrast with the reality, as indicated by people's behaviour. Almost all respondents pointed to economic factors related to transition as causing neglect of health.
"I think that every Bulgarian is aware that their health is very important, because when a person is ill, especially now, in these difficult economic conditions, can't work and look after themselves and relatives. Thus a vicious circle occurs – many people don't pay attention to their health in order to work as much as possible." [user]

"Low standards of living combined with low health education lead to higher morbidity in our country." [user]

“(not looking after health) is related to health care and the payment already required, expensive medicines etc.” [user]

Economic factors were superimposed on what some thought was already a less than satisfactory model of illness behaviour shaped by cultural attitudes, individual preferences and lack of concept of investment in health through health promotion or lifestyle change.

“Yes health is valued, but people don’t know how to preserve it...” [user]

“From what I observe... health education is low, care for oneself is minimal” [user]

Severe illness did, however, act as a trigger to seek care. Several respondents thought that health is perceived to be more valuable when endangered by serious illness.

“I think in Bulgaria, a person begins to value their health when they become ill, and then remembers how precious it is to be healthy.” [user]

When asked to compare the value placed on health in Bulgaria compared with other countries, most users felt that, in the West, people look after their health much more. The most commonly cited reasons fall into three groups: the health system in the West focused on health prevention, health education, and timely treatment of health problems; high living standards and wealth; national characteristics (“elsewhere a person immediately runs to the doctor even for the smallest complaint”, “they are overly concerned with their health. I have witnessed an American wasting several days checking whether he’s got measles.” [users]). Several respondents noted that the situation was better in Bulgaria than in developing countries, or Russia. Some physicians felt there were no difference between Bulgarians and other nationalities.

Whether one values one's health sufficiently was spontaneously linked to the level of health awareness of the Bulgarian population. Most respondents who had a view on this thought health awareness to be average or low. This conclusion was reached on the basis of indicators such as people delaying utilisation, rarely requesting check-ups, leading an
unhealthy life-style, but most of all consulting alternative and potentially harmful practitioners.

"There is a pseudo-culture... The majority of people don't trust the physicians, but crooks, faith healers etc. or start using self-treatment or alternative therapies. Unfortunately, this harms the health of some patients..." [physician]

"As a whole, the Bulgarian has low health awareness - knowledge about illness, healthy lifestyles, rational nutrition, sport, and stress..." [physician]

"the Bulgarian prefers not to deal with physicians until absolutely necessary." [user]

In many cases, this was thought to be a product of institutional failure to implement health promotion policies, and lack of trust or poor communication between patients and physicians.

"Physicians have some fault in not urging the population to seek prevention before an illness has developed... It is also a fault of mass media, the family, the school." [user]

"Bulgaria has one of the highest cardio-vascular mortality rates, the typical patient visiting my surgery is a pensioner suffering from hypertonia... but often people don't have the habit of checking their blood pressure or can't afford to buy drugs." [physician]

"I think that elsewhere illnesses are discovered earlier and the patients receives better medical care, not because of a better health awareness, but a better organisation, obligatory yearly check-ups." [physician]

Insufficient health awareness, along with financial difficulties were main reasons for people delaying consulting in a medical facility (chapter 6).

The role of the state

Data from the population survey

There was wide-spread support for the current tax-based model, more than half of respondents (57% of men and 59% of women) agreeing that the state should finance and provide universal, free, health care. Another 39% of men and 38% of women thought that the state should guarantee health care only for people who cannot pay themselves, or for some clearly defined groups such as the disabled or elderly. Only 2% of men and 1% of women thought that the state should not finance free health services, regardless of personal circumstances.

Regardless of socio-demographic circumstances, men and women held the same views about responsibility for financing health care (Figure 9.1). Universal state financing and
provision for all regardless of income status was more popular among the elderly. 70% of men and 69% of women above 70 supported universal state provision, compared to 54% of men and women under 30. The poor are also more supportive of state involvement. However, the relationship with material circumstances is clearer when self-perceived financial status is considered. Support for a state role decreases with increasing education - those with only primary education are 50% more likely to support it than those with higher education. Marital status has little impact. Those living in small towns and villages and those with poor or rather poor health were more likely to support a strong state role.

As many of these variables are mutually correlated, they were explored further through multiple regression (Table 9.1). In the following analysis, the dependent variable is whether or not they felt that the state should offer universal free health care for all.

Responses to this question assess a broad value judgement related to collective versus individual responsibility, so they can be expected to be influenced by a range of factors. The factors associated with support for universal free state provision were broadly similar among men and women. In the age-adjusted model, those in the oldest category, over 70 years of age, were twice as likely to support universal care as those aged under 40. Those in the higher income quartiles were half as likely to support it as were those in the lowest income quartile. Those whose financial status was reported as very poor were about two and a half times as likely to support universal free care as those whose situation was good, as were those living in villages compared with those in Sofia. Education was a particularly strong predictor of preference for state involvement, those with only primary education being three and a half times more likely to support this view. Poor health was also associated with support for free health care.

In all categories, the percentage of people stating that the state should not offer free health care at all was below 4%, with the exception of men with higher education (6%), or living in Sofia (7%).

In summary, there is very wide agreement that the state should provide free health care, although there are divergent views about whether state coverage should be universal (as in the old Semashko system) or limited to those who cannot afford to pay. As shown in Table 9.2, support for full coverage increases with increasing age, and support for selective coverage decreases. Similar shifts are seen in relation to education, financial status, income and self-perceived health. 64% of men and 65% of women agreed
strongly, and 18% of men and women agreed to a certain extent with the related statement that state funded and provided health care is the most suitable option for Bulgaria in the present circumstances. 12% of men and 11% of men disagreed with this statement to some degree.
Figure 9.1. Percentage agreeing that state should finance and provide free universal health care for all by a range of variables
Table 9.1. Predictor of probability of stating that the state should provide free health care for all

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>% (n) paid</th>
<th>Odds ratio (95% CI) (Age-adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>53.7% (124)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>53.2% (66)</td>
<td>0.98 (0.63-1.52)</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>61.5% (59)</td>
<td>1.38 (0.85-2.24)</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>61.2% (63)</td>
<td>1.36 (0.85-2.18)</td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>70.2% (66)</td>
<td>2.03 (1.22-3.39)</td>
</tr>
<tr>
<td>Income quartile (Leva)</td>
<td>I (&gt;160,000)</td>
<td>49.4% (77)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>II (100,000-160,000)</td>
<td>49.6% (64)</td>
<td>0.94 (0.59-1.52)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>61.8% (97)</td>
<td>1.52 (0.94-2.45)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>69.6% (110)</td>
<td>2.12 (1.29-3.49)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>44.3% (39)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>51.1% (165)</td>
<td>1.33 (0.83-2.14)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>73.5% (175)</td>
<td>3.46 (2.01-5.93)</td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>46.3% (25)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>54.9% (100)</td>
<td>1.41 (0.76-2.60)</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>55.7% (117)</td>
<td>1.37 (0.75-2.52)</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>69.1% (132)</td>
<td>2.40 (1.29-4.49)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>59.6% (286)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>54.8% (57)</td>
<td>1.01 (0.61-1.68)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>56.3% (36)</td>
<td>0.78 (0.45-1.34)</td>
</tr>
<tr>
<td>Settlement</td>
<td>Sofia</td>
<td>47.8% (33)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>City</td>
<td>59.0% (118)</td>
<td>1.61 (0.93-2.80)</td>
</tr>
<tr>
<td></td>
<td>Town</td>
<td>45.8% (81)</td>
<td>0.92 (0.53-1.61)</td>
</tr>
<tr>
<td></td>
<td>Village</td>
<td>72.3% (146)</td>
<td>2.62 (1.48-4.66)</td>
</tr>
<tr>
<td>Self-reported health</td>
<td>Good/Rather good</td>
<td>54.2% (267)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Bad/Rather bad</td>
<td>71.8% (112)</td>
<td>1.89 (1.23-2.90)</td>
</tr>
<tr>
<td><strong>WOMEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>54.2 155 1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>60.5 92 1.30</td>
<td>(0.87-1.93)</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>61 94 1.32</td>
<td>(0.89-1.97)</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>61 83 1.32</td>
<td>(0.87-2.01)</td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>68.8 97 1.86</td>
<td>(1.22-2.85)</td>
</tr>
<tr>
<td>Income quartile (Leva)</td>
<td>I (&gt;160,000)</td>
<td>48 85 1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>II (100,000-160,000)</td>
<td>59.5 97 1.57</td>
<td>1.02-2.42</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>57.5 119 1.46</td>
<td>0.96-2.22</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>68.7 178 2.24</td>
<td>1.45-3.46</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>50.3 86 1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>51.8 176 1.11</td>
<td>0.77-1.62</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>72.1 259 2.90</td>
<td>1.89-4.44</td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>41.4 24 1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>54.8 136 1.72</td>
<td>(0.96-3.08)</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>62.8 191 2.29</td>
<td>(1.28-4.08)</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>65.8 158 2.59</td>
<td>(1.43-4.68)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>61.5 345 1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>47.9 46 0.66</td>
<td>(0.41-1.06)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>61 130 0.82</td>
<td>(0.57-1.18)</td>
</tr>
<tr>
<td>Settlement</td>
<td>Sofia</td>
<td>44.8 60 1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>City</td>
<td>49.4 120 1.18</td>
<td>(0.77-1.80)</td>
</tr>
<tr>
<td></td>
<td>Town</td>
<td>66.2 153 2.43</td>
<td>(1.56-3.77)</td>
</tr>
<tr>
<td></td>
<td>Village</td>
<td>71.8 188 3.02</td>
<td>(1.93-4.72)</td>
</tr>
<tr>
<td>Self-reported health</td>
<td>Good/Rather good</td>
<td>56.3 352 1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bad/Rather bad</td>
<td>69 169 1.59</td>
<td>(1.12-2.24)</td>
</tr>
</tbody>
</table>
Table 9.2. Views on full and selective state coverage by the state

<table>
<thead>
<tr>
<th>Variable/Category</th>
<th>MEN</th>
<th>WOMEN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Free for everybody %</td>
<td>Free only for those who cannot pay %</td>
</tr>
<tr>
<td>AGE GROUP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;39</td>
<td>52.1</td>
<td>40.3</td>
</tr>
<tr>
<td>40-49</td>
<td>53.2</td>
<td>38.7</td>
</tr>
<tr>
<td>50-59</td>
<td>60.2</td>
<td>30.6</td>
</tr>
<tr>
<td>60-69</td>
<td>61.2</td>
<td>37.9</td>
</tr>
<tr>
<td>&gt;70</td>
<td>68.0</td>
<td>24.7</td>
</tr>
<tr>
<td>INCOME QUARTILE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I (&gt;160,000 Leva)</td>
<td>48.4</td>
<td>40.9</td>
</tr>
<tr>
<td>II (100,000-160,000 Leva)</td>
<td>48.9</td>
<td>42.7</td>
</tr>
<tr>
<td>III (60,000-99,000 Leva)</td>
<td>60.6</td>
<td>32.5</td>
</tr>
<tr>
<td>IV (&lt;60,000 Leva)</td>
<td>68.8</td>
<td>29.4</td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
<td></td>
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<tr>
<td>Higher</td>
<td>44.3</td>
<td>46.6</td>
</tr>
<tr>
<td>Secondary</td>
<td>50.3</td>
<td>42.4</td>
</tr>
<tr>
<td>Primary</td>
<td>71.4</td>
<td>23.3</td>
</tr>
<tr>
<td>FINANCIAL SITUATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very good/good</td>
<td>45.5</td>
<td>45.5</td>
</tr>
<tr>
<td>Neither good nor bad</td>
<td>54.1</td>
<td>39.5</td>
</tr>
<tr>
<td>Rather poor</td>
<td>54.9</td>
<td>37.1</td>
</tr>
<tr>
<td>Very poor</td>
<td>67.7</td>
<td>28.2</td>
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<tr>
<td>SETTLEMENT</td>
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<td></td>
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<tr>
<td>Sofia</td>
<td>47.1</td>
<td>41.4</td>
</tr>
<tr>
<td>City</td>
<td>58.7</td>
<td>35.3</td>
</tr>
<tr>
<td>Town</td>
<td>44.5</td>
<td>47.8</td>
</tr>
<tr>
<td>Village</td>
<td>70.5</td>
<td>24.2</td>
</tr>
<tr>
<td>HEALTH STATUS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good/Rather good</td>
<td>53.1</td>
<td>39.0</td>
</tr>
<tr>
<td>Bad/Rather bad</td>
<td>70.9</td>
<td>25.9</td>
</tr>
</tbody>
</table>

Data from qualitative research

Attitudes to free state health care were explored by means of qualitative research. The wording of the question was identical in both the survey and the interview guide, but the in-depth interview responses were open-ended in order to allow for more flexible interpretation.

The views expressed in the survey re-emerged in the qualitative research. There was, however, some divergence of views between physicians and patients. A large majority of patients (19 out of 33) expressed the view that the state should at least guarantee free health care for specific sections of the population (the poorest, socially disadvantaged,
those suffering from life-threatening or chronic illnesses; certain types of services (basic or too expensive); or levels of care (hospital care). A few respondents thought that selective coverage should be retained during the transition as a temporary measure. In contrast, fewer physicians (8 out of 25) recommended state coverage for particular population groups.

"Yes, particularly for the average and disadvantaged Bulgarians... who are unable to pay even for a treatment in polyclinics, let alone in hospitals". [User]

"The state can provide free medical care only for particular type of diseases, whose treatment is extremely expensive, such as cancers, tumours; for patients who can't pay and for socially disadvantaged. Otherwise, the majority of people, working, with reasonable incomes, they should pay themselves for at least some part..." [User]

"The state should provide a minimum volume of health care for people who are socially marginalised, poor, and cannot pay from their own resources, savings, salary... As far as I know in the West, nobody is refused medical care, regardless of their social status. This should be the role of the state - to provide what is needed, without luxury..." [Physician]

Universal free health care was not widely supported among physicians and users (3 physicians in countryside; 6 users).

"...the state is obliged... especially for pensioners, because at the time when we were working, we were paying for insurance, but we are not getting anything now." [User]

"In the current situation, during this crisis... the state should look after the health care. The majority of the population are unable to obtain health care by themselves. " [User]

However, while supporting the concept, some respondents were cautious about the feasibility of free provision (3 physicians; 4 users).

"It wouldn't be good if 'free' health care is at expense of quality... " [User]

"This would be ideal, and is normal for a well developed country, but Bulgaria, in its current situation is far from it..." [User]

The idea of a public-private combination received some support, with the private component thought to improve incentives and quality of care. ("a happy medium" [User]).

"Still the state is obliged to provide some free medical care for all citizens... to a certain minimum. If the limit is exceeded, then something should be paid." [User]

"In my opinion, for a start it can be partially paid by the patient, because de facto now nobody receives what they need, we simply deceive ourselves that it is free." [Physician]

"It depends, if people pay a lot for social insurance...the state should provide for them. But if lower tax is collected, then the state will have no extensive obligations. " [User]
One of the underlying purposes of this question was to test reaction to the phrase "free health care", which has long been part of the official vocabulary in the Soviet-style health sector. Physicians were sensitive to this, about half (10) disagreeing with the way the question was posed, or raising different issues. Such views were expressed, without prompting, by only four patients.

"For me nothing 'free' exists, including in medicine. Payment has to be through health insurance system as in the civilised world. 'Free' simply scares me." [user]

"Free health care is very vague concept", "controversial", "an illusion, with which politicians have long been speculating and elections have been won" [physicians]

"Health care isn't free and it has never been because the employees have always been taxed, pharmaceuticals have always been paid. 'Free' is fabricated notion..." [physician]

For some, maintenance of free health care was seen as a non-issue, because "health care as such can never be free" and is not free at present in Bulgaria. Others spontaneously distinguished between free health care and health care provided free at the point of use. Some respondents saw the familiar free state health care (tax based model) as currently unsustainable, as economic recession has undermined the state's resources.

"The state is very weak at present, and it is impossible to have free health care as we know it." [physician]

The idea of free health care was seen to be feasible only if a different system of health care financing was adopted, with the state assuming a new role. Patients and physicians often compared the role of the state in Bulgaria with the role of the state in the West. The latter was perceived as a gold standard, the provision of a basic package of health care benefiting all groups ("as in the West"; "in the normal countries").

"In my view a sort of free health care could be preserved, but in a different form: as in Western Europe amounts are deducted from the employees' payment, contributions are collected by funds, and people do not pay out-of-pocket during their treatment." [user]

"The state can provide free health care in state facilities where the patients will pay through their medical insurance. This is by no means 'free', because money are deducted at source or the employer pays." [physician]

The semi-structured interviews seemed to indicate slightly less support than the survey for universal state coverage. There are several possible explanations. First, the open-ended format of the question may have permitted greater reflection and, in particular, encouraged respondents to consider the economic reality facing Bulgaria. Second, it could reflect sample differences, as the qualitative research included more people with
higher education and socio-economic status. The survey data shows that such people are more likely to support more limited state provision.

**Solidarity**

**Data from the population survey**

There is little recent evidence about attitudes to solidarity and collectivist values in Bulgaria. In this study, the focus has been mostly on equity, as a dimension of solidarity. Attitudes to equity (horizontal and vertical) were assessed by asking respondents if they agree with a range of statements. Horizontal equity is defined as "people...of the same ability to pay make the same contribution...regardless of, for example, gender, marital status...", while vertical equity was defined as those "of unequal ability to pay made appropriately dissimilar payments for health care".

More than half of respondents (53% men and 52% women) disagreed with the statement that all patients should pay the same sum for a particular health service, in effect supporting the principle of vertical equity. However, 33% of men and 31% of women thought that everybody should pay equally for a particular health service, regardless of their ability to pay. 14% of men and 17% of women were not sure. The qualitative research suggested that some respondents might have misinterpreted this question as meaning everybody paying an equal percentage of income rather than a fixed sum.

The interpretation of these results can be better understood using qualitative data. As in the survey, two-thirds of patients and a third of the physicians thought that payment for particular services should be differentiated according to ability to pay, the rest supporting equal payment regardless of other characteristics. The latter group envisaged administrative complexity and additional workload on staff as main problems. This view was common among physicians, who thought that every service has a fixed price and differentiation has to be made through redirection of patients to facilities of different standard (luxurious or more basic). Some people were against differentiation of payment at facility level, but supported differentiation in contributions, use of reimbursement by the state, insurance funds, or charities. The views on equity in relation to exemption from direct out-of-pocket payments, will be considered in more detail in the next chapter.

There are some existing analyses of solidarity in Bulgaria. Rose and Makkai analyzed the New Democracies Barometer Survey (NDB) data set covering nine Central and
Eastern European countries. The predominance of individual or collective values is measured through questions about individual versus state responsibility for distribution of income, ownership of enterprises, job security, social expenditure etc. There is no conclusive evidence in favour of individualistic or collective provision of welfare, with two-thirds of the respondents choosing an individualistic alternative such as payment based on individual achievement rather than egalitarian intervention (24% support making incomes more equal); and private rather than state ownership. At the same time, there is also support for job security, state provision of “basic security for everyone”, and willingness to pay higher taxes to increase spending levels for health, education and pensions (67% of respondents across the countries), which reflect a more egalitarian perspective. Surprisingly, respondents who approve of higher tax and benefits, are more likely to reject equality of incomes. Estimation of a score on the basis of ‘collectivist’ answers shows that Bulgaria and Poland were slightly more collectivist than the other countries, with the Czech Republic the least (1 maximum; Bulgaria: 0.54, Poland: 0.52, Czech Republic: 0.30).

The reasons for this division in opinion among respondents in this survey may be that while income determined by individual achievement and privatisation are essential elements of the new market economies, there are wide-spread fears of unemployment and loss of income. People may be willing to pay higher taxes to reduce the insecurity through collective (state) provision.

Respondents who were most likely to have individualistic values are those below 30, university educated, satisfied with their economic status, optimistic about general economic recovery, holding a positive attitude to the government (democratic at that time), and having more assets. Regression analysis shows that in Bulgaria socio-economic factors explain 33% of the variation and political values 6%, with further analysis showing that only in Bulgaria does national culture influence values.

These results can be compared to a similar survey for Bulgaria, conducted in 1991 by the National Public Opinion Centre (NAPOC)\(^{21}\) (Table 9.3). Both surveys were performed by the same agency, using standard methods and have a similar sample size. It appears that between 1991 and 1993, individualistic values have been eroded, while collectivist values became more prominent. The first years of transition brought severe impoverishment and insecurity, causing idealisation of the past among many groups, and a resurgence of collectivist values, culminating in election of the ex-communist party.
Table 9.3. Solidarity versus individualism in Bulgaria: comparison of results

<table>
<thead>
<tr>
<th>Year</th>
<th>Agency</th>
<th>Sample size: Bulgaria</th>
<th>Individualistic</th>
<th>Individualistic</th>
<th>Collectivist</th>
<th>Collectivist</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Individual achievement as a basis of earnings</td>
<td>Individuals should provide for themselves</td>
<td>Secure but low paid job preferred</td>
<td>Willing to pay more taxes</td>
</tr>
<tr>
<td>1991</td>
<td>NAPOC</td>
<td>1,153</td>
<td>63%</td>
<td>51%</td>
<td>50%</td>
<td>61%</td>
</tr>
<tr>
<td>1992/3</td>
<td>NAPOC for NDB</td>
<td>1,127</td>
<td>59%</td>
<td>37%</td>
<td>65%</td>
<td>65%</td>
</tr>
</tbody>
</table>

In the present survey, the relationship between egalitarian views and income was explored (Figure 9.2). Among those with very good or good self-assessed financial situations, 36% of men and 52% of women disagreed to a certain extent that everyone should have the right to free health care. Support for equal rights regardless of income was higher among those who perceived themselves as poor, or had lower income.

Figure 9.2. Support for right to universal free health care by financial situation

Attitudes to a right to free health care, this time in relation to age and income, were also explored. About half of respondents strongly agreed that everybody, regardless of age, has the right to free treatment (51% of men and 52% of women), with 19% of men and 20% of women agreeing to a certain degree. Only 13% of men and women disagreed. 59% of men and of women agreed strongly, or with some reservation, with the statement that both the rich and the poor have the right to be treated free of charge, although it is a widely shared view that it is fair that wealthier people should pay at higher prices (67%
of men and 66% of women). There is a certain ambiguity as both statements appear opposite, but achieve very similar response. Therefore some inherited, explicit and easy to identify and measure personal characteristics (age, chronic illness etc.) deserve exemptions or reduction in prices.

The majority of the respondents disagree that people using health services more often should pay higher contributions for health care (men: 41% disagree strongly, 23% rather disagree; women: 36% disagree strongly, 22% rather disagree). There is an implicit understanding that treatment of certain more common diseases must be free for everybody, with 81% of men and 85% of women agreeing to a certain extent.

More respondents with self-assessed poor financial status or low income agreed with the view that wealthier people should pay progressively more for health care. Among women the support for this view was less explicitly related to financial situation or income (Figure 9.3).

Figure 9.3. Wealthier people should pay at higher prices by financial situation

![Chart showing wealthier people paying at higher prices by financial situation](image)

In order to test further egalitarian values, people were asked whether certain groups should make a higher contribution to health care (in tax, user fees, or health insurance). While more than half of men disagreed with higher contributions by smokers (55% disagree; 31% agree), among women opinions were split (42% disagree; 41% agree). Support for monetary sanctions against smokers was analysed in relation to reported smoking rates (Figure 9.4). As expected, more than half of the smokers strongly
disagreed with such policies, although the attitude of non-smokers was relatively tolerant, with almost an equal percentage being for or against higher contributions associated with smoking.

**Figure 9.4. Attitudes towards higher prices for smokers by smoking habits**

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Rather disagree</th>
<th>Rather agree</th>
<th>Strongly agree</th>
<th>DK-NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smokers</td>
<td>53%</td>
<td>17%</td>
<td>10%</td>
<td>7%</td>
</tr>
<tr>
<td>Non-smokers</td>
<td>29%</td>
<td>15%</td>
<td>12%</td>
<td>25%</td>
</tr>
</tbody>
</table>

On the question of whether heavy alcohol drinkers should pay higher contributions (or share health care costs), the situation was different. Equal percentages of men agree or disagreed to a certain degree with the statement (44% agree; 40% disagree), while the majority of women agreed with the policy (55% agree; 29% disagree).

32% of men and 41% of women agreed strongly with the statement that people who endanger the health of other people through traffic accidents or other criminal offences should pay higher contributions for health care, a further 22% of men and 23% of women agreeing to a certain extent. 27% of men and 18% disagreed.

**Attitudes to the private sector**

**Data from the population survey**

This section explores attitudes to the private sector which are likely to have an impact on the public-private mix of services.

The predominant view (more common among women) was that fees paid for private physicians’ services were adequate, in view of the service provided. Thus, of those who reported being ill or consulting a doctor, 13% of men and 19% of women reported a visit to a private physician, and 23% and 28% respectively to a private dentist. Among those who consulted a private physician, 34% of men and 50% of women thought the fees corresponded to the level of service, and less than a quarter (22% and 21%) thought they were too high. In contrast, fees for dental services were perceived as less affordable and
too high in relation to the services provided (49% of men and 48% of women). It should be noted that in the case of private dental services, prices have increased steadily due to periodic rises in the price of mostly imported materials reflecting changes in exchange rates.

Private service users were then asked whether they would again visit a private consultation room. 20% of men and 25% of women stated that they would again use the private sector, while 50% of men and 55% of women stated that they would do so if some things changed, such as an improvement in service or more affordable fees. Among those who stated they would definitely visit private physicians again, 62% of men and 66% thought the fees to be about right or low for the service. The majority of those who were willing to visit the private sector under certain conditions also thought private fees affordable, which seems to suggest that changes sought are not entirely related to price. Of those who did not wish to visit the private sector again, about half thought that the fees were too high, showing that at least some private utilisation has been discouraged.

For dental services the pattern is similar, but willingness to use the private sector is more clearly related to affordability of fees. 68% of men and 58% of women who were inclined to visit the private sector again viewed the price as about right, only a small percentage viewing the fees as low. Of those willing to visit a private dentist under certain conditions, the majority stated that dental services are too expensive (54% and 55% of women), suggesting price may be one such condition.

When asked to assess the level of fees in the private health sector in general, half were unsure (59% of men and 56% of women). This could be explained by low private sector utilisation, lack of advertising or other information sources. An insignificant percentage considered private payments low for the service, while a quarter thought them high.

In response to a question about whether private health care is a positive phenomenon, the majority of respondents agreed (53% of men and 50% of women), although ‘rather agree’ response was more common than ‘strongly agree’. However, 30% of men and 32% of women disagreed to some extent. This result seem to be in accordance with a 1989 study where 52% of survey respondents advocated legalisation of private practice as an important step in a strategy for radical reorganisation of the health care system in Bulgaria. 


Although it has been often assumed (especially in the early transition), that privately practising health professionals are more responsible that the state-employed due to better financial incentives, a majority of 43% of men and of women disagreed to a certain extent with this statement. 32% of men and 31% of women agreed to a certain extent.

There have been some doubts regarding the qualifications of private sector staff. A large majority disagreed with the statement that private practitioners are better qualified than those working in the public sector, 60% of men and 55% of women expressing disagreement with the statement. Opinions were split on the issue of whether privately practising physicians have better equipment than state physicians (41% of men and 39% of women agreed; 29% of men and 30% of women disagreed to a certain extent).

Although, in terms of qualification, resources, and sense of responsibility, private and state-employed physicians are seen as relatively similar, there seems to be a view that private physicians have better attitudes to patients. A large majority agreed with the statement that in the private sector more attention is paid to the patient (54% of men and 56% of women agreeing to some extent; 23% of men and 19% of women disagreeing).

Data from the qualitative research

These results are comparable with the qualitative data. Attracting more attention to their medical problem was one of the main reasons for patients to seek private services. On the whole, the private sector ensures a more attentive, quicker and possibly more luxurious service. As the private sector is in its infancy, most physicians work also at the state facilities. In many cases, the most sophisticated equipment and well-known and best qualified physicians work in the state teaching hospitals. For emergency or hospital care, the state sector was still seen as the only alternative.

There were also some negative perceptions about the private sector. This is supported by other research, in which privately practising physicians in some cases neglect their patients in the state sector, with bribes or 'connections' a prerequisite to obtain treatment in the private sector. For this reason some stakeholders were against physicians being allowed to work in the private and public sector at the same time.
Attitudes to income of health professionals

Data from the population survey

Understanding the attitudes to physicians' financial status may be important, as most reform strategies have aimed to raise the status of physicians.

In the survey, attitudes to incomes of health professionals (physicians, nurses and dentists) differ according to whether they work in public facilities or in the private sector. The predominant view is that salaries of physicians in the state sector are low (44% of men and 46% of women). This is true also for nurses and dentists in the state sector (nurses: 45% of men 48% of women; dentists: 41% of women and of men).

In contrast, a majority of respondents had no view about the size of income from private practice (physicians: 43% of men and 44% of women; nurses: 54% of men and 56% of women; dentists: 42% of men and 44% of women). Of those who expressed an opinion about private practitioners’ incomes, most thought they were high. Overall, dentists’ incomes from private practice were rated the highest (74% of men and 71% of women), followed by physicians (67% of men and 64% of women) and somewhat lower for nurses (46% of men and 48% of women). This reflects the more advanced privatisation of dental services compared to other health services.

Summary

The evidence set out in this chapter indicates that the Bulgarian population places a high level of importance on the concept of health and sees it as a fundamental human right. There was, however, a widespread view that neither individuals nor the state, in their actions, reflected this importance. There was some evidence that a greater emphasis on health was seen as a manifestation of modernisation or "westernisation", and thus something to aspire to.

A majority supported a strong state role in health care financing, over 50% advocating universal provision, free at the point of use, and nearly 100% believing that the state should, as a minimum, cover vulnerable groups. This reflects a continued reliance on the state to finance and provide health care, despite its weakened role during transition. It has been argued that such a reliance on the state and preference for free services in Bulgaria may be obstructive to economic liberalisation. Support for universal coverage varied little within the population, other than the intuitive finding that it was stronger in the
most old, poor, least well educated and those in rural areas. Physicians seem rather less supportive of universal coverage and were more concerned with unveiling the myth of 'free health care', and arguing that the state could not, and should not, be asked to provide it. This broad support for collectivist values is confirmed in other research that places Bulgaria in the context of its more individualistic neighbours.
CHAPTER 10. WILLINGNESS TO PAY FOR HEALTH CARE IN BULGARIA

Given the large informal sector and inefficient tax system in Bulgaria, the population’s willingness to pay under a particular financing scheme is likely to have a strong impact on its sustainability. Implementation of financial reform has focused predominantly on building administrative capacity through technical assistance, with much less attention to the population’s attitudes to reform. An essential component of a PHARE project on restructuring of health financing was conducting a population survey on users' views, but this was later sidelined. It is unclear whether people are willing to contribute explicitly for health services which were previously financed from general taxation, and thus perceived to be “free of charge”. Similarly, although willingness to pay (particularly user fees) has been extensively studied in the context of developing countries, virtually no work on Central and Eastern Europe is available from international sources.

It has been argued that, in health care systems where services have been free at the point of use, people are generally less willing to pay for health care than in systems requiring some direct and visible participation. This section will explore the levels and determinants of willingness to pay for health care, preferred circumstances of payment, and factors influencing decisions to pay by means of analysis of data from the survey and qualitative research.

Willingness to pay for health care: levels

Data from the population survey

When asked directly about any form of payment (cash, present, donation) for health services, 19% of men and 15% of women indicated definite and unconditional willingness to pay. About half of the respondents (46% of men, 48% women) stated that they were willing to pay under certain conditions, such as having sufficient resources; if they were especially satisfied with the outcome of the treatment; or in an emergency situation. Although the majority of respondents were not averse to the idea of some form of payment for previously free services, 35% of men and 37% of women were not willing to pay under any circumstance.
A more detailed analysis showed that only about 3% of men and 5% of women would consistently refuse to pay for health care for any of a range of specified services that were listed throughout the questionnaire, which shows that the responses may depend on wording of the questions, and specific circumstances of payments, rather than a general unwillingness to pay for health care.

**Willingness to pay for health care: determinants**

**Data from the population survey**

In the univariate analysis, willingness to pay for health services falls with increasing age, decreasing education, decreasing income, worsening self-assessed financial status and poor self-reported health status (Figure 10.1). Those living in villages were less likely to be willing to pay than those in Sofia, and those who believed in universal state provision were less willing to pay than those who favoured a more selective state provision. As many of these variables are correlated with age, the relationships were explored in a multivariate analysis, adjusting for age (Table 10.1). In general, the univariate relationships remained significant in the age adjusted model. Income and self-assessed financial situation are highly significant predictors of willingness to pay for health care, as is educational attainment. Respondents in the highest income quartile are three times as likely as those in the lowest, to be willing to pay for health care. Those with only primary education are several times less likely than those with higher education, to favour payment for health care. Living in Sofia is associated with higher willingness to pay.
Figure 10.1. Percentage willing to pay for health services by range of variables

- **Age**
  - > 39
  - 40-49
  - 50-59
  - 60-69
  - > 70

- **Income quartile**
  - Highest
  - 2
  - 3
  - Lowest

- **Education**
  - Higher
  - Secondary
  - Primary

- **Financial situation**
  - Very good/good
  - Neither good/nor bad
  - Rather poor
  - Very poor

- **Settlement**
  - Sofia
  - City
  - Town
  - Village

- **Health status**
  - Good/Rather good
  - Bad/Rather bad

- **View on the state role**
  - State should not provide for all
  - State should provide for all
<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>% (n) paid</th>
<th>Odds ratio (95% CI) (Age-adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>69.7% (166)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>72.6% (90)</td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>70.4% (69)</td>
<td>1.03</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>54.4% (56)</td>
<td><strong>0.52</strong></td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>45.4% (44)</td>
<td><strong>0.36</strong></td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (&gt;160,000)</td>
<td>81.8% (130)</td>
<td>1.00</td>
</tr>
<tr>
<td>(Leva)</td>
<td>II (100,000-160,000)</td>
<td>66.4% (87)</td>
<td><strong>0.46</strong></td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>56.3% (90)</td>
<td><strong>0.34</strong></td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>49.4% (79)</td>
<td><strong>0.26</strong></td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>79.5% (70)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>71.3% (234)</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>49.8% (122)</td>
<td><strong>0.31</strong></td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>83.6% (46)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>75.1% (139)</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>65.7% (140)</td>
<td><strong>0.39</strong></td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>46.7% (91)</td>
<td><strong>0.19</strong></td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>64.7% (315)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>66.7% (72)</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>58.5% (38)</td>
<td>0.93</td>
</tr>
<tr>
<td>Settlement</td>
<td>Sofia</td>
<td>72.9% (51)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>City</td>
<td>72.1% (145)</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td>Town</td>
<td>67.6% (123)</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>Village</td>
<td>51.2% (106)</td>
<td><strong>0.47</strong></td>
</tr>
<tr>
<td>Self-reported health</td>
<td>Good/Rather good</td>
<td>67.6% (340)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Bad/Rather bad</td>
<td>54.4% (86)</td>
<td>0.80</td>
</tr>
<tr>
<td><strong>WOMEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>72.4% (213)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>76.1% (118)</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>61.0% (94)</td>
<td><strong>0.60</strong></td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>51.8% (71)</td>
<td><strong>0.41</strong></td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>43.4% (63)</td>
<td><strong>0.29</strong></td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (&gt;160,000)</td>
<td>78.6% (143)</td>
<td>1.00</td>
</tr>
<tr>
<td>(Leva)</td>
<td>II (100,000-160,000)</td>
<td>67.7% (113)</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>65.9% (137)</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>48.7% (128)</td>
<td><strong>0.40</strong></td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>83.8% (145)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>71.6% (249)</td>
<td><strong>0.50</strong></td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>45.5% (166)</td>
<td><strong>0.21</strong></td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>77.6% (45)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>71.4% (180)</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>67.6% (209)</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>46.1% (113)</td>
<td><strong>0.30</strong></td>
</tr>
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<td>Marital status</td>
<td>Married</td>
<td>64.6% (370)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>73.5% (72)</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>54.9% (118)</td>
<td>1.05</td>
</tr>
<tr>
<td>Settlement</td>
<td>Sofia</td>
<td>75.9% (104)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>City</td>
<td>72.8% (179)</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td>Town</td>
<td>61.6% (146)</td>
<td><strong>0.55</strong></td>
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<tr>
<td></td>
<td>Village</td>
<td>49.2% (131)</td>
<td><strong>0.41</strong></td>
</tr>
<tr>
<td>Self-reported health</td>
<td>Good/Rather good</td>
<td>67.7% (432)</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Bad/Rather bad</td>
<td>51.6% (128)</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.54-1.05)</td>
</tr>
</tbody>
</table>
Willingness to pay for health care: factors

Data from the population survey

As shown earlier, for half of respondents, willingness to pay for health care was tied to certain conditions, such as purpose of payment. Factors affecting willingness to pay were identified through qualitative research, and then incorporated in the survey questionnaire. Respondents were asked whether they would pay under each scenario (Table 10.2). It is clear that burden of illness and affordability significantly increased willingness to pay. Factors related to quality of service, for example: access to a facility with higher standards, a highly qualified specialist, better staff attitude, quick or convenient service, or service provided nearby, were considered of less importance.

Table 10.2. Willingness to pay for health care under different scenarios

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Men (%)</th>
<th>Women (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In case of serious illness</td>
<td>75 %</td>
<td>74 %</td>
</tr>
<tr>
<td>If my child/person very close to me is ill</td>
<td>70 %</td>
<td>68 %</td>
</tr>
<tr>
<td>If I have enough money</td>
<td>70 %</td>
<td>68 %</td>
</tr>
<tr>
<td>If the price is affordable</td>
<td>58 %</td>
<td>57 %</td>
</tr>
<tr>
<td>If I am satisfied with the successful treatment</td>
<td>55 %</td>
<td>51 %</td>
</tr>
<tr>
<td>For consultation with a well known specialist/clinic</td>
<td>51 %</td>
<td>50 %</td>
</tr>
<tr>
<td>If I know that I will receive a high quality service</td>
<td>49 %</td>
<td>48 %</td>
</tr>
<tr>
<td>If there is good equipment/medication</td>
<td>48 %</td>
<td>46 %</td>
</tr>
<tr>
<td>If the physician pays me special attention</td>
<td>41 %</td>
<td>43 %</td>
</tr>
<tr>
<td>If the attitude of staff is very good</td>
<td>37 %</td>
<td>37 %</td>
</tr>
<tr>
<td>If I know that I will be treated immediately</td>
<td>32 %</td>
<td>29 %</td>
</tr>
<tr>
<td>If I could be treated close to my home</td>
<td>24 %</td>
<td>24 %</td>
</tr>
</tbody>
</table>

87% of men and 85% of women were willing to pay in at least one scenario; 16% of men and 15% of women were willing to pay in all 12 cases. 13% of men and 15% of women were unwilling to pay in any scenario.

Those who were willing to pay in at least one scenario were then asked to rate the three most important reasons why they would pay for health care. The scenarios were then ranked using a composite score (Table 10.3) followed by treatment of a child or other close relative, and affordability.
Table 10.3. Willingness to pay for health care under different scenarios: rating

<table>
<thead>
<tr>
<th></th>
<th>Men (%)</th>
<th>Women (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
<td>2nd</td>
</tr>
<tr>
<td>If serious illness</td>
<td>53.4</td>
<td>16.5</td>
</tr>
<tr>
<td>If for child/relative is ill</td>
<td>14.5</td>
<td>22.7</td>
</tr>
<tr>
<td>If I have enough money</td>
<td>14.7</td>
<td>19.4</td>
</tr>
<tr>
<td>If well known specialist/clinic</td>
<td>5.6</td>
<td>14.0</td>
</tr>
<tr>
<td>If high-quality service</td>
<td>3.8</td>
<td>8.3</td>
</tr>
<tr>
<td>If successful treatment</td>
<td>2.5</td>
<td>7.0</td>
</tr>
<tr>
<td>If affordable price</td>
<td>1.8</td>
<td>6.4</td>
</tr>
<tr>
<td>If good equipment/medication</td>
<td>1.1</td>
<td>1.9</td>
</tr>
<tr>
<td>If special attention</td>
<td>0.7</td>
<td>1.9</td>
</tr>
<tr>
<td>If quick service</td>
<td>1.4</td>
<td>0.4</td>
</tr>
<tr>
<td>If good staff attitude</td>
<td>0.2</td>
<td>0.8</td>
</tr>
<tr>
<td>If close to home</td>
<td>0.4</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Data from the qualitative research

Willingness to pay for health care was explored further in qualitative research. First, respondents were asked whether the patient can contribute personally to receiving good health care. This question aimed to capture spontaneous reactions without explicitly suggesting financial contribution. Almost all respondents stated that the patient should contribute to their health care in a more active way. Half interpreted ‘contribution’ as financial contribution, while a third of the patients and slightly less than half of the physicians requested a contribution of a different sort (users: “good attitude and helpfulness”, “gratitude”, “looking after one’s health”, prophylaxis, help in diagnostics, following the prescribed treatment, “to consult a physician only when really needed”; physicians: “patients are...too critical, negative”, need of “understanding, not...distrust, preconceptions”, “patients think that the staff have to indulge their every whim even when contradicting the treatment”, “hygiene”, “take care of their health”, “give full details”). Among those who suggested, unprompted, that the patient should contribute financially (less than half), most supported payment of health insurance contributions.

“...obligatory to pay a certain percentage of salary for health insurance, in order to be sure that when going to a physician, will be paid attention....” [user]

“...by paying taxes, health insurance - to supply resources for health care” [physician]

A third supported direct payment (user fee or fee-for-service), with a few supporting co-payments or sponsorship. Several respondents mentioned that financial contributions
should reflect ability to pay, with the rich contributing more. Two users mentioned a need to give gifts to the physician ("to stimulate them" [user]).

"I have heard that in the West there are distortions of health insurance, where the state covers non-essential services, e.g. dandruff shampoo, because the population do not participate financially. The system should motivate people to seek care only when needed, but not to deter their use – a balance should be found." [user]

"A good patient should contribute through showing his/her respect for the physician who had treated him/her... whether with flowers, or some sort of payment..." [user]

Several physicians mentioned that patients already pay extensively ("currently they contribute for almost everything, buy their own drugs, supplies, but not to staff service" [physician], "in many clinics scheduled operations are paid – obviously a necessity" [physician]). Several physicians doubted the willingness of the population to contribute.

"The Bulgarian patient... selfishly demands free consultations or home visits with no sound reason due to a deeply rooted psychology: 'if it is free, let’s use it no matter whether I need it or not', and thus deprive others who really need care..." [physician]

"In Bulgaria the patients are accustomed to receive everything without making any effort, and are often rude to staff, do not appreciate their work by merit." [physician]

The reasons for people being willing to pay were further examined in several stages. First, respondents spontaneously listed factors having an impact on willingness to pay. Then, they were asked to assess the relevance of several factors identified through pilot interviews. Finally, the three most important factors were ranked.

When giving unprompted answers, the predominant views among patients and physicians were very different. The opinions of users were split between ability to pay (16 cases) and satisfaction with a high quality treatment or good attitude (14), only a few stating other reasons, such as need. Physicians also considered financial status to have an impact on willingness to pay (9), but the major factors were attitudes and beliefs (13).

When presented with a showcard, the situation changed slightly. For a large majority of respondents, willingness to pay was associated with two main factors: health needs (incidence of serious, life-threatening illness, or illness requiring immediate treatment) and patient ability to pay. These were followed by patient satisfaction with the service, and surprisingly, how much the patient values his or her health (Table 10.4).
Table 10.4. Factors influencing willingness to pay for health care (showcard)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Patients (n)</th>
<th>Doctors (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious / life-threatening illness</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>Patient’s ability to pay</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Patient’s satisfaction (higher-quality/ quick/ convenient service)</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Patient’s value of their own health</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Patient’s politeness/ good manners/ mentality</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Type of service (pharmaceuticals, payment to physician, etc.)</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Type of health facility (hospital / polyclinics)</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Circumstances of payment (large/small sum; monetary/ in-kind; before/ after the treatment)</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Location (in Sofia or in small town/village)</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

When aggregated into broader categories, it is evident that need is perceived to be of primary importance to patients, while physicians rated it second lowest (Figure 10.2).

Figure 10.2. Factors influencing willingness to pay for health care (grouped)

These findings corroborate the results from the survey, where serious illness and affordability were among the top three reasons for willingness to pay, followed by several indicators related to satisfaction and conditions of treatment.

Importantly, these factors were seen as closely interrelated and some respondents, both patients and physicians, found it difficult to distinguish between cause and effect. For example, if a patient is seriously ill, whether they consider making a payment will also depend on their ability to pay or upbringing (physician). Motivation for payment may be determined by the type of service and whether the patient is satisfied with it (physician).
Whether patients value their own health is often indistinguishable from the overall value system and upbringing (physician).

The connection between willingness to pay and ability to pay is complex. As some respondents noted, people have a real choice whether or not to pay only when they have sufficient means.

“A person may value his/her health, but cannot afford to pay for it” “Everyone...is willing to pay for a quality service, but not everyone has the means” [users]

In some cases other factors, such as the subjective value of health, may be of higher importance:

“...it depends to what extent the patients value their health, because even if not seriously ill, they may be ready to pay” [user]

As shown in chapter 7, many respondents already have experience of formal and informal payments for health care. Thus some respondents understood the question in terms of whether they are willing to make an informal payment. However, in many cases the reasons why users have paid in the past are identical to why they are willing to pay in the future, namely to obtain good and successful treatment (“if I think that the physician has made an effort, I will express my gratitude” [user]; “[...after the treatment, when I assess the service, and whether the physician deserves remuneration”[user]). As the attitudes to the existing practice of informal payments have been explored in chapter 7, this issue will not be pursued further here.

Willingness to pay could also be influenced by whether payment is formal or informal. As informal payment usually involves a direct transaction between patient and physician, even some formal payments, where the patient pays directly to the physician, may create an impression of being illicit.

“It is much easier when the payment is formalised. You know that it will cost you 2,000 Leva to see this specialist, it is much easier than if you have to leave 2,000 Leva on the desk informally.” [physician]

However, several respondents objected to any (direct) payment as contradicting the right to free health care guaranteed by the Constitution.

“...If the patient pays, his Constitutional rights are infringed, as the Constitution says health care is free...” [physician]
It was also suggested by several respondents that willingness to pay can be dependent on the amount of choice available in the system. Clear separation of paid and free services was preferred.

“Depends on patient's financial means. If they can afford it, will go to a private physician, but facilities like ours (state) should remain free.” [physicians]

Factors related to need

Need is seen widely as a strong incentive for payment, independent of other factors. Need is defined as a serious (as judged by the patient), complex, life-threatening, or unexpected illness. Many people thought that where there is urgent need (“especially if there is pain”) money will be found somehow.

“When an illness is quite serious, even if a person don’t have the means, will borrow, will remorgage their flat, but save themselves or relative from a life-threatening illness.” [user]

“(WTP depends) from the degree of discomfort. For dental services people pay without thinking, because they usually go when they have toothache.” [physician]

“I think that here money do not play a significant role, because when one needs health care, he will find a way to provide them.” [user]

Two respondents noted that, given the high level of illness affecting all income strata in Bulgaria, almost everybody needs health care at some stage, so ability to pay becomes a much more relevant factor.

“When in need, everybody is willing to pay... but many people are too poor to afford to do it voluntary.” [physician]

Factors related to ability to pay

Another widely held view is that ability to pay is a crucial factor constraining willingness to pay. It was noted by several patients that some people may simply be forced to pay by necessity, and “able to pay” only with great strain on their resources (patient). The fact that people do pay does not reflect a preference for payment.

“Everything boils down to financial resources of the health facility and financial means of the patient.” [user]

“Every person wants to pay for health care... the mentality is that if one is paying, will be treated better. But people are restricted by their inability to pay” [user]

“The population in its large majority is socially disadvantaged - I don’t see how such person could cover the cost of their treatment...only partially.” [physician]
"If all health services are to be paid for, the Bulgarian wouldn’t go to a physician, ...will prefer to buy food, for himself and for his family, but not give for health." [user]

While most patients tended to perceive willingness to pay as closely correlated with income, several physicians thought the association not so clear-cut.

"I disagree that ability to pay is essential. I have witnessed many cases of people who have enough money... but constantly remind us of their right to free care." [physician]

"...pensioners would give me a small token... while some well-off people, of high standing in the society... treat the physician with disrespect. I don’t say they have to give money, but giving something small, a small souvenir, is to show respect." [physician]

Factors related to values and attitudes

Other factors perceived to have a significant impact on willingness to pay are values, beliefs and attitudes to payment. Health awareness and general knowledge, in particular, were seen as ways to help patients appreciate the complexity of the service provided by the physician and have a better idea about appropriate payment [user]. Physicians tended to emphasise these factors to a larger extent.

"(WTP) depends mostly on growing public awareness. Until a few years ago it was anathema to say that you can pay for a consultation. Now I see that quite a few people go to private consultation rooms and prefer to pay to get what they want." [physician]

"Every reasonable person is willing to pay more, to get rid of illness quicker..." [user]

"I would happily pay, if I know that this will contribute to a good health care... to improve not only my health, but also health of other people." [user]

The hypothesis that the long tradition of free health care in Bulgaria may have contributed to a reduced willingness to pay was confirmed to a certain degree in this survey. Some respondents (to a larger extent, physicians) thought that, despite introduction of payments in many previously free sectors (health, education, social services), people are still not used to the idea of payment.

"We have to get accustomed that every manipulation, hospital admission, element of treatment has a price and somebody has to pay for it, otherwise it is a chaos – as it is now..." [physician]

"Depends on the education, change of the mentality of the patient: to realise that what has been done for him is valuable." [physician]

"People should understand that health care is not free, and the work of physician, nurse, even of hospital attendant, has its monetary equivalent." [physician]
Physicians tend spontaneously to compare payment for health care to other services within or outside the health sector. Due to the fact that a small service sector, often informal, operated during the socialist period, payment for such services is more familiar.

"...people pay for everything: pay to car mechanic, to plumber; to have their television set repaired... but when asked to pay for their health, would say: ‘oh no, the state or the Party has promised this without money and you are obliged’. But nobody, especially now, is obliged. We say somebody is socially vulnerable because they can’t buy bread and milk, but not if they can’t pay for health care.” [physician]

It is clear that many people now find it easier to accept payment in the private sector, but remain averse towards payment in the public sector. Expansion of the private sector in other spheres of society is familiar and viewed positively. In contrast, payment for services that were until recently state-guaranteed was seen to require some preparation (“the patient to be oriented” [user] “going to private facilities, you know how much you will pay” [physician]). One of the reasons that payment may be acceptable in the private sector is that it involves an element of choice.

“Every person knows well their family budget, and respectively according to this budget chooses the health facility, the physician, in order to be able to pay.” [user]

Factors related to patient satisfaction

Patient satisfaction with treatment was identified as another issue, although less important, relating to willingness to pay. Satisfaction may be related to the final outcome of treatment (success), or to the process and circumstances of treatment (high quality, good staff attitudes, equipment, etc.). Generally more than a quarter of users were prepared to pay in order to obtain a pleasant attitude by staff; to gain access to professionals who are the best specialists in a certain field (“competence of the physician who treats them” [physician]); or if convinced that a particular physician could help them. The perceived outcome of treatment also appeared to influence the decision to pay among several users (“really of high quality, normal, and effective” [user], “results expected from a certain physician” [user]). Some users mentioned being willing to pay where treatment abroad is required or treatment is available only in the private sector.

“If a person is absolutely sure that by means of this payment their health will be improved significantly, he/she would be pleased to pay.” [user]

“(recently paid a dentist $200) Not that it wasn’t a problem, but I am satisfied with the quality of the service and the next time I would go to the same dentist. Because I have used before unpaid dentist – it just isn’t worth the saving.” [user]
“People would pay if they knew they will be well treated and cured.” [physician]

The type of health facility and its location also influenced willingness to pay for health care.

“people trust institutions, and not personalities.” “The name of the hospital, whether in the capital, determines the willingness to pay” [physicians]

“The type of health facility matters, because people are much more willing to pay in an elite health facility, with a better reputation.” [physician]

“It’s easier for the patient to pay and get a convenient contact with the physician... to avoid the bureaucracy, at a central, bigger facility, with better quality” [physician]

The method of payment, e.g. payment in advance or retrospectively, was not considered an important factor. People may, however, be adverse towards payment if it is not matched by improvements in service (“things are confused: I have paid, paid, and haven't received quality.” [user]).

Willingness to pay: projections

This section draws broadly on contingent valuation techniques. Respondents were presented with a hypothetical market, where they gave monetary values to a range of health services. Although, in contrast to the contingent valuation method, the respondents did not have to compare directly the payment for different services with other goods, the emphasis was on rating the services in relation to each other. Thus, respondents evaluated first more routine services, such as consultation at polyclinic, followed by more complex treatments such as operations, finishing with comprehensive insurance. Qualitative research suggested that willingness to pay was often greater for a child or close relative than for oneself, and for that reason, study respondents were asked to evaluate health services in both situations.

Data from the population survey

A large majority of respondents stated that they would consult in the state sector (93% of men and 92% of women) if ill, which shows that the state retains its monopoly in provision. When a child or close relative is ill, the percentage of those willing to seek help in the private sector doubled (8% for illness of respondent; 15% of men and 14% of women for illness of child/relative).
An open-ended question was asked concerning the prices that respondents would pay for different types of service, distinguishing between themselves and their close relatives (Table 10.5). Half of respondents indicated willingness to pay 25-30,000 Leva contribution yearly for full medical insurance for themselves. This amounts to 1.5-2% of the average monthly salary of those employed in the state sector in May 1997, when the survey was conducted. However 75% of men were willing to pay 5% (80,000 Leva) of their monthly income for health insurance for themselves, while for women the respective figure was 3.5% (60,000 Leva) of the average salary. These values represent 16% and 12% respectively of the minimum salary.

In all categories, men expressed an equal or higher willingness to pay for a child or close family member. Among women the figures are similar, apart from payment of insurance cover where women were willing to pay slightly less, 75% of women being willing to pay 50,000 Leva or 3% of average monthly salary, in the case of a child or other relative. Although, in international terms, these figures are very small, they may actually be an even smaller proportion of true income, given underreporting in the private and informal sector. On the other hand, official statistics exclude those unemployed and not registered as such, thus underestimating the average income figures. Given that a sizeable population is below the poverty line, reliant on minimal salary and social benefits, the figures in this study appear more significant.
Table 10.5. Prices that respondents were willing to pay for selected services (Leva)

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Median</th>
<th>Percentile 25</th>
<th>Percentile 75</th>
<th>Valid N</th>
<th>Nothing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full insurance – yearly</td>
<td>30,000</td>
<td>10,000</td>
<td>80,000</td>
<td>142</td>
<td>441</td>
</tr>
<tr>
<td>Birth</td>
<td>17,500</td>
<td>10,000</td>
<td>50,000</td>
<td>70</td>
<td>441</td>
</tr>
<tr>
<td>Operation for appendicitis</td>
<td>10,000</td>
<td>5,000</td>
<td>20,000</td>
<td>139</td>
<td>441</td>
</tr>
<tr>
<td>One-day stay at hospital</td>
<td>2,000</td>
<td>1,000</td>
<td>5,000</td>
<td>156</td>
<td>441</td>
</tr>
<tr>
<td>Physician on call (home visit)</td>
<td>2,000</td>
<td>1,000</td>
<td>5,000</td>
<td>123</td>
<td>441</td>
</tr>
<tr>
<td>Consultation at polyclinic</td>
<td>1,000</td>
<td>600</td>
<td>2,000</td>
<td>194</td>
<td>441</td>
</tr>
<tr>
<td><strong>Child/relative</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full insurance – yearly</td>
<td>30,000</td>
<td>10,000</td>
<td>80,000</td>
<td>135</td>
<td>568</td>
</tr>
<tr>
<td>Birth</td>
<td>20,000</td>
<td>10,000</td>
<td>50,000</td>
<td>92</td>
<td>568</td>
</tr>
<tr>
<td>Operation for appendicitis</td>
<td>10,000</td>
<td>5,000</td>
<td>20,000</td>
<td>142</td>
<td>568</td>
</tr>
<tr>
<td>One-day stay at hospital</td>
<td>2,000</td>
<td>1,000</td>
<td>5,000</td>
<td>160</td>
<td>568</td>
</tr>
<tr>
<td>Physician on call (home visit)</td>
<td>2,000</td>
<td>1,000</td>
<td>5,250</td>
<td>125</td>
<td>568</td>
</tr>
<tr>
<td>Consultation in polyclinic</td>
<td>1,000</td>
<td>800</td>
<td>2,000</td>
<td>191</td>
<td>568</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full insurance – yearly</td>
<td>25,000</td>
<td>10,000</td>
<td>60,000</td>
<td>186</td>
<td>447</td>
</tr>
<tr>
<td>Birth</td>
<td>15,000</td>
<td>5,000</td>
<td>30,000</td>
<td>192</td>
<td>447</td>
</tr>
<tr>
<td>Operation for appendicitis</td>
<td>10,000</td>
<td>5,000</td>
<td>15,000</td>
<td>220</td>
<td>447</td>
</tr>
<tr>
<td>One-day stay at hospital</td>
<td>2,000</td>
<td>1,000</td>
<td>5,000</td>
<td>244</td>
<td>447</td>
</tr>
<tr>
<td>Physician on call (home visit)</td>
<td>2,000</td>
<td>1,000</td>
<td>5,000</td>
<td>187</td>
<td>447</td>
</tr>
<tr>
<td>Consultation in polyclinic</td>
<td>1,000</td>
<td>500</td>
<td>2,000</td>
<td>286</td>
<td>447</td>
</tr>
<tr>
<td><strong>Child/relative</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full insurance – yearly</td>
<td>20,000</td>
<td>10,000</td>
<td>50,000</td>
<td>173</td>
<td>577</td>
</tr>
<tr>
<td>Birth</td>
<td>15,000</td>
<td>5,000</td>
<td>30,000</td>
<td>181</td>
<td>577</td>
</tr>
<tr>
<td>Operation for appendicitis</td>
<td>10,000</td>
<td>5,000</td>
<td>15,000</td>
<td>208</td>
<td>577</td>
</tr>
<tr>
<td>One-day stay at hospital</td>
<td>2,000</td>
<td>1,000</td>
<td>5,000</td>
<td>234</td>
<td>577</td>
</tr>
<tr>
<td>Physician on call (home visit)</td>
<td>2,000</td>
<td>1,000</td>
<td>5,000</td>
<td>179</td>
<td>577</td>
</tr>
<tr>
<td>Consultation in polyclinic</td>
<td>1,000</td>
<td>800</td>
<td>2,000</td>
<td>279</td>
<td>577</td>
</tr>
</tbody>
</table>

It is important to examine the relationship between reported expenditure and willingness to pay in the future. When individuals who have paid during their last consultation were divided into those who had paid above and below the median payment (2,200 Leva), there was no difference in willingness to pay in the future (68% and 69% respectively). However, those who have paid informally in the past were significantly more willing to pay in the future (87%), compared to those who have never paid (58%). Surprisingly, willingness to pay for consultation or operation, measured in Leva, appears to exceed reported actual health expenditure for consultations in the past 4 weeks (Figure 10.3).
Data from the qualitative research

Willingness to pay for health care was explored also in the qualitative research. Respondents were presented with several scenarios, including their own acute illness or that of a close family member. Consultations at a first-level provider, hospital admission, purchase of pharmaceuticals and dental consultation were explored separately.

As in the survey results, many respondents found it difficult to place a monetary value on medical services. Users and physicians proposed similar values for their own consultations (mean: 2,000 and 2,500 Leva respectively), which is similar to the survey data.

While a large majority of respondents were willing to pay significantly more in the case of illness of their child or close relative than for themselves, most were unable to determine an upper limit or give an estimate at all. The mean among users was 5,000 Leva, while there was only one answer among physicians.

Physicians were less inclined to place monetary values on a hypothetical situation, and mostly gave values recommended by the Bulgarian Physicians Union or Ministry of Health; or referred to payments actually made by their patients. For example, while respondents suggested more realistic payments for hospital admission (mean: 14,000 Leva), several physicians quoted figures of about 70,000 Leva as there had been speculation about introduction of charges for hospital stays in state facilities, later
abandoned. Similarly, while patients were willing to pay 13,000 Leva for pharmaceuticals on average, physicians suggested a mean of 49,500 Leva.

The reasons why respondents found it difficult to value health services in relation to other commodities will be briefly explored as these are important for understanding willingness to pay. Most commonly, respondents' answers were hampered by what they perceived to be a "no choice" situation. Respondents commonly felt that in case of illness there is no real choice, as the illness has to be treated. Some respondents even found it impossible or unethical to discuss possible payment when the health of a child or close family member is at stake. Most respondents stated that they would pay not only what is affordable for them, but also raise funds through borrowing or sale of property to provide what is necessary for the treatment.

"When it's a question of life and death, I think that the sum doesn't matter too much." [user]

"(child's illness). I would do absolutely anything to help, I would sell my personal belongings if I have to, in order to pay for the best doctors." [user]

"If it is very necessary and if payment is obligatory, I will pay what I am asked... regardless of financial difficulties." [user]

In a broader sense, some respondents thought the question not relevant as prices are imposed with no consultation or means testing, thus they have no choice but to pay. Several respondents did not feel confident giving an estimate, which they thought inexpert and "subjective". While poorer respondents tended to accept the requested amount because they could not do anything about it, the wealthier were more inclined to accept it as a normal practice. (users: "(would pay) as much as they ask for...I wouldn't be stingy"; "it's quite expensive, but this is the reality - a person can't choose"; "the sum is determined by the physician, and the patient has no choice").

Another reason is lack of clarity about the cost of health services, reflecting a chaotic expansion of user fees, discretionary informal payments and a largely unregulated private market for health care. Physicians were better informed about actual and planned payments in the health sector and most reproduced what they have heard about or observed ("I am a side in this matter and can't be very objective" [physician]). In contrast patients, who had less information, expressed their willingness to pay on the basis of their own financial means. Physicians tended to describe the actual situation while patients found it easier to imagine a hypothetical market.
The open-ended format of the scenario of willingness to pay posed some difficulties ("it is difficult to determine the exact sum" [physician]). Many respondents (mostly physicians) felt they lacked the necessary details to decide on payment for services or medication. As with the previous evidence on factors influencing willingness to pay, here willingness to pay was related to type of illness (serious, life-threatening, complications, length, level of discomfort); type of consultation (involving diagnostics, follow-up, specialised; repeated), type of health facility ("I go to a state facility, in order not to pay" [user]); qualifications of physician; whether the payment is to a particular person (acquaintance) or to a facility; and available resources in the health facilities. Other contextual factors considered important were the rate of US dollar to the Lev, type of pharmaceuticals (imported, brand names, substitutes), fluctuations in wages, drug prices and standard of living; pharmaceutical trade (resale leading to higher prices). Only three respondent were unwilling to pay at all, and in two of those cases it was specifically payment for hospital admission that was considered unacceptable.

**Discussion**

This chapter presented quantitative and qualitative results related to willingness to pay for health care in Bulgaria. Before discussing the potential implications of these results, some limitations will be noted.

Measuring willingness to pay and beliefs raises several issues. First, as Blaxter notes, beliefs are not very good predictors of behaviour\(^{22}\). Statements given in an interview may differ from actual actions, especially related to the stress of illness.

Second, measuring willingness to pay in a hypothetical situation may not be valid because expressed willingness to pay may have been influenced by a tradition of free health care in Bulgaria and lack of awareness of cost. According to Drummond, "the willingness to pay may prove to be an unreliable indicator in the economic evaluation of health decisions and to lead to underestimation of the desire to participate in the system, when having the background of previously free access"\(^{217}\). However, this effect is likely to have been mitigated by the increasingly common direct payment for health services (chapter 7). Abel-Smith and Rawal reported that respondents did not hesitate to answer questions about willingness to pay in a situation of free health services in Tanzania\(^{36}\). Similarly, in Kyrgyzstan, which had a Soviet health care system, only about a third were
unwilling to pay (39% unwilling or unable to pay for ambulatory care and 39% for inpatient care). The third point is that measurement of willingness to pay may also underestimate the ability of households to pay. Respondents are likely to give figures based only on their disposable income, not taking into account their non-monetary assets and reserves. On the other hand, this interpretation may reflect more adequately the sums people can afford to pay without imposing a longer term burden on their household.

Although approximately a third of respondents were unwilling to pay at all when asked in general (similar to the above given example of Kyrgyzstan), when confronted with concrete scenarios and circumstances of payment, only a very small percentage remained consistently unwilling to pay. This supports the difference between general beliefs and projected behaviour in certain circumstances, but also suggests a change in public attitudes during the first seven years of transition. Interestingly, willingness to pay (in Leva, for particular health services) exceeds the actual health spending in the past four weeks, suggesting a margin for an increase in population spending. However, reported expenditure is likely to be an underestimation of the real financial burden of disease.

There are few studies which look at willingness to pay in Bulgaria. The issue has been considered politically difficult, as through the 1990s payment for health services, in effect, contradicted the Bulgarian constitution. The results from the current survey are broadly compatible with another representative nation-wide survey conducted in 1996, which addressed the acceptability of direct user payment (Table 10.7). Although the response scale was different, it is evident that the percentage of those who strongly support or oppose the idea of user payments, is similar in both studies. It could also be suggested that those who had no opinion may have had reservations about payment, which were recorded in the current survey.

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Table 10.6. Willingness to pay for health care: comparison of results

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you pay (in cash/present/donation) for treatment?</td>
<td>Are you willing to accept some form of mixed payment for health services by the government and directly by the patient?</td>
</tr>
<tr>
<td>Yes, completely</td>
<td>Yes</td>
</tr>
<tr>
<td>Yes, under certain conditions</td>
<td>No</td>
</tr>
<tr>
<td>No</td>
<td>No opinion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16.4%</td>
<td>47.3%</td>
<td>36.3%</td>
</tr>
<tr>
<td></td>
<td>21.6%</td>
<td>47.0%</td>
<td>31.4%</td>
</tr>
</tbody>
</table>

Predictably, the younger, highly educated, better off (actual and perceived), urban dwellers were more likely to be willing to pay for health care, reflecting their higher ability to pay. Other factors may include greater awareness of costs and benefits involved in paying, but further research is needed. A national study from Bulgaria in 1991 found similar variations, 61% of the respondents were willing to pay more tax if it led to an improvement in the health services, education and other social services (71% in the cities, 63% in towns, and only 44% in the rural areas). This could be explained by the centralisation of facilities in urban areas and rural residents’ inability and unwillingness to pay for poor or unavailable services[12]1.

In the analysis on willingness to pay there is a very good match between qualitative and quantitative evidence. Need (particularly for serious illness) and ability to pay equally affect willingness to pay (Figure 10.4). In the qualitative research, values and beliefs emerged strongly as an important independent factor influencing willingness to pay. As discussed in chapter 9, values, beliefs and attitudes were viewed as particularly important in the circumstances of health care reform: population awareness and acceptance of the need to pay for health care under the new health financing system; patients acknowledging the seriousness of their illness and the complexity involved in health professionals’ work.
Circumstances of treatment, and user satisfaction, appeared to be of secondary importance. These were thought to be relevant only if need occurs, and to be constrained by ability to pay. A nationally representative survey from Bulgaria, conducted in 1995 among 1,188 respondents over 15, looked at willingness to pay a higher price for a higher quality treatment, and so is not directly comparable with the current survey. In it, most respondents were willing to pay to be treated by a highly qualified specialist (88%), followed by payment to receive a more attentive service by staff (79%), and less waiting time at facilities (54%). As in this study, people were least willing to pay for convenience or service provided near their home, indicating that the infrastructure (although of poor quality) still exists.

Another factor strongly affecting willingness to pay is where treatment of children is concerned. This study shows that respondents are concerned much more about the health of their children or close relatives than their own. This agrees with two other studies in Bulgaria. A qualitative study conducted in 1996 found that when a child is ill, his or her parents are prepared to travel “any distance” and to spend “whatever money is
required" (even to "suffer all kinds of humiliations") in order to be able to provide the best medical treatment \(^{196}\). A representative survey in 1997 found that in case of their own mild illness, 61% apply self-treatment or alternative medicine and 38% visit a physician, in the same situation in relation to a child, 84% directly go to a physician \(^{126}\). This reflects a strategy for prioritising within the family, observed also in Armenia where children are consistently prioritised within the household in terms of food consumption and use of health services \(^{218}\).

It was also shown that people with past experience of informal payment are less adverse to future payment. This may be explained by custom or satisfaction with results.

This chapter suggests that willingness to pay seems to be strongly influenced by values and beliefs, but when considered in the context of particular circumstances of payment, it is to a large extent determined by the concrete situation. The next chapter will further examine willingness to pay under several financial mechanisms that are likely to play some role in Bulgaria.
CHAPTER 11. OPTIONS FOR REFORM: POPULATION PERSPECTIVE

Introduction

This chapter will examine attitudes to, and understanding of, three methods for health financing: compulsory health insurance; user fees; and voluntary insurance; in comparison to the existing tax-based model. A compulsory health insurance scheme is in the process of implementation, with the Law for Health Insurance enacted in 1998. It is also likely that the existing system of widespread under-regulated user fees will be streamlined into co-payments. Voluntary insurance will provide an optional supplementary cover on top of social insurance contributions. These are relatively new and unfamiliar mechanisms for financing, and it is unclear to what extent the population is informed about current and forthcoming arrangements.

In circumstances of imperfect mechanisms for enforcement of financing methods in Bulgaria (e.g. inefficient taxation), understanding of the population's preferences and willingness to pay under a particular model is a decisive factor in compliance, affecting the sustainability of the schemes. A viable health financing system has to be acceptable from the population's perspective, therefore it is important to understand the viewpoint of the population.

This chapter will first examine in turn the attitudes to compulsory insurance; user charges; and voluntary insurance. Attitudes to the existing tax-based model will be used for comparison. Then, attitudes to methods of health care financing will be assessed using two approaches: indirectly, by establishing preferences for certain attributes of a financing model, and directly, by asking respondents to choose between financing models.
Attitudes to alternative methods for health care financing

Compulsory health insurance

Results from the population survey

All respondents were presented with the scenario of introduction of a health insurance system. The model was described briefly as payment of monthly contributions to a health fund (or funds), which will cover most of the costs of treatments and medication.

Assuming that membership of a health insurance scheme is not compulsory, respondents were asked whether they would like to contribute to such a scheme. The majority of the respondents (55% of men and 52% of women) were willing to pay even if they never become ill, to insure against insecurity. 7% of women and of men were willing to pay only if they perceived a chance of becoming ill. 17% of men and 19% of women were unwilling to pay at all, which is consistent with earlier responses. However, 21% of men and 22% of women were unsure or did not answer the question.

About half (58% of men and 50% of women) supported contributions unrelated to risk, 21% of men and 23% of women supported a risk-rating. 21% of men and 27% of women were unsure.

Respondents were asked to evaluate several alternatives for handling surplus health insurance contributions not used immediately to pay for health services (Table 11.1). A composite score was estimated, with weighting of 3 for first place, 2 for second place, and 1 for third place. It is clear that the most preferred option was for insurance also to cover dependants and other close family members. Other highly preferred options were that some surplus or unused revenue from health insurance is either returned to the contributor or transferred to charity and social welfare payments, followed closely by use of funds by the Ministry of Health for national programmes, e.g. for health prevention and screening. Use of collected funds outside the health sector (return to the state budget or redirection of surplus funds for municipal activities) did not gain support.
Table 11.1. Scenarios for utilisation of surplus health contributions

<table>
<thead>
<tr>
<th>Treatment of dependents</th>
<th>Men</th>
<th>Women</th>
<th>Composite score</th>
<th>Men</th>
<th>Women</th>
<th>Composite score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
</tr>
<tr>
<td>Treatment of dependents</td>
<td>59.0</td>
<td>28.0</td>
<td>5.5</td>
<td>59.8</td>
<td>29.9</td>
<td>3.7</td>
</tr>
<tr>
<td>Return to contributor regularly</td>
<td>25.8</td>
<td>19.1</td>
<td>8.8</td>
<td>1.24</td>
<td>28.1</td>
<td>15.1</td>
</tr>
<tr>
<td>Charity, social security subsidies</td>
<td>6.4</td>
<td>27.0</td>
<td>29.3</td>
<td>1.02</td>
<td>6.7</td>
<td>30.7</td>
</tr>
<tr>
<td>Give to Ministry of Health (epidemics, health prevention)</td>
<td>6.7</td>
<td>18.1</td>
<td>36.0</td>
<td>0.92</td>
<td>4.1</td>
<td>17.7</td>
</tr>
<tr>
<td>Returned to the state budget</td>
<td>1.1</td>
<td>5.2</td>
<td>12.2</td>
<td>0.26</td>
<td>1.0</td>
<td>4.6</td>
</tr>
<tr>
<td>Give to municipalities (e.g. for infrastructure)</td>
<td>1.1</td>
<td>2.6</td>
<td>8.1</td>
<td>0.17</td>
<td>0.4</td>
<td>2.0</td>
</tr>
</tbody>
</table>

The willingness to pay analysis in the previous chapter suggested that respondents may find it difficult to judge precisely how much they would pay for health care. Despite this potential limitation, recent mass media coverage and public debates related to health insurance mean that at least some respondents had a rough idea of a feasible contribution size. Typically, respondents declare they are willing to pay 5% of their monthly income (15% of men and 12% of women). This figure is comparable with a 1994 survey from Bulgaria where 5% was the most common percentage reported\textsuperscript{205}. The second most common percentage was 10% of monthly income (11% of men and 10% of women), and the third was 2% (9% of men and 10% of women). When aggregated, it was evident that a third (33% of men and 32% of women) were willing to pay up to 5% of their income in health insurance contributions. 17% of men, and 14% of women were willing to pay more than 5% for health care. 18% of men and 22% of women were unwilling to pay at all for health insurance, and another third were unable to suggest a figure for contribution.

Preliminary interviews showed that the institution collecting and managing health insurance contributions may influence the general acceptance of a compulsory insurance scheme. A large majority (68% of men and 66% of women) thought that the Ministry of Health should be in charge of handling of contributions, with small percentages in favour of the Ministry of Finance (7% of men and 4% of women), and NGOs (3%, both sexes). 18% of men and 23% of women did not know. Co-operative organisations, parliamentary elected bodies and the private sector did not score well and were not deemed appropriate to participate in the management of the health insurance funds.

There was a division of opinions over whether health funds should be organised on a geographical or employment basis. An equal percentage of respondents supported the
idea of national health funds, or funds decentralised to municipality level (altogether 24% of men and 23% of women). 20% of men and 17% of women preferred enterprise-based funds, with membership restricted only to their employees. There was little support for regional-based funds, probably due to the purely formal functions of the regions in Bulgaria, in contrast to the municipalities, which assumed substantial administrative responsibilities with the Law for Self-Government of 1991. Notably, despite their dominance before 1989, labour unions were not seen as institutions that could deal with health fund management, reflecting recent corruption scandals and generally low membership. However, 25% of men and 31% of women did not have specific preferences or did not answer.

It was also important to assess to what extent the population was informed of recent plans for introduction of a national health insurance system. More than half of the respondents (57% of men and 56% of women) had heard about governmental plans for introduction of health insurance.

The majority of respondents found out about plans for introduction of health insurance from the mass media. Typically respondents obtained information from one or two sources. Television was the most common source (45% of men and 44% of women), and equal numbers from the press or radio (30% men and 27% women). The next most common sources of information were friends or social networks (19% of men and 18% of women) and colleagues at work (13% of men and 12% of women). In a very small number of cases, information was obtained from advertising, labour unions or other sources.

The most common combination was television and newspapers (27% of men and 24% of women), television and radio (26% of men and 23% of women), or from press and radio (19% of men and 17% of women).

In all settlements, television was the most commonly reported source of information on health insurance. While in Sofia and the bigger cities the second most important source of information after television was newspapers, in small towns radio was an equally common source, and in villages, radio was a much more common source than the press. Information through family contacts had similar importance everywhere. Those living in villages were more rarely informed through work, advertising or labour union campaigns.
It is important to look specifically at the characteristics of those who were not informed about introduction of health insurance in order to identify gaps in information dissemination. Those between 40 and 60 appeared most informed of plans for implementation of health insurance, while older people were the least informed (Figure 11.1). Among women over 70 there were three times more people who had not heard of health insurance plans than in the 40-49 age group. Awareness was lower also among the poor (in the lowest income quartile and with poor self-perceived financial situation) compared to the rest. Information about health insurance was influenced by educational attainment, more than two-thirds of those with only primary education not being informed, compared to a quarter of those with higher education. The divorced, widowed or separated were less informed than the married and single. Those with poor self-reported health were about 50% less informed than those with good health, probably because of the relationship of health with income discussed earlier. Predictably, those who lived in Sofia were about three times as informed as those living in villages.
Figure 11.1. Percentage of those who have not heard about introduction of health insurance by range of variables

- **Age**
  - > 39
  - 40-49
  - 50-59
  - 60-69
  - > 70

- **Income quartile**
  - Highest
  - 2
  - 3
  - 4
  - Lowest

- **Education**
  - Higher
  - Secondary
  - Primary

- **Financial situation**
  - Very good/good
  - Neither good/nor bad
  - Rather poor
  - Very poor

- **Marital status**
  - Married
  - Single
  - Divorced/separated

- **Settlement**
  - Sofia
  - City
  - Town
  - Village

- **Health status**
  - Good/Rather good
  - Bad/Rather bad

- **Men**
- **Women**
Results from qualitative research

Views about some key issues in design and running of a health insurance system, such as collection and management of revenue from health insurance contributions; level of contribution; and type of insurance fund or funds; were explored by means of qualitative research.

Management of health insurance system

Almost half of the patients thought that the Ministry of Health should take the lead in the health insurance system. Another common view (about a quarter) was that municipalities (local government) should assume responsibility. Thus, about two-thirds of patients supported public ownership and management of the insurance system. The state was seen as the only institution capable of discharging the huge task of running a health insurance system and controlling revenue flows.

"The Ministry of Health should collect these contributions and allocate them. There they will be controlled the best, and not at local level." "If centralised in the MoH, it would bear all the responsibility" [users]

"This is a matter for the state, to provide a fund to deal with this. I don’t exclude the possibility to combine it with the local self-government through municipalities, with specialised local branch offices dealing with provision of insurance" [user]

Among the physicians interviewed, about half preferred management of the funds by the government, but were less likely to suggest the Ministry of Health. Even when they favoured involvement by the Ministry of Health or municipalities, many emphasised that the “institution” or body running the health insurance fund should be clearly separated within the Ministry of Health structure as an independent "section", or "team"; and accountable separately. Only one respondent saw a role for NGOs in managing a mandatory insurance scheme, another respondent named the private sector.

"The MoH, as a part of the government. The things have to be synchronised at state level.” “Maybe the MoH is the most competent, and will have an idea how to allocate the money, for which health facilities, what equipment etc.” [physicians]

Collection and management of contributions by an autonomous self-regulated body such as a health insurance fund (or "bank") fully independent from the state was a relatively popular option (a quarter of users; more than a third of physicians) ("independent as the Bulgarian National Bank" [physician]). Such an arrangement was perceived to be more “serious”, not susceptible to external interventions, and run by technical experts and
physicians ("specialised earmarked fund...only broadly supervised by the state" [user]).

The fund was most often seen as a financial institution whose task is to maximise revenue ("everywhere medicine is a business like any other" [physician]), and provide guarantees ("safeguard"), but at the same time have a "social element" [physician].

"Health insurance, as well as the pension fund, have to be separate and not dependent on the state. There should be a fund ... not controlled by the state who can redirect resources to other areas. To be used only for health care. Of course, the government can run it, but in agreement with certain law and obligatory procedures." [user]

Collection of health insurance contributions

Some respondents differentiated between the collection of insurance funds and their management, many respondents viewing the former as a task for the state due to its experience in collecting tax. Deducting health insurance payments at source, as a percentage of salary, was seen as the only practical way to ensure actual collection.

"I think that the most appropriate way is as a percentage on the salary, i.e. the state to collect them, respectively for the municipal enterprises – to be collected by municipalities; for those attached to ministries – by the respective ministries." [user]

While some considered the Ministry of Health to be in the best position to collect funds, others thought it inappropriate for it to have full control of the health insurance scheme, given its other functions. After the Ministry of Health, there was significant support for collection and management of funds on a regional basis. Many people did not have a strong preference for the Ministry of Health, municipalities, or other organs of government, as long as the system is publicly run and controlled.

"I would have liked the procedure to be as straightforward as possible, not to pay salaries to additional staff. In my view, in the health ministry there are enough officials who could do the job. [user]

"If possible, this could be done by the municipality, because we cannot burden a Ministry of Health, in the end of the day it has many other tasks." [user]

Others felt the optimal solution to be a board, controlled by state institutions. Two respondents emphasised the need for a legal basis to provide guarantees. The main themes to emerge were that, whether or not the health insurance system is a fully independent entity, or a team within the Ministry of Health or municipalities, there should be transparency, accountability and trust.
"There should be a commission or board, in which obligatory to have representatives of the MoH and of all institutions dealing with health, in order to achieve full transparency of resource flows and their allocation... in order to have complete effectiveness." [user]

"The commission should be elected, to include experts, competent people..." [physician]

Some respondents also thought that while contributions can be collected in a separate health fund, this should be managed by the Ministry of Health. Several respondents, unprompted, advocated local collection and expenditure, in some cases at industry level, suggesting confusion with voluntary insurance or simple subscriptions in the private sector.

Use of health insurance contributions

Another issue was whether the health insurance contributions should be directed to health care alone, or to financing broadly related areas such as social care. A large majority of respondents preferred health insurance funds to be used only for health care. Among many physicians there was a particularly strong feeling that funds should be used exclusively for health care. This shows that most respondents understood the formal principles of a health insurance system. Many respondents recommended that social security be financed by another fund, or other institutions (the state, ministries, foundations, charities, rich individuals and firms, the church), thus not burdening the health care system. These respondents showed little evidence of awareness of the potential complexity of the interface.

"For covering pressing medical needs. The resources must be differentiated: those who are for health care should be unconditionally for that. For other social needs, there is a role for foundations, charities, this is quite a different matter." [user]

However, a third of patients, although only two physicians, supported the idea that funds could be spent also on broader social purposes, reflecting a more holistic and socially-oriented approach to health care financing.

"For the majority of people in Bulgaria, health insurance relates only to health care. But health is a multicomponent system, and social conditions can also influence health. ...the money has to be used for all these things." [physician]

"The allocation of contributions is determined by the law...if the structure handling the health fund allocates money incorrectly, the system will be bureaucratised." [user]

From those who supported limiting use of funds to health care only, two groups emerge. The first (more patients) is those who see the funds covering only some costs, such as
pharmaceuticals, emergency care, or subsidies to the poor for essential drugs. The second are those who see all costs being covered, including staff salaries and capital expenditure e.g. building new hospitals or new equipment. Given, in the future, the accumulation of more significant resources and the possibility for some of the money to be spent beyond the provision of basic health care, further distinctions arise. Some thought that some of the amassed resources could be used to subsidise the poor to help them pay for drugs and food (mainly patients, “currently for the most necessary - medicines” [user], “social security, yes, as far as it is related to health issues…” [user]), while the physicians thought the surplus should be spent within the health care system only, for professional qualification of staff or conference attendance (“it would be hard to convince anyone to pay for physicians' services, but if they are told that these means will cover their stay in the hospital, they probably would.” [physician]). Several physicians thought that even more state subsidies are needed, in addition to the health insurance fund. Two patients recommended spending on health care accompanied by spending on prevention and promotion.

"If it is a state insurance system, naturally the state decides whether the money will be spend on health care or not... It is right for this money to stay in the health care system, because it’s logical if people are happy to pay more and the surplus can be used for research and development, staff training abroad, new equipment.” [physician]

Willingness to pay for health insurance (as a % of income)

Willingness to pay measured as a percentage of recurrent disposable income was also considered in the qualitative part of the research. The response rate was relatively low, with 20% of users and 30% of physicians declining to give a figure due to their perception of the complexity of multiple intervening factors.

Among those who gave a percentage, several qualifications were made, especially regarding the type and quality of services received ("I would give 10-15%, if I know that everything will be all right.” [user]).

About equal numbers of respondents said that contributions should be below 5%, between 5% and 10%, and above 10%. Physicians tended to give mostly figures under 10%. While most users recognised the need for such payments for health care, and viewed then as generally adequate ("completely realistic” [physician], “quite appropriate” [physician]), the majority stated that they can pay only with considerable difficulties and complications for their family budget (“Oh, it is a percentage of my
current income, I can't provide anything with it” [physician], “more than 3-4% would be difficult, given that payment for pension fund is 2%” [physician]). Four users viewed payments above 10% as “normal” or indicated ability to pay “whatever is necessary” with no serious problems.

“I, as most people in this country, receive small salary, and if it is possible not to pay, I wouldn't do it, but according to me it is normal to pay at least 15%.” [user]

“Depending on whether I will insure only me or also my family... from the monthly salary for me 5%, and for the whole family – 15%.” [user]

All respondents were willing to pay a health insurance premium. Only one respondent reported being unable to pay at all.

“Between 5 and 8%, but I don’t know based on that what you will get. I think that a person has to pay for a good health care.” [user]

“May be it should be about 20%, but not with the salary I get.” [physician]

“In the circumstances of Bulgaria 10% are both a little and a lot. 10% is a significant part of my family budget, but on the other hand, it is a small sum, $10, this is nothing... It’s very difficult to judge in our conditions...” [physician]

Again, there were several respondents who clearly misunderstood the proposals for a health insurance system, or confused it with voluntary health insurance.

"...it's not me who is going to pay - as in Western Europe. It may be 1% or 5% on top of my salary. The employer pays this, if it is some big shot, he can afford it.” [physician]

**Principle of health insurance funds**

A range of more specialised questions, in relation to health insurance, were asked of physicians only. One concerned the principles on which a future health insurance system should be based. Among physicians who responded, two-thirds (12) supported the idea of a national health insurance fund, but some suggested that while a national fund can be used initially to establish the system, other models, such as regional or municipal funds, could be implemented later. National funds are viewed as providing safeguards for resources and ensuring regional cross-subsidisation. Enterprise-based professional funds were not popular (“...only for those able to work”).

**Single versus multiple health insurance funds**

On the question of whether a single-fund health insurance system or a more pluralistic system of multiple funds (possibly competing) is more suitable for Bulgaria, opinions
were split. Half of physicians supported a single health insurance fund, and the other half multiple funds. The main reasons for selecting a single fund are stability, potential for better control, and to ensure coverage of the whole population. Several respondents perceived a single state fund as optimal initially, while a more mature system may allow for several smaller funds, or private funds, to provide a wider range of services. About half envisaged a non-centralised system with several funds. All but two thought that, in such circumstances, competition between funds will be beneficial for the user and the health care system as a whole. Although competition was generally viewed as a “positive” phenomenon (“progressive”, “stimulating development of the organisation”), several respondents were aware of potential dangers, and recommended non-price competition (e.g. between types of payment or choice of physicians). Several respondents mentioned spontaneously that competition is particularly important if some of the funds are private. Several physicians recommended adapting experience from elsewhere to Bulgarian circumstances. Notably, Germany and Northern Europe were mentioned (“Bismark system”, "krankenkassen") as examples of the operation of multiple health insurance funds in a highly regulated environment. In two cases, the example of the State Insurance Institute in Bulgaria, a national institution with branch offices nationwide; and of the large insurance companies (for property, cars) also operating nationwide, were recommended as appropriate organisational structures. Two physicians also suggested a single fund with several levels of service.

Compulsory versus voluntary membership

Another key issue in designing a national insurance scheme is whether or not membership of health insurance funds should be obligatory, and whether there should be a choice of fund. This question was also asked of physicians only. Linked to this is the question of whether the rich should be excluded as, for example, in the Netherlands. In most cases people who were in favour of free choice thought also that the better off should not be excluded by the rules of the system. There was little support for compulsory membership, all but three respondents stating that membership should be optional, and people should be allowed to choose between funds. A common view was that participation and level of insurance should be a "personal decision" according to one's assessment of likely need.
There is a clear link between those supporting free choice also thinking that the rich should be treated as the rest of the population, due to difficulties establishing wealth. Regulation through administrative measures was viewed as risky, difficult to enforce, and incompatible with a democratic society and a reformed health care system allowing free choice of a physician, facility and method of payment. Many respondents said people have to understand clearly the consequences of their choice and, on the other hand, the benefits of contributing to a scheme. Still, several physicians favoured obligatory membership at least for basic care due to possible externalities.

“There should be some compulsion, as with the tax on cars. If you get ill and haven’t paid, you have to pay directly to the fund... but if you don’t want to pay, you should be forced, because if you have communicable disease, you may infect others. It is the employers who should be forced to allocate... as for pension insurance.” [physician]

As noted earlier, almost all respondents favoured a health insurance system that gives the opportunity for the richest sections to participate. The arguments for choice were that the rich are difficult to identify (“it is a grey zone”, “what is the criteria for very rich”), it is not “democratic”, and unfair, “not very ethical”, and they will contribute more in real terms via progressive taxation. Excluding the richest from the health insurance system was viewed as discriminatory and “in some way violation of human rights”. Some suggested two parallel funds with higher levels of contribution for the rich covering a wider range of services, or supplemental voluntary insurance. Yet several people thought that, above a certain income, people will be able and willing to pay directly (mainly for non-essential optional services, luxury hospital settings etc.).

**User charges**

**Results from the population survey**

A major issue in the implementation of user fees, given low incomes and growing poverty, is who should be exempted and how to protect the interests of disadvantaged groups. Clearly, the current system of ad hoc charging and unofficial payments does not allow efficient targeting. Official cost-sharing, possibly in the form of co-payment, will allow for explicit and publicly supported targeting through exemptions. A social
consensus on which groups should be granted an exemption is essential. Although some attitudes to user charges have been partially explored in relation to informal payments (chapter 7), this section will focus specifically on views on exemption categories.

It was unanimously agreed that in the case of introduction of user charges or co-payments in state facilities, some exemptions, or reduced rates for certain groups, should be levied (91% of men and 93% of women). This figure is much higher than expected given the earlier views on whether patients should pay equally (53% of men and 52% of women supporting differentiated payments). The two variables do not correlate strongly. A large majority of those who supported equal payment for everybody (86% of men and 89% of women), also supported exemptions. An explanation for this discrepancy could be that the earlier question was more general, potentially covering different types of payments (insurance contribution, charges etc.), while the latter is applied only to the specific case of user charges.

Respondents were asked to review a list of groups identified through qualitative research, and to select those who should be exempted. The views of men and women were similar (Table 11.2). There was wide-spread agreement that the chronically ill or disabled, children, socially disadvantaged people and elderly should be exempted. More than two thirds also thought that families with young children, breadwinners, or people who care for disabled should have their fees reduced. Other groups that were viewed to justify exemption were students, the unemployed, and people living alone. There was relatively little support for rewarding behavior, e.g. leading a healthy life-style or looking after one's health. The view that people willing to pay directly, higher than the official fee, receive price discounts, was supported by about a quarter.

Typically, exemption was recommended for three groups (17%). 12-15% of respondents supported exemptions for four to eight groups. Only 1% of men and 2% of women stated that none of the listed groups should have their fees reduced. This confirms the observation that people are more willing to agree with granting exemption rights when asked about particular groups, rather than when asked out of context.

Those respondents who selected at least one group for exemption were asked to rank the listed groups according to need, to be exempted in case of cost-sharing. Children, followed by the disabled, disadvantaged people and older people (here understood as pensioners) were given the highest composite scores.
Table 11.2. Groups to receive price reduction in user fees

<table>
<thead>
<tr>
<th></th>
<th>Men (%)</th>
<th>Women (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronically ill/ disabled</td>
<td>97 %</td>
<td>96 %</td>
</tr>
<tr>
<td>Children</td>
<td>95 %</td>
<td>95 %</td>
</tr>
<tr>
<td>Disadvantaged people (orphans etc.)</td>
<td>94 %</td>
<td>94 %</td>
</tr>
<tr>
<td>Older people</td>
<td>88 %</td>
<td>87 %</td>
</tr>
<tr>
<td>Families with young children</td>
<td>78 %</td>
<td>81 %</td>
</tr>
<tr>
<td>People who look after elderly/invalids</td>
<td>74 %</td>
<td>74 %</td>
</tr>
<tr>
<td>People who are breadwinners/support family</td>
<td>69 %</td>
<td>71 %</td>
</tr>
<tr>
<td>Young people</td>
<td>35 %</td>
<td>41 %</td>
</tr>
<tr>
<td>People willing to pay directly a higher than the official fee</td>
<td>22 %</td>
<td>22 %</td>
</tr>
<tr>
<td>Other</td>
<td>16 %</td>
<td>18 %</td>
</tr>
<tr>
<td>People having healthy lifestyle</td>
<td>12 %</td>
<td>15 %</td>
</tr>
<tr>
<td>People with certain merits to society /talents</td>
<td>11 %</td>
<td>12 %</td>
</tr>
<tr>
<td>People, who are very careful with their own health/ consult a doctor immediately if they feel unwell</td>
<td>7 %</td>
<td>11 %</td>
</tr>
</tbody>
</table>

Voluntary insurance

Results from the population survey

This section will look at the prevalence of insurance in general, and medical insurance in particular. Having insurance might indicate a certain familiarity with insurance principles. The characteristics of those insured will then be examined.

Approximately 38% of men and 27% of women had at least one type of insurance. Among men, car insurance was the most common (25%), followed by life (15%), property (8%), and accident insurance (7%). Among women, life insurance was the most common (15%), followed closely by car insurance (14%), while accident and property insurance were less common (4% each). This shows that a significant proportion of the population, particularly men, is familiar with the principles of insurance.

7% of men and 5% of women indicated that they, or any other members of their households, have (or have had) insurance against expenditure during illness or other related risks. Voluntary health insurance was not available before 1992-3 and is not yet well-known or popular in Bulgaria. Qualitative data show that some respondents equate medical insurance with life or accident insurance. Of those who reported ever having medical insurance, 41% of men and 48% of women also had life insurance, and 16% of men and 11% of women had also accident insurance, and it is, therefore, possible that some respondents confused medical with life insurance, although it may be simply that they have opted for both.
Among men and women, variation between socio-economic groups, is similar (Table 11.3). For car and life insurance, respondents in their 40s, in the higher income quartiles, and very good financial situation, higher or secondary education, married, and in good health tend to take insurance. The characteristics of those who reported having medical insurance are generally similar. They were mostly below 50 (for women) and below 60 (for men), with higher or secondary education, with a neutral or rather poor financial situation. Income quartile and marital status did not make a difference. Among men, the incidence of insurance was similar among those with good or bad health, while among women more people with good health tend to insure. Apart from car insurance, there is no difference between insurance uptake in urban and rural settlements, but a more detailed breakdown of categories shows that people in former district centres and small towns tend to insure to a higher extent. However, conclusions should be tentative given the small numbers reporting having medical insurance.

24% of men and 19% of women reported having one type of insurance, 9% of men and 5% of women two types of insurance, and 4% of men and 3% of women three or more types of insurance. The most common combination was car and life insurance (7% of men and 4% of women: whole sample). Among men, the second most common was car and property insurance (6%) and third, car and accident insurance (4%). For women, the second most common combination was car and accident insurance (3%), followed by car and property insurance (2%).

Of those insured, 43% of men and 52% of women reported that their insurer was DZI (the State Insurance Institute). 21% of men and 18% of women were insured with private companies. However, a third did not know the name of their insurer, probably because insurance was through employment, set up a long time ago, or covers another family member.

Among those with no medical insurance, opinions about taking voluntary insurance were divided. 42% of men and 46% of women were willing to insure themselves, while 39% were not. 14% of men and 16% of women stated that they would take voluntary medical insurance in any case, and another 28% of men and 29% of women were willing to become insured under certain conditions (e.g. advantageous insurance policy or trusted company). Slightly below one fifth of all were uncertain or did not answer.

Those who have not used medical insurance showed a strong preference towards taking voluntary health insurance in a state company (51% of men and 53% of women). Much
smaller percentages were willing to be insured by a private company (4% of men and of women), or by a company with mixed (state-private) ownership (4% of men and 5% of women). Insignificant numbers preferred to be insured by a co-operative organization.

It should be also noted that of those who earlier stated an unwillingness to insure at all, about two-thirds (60%) reiterated this view, a third (32%) stating that they would insure in state companies, with very small numbers choosing other options. Thus state ownership appears an important factor influencing the decision to take voluntary health insurance.
Table 11.3. Level of insurance by selected socio-economic variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Car insurance (currently)</th>
<th>Life insurance (currently)</th>
<th>Medical insurance (ever)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEN</td>
<td></td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>27.3 (65)</td>
<td>18.5 (44)</td>
<td>7.6 (18)</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>49.2 (61)</td>
<td>25.0 (31)</td>
<td>9.7 (12)</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>30.6 (30)</td>
<td>16.3 (16)</td>
<td>9.2 (9)</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>9.7 (10)</td>
<td>5.8 (6)</td>
<td>1.9 (2)</td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>2.1 (2)</td>
<td>1.0 (1)</td>
<td>3.1 (3)</td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (&gt;160,000)</td>
<td>47.2 (75)</td>
<td>26.4 (42)</td>
<td>7.5 (12)</td>
</tr>
<tr>
<td>(Leva)</td>
<td>II (100,000-160,000)</td>
<td>24.4 (32)</td>
<td>13.0 (17)</td>
<td>6.1 (8)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>16.9 (27)</td>
<td>11.9 (19)</td>
<td>8.1 (13)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>12.5 (20)</td>
<td>9.4 (15)</td>
<td>5.0 (8)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>40.9 (36)</td>
<td>15.9 (14)</td>
<td>9.1 (8)</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>34.5 (113)</td>
<td>20.1 (66)</td>
<td>7.6 (25)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>7.8 (19)</td>
<td>7.3 (18)</td>
<td>4.5 (11)</td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>61.8 (34)</td>
<td>23.6 (13)</td>
<td>1.8 (1)</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>35.1 (65)</td>
<td>21.6 (40)</td>
<td>7.6 (14)</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>19.2 (41)</td>
<td>13.1 (28)</td>
<td>9.4 (20)</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>13.3 (26)</td>
<td>7.2 (14)</td>
<td>4.1 (8)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>29.0 (141)</td>
<td>16.4 (80)</td>
<td>7.6 (37)</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>16.7 (18)</td>
<td>12.0 (13)</td>
<td>5.6 (6)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>12.3 (8)</td>
<td>6.2 (4)</td>
<td>1.5 (1)</td>
</tr>
<tr>
<td>Self-reported health</td>
<td>Good/Rather good</td>
<td>29.8 (150)</td>
<td>16.7 (84)</td>
<td>6.8 (34)</td>
</tr>
<tr>
<td></td>
<td>Bad/Rather bad</td>
<td>11.4 (18)</td>
<td>8.9 (14)</td>
<td>6.3 (10)</td>
</tr>
<tr>
<td>Settlement</td>
<td>Urban</td>
<td>29.9 (81)</td>
<td>14.4 (39)</td>
<td>7.0 (19)</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>22.4 (87)</td>
<td>15.2 (59)</td>
<td>6.4 (25)</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td>25.4 (168)</td>
<td>14.8 (98)</td>
<td>6.7 (44)</td>
</tr>
<tr>
<td>WOMEN</td>
<td></td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>19.0 (56)</td>
<td>17.7 (52)</td>
<td>7.5 (22)</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>28.4 (44)</td>
<td>21.9 (34)</td>
<td>7.7 (12)</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>9.7 (15)</td>
<td>20.1 (31)</td>
<td>3.9 (6)</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>5.1 (7)</td>
<td>7.3 (10)</td>
<td>0.7 (1)</td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>0.7 (1)</td>
<td>1.4 (2)</td>
<td>2.1 (3)</td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (&gt;160,000)</td>
<td>29.1 (53)</td>
<td>19.2 (35)</td>
<td>6.0 (11)</td>
</tr>
<tr>
<td>(Leva)</td>
<td>II (100,000-160,000)</td>
<td>18.6 (31)</td>
<td>20.4 (34)</td>
<td>6.0 (10)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>11.1 (23)</td>
<td>14.9 (31)</td>
<td>5.8 (12)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>3.8 (10)</td>
<td>9.1 (24)</td>
<td>3.0 (8)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>23.1 (40)</td>
<td>19.1 (33)</td>
<td>5.8 (10)</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>19.8 (69)</td>
<td>21.3 (74)</td>
<td>8.0 (28)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>3.8 (14)</td>
<td>6.0 (22)</td>
<td>1.6 (6)</td>
</tr>
<tr>
<td>Financial situation</td>
<td>Very good/good</td>
<td>25.9 (15)</td>
<td>20.7 (12)</td>
<td>3.4 (2)</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>24.2 (61)</td>
<td>19.8 (50)</td>
<td>6.0 (15)</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>10.4 (32)</td>
<td>14.6 (45)</td>
<td>5.2 (16)</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>5.3 (13)</td>
<td>7.3 (18)</td>
<td>3.7 (9)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>19.2 (110)</td>
<td>17.1 (98)</td>
<td>5.4 (31)</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>7.1 (7)</td>
<td>14.3 (14)</td>
<td>6.1 (6)</td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>2.8 (6)</td>
<td>7.9 (17)</td>
<td>3.3 (7)</td>
</tr>
<tr>
<td>Self-reported health</td>
<td>Good/Rather good</td>
<td>16.8 (107)</td>
<td>16.8 (107)</td>
<td>6.0 (38)</td>
</tr>
<tr>
<td></td>
<td>Bad/Rather bad</td>
<td>6.5 (16)</td>
<td>8.9 (22)</td>
<td>2.4 (6)</td>
</tr>
<tr>
<td>Settlement</td>
<td>Urban</td>
<td>17.2 (66)</td>
<td>14.6 (56)</td>
<td>5.2 (20)</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>11.3 (57)</td>
<td>14.5 (73)</td>
<td>4.8 (24)</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td>13.9 (123)</td>
<td>14.6 (129)</td>
<td>5.0 (44)</td>
</tr>
</tbody>
</table>
Preference for payment options: indirect evidence

Each model of health care financing is associated with a set of specific procedures for payment. Thus, preference for means of payment might be interpreted as indirect evidence of the respondent's preference for the financing model itself. In many cases, specific circumstances are likely to determine the acceptability of any financing method. In addition, respondents may be likely to indicate support for a model in general, but to be neutral or unfavourable to some of its characteristics, due to unfamiliarity or because of automatic response.

This section will address willingness to pay in relation to circumstances of payment (timing and location of payment, method of payment, institution or individual collecting payments, collection procedure, and presence of choice). Respondents were asked to evaluate a set of statements related to their preferred circumstances of payment using a five-category scale ('strongly agree' to 'strongly disagree'; 'don't know'). The financing models, which are likely to be linked to these circumstances were not explicitly named, to reduce the effect of preconceptions.

Results from the population survey

More than a third (31% of men and 32% of women) agreed strongly with the statement that if health services are paid for, it is better that the patient pays directly at the state or private health facility. Another 23% of men and 19% of women rather agreed. This might be explained by a preference for higher transparency in health financing and local use of funds. However, 31% of men and 30% of women disagreed to a certain extent. The non-response rate was below 15% for men and 19% of women, close to the average for this group of statements (18% for men and 20% for women).

62% of men and 60% of women were willing to pay for consultation if they could choose the physician themselves, while 27% of men and of women disagreed.

There was predominant support (37% of men and women strongly agreeing) for payment at the end of treatment, conditional on a successful outcome. Qualitative research shows that adequate outcome, as judged by the user, can be an indicator of quality of service, but also can reflect a desire for accountability.
Half of respondents (54% of men, 51% of women) disagreed with payment for each separate consultation in the process of treatment, while 28% of men and of women agreed.

Given a scenario of obligatory payment for health services, 34% of men and 32% of women preferred to pay directly to the physician. About a quarter preferred to pay to the administration of the health facility (25% of men and 21% of women), and 15% of men and 17% of women preferred to pay to an intermediary, such as insurance company, health fund, or state institution. This shows that a majority of 41% of men and 38% of women prefer to pay indirectly, without involving the physician. 19% of men and of women were unwilling to pay at all. It is evident that the direct exchange of money for health services, examples being fee-for-service payments in the private sector; user fees; or informal payments; are still preferred by many, possibly due to their perceived higher impact and simplicity.

About a third of all respondents preferred to contribute monthly a certain sum, with no co-payments in case of illness (37% of men and 34% of women). 20% of men and 18% of women chose to pay a small percentage of all expenses incurred during treatment. 18% of men and of women supported payment for each visit at the point of use. 19% of men and 20% of women preferred another alternative; including tax, or were not willing to pay at all. The non-response rate was 7% for men and 10% for women.

Results from qualitative research

Respondents' preferences for payment were examined in semi-structured interviews. The suggested options were: payment of user fee for each consultation (covering service, drugs); monthly payment with no further expenses; or payment of 3-5% of all treatment-related costs. Clearly the first and third option are forms of direct payment, either fixed rate user fee or co-payment, while the second is a national insurance contribution. The wording of the question, and subsequent discussion with the respondent, intentionally used descriptive phrases rather than concepts of financing models (for example 'monthly payment' or 'subscription' rather than insurance premium). However, unprompted, some respondents started using those terms interchangeably.
Preference for a payment scheme: respondents themselves

In the qualitative study, the preference for regular monthly contributions with no payment at the point of use is somewhat lower than expected, given the results from the study. About half of users, and slightly more physicians, were in favour of this option for payment. The main arguments were that it reduced uncertainty ("if I need to use health services, to be sure that I will get a response from them" [user]); neutralised risk; was easier to accommodate as an expense; was simple and "convenient"; ensured subsidies from rich to poor; and collection of more resources for health care, “better value for money, particularly in case of serious illness” [physician], ensuring a provision of "guaranteed and free treatment" [physician].

Of the rest, most supported a fixed fee per consultation, covering all costs. An explanation could be that respondents thought that they were choosing a model applicable to the current circumstances in the health care system. Some respondents actually viewed user fees as a transitional step to an insurance system with no user payments. Two users emphasised that such payment is feasible mainly in outpatient circumstances, for less complex illnesses. Fees were seen as "more flexible", easier, accounting for individual differences in service utilisation, deterring frivolous demand and particularly benefiting those who use health services least. Some sections of the population were viewed as able to afford to pay fees. It was also thought to be the most simple and feasible form of payment prior to introduction of health insurance. The preference was for user fees to cover services as well as drugs, which is not the case in Bulgaria.

Several physicians who generally supported the introduction of health insurance were in favour of fees during the transition from tax-based to health insurance financing. A few suggested that the fees should reflect the type of consultation and particular service received, or whether it is a first consultation. In several cases it was emphasised that the collected revenue should not be paid directly to the physician, which may create scope for corruption. Perceived problems with fees related mainly to lack of affordability in case of catastrophic illness.

Two users and one physician spontaneously suggested a mixed system, combining insurance payments with co-payments at the point of use.
"Maybe the best option is a mixed system, where a monthly sum and a minimal fee for each consultation with physician is paid. Thus you will be both guaranteed against serious illness... on the other hand it will prevent you from consulting a physician about trifles or every day, because you have already paid... " [user]

Preference for a payment scheme: those who are chronically ill

The best options for payment were also discussed in view of the specific circumstances of those who suffer from chronic illness or disability. A widely shared preference among users was for monthly payment of an insurance premium, followed by payment of 3-5% of treatment cost (perceived as a very low amount). Prepayment schemes, in general, were seen to ensure timely response by medical staff and continuity of care for chronically ill patients. Physicians were split between monthly contribution and special policies for coverage of such groups by the state or other public bodies. The latter view was expressed only by physicians, even though many users interviewed had chronic illness.

Several respondents supported user fees for the chronically ill, with direct payment to the physician in order to ensure a good level of service, or were generally against the cross-subsidisation entailed by health insurance. Three physicians emphasised the need for user fees to differentiate between an initial and follow-up consultation.

Regarding patients who rarely need medical care, two-thirds of users agreed that the most suitable option is direct payment of a fee for each consultation. However, a third of patients and almost all physicians still maintained that a monthly contribution under a health insurance system should be a "universal practice" [user]), which will provide all users with a good standard of health care, and spread the risk in a larger pool ("there is no guarantee that they would not start using services more often" [user]).

Preference for a payment scheme: pensioners

Pensioners were used as an example of a social group that is recognised by the public to have very low economic status and significantly more likely to suffer from chronic illnesses. Of those who suggested any payment option, about half were of the opinion that this group should receive free health care, covered by the state, pension or employment funds, or other bodies. The main reason was their perceived inability to pay even minimal fees. The second most common view was that they could pay monthly due to their higher health needs and incidence of chronic illness, with significant state
subsidies. Several respondents commented on the complexity of the issue, since most pensioners have a record of long-term social insurance contributions under the socialist system, which are now unavailable.

**Location of payment (users only)**

Unprompted, all but a few respondents indicated a strong preference for indirect methods of payment for health care. When a showcard was presented, the opinions split equally between contribution to a health insurance company or to a state health fund, many respondents selecting both. Many respondents did not have a specific preference as long as payment involves an intermediary. Payment to the administration of the health facility was deemed more appropriate in current circumstances, while in the future, establishment of a health insurance system was envisaged. The option for health funds was seen to require radical restructuring of the system and provide better incentives to staff and protection of revenue.

The advantages of payment to the health facilities were that it is local, with closer links between actual payment and utilisation of revenue, lower operational costs, and greater accountability and cost-consciousness. Also, retaining revenue at the health facility could be a stimulus for better performance and resource allocation according to local needs. Several respondents argued that, in this case, funds should be used not only for staff payment, but also for improvement of infrastructure. In general, there was a strong preference that payment be made at a specific place and handled and allocated by a non-medical intermediary.

"The most suitable option is to pay to the administration of the health facility ... the money enter directly into the budget of the facility... can be allocated quicker and better for its needs. The option with the fund creates additional difficulties...." "...in this way there will be a transparency in the cost of each type of service." [users]

In contrast, preference for direct payment to staff in the state or private sector was relatively rare. Among the objections were that it diminishes the physician, is "inappropriate", "humiliating", increases the workload of professional staff through more book-keeping, and creates potential for corruption, tax evasion, and differentiated quality of treatment. Four users (although none of the physicians) thought that direct taxable payment to a physician was more acceptable in the private sector.
Preference for financing method: direct choice

While the previous section looked at indirect measures of system preference, this section will examine the direct choices made by respondents. Earlier chapters suggested that many respondents have some broad understanding of financing models (existing and alternative models) as a result of public discussions.

Direct choice of financing method

Results from the population survey

Respondents were asked directly for their preferred method for health care financing. The financial methods were described briefly, but again not named, to avoid bias. The options offered were universal monthly contribution as a percentage of income (national health insurance); payment of full costs of treatment at the point of use for each contact with the health system (fee-for-service); retaining a formally free system with reallocation of more funds to health care from other sectors (tax); and to retain a formally free system accompanied by small user charges at health facilities (tax plus user fees). 40% of men and of women preferred a monthly contribution covering all expenses related to illness, with no further payments at the point of use. The next most popular option (34% of men and 33% of women) was to retain the current tax based model with additional resources. However, 18% of men and 21% of women preferred one-off user fees for each visit to a physician, in combination with taxation - in effect, the current situation in Bulgaria. Only 2% of men and 3% of women were willing to pay directly for overall treatment costs. 6% of men and 4% for women did not express opinions.

These results are comparable with an earlier question on types of payment (Table 11.4). Of those who preferred to pay a percentage of their monthly income covering all expenses, 68% of men and 72% of women confirmed their support for a national insurance scheme. Of those preferring to pay a charge for each visit to a physician, 23% of men and 29% of women reiterated their preference to pay at the point of use for each contact, although the 37% of men and 31% of women changed their mind to monthly payments, probably because the later question was phrased “cost of full treatment” instead of charge. 68% of men and 65% of women, who stated earlier that they would not like to pay in any event, indicated a preference for the current model, with transfer of more funds from other sectors.
Table 11.4. Preference for payment scheme and direction of health reform: comparison

<table>
<thead>
<tr>
<th>Type of scheme (characteristics described)</th>
<th>Direction for health care reform (named)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEN</strong></td>
<td></td>
</tr>
<tr>
<td>Monthly contribution</td>
<td>Health insurance 40.4 %</td>
</tr>
<tr>
<td>Small % of treatment</td>
<td>Free &amp; small fees 33.7 %</td>
</tr>
<tr>
<td>Other/wouldn’t pay</td>
<td>Free &amp; higher budget 17.9 %</td>
</tr>
<tr>
<td>Fee for each treatment</td>
<td>Full price per treatment 2.4 %</td>
</tr>
<tr>
<td>DK</td>
<td>DK 5.6 %</td>
</tr>
<tr>
<td><strong>WOMEN</strong></td>
<td></td>
</tr>
<tr>
<td>Monthly contribution</td>
<td>Health insurance 39.6 %</td>
</tr>
<tr>
<td>Small % of treatment</td>
<td>Free &amp; small fees 20.8 %</td>
</tr>
<tr>
<td>Other/wouldn’t pay</td>
<td>Free &amp; higher budget 33.2 %</td>
</tr>
<tr>
<td>Fee for each treatment</td>
<td>Full price per treatment 2.9 %</td>
</tr>
<tr>
<td>DK</td>
<td>DK 3.5 %</td>
</tr>
</tbody>
</table>

Results from qualitative research

The qualitative methods were used here mainly to establish levels of awareness and familiarity with some general principles of the model. The user-perceived suitability of the existing tax-based model and respondent assessment of several models of health financing are examined.

Awareness

Questions on choice of financing mechanisms are only valid if respondents are familiar with each method. Respondents were asked to list all financial systems they could think of, with no prompting. All respondents were aware that the current health care system is financed through a state budget, resources being supplied via general taxation, namely the General Income Tax (Figure 11.2). Broad awareness of health insurance either as a national mandatory system or voluntary insurance is relatively high, although the specific principles of these two are not often clearly distinguished. Patients tended to ascribe more importance to various sources of sponsorship, international aid, and donations. Direct user payments were less often perceived to be a viable source of health sector financing.
Figure 11.2. Awareness of methods for health care financing

<table>
<thead>
<tr>
<th>Patients</th>
<th>Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>tax</td>
<td>tax</td>
</tr>
<tr>
<td>health insurance</td>
<td>health insurance</td>
</tr>
<tr>
<td>sponsorship/aid</td>
<td>sponsorship/aid</td>
</tr>
<tr>
<td>fee-for-service</td>
<td>fee-for-service</td>
</tr>
<tr>
<td>fees/copayments</td>
<td>fees/copayments</td>
</tr>
</tbody>
</table>

General assessment

Figure 11.3 shows results from the assessment of various methods for health financing given by the respondents in the course of the interview. In agreement with the semi-structured format, mostly spontaneous answers were sought, not all directions were explored with all respondents, and the questions were asked in random order. This ultimately led to reduction in numbers, especially among the physicians, who tended to follow their own logic. The most complete information was obtained for the "most suitable" or "the best" method.

Most attention was given to health insurance as a preferred method and the current tax-based budget financing. In many cases these two were opposed to each other. Most respondents expressed desire for change, either as a modification of the current tax-based model, or transition to an alternative model, most often mandatory health insurance.

As shown above, all respondents were broadly aware of the way the health care system in Bulgaria is financed. With only occasional prompting, many could name the General Income Tax, or describe how resources are collected in a general pool and then distributed to different sectors. In itself this shows that the principle of this method is relatively transparent, but the actual handling of resources once they are deducted at source is less so. The tax-based method was commonly named "budgetary", "state", "via General Income Tax", or "centralised/centrally" (several physicians), "indirectly".
Suitability of financial methods

There is a marked difference between the views of physicians and users. While a significant proportion of patients thought the current state model broadly acceptable, half being positive about it, this was a very rare view among the physicians (only 5 agreeing to a certain extent). It has to be noted that satisfaction with the current health care system and level of financing, is equally low among physicians and patients as discussed in chapter 6.

It is also important to outline the main problems perceived. Respondents were divided into those who thought the model suitable to Bulgarian circumstances and those who thought it not suitable. In the following analysis the suffixes [s] and [ns] were used to designate those who viewed the model suitable or not. As throughout this thesis, the views of patients and physicians will be examined in parallel.

Most respondents who viewed the tax based system to be currently suitable had some reservations. The main benefits were seen as protection of equity, universal coverage, and simplicity for the tax-payer ("the regular deduction of tax did not burden us, health care was free..., we did not have to waste time paying special tax" [user-s]). In some cases respondents were unaware of the advantages of another method, or were neutral and did not have a clear preference ("if no more rational model for collection of revenue
specifically for health care is suggested, and this model is still working... it can be retained.” [user-s]). However the main point of division is between those respondents who favour adjusting the existing model to new circumstances, and those who viewed the system as completely obsolete and in need of a radical overhaul.

“No, it is unsuitable for the Bulgarian conditions, and is ineffective as such. Therefore a radical reform in near future is needed... the Bulgarian Physicians Union, the labour unions... have done some work in this area, and should be given an opportunity to apply it in practice.” [physician-ns]

“In Bulgarian conditions budget financing should be retained to cover a certain group of the population, who are very poor... the rest should be paid.” [user]

“The question is how to adapt the inherited system so that it could start working... given the scarce resources available.” [physician]

Some respondents (mainly users) felt that the model is generally suited to Bulgaria, but not in the new circumstances (“maybe it is suitable, but things change daily, and to get closer to Europe maybe everyone will have to have an insurance membership book and to know once for all that they are insured.” [user-s]). It can be hypothesised that those who perceive the model as generally applicable to Bulgaria are the group who see less serious inherent problems in the system. Several respondents viewed it as suitable during transition.

“I think that as the entire legislation will be changing with the new conditions in Bulgaria, we should move in a painless way to European standards. But this should be during a long period, so as not to burden people who are still not provided for.” [user-s]

Notably, among both those who viewed the tax-based model to be suitable for Bulgaria, and those who thought it unsuitable, emerging themes were similar, although in the latter group such problems were more rarely mentioned. In effect, this may show that desire for change may be a product of factors other than objective problems with the model, for example, lack of information about alternative financing methods. (“I think that given there is nothing else better, this is also some solution” [user]).

Many respondents, including physicians, did not fully exclude the tax-based model and suggested that it could be retained in combination with other financing mechanisms. Some perceived a continuing need for the state budget to support vulnerable groups and contribute to capital investment. However, most respondents were immediately aware of problems, and did not think it fully consistent with the situation after transition.
"I think that Bulgaria has to go through the stage when each person will be paid adequately for their work, and then pay as in – I think – Holland, Denmark, where the social allocations of the net earnings of an average worker reach 40-50%, but on the other hand users have excellent health care." [user-ns]

Among the most common concerns regarding budget financing based on general taxation was that the health care budget is insufficient for existing needs. This was by far the most common objection among those who believed the tax-based method unsuitable, and second among those viewing the model as generally applicable. As discussed in chapter 6, funding deficits have resulted in a visible deterioration in accessibility of care and quality, observed by most respondents, including shortages of basic supplies and equipment. Several respondents were unsure how the system operates at all ("it is a magic – all our surgical supplies come from aid, only our salaries must be from the budget" [physician-ns]).

"...the Ministry covers about 15% of the needs. All the rest comes from foundations, donations, user payment for pharmaceuticals... The so called social medicine, in fact does not exist anymore." [physician]

"The Bulgarian health care is financed by a very small proportion of what is deducted as Social Insurance Tax. As a percentage of income, it may be sufficient, but I don't know what share of it is really spent for health care...". [user-s]

"The allocated health care budget is simply not enough, it is exhausted in the middle of the year. The state can’t cover these huge expenses..." [physician-ns]

This was spontaneously and strongly linked, especially among the supporters of the model, to inadequate tax collection, underreporting of income, a growing shadow economy and rising unemployment. A particular concern was the failure of taxation to cover contract-based, part-time employees, or those on ‘civil contracts’, considered by several respondents to increase inequity.

"...it is insufficient because it is deducted mainly from people employed in the budgetary sphere. It is impossible to collect the 100% due tax from those employed on a private or personal basis are – they can’t be covered as taxpayers...” [user-s]

"Only people who can be taxed are taxed. Many private firms avoid tax, and their employees do not pay General Income Tax like the state ones... Not all fall under the collection procedures. I think that those who actually pay are a minority." [user-s]

The funding of the health care system is seen by many as a function of economic development ("the money have to come from somewhere. Without the development of the

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1 Type of contract not involving payment of State Social Insurance, similar to freelance status
economy there is no health care” [physician-ns]). Interestingly, in many cases the state is perceived as something external and restrictive, not as a representation of the people.

Another major problem, particularly among those accepting the tax-based model, is that the funds are not earmarked for health care, thus it is difficult to control whether they are actually spent on health care.

“As a percentage of income, the tax may be sufficient, but I don't know what share of it is really spent for health care...” [user-s]

“The General Income Tax finances not only health but also other social services. The revenue is added in a pile, and is then distributed... It fills gaps everywhere... There is no strategy - it is impossible to have one.” [user-ns]

Low accountability also distorts resource allocation which, according to many respondents, involves significant bureaucracy. Internal misallocation, with particular health facilities benefiting more than others, was noted with no prompting - but only by respondents from the countryside. The misallocation also gives rise to potential corruption (“once in the budget, the money ‘disappear’ without a trace” [user-s]).

“Generally it is fine, but it depends how the subsidies are distributed... Facilities as treated unequally. I saw how a university hospital ’Tsaritza Ioanna’ and the Lovetch district hospital are subsidised...not according to need.” [physician-s]

“The last seven years clearly showed the ineffectiveness of this system for our health care. In Bulgaria there is a heavy bureaucratic system for distribution of resources, a delayed transfer to facilities, and ineffective spending.” [user-ns]

An emerging issue was that of the structure of governance. Several physicians mentioned centralisation as a major problem related to the tax-based model (“in order to achieve democracy, the functions of the Ministry of Health have to change from controlling to co-ordinating” [physician-ns]). Bureaucracy is associated with resources going missing. Two physicians pointed to a lack of adequate cost containment at hospitals and lack of sense of ownership, due to hospitals not being autonomous legal entities and their lack of information on costs.

“The trouble is that even the limited resources for health care are not all spent purposefully, are diverted and not spent for high priority services.” [physician-ns]

Another outcome of the tax-based system, perceived mostly by physicians, was the inadequate payment of health professionals, low social status, poor working conditions, and lack of a link between performance and salaries, all leading to reduced motivation.
The quality of care was not often noted as a problem specific to the tax-based model, and as shown in chapter 6, is mostly explained by the macroeconomic situation.

"The Bulgarian physician is extremely low in the social hierarchy, poorly paid, lacks resources, pharmaceuticals..." [physician-s]

"In the past everybody was getting the same money. Although these were not enough, given that everybody was alike, this was accepted as a matter of fact. Now a coffee shop owner gets ten times more than a physician, and he/she feels this situation as abnormal, and their work motivation is much lower." [physician-ns]

When assessing the suitability of different models of financing to the circumstances of Bulgaria, problems associated with the tax-based model were viewed as advantages of health insurance, and thus were used as arguments for its introduction. Donations, aid and user payments were considered of secondary importance. As mentioned earlier in the chapter, many respondents knew some basic terms associated with social insurance, made comparisons with other countries, and several had first hand observations (“I was in Germany, ill and uninsured, and I saw how nice it would have been if I had health insurance. I was impressed how people get high quality care, almost for free.” [user]).

Although users reported certain benefits associated with the tax-based model, such as better potential for control over resources, this view was rare among physicians.

"Given the traditions in this respect, I think the state subsidies (are better)... also the prices of imported drugs on sale in the pharmacies are controlled." [user]

A predominant view was that health insurance is the most appropriate model, best suited to Bulgaria (“the best system in the world: this is the way for Bulgaria” [user], “the world has proven it, there is no other alternative” [physician], “the most perfect model long ago adopted in the West, especially in Sweden and Germany” [physician], “why do we have to rediscover the wheel?” [user]; “it is used worldwide, regardless whether the country is rich or poor” [user], "health insurance is working, there are some minuses, but not fundamental, and can be solved" [physician]). This view was common to a large majority of the physicians (“this should be the opinion of every sensible doctor” [physician]), and about half of patients. Many physicians claimed to reflect the opinion of their colleagues. Its main advantages are seen as providing social protection for all, accountability (“for each sum, to know from whom it is taken, and where it is gone” [physician]), and ensuring that collected revenue is spent on health care (“to keep track precisely what percentage is spent on health care” [physician]).
Several respondents noted insufficient political will as a main obstacle to implementation of social insurance, while the situation in the health care system has been exacerbated by this delay ("they don't want it because there will be unemployment among physicians and nurses...the system will prove many to be ineffective..." [physician], "the politicians will argue...the socialists will say that the employer should pay more, others will say the employer is not obliged...the attitude to this can bring down a government. In the West they say 'we will reduce tax or reduce health insurance or something else - and people choose" [physician]). Two respondents recommended the German health insurance system as providing better financial control than a tax-based model. In general people thought that implementing a social insurance system would raise Bulgarian health care towards Western European standards and would be useful during EU accession.

An important attribute of health insurance is that it is equitable ("health insurance... can guarantee all groups of the population a good health service" [user], "it more or less neutralises the differences in the material status of people" [user], "it is a more caring, somehow more social model..." [user]). In contrast to the tax-based model, this is not only rhetoric but is sustainable through universal coverage and incentives to participate. The difference from the tax-based method is that there are actual resources underpinning free (at the point of use) provision.

Several physicians recommended a combination of state and private funds.  

"The only way is a health insurance system, with finding the right balance between public-private funds in collecting resources. If entirely private, I think few people would be able to afford it, it would deter 60-70% of the population – it is not the most humane way to solve the health problem in the country." [physician]

"Via health insurance tax... The money can go to independent organisations controlled by the government, or private - maybe both types should be used to experiment. To start with a state insurance fund, and then if effective, to be partly privatised, because the private business in Bulgaria has no traditions..." [physician]

However, others misunderstood the principles of health insurance, thinking that it will be the employers who cover the entire insurance contributions of their employees. In some cases health insurance was confused with voluntary insurance, e.g. employers paying for their employees at a private medical facility.

Several respondents also perceived compulsory insurance as a kind of medical savings account, where each person pays only for their own health care. Some of those respondents (mainly physicians) tended to suggest that if treatment costs exceed the
money collected, a co-payment may be required to ensure sustainability and high quality of care. Others objected to such co-payment ("If one has health insurance, they shouldn't pay additionally" [user]). However, many respondents understood clearly that in the case of health insurance, there is cross-subsidisation. Only one physician was aware that health insurance is likely to involve rationing of volume and type of services covered, and utilisation will not be unlimited.

A third view was that a "combined" system is more suitable to Bulgaria. Mainly, this involves the state retaining obligations such as financing capital investment, emergency care and research institutions. Strong state participation through budgetary subsidies is viewed to be necessary during transition. Two respondents supported a more pluralistic system, where several alternative financing models coexist.

"Combination of methods... We can't move entirely to paid health care, because our low living standards do not allow us to pay for insurance..." [user]

"The state should also be contributing a certain sum, especially for the Institute for Emergency Care." [user]

"The state has to allocate for health care, because... there will always be people who will not be able to give even minimal contributions. Worldwide there are hospitals for poor, fully or partially funded by the state" [physician]

Three respondents attributed some significance to donations; sponsorship by organisations and individuals; and direct payment in health care financing; noting the example of leading health facilities relying only partially on the state budget to cover their needs. Donations were generally perceived as a secondary, supplementary method, usually in combination with state financing and mainly to alleviate shortages during transition.

Implementation issues

The next section explores perception on which method is easiest to implement. Two observations were made, first, that respondents tended to equate desirable with feasible methods of financing, supporters of a certain method likely to maintain that it is also simple to implement. Second, some did not see the relevance of the question and did not provide a clear answer as they thought it axiomatic that the benefits outweighed the implementation costs. The exceptions were the physicians in whose view health insurance was more suitable to Bulgaria, some of whom were aware of potential problems.
Roughly similar shares of users considered tax-based and health insurance models easy to operate, only a minority suggesting another model (3-aid; 1-fee-for-service). Among physicians the situation was roughly the same, with slightly more than a third stating that health insurance is the easiest option, although a third suggested that health insurance is the only way, despite some complexities with implementation.

"The current one seems the easiest, but it is the most inefficient." "The easiest is for the state to pay everything, but it is unable to do so." [users]

"Sponsorship is the easier, but it can't always be predicted." [user]

"In my view, the health insurance funds remain the simplest and the most natural solution to the problem for Bulgaria."

Among the issues that have to be resolved with the implementation of a health insurance system were adequate legislation and institutional development ("a structure where the state and a fund collecting resources will interact" [user]), possible inclusion of private providers, identifying the package of services to be covered, and consultations with stakeholders. Time, training of staff, accounting systems, investment in material conditions were perceived to be essential. Consideration of economic hazards such as inflation and unemployment was also thought important ("It is crazy to have health insurance given an actual inflation of 300%." [physician]). Several respondents (mainly physicians) thought the main issues lie in amassing the initial health insurance fund/s, and suggested this could be done via state subsidies, increased budgetary allocations, or collection of user fees.

"To implement a health insurance system, the state has to have large resources, and people who want to participate - to have an initial capital. We know how many socially disadvantaged, low income groups, pensioners, there are in Bulgaria – it is difficult to start such a system. There should be an economic growth first..." [physician]

"In order for the health insurance system to start working, maybe some of the patients should pay user fees as suggested in 1990-91, but now I don't know whether anybody could be made to pay fee given that they pay for almost everything in the health facility. May be the budget has to stretch a little bit..." [physician]

However, some thought that implementation difficulties (amassing the initial capital) too often have been used as an excuse not to reform the system. Only one physician thought implementation difficulties a serious obstacle to a health insurance system.

"We have neither capacity, nor financial means to implement health insurance system, which requires large investment in information and other resources – it would be a mistake. Currently we could only do small corrections to make the budgetary system to
function according to market mechanisms... It is not so important where the money come from, but once in the system, to achieve an effect.” [physician]

Acceptance by the public

Another important element is public acceptance of a financing method. Some health professionals considered this question to be irrelevant, saying that any reform of this scale is bound to face opposition. Among patients, opinions were split as to whether tax or health insurance will prove more acceptable, with just a few people suggesting aid or user fees. In contrast, most physicians thought health insurance perfectly acceptable, on condition that proper preparatory work is carried out.

Public acceptance of a tax-based system seems to be based on tradition and resistance to change, but also lack of trust of feasibility of reforms. Some respondents did, however, suggest that this is changing. These views were exemplified by the following comments:

“Clearly, entirely state financing is accepted the easiest, when one doesn’t have to pay anything. Of course, it is paid through tax on salary, but it is minimal and people do not have a sufficient idea that they give these money.” [physician]

“The predominant opinion in Bulgaria will be for the state health care to continue, everyone to be able to visit their district physician, even if unsatisfied, because many people can’t afford the prices in the private sector. In the future this mentality and the ability to pay will change. People will get accustomed to pay, but they still can’t.” [user]

“People who are afraid about their future may prefer centralised financing, in order somebody else to be responsible for them.” [user]

On the other hand some thought that familiarity with income tax could lead to an acceptance of health insurance, if it is clearly earmarked. A strong motivation for accepting health insurance is the guarantee that contributions will be used solely for health care as demonstrated by the following quotations:

“It is difficult for the people given the lack of money they have to pay, but it seems to me that people will get convinced that this is the best way, painlessly, not paying 100% of their treatment, but supported by the state and others, through the fund...” [user]

“I think people in Bulgaria would accept to pay percentage of their income for health care if they are sure that this money will be properly utilised, and will receive adequate attention and level of service when needed.” [user]

"When you invest in your own health, and you know what you will receive back... and there is control, precise rules... and the cost of the service is clear.” [physician]
Public understanding of model

The question of public understanding of a financing model produced the fewest responses, with some respondents viewing the question as not worth discussing. Their reasons were difficulty in achieving transparency when implementing a new system, difficulty of accommodating many views in reform and, in the view of health professionals, a lack of public interest. Several physicians considered that health insurance would not be readily understood by the public despite being "the best" method for financing.

No single method of financing was considered to be significantly more comprehensible than others. Physicians tended to see health insurance as more understandable, although several also pointed out that despite being the most transparent, it may be the most difficult to understand. Despite that, several users and physicians viewed a tax-based model as the most transparent, while some argued that taxation is most understandable, but not most transparent.

"The health insurance system can easily be accepted, as soon as it is well explained, and well applied, because this will be the most efficient method." [user]

"The current one (tax)... seems the most understandable, but it is not the most transparent although it looks like it at first sight, because after the means go into the budget, they can't be traced. It is not clear how much is for health care, or for other areas, and in the end is allocated whatever possible." [user]

It was also argued that understanding of a system is not necessary for it to be implemented and work well ("the centralised health care is the most understandable for the society, but it is inefficient" [physician]). A common view among physicians was that few people were familiar with the concept of health insurance, and not clear what changes it would involve. As one physician stated, despite the existence of elements of health insurance in Bulgaria throughout this century, public understanding usually has been “distorted”. Transparency was linked explicitly to the concrete demonstration of the exact percentage deducted for health care ("it should be strictly regulated" [physician]).

"...in our wage slip it will read 6% of my salary for health insurance, 6% - for pension fund... now they deduct from us about 30-35%.” [physician]

It was also stated that clarity for the public is not a feature of a particular financing method, it is more the way the system is run.
"That the system (tax) has not been transparent so far is due more to political connotations... Health care is one of the biggest financial institutions in a country, it consumes the most money from the budget, and many people try to get a piece of the pie. There has never been a transparent budgeting of health care in Bulgaria, it is not known what percentage, the estimates are fairly unreal." [physician]

**Fairness**

In the same way, respondents were asked specifically to assess whether one system was fairer than another. About half saw the current financing as fair, and the other half, as unfair. There was no apparent relationship between support for the existing model and views on the fairness of the system. However, among those who viewed the current system as fair, users and physicians emphasized different aspects, suggesting a different understanding of fairness.

The features of an unfair system are perceived to be low quality of service, lack of guarantees, and thus dependence on certain professionals. Unfairness in the health sector was also linked, by some, to trends in society since 1989, such as weakening of the state ("such are the means of the state at present" [user]), and income polarisation. However, about half of respondents still thought that fairness is an important underlying principle of the health care system, despite the poor conditions, and its loss perceived as detrimental to the user.

It was a common view that the state primary health services, particularly in district polyclinics, are accessible, and still fair, although basic ("generally, in the public polyclinics all are treated the same, below the average level." [user]).

Despite this, several respondents argued that fair access is meaningless given the perceived low quality of polyclinic staff, with patients bypassing facilities, lack of low cost drugs for the chronically ill, corruption, and poor working conditions, inadequate resource allocation between urban and rural areas, and between facilities.

A distinctive theme among physicians was to distinguish between two aspects of fairness: attitude of staff and availability of resources. Physicians tended to think that staff attitudes are relatively fair but, due to the poor material conditions, standards are so low that fairness loses significance for the patient ("given that the treatment is miserable, it can't be fair... now it's equally bad for all..." [user], "everyone who needs help receives it, it's another matter how effective it is" [physician]). Payment (in the private or public sector) is thought to lead to a better service.
Many users emphasised as a manifestation of unfairness, the use (specifically by the better off), of a 'connection' or nepotism. This view was rare among physicians. Payment of user fees was perceived as inequitable by several physicians. Still, several users stated that medical staff do their best to provide services despite difficult conditions.

"Depending on the social status of a person... who they are, who sends them... this is the service. Or depending on what they will give, what present, what money. ...such variations in treatment have always existed in Bulgaria." [user]

"If, unfortunately, one is in need, and it is serious, they should have a great luck to come across qualified help, which would not cost them any money." [user]

**Determinants of choice**

The determinants of why someone might choose a particular model have been examined according to a range of socio-economic characteristics (Table 11.5a/b). All models have been adjusted for age. People in the older and less educated groups, with lower income or self-perceived financial status, are more likely to support the current tax-based financial arrangements. This is surprising given the argument that a compulsory insurance scheme would reinforce equity and serve the interests of the vulnerable groups. This could be explained by a lack of information among the poor, aversion to change, or a feeling of being too poor to contribute at all. There is a clear association between willingness to pay for health care and preference for a particular payment method, those unwilling to pay being more likely to support the tax-based model.

These findings are generally comparable to a Bulgarian study from 1994 where preference for the existing system was greatest among the old, the poor, and those with poor self-reported health[^206]. Similarly to this study, the young were in favour of compulsory and voluntary insurance. However, there were some differences. Among higher income groups, the current survey does not show a strong preference for voluntary insurance. In the 1994 survey, 71% of males and 61% of females indicated willingness to pay official user fees for health services, in the current survey only 44% of men and 40% of women supported this view. Compared to 1994, the 1997 survey showed less pronounced variations by age, income and health, although for women age and financial status were significant predictors.
Figure 11.5 illustrates the choice of health financing options. The national health insurance system gained most support (55%), followed by voluntary insurance (44%), user fees/co-payments (37%) and finally, the existing tax-based system (35%). Respondents tended to view a health insurance system and user fees as more compatible (19%) than tax and user fees (12%) or insurance and tax (10%) (Figure 11.4).

Figure 11.4. Choice of models for health financing (total percentage of sample)
<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>National insurance</th>
<th>Tax</th>
<th>Voluntary insurance</th>
<th>User fees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>% (n) Odds ratio (95% CI; age-adjusted)</td>
<td>% (n) Odds ratio (95% CI; age-adjusted)</td>
<td>% (n) Odds ratio (95% CI; age-adjusted)</td>
<td>% (n) Odds ratio (95% CI; age-adjusted)</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;39</td>
<td></td>
<td>67.1 (155)</td>
<td>28.6</td>
<td>64</td>
<td>45.9 (102)</td>
</tr>
<tr>
<td>40-49</td>
<td></td>
<td>72.3 (86)</td>
<td>1.28 (0.79-2.08)</td>
<td>19.3 (23)</td>
<td>60.0 (0.35-1.03)</td>
</tr>
<tr>
<td>50-59</td>
<td></td>
<td>62.5 (60)</td>
<td>0.82 (0.50-1.34)</td>
<td>32.2 (29)</td>
<td>1.19 (0.70-2.02)</td>
</tr>
<tr>
<td>60-69</td>
<td></td>
<td>31.0 (31)</td>
<td>0.22 (0.13-0.37)</td>
<td>54.1 (53)</td>
<td>2.94 (1.80-4.82)</td>
</tr>
<tr>
<td>&gt;70</td>
<td></td>
<td>30.2 (29)</td>
<td>0.21 (0.13-0.36)</td>
<td>58.7 (54)</td>
<td>3.55 (2.14-5.89)</td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (&gt;$160,000)</td>
<td>77.6 (121)</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Leva)</td>
<td>II ($100,000-160,000)</td>
<td>64.1 (82)</td>
<td>28.6 (25)</td>
<td>1.64 (0.93-2.91)</td>
<td>44.3 (54)</td>
</tr>
<tr>
<td>III ($60,000-99,000)</td>
<td>39.0 (62)</td>
<td>31.2 (39)</td>
<td>0.60 (0.35-1.03)</td>
<td>38.1 (56)</td>
<td>0.91 (0.55-1.48)</td>
</tr>
<tr>
<td>IV ($&lt;60,000)</td>
<td>43.4 (66)</td>
<td>44.3 (54)</td>
<td>0.91 (0.55-1.48)</td>
<td>47.7 (71)</td>
<td>2.49 (1.42-4.37)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>77.9 (67)</td>
<td>22.6 (19)</td>
<td>1.26 (0.71-2.25)</td>
<td>43.3 (133)</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>66.9 (218)</td>
<td>55.5 (39)</td>
<td>1.00 (0.56-1.63)</td>
<td>38.7 (127)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>33.3 (77)</td>
<td>66.9 (31)</td>
<td>0.20 (0.11-0.37)</td>
<td>52.4 (23)</td>
</tr>
<tr>
<td></td>
<td>Financial</td>
<td>83.6 (46)</td>
<td>19.2 (10)</td>
<td>1.26 (0.71-2.25)</td>
<td>43.3 (133)</td>
</tr>
<tr>
<td></td>
<td>Situation</td>
<td>70.4 (126)</td>
<td>26.4 (83)</td>
<td>0.60 (0.35-1.03)</td>
<td>38.4 (71)</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>54.8 (115)</td>
<td>46.2 (72)</td>
<td>1.39 (0.63-3.06)</td>
<td>48.2 (82)</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>36.4 (68)</td>
<td>48.9 (88)</td>
<td>2.54 (1.18-5.47)</td>
<td>41.1 (85)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>56.1 (266)</td>
<td>48.8 (88)</td>
<td>3.37 (1.56-7.27)</td>
<td>35.3 (65)</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>67.3 (70)</td>
<td>48.9 (88)</td>
<td>0.32 (0.19-0.57)</td>
<td>50.8 (98)</td>
</tr>
<tr>
<td></td>
<td>Divorced/ widowed</td>
<td>39.1 (25)</td>
<td>50.8 (98)</td>
<td>1.00 (0.56-1.63)</td>
<td>24.4 (88)</td>
</tr>
<tr>
<td>Settlement</td>
<td>Sofia</td>
<td>70.6 (48)</td>
<td>29.4 (20)</td>
<td>1.64 (0.64-2.01)</td>
<td>38.1 (24)</td>
</tr>
<tr>
<td></td>
<td>City</td>
<td>64.0 (128)</td>
<td>36.2 (166)</td>
<td>0.56 (0.34-0.81)</td>
<td>22.6 (19)</td>
</tr>
<tr>
<td></td>
<td>Town</td>
<td>62.8 (113)</td>
<td>31.6 (54)</td>
<td>1.14 (0.60-2.14)</td>
<td>47.6 (80)</td>
</tr>
<tr>
<td></td>
<td>Village</td>
<td>37.4 (73)</td>
<td>50.8 (98)</td>
<td>1.84 (0.99-3.42)</td>
<td>33.0 (66)</td>
</tr>
<tr>
<td></td>
<td>Self-reported</td>
<td>62.2 (304)</td>
<td>31.1 (148)</td>
<td>0.89 (0.47-1.68)</td>
<td>46.4 (89)</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>37.7 (58)</td>
<td>0.63 (0.41-0.97)</td>
<td>50.7 (75)</td>
<td>1.43 (0.93-2.20)</td>
</tr>
<tr>
<td></td>
<td>Willingness</td>
<td>32.0 (71)</td>
<td>55.3 (119)</td>
<td>1.00 (0.56-1.63)</td>
<td>38.1 (24)</td>
</tr>
<tr>
<td></td>
<td>to pay (general)</td>
<td>69.1 (291)</td>
<td>29.4 (20)</td>
<td>0.32 (0.22-0.45)</td>
<td>44.2 (78)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>IN FAVOUR</td>
<td>54.8 (362)</td>
<td>33.7 (223)</td>
<td>39.5 (261)</td>
<td>37.7 (249)</td>
</tr>
</tbody>
</table>
Table 11.5b. Predictor of choice of financing model: comparison between models (women)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>National insurance (%) (n)</th>
<th>Tax (%) (n)</th>
<th>Voluntary insurance (%) (n)</th>
<th>User fees (%) (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Odds ratio (95% CI; age-adjusted)</td>
<td>Odds ratio (95% CI; age-adjusted)</td>
<td>Odds ratio (95% CI; age-adjusted)</td>
<td>Odds ratio (95% CI; age-adjusted)</td>
</tr>
<tr>
<td>Age group</td>
<td>&lt;39</td>
<td>68.8 (198)</td>
<td>0.80 (0.64-1.28)</td>
<td>21.5 (61)</td>
<td>1.00 (0.64-1.47)</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>68.5 (102)</td>
<td>0.99 (0.64-1.28)</td>
<td>23.5 (35)</td>
<td>1.07 (0.71-1.59)</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>54.4 (81)</td>
<td>0.54 (0.36-0.81)</td>
<td>38.5 (57)</td>
<td>0.77 (0.51-1.15)</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>38.3 (51)</td>
<td>0.28 (0.18-0.43)</td>
<td>45.9 (61)</td>
<td>0.78 (0.51-1.19)</td>
</tr>
<tr>
<td></td>
<td>&gt;70</td>
<td>22.9 (32)</td>
<td>0.13 (0.08-0.21)</td>
<td>56.4 (79)</td>
<td>0.68 (0.45-1.03)</td>
</tr>
<tr>
<td>Income quartile</td>
<td>I (160,000)</td>
<td>67.6 (121)</td>
<td>1.20 (0.64-1.51)</td>
<td>20.6 (37)</td>
<td>1.12 (0.64-1.51)</td>
</tr>
<tr>
<td></td>
<td>II (100,000-160,000)</td>
<td>64.0 (105)</td>
<td>1.00 (0.63-1.59)</td>
<td>27.3 (44)</td>
<td>0.80 (0.51-1.23)</td>
</tr>
<tr>
<td></td>
<td>III (60,000-99,000)</td>
<td>53.9 (111)</td>
<td>0.81 (0.52-1.26)</td>
<td>40.7 (83)</td>
<td>0.99 (0.64-1.52)</td>
</tr>
<tr>
<td></td>
<td>IV (&lt;60,000)</td>
<td>40.2 (101)</td>
<td>0.67 (0.42-1.04)</td>
<td>43.4 (109)</td>
<td>0.75 (0.42-1.35)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher</td>
<td>78.6 (136)</td>
<td>1.00 (0.63-1.59)</td>
<td>11.0 (19)</td>
<td>1.00 (0.63-1.59)</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>65.1 (224)</td>
<td>0.51 (0.33-0.79)</td>
<td>28.9 (99)</td>
<td>0.95 (0.65-1.39)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>30.3 (104)</td>
<td>0.19 (0.12-0.30)</td>
<td>51.8 (176)</td>
<td>0.64 (0.42-0.98)</td>
</tr>
<tr>
<td>Financial</td>
<td>Very good/good</td>
<td>78.9 (45)</td>
<td>1.00 (0.63-1.59)</td>
<td>17.9 (30)</td>
<td>1.00 (0.63-1.59)</td>
</tr>
<tr>
<td></td>
<td>Neither good nor bad</td>
<td>64.8 (160)</td>
<td>0.52 (0.25-1.06)</td>
<td>25.6 (63)</td>
<td>0.80 (0.44-1.42)</td>
</tr>
<tr>
<td></td>
<td>Rather poor</td>
<td>53.3 (161)</td>
<td>0.42 (0.21-0.84)</td>
<td>37.5 (113)</td>
<td>0.69 (0.39-1.23)</td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>37.3 (87)</td>
<td>0.20 (0.10-0.41)</td>
<td>43.7 (109)</td>
<td>0.75 (0.42-1.35)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>57.5 (318)</td>
<td>1.00 (0.63-1.59)</td>
<td>33.2 (184)</td>
<td>1.00 (0.63-1.59)</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>72.2 (70)</td>
<td>1.32 (0.78-2.21)</td>
<td>21.1 (20)</td>
<td>0.86 (0.49-1.53)</td>
</tr>
<tr>
<td></td>
<td>Divorced/ widowed</td>
<td>36.2 (76)</td>
<td>0.78 (0.53-1.13)</td>
<td>43.9 (90)</td>
<td>1.38 (0.96-1.98)</td>
</tr>
<tr>
<td>Settlement</td>
<td>Sofia</td>
<td>68.9 (91)</td>
<td>1.00 (0.63-1.59)</td>
<td>18.8 (25)</td>
<td>1.00 (0.63-1.59)</td>
</tr>
<tr>
<td></td>
<td>City</td>
<td>68.2 (167)</td>
<td>1.08 (0.67-1.74)</td>
<td>26.6 (64)</td>
<td>0.99 (0.64-1.53)</td>
</tr>
<tr>
<td></td>
<td>Town</td>
<td>54.7 (128)</td>
<td>0.60 (0.38-0.96)</td>
<td>39.9 (93)</td>
<td>1.07 (0.70-1.66)</td>
</tr>
<tr>
<td></td>
<td>Village</td>
<td>31.3 (78)</td>
<td>0.30 (0.18-0.48)</td>
<td>45.2 (112)</td>
<td>0.68 (0.44-1.06)</td>
</tr>
<tr>
<td></td>
<td>Good/Rather good</td>
<td>60.2 (375)</td>
<td>1.00 (0.63-1.59)</td>
<td>28.7 (176)</td>
<td>1.00 (0.63-1.59)</td>
</tr>
<tr>
<td></td>
<td>Bad/Rather bad</td>
<td>37.6 (89)</td>
<td>0.72 (0.50-1.02)</td>
<td>49.0 (118)</td>
<td>0.97 (0.69-1.36)</td>
</tr>
<tr>
<td></td>
<td>Unwilling to pay</td>
<td>34.1 (106)</td>
<td>1.00 (0.63-1.59)</td>
<td>51.5 (159)</td>
<td>1.00 (0.63-1.59)</td>
</tr>
<tr>
<td></td>
<td>Willing to pay (general)</td>
<td>65.2 (358)</td>
<td>2.94 (2.16-4.00)</td>
<td>24.7 (135)</td>
<td>0.37 (0.28-0.51)</td>
</tr>
<tr>
<td></td>
<td>Total IN FAVOUR</td>
<td>52.4 (464)</td>
<td>33.2 (294)</td>
<td>43.1 (382)</td>
<td>36.1 (320)</td>
</tr>
</tbody>
</table>
Figure 11.5. Preference for a financing model by selected socio-economic variables

Age

Income

Education

Financial situation

Self-reported health

Willingness to pay

- Tax
- Social insurance
- Voluntary insurance
- Fees
Discussion

This chapter sought to identify preference for a range of health care financing methods. Despite large scale reforms of health care financing in most Central and Eastern European countries, studies on willingness to pay, attitudes and belief systems, are rare, preventing comparison.

In the context of a long-term dependence on the state budget through collection of general revenue, it is very difficult to assess attitudes to financing mechanisms involving direct payment. However, in recent years the public has been exposed to several co-existing finance methods involving a diversity of payment methods, as well as the basic system of general taxation. These include earmarked tax for social insurance, out-of-pocket user charges, and voluntary insurance. This has gradually increased awareness and acceptability of ‘new’ methods.

Evidence from the quantitative and qualitative research suggests that there is strong support for introduction of a compulsory health insurance system. A health insurance system, in contrast to the tax-based model, is perceived as able to mobilise more resources (through more effective collection); guarantee tighter control; provide transparency; offer the greatest benefit for the least contribution; be more user friendly; and raise the motivation of staff. A particular advantage of health insurance is that it provides guaranteed access to health care in a highly insecure environment. The preference for small but regular monthly contributions, rather than one-off user fees or fee-for-service payments, may be explained by the increasing unaffordability of health care in the years after transition. However, health insurance often means different things to different people, and the expectations it invokes can seem somewhat unrealistic. Costs often seem to have been underestimated, as contributions were perceived to be covered by the employer or the state. This suggests a need for an extensive public campaign setting out costs, benefits and potential pitfalls, prior to introduction.

The complexity and cost of implementing a health insurance scheme have been recognised most by the physicians, who have particular concerns about the unemployed or informally employed and the lack of initial investment in the insurance fund.

The existing model was perceived as unable to raise sufficient resources, leaving the health system underfunded. However, respondents tended to see the problem of shortage of financing as due to lack of political commitment, rather than the model of financing.
Despite these views, there seems to be a strong case for retaining significant state involvement. The key question is which functions it should have. The state was commonly seen to have several functions, some of which overlap. Some see it as a primary financier and provider of health care; but more tend to see it as providing a safety net for the poor within a health insurance system; others, especially those favouring independent insurance bodies, see it having a regulatory function. Many problems with state funding were identified, such as a severe shortage of resources; misallocation of funds; and lack of budgetary controls. However, many respondents saw no real alternatives during the period of transition. This may reflect a lack of information on different financing solutions, or simple inertia. A combination of methods during the transition seems popular. In assessing a financing model, patients viewed specific issues as problematic, although not disagreeing with the principle underlying the model. Although some thought changes possible within the current model, only a few believed this model to be sustainable in the long run.

Virtually all respondents were aware of the principles underlying the tax-based model. Although many showed good knowledge of a health insurance system, often the principles of mixed mandatory and voluntary health insurance were confused. This is evident from the common opinion that contributions should be risk-adjusted and optional and explains some apparently contradictory answers. In many cases health insurance was preferred as it was perceived to be a method widely used in Western Europe, and the most familiar.

It could be argued that from the point of view of the individual, a health insurance system resembles the current tax-based taxation operating via collection through payrolls, and treatment is free at the point of use. The main attractions of a health insurance system are transparency, guaranteed resources for health care, and risk-pooling function. It is deemed to provide better insurance against the risk of illness than the current tax-based model. Most respondents seem to perceive health insurance to be an ideal solution, and believe it can succeed where the current model fails.

Overall, options involving a significant public responsibility for health financing were preferred, but reducing the direct role of the state in the allocation and distribution of resources. This is logical given that most people still use, or plan to use, the public sector (chapters 6 and 9). The state, despite its inefficiencies, was deemed the only
institution trustworthy enough, and able, to provide guarantees during the transition period.

User charges have not received much attention in the current chapter, reflecting the fact that most respondents did not perceive them to be a viable method of financing health care. In some cases these were seen rather as a distraction from more radical reform (mostly compulsory insurance).

It can be suggested from the evidence in this chapter, as well as that concerning informal payments (chapter 7) that, paradoxically, chaotic use of formal and informal fees and the lack of clear rules have prepared the ground for a national health insurance system where monthly contributions are seen as the preferred option. Introduction of user fees into the public health sector, in the view of many respondents, threatens the basic package of care. Using various terms, respondents concluded that what they want is a form of insurance that will guarantee unconditional access to health care of acceptable quality against pre-determined contributions.

However, many people believe that they can be treated at no additional cost to themselves, and only a few find co-payment under social insurance acceptable. The expectation is that in a compulsory insurance system, with more resources available and clear rules for the collection and handling of money, there should not be any additional user fees or payments requested by physicians. Given that it is highly likely that, initially, some cost-sharing will be required to ensure sustainability, and later, potentially - to control demand, such an attitude can seriously undermine the credibility of the system.

Overall there is much confusion surrounding potential exemption rules, and doubts about what might work, given the volume of those who need to be exempted. Qualitative data showed that the idea that some people should receive preferential treatment was associated with the old system of privileges for the nomenklatura during the communist regime. This chapter also demonstrated that those with better socio-economic status are more willing to accept new mechanisms, and that many poorer groups oppose change.
This chapter seeks to bring together the evidence from previous chapters to assess the feasibility of compulsory health insurance, the financing system currently being implemented in Bulgaria. It also examines co-payment and voluntary insurance, both of which are likely to play a supplementary role in any future health financing system. It begins with the premise that a successful health financing system has to be sustainable, equitable, acceptable, and compatible with traditions and societal values.

**Implications of the research for Bulgaria**

This thesis provides new information that is policy-relevant and especially timely given that implementation of health care financing reform is beginning in 2000. The contribution of the research can be seen at three levels. At the first level, the research describes the basic principles that the Bulgarian population consider appropriate for any system of health care financing. At the second level, it examines the strengths and weaknesses of different choices of financing system and their impact on different population groups. At the third level, the study provides information that will be required to fill in details concerning the implementation of whichever system is chosen. The implications of the key findings as they relate to decisions at each level will be considered in turn.

**Principles of financing**

Since 1990, consecutive Bulgarian governments have sought to reflect certain values in their policies on the health care system. Their goal was to enhance choice while maintaining solidarity, and they tried to achieve this by creating a pluralist system characterised by competition but within a framework of collective responsibility. Although individual governments have pursued reforms that differ in detail, this general ethos has been supported by governments of different complexions. So far, it has been unclear whether these views truly reflect those of the Bulgarian people. This study, for
the first time, elicits those principles the Bulgarian population considered essential in any future model.

**Public sector control**

There was widespread agreement that health care financing should remain a public sector responsibility. This is, however, more a rejection of private sector ownership than active enthusiasm for government control. Indeed, the past failure of the state to guarantee even basic treatment, or to formulate a coherent health policy, has led to marked public dissatisfaction. The views expressed reflect a combination of persistent collectivist values as well as fear of the future and economic insecurity. Consequently, there is a preference for the creation of para-state bodies, which retain some independence while the government remains the guarantor. Other models of ownership, involving labour unions, NGOs or co-operatives, found little favour as there is little confidence that they would have adequate capacity.

**Egalitarian values**

There is strong support for the principles of universal coverage and guaranteed access to essential health care. This could be interpreted as support for a system based on funding from general taxation. In reality, such a system is rejected. This is, essentially, the existing system which is viewed by most people as failing to comply with these principles. The tax based system is seen as under-funded, unresponsive to users, and increasingly inequitable. In contrast, the desired principles of universal coverage and access to essential care are identified with a system of social insurance.

A caveat is required. Despite the expression of egalitarian values, when asked about the specific implications of a system of social insurance that would involve redistribution of resources and risk sharing, the value placed on equity seems to be less apparent. While there was widespread support for state provision for low income groups, when it was pointed out that this would mean the redistribution of individual’s resources, respondents were less supportive. These beliefs are, however, balanced by strong support within extended families and social networks.

**Accountability and transparency**

Concerns about the past use of resources allocated for health care has created a strong demand for accountability and transparency. The preferred option is for a fund managed
by independent institution(s), given clear mandates, but under the supervision of the Ministry of Health. The government, in particular, is not trusted to spend the money collected for health care. Thus, although social insurance can be considered a tax, it has a key advantage in that the funds are earmarked for health care, and clearly distinguishable within the tax revenue pool; which should ensure that this is what they are used for. There is little understanding of the ways in which this can be circumvented by, for example, varying the contributions made by the state in respect of those who are not in regular employment.

**New role for the state**

There is widespread acceptance that the role of the state in the funding and delivery of health care must change, reflecting economic and political liberalisation. Many question whether the state, in any foreseeable economic situation, can guarantee universal high quality services. The state is, however, expected to fund a basic package of services for all or to provide for groups that would otherwise have no cover, to supervise health insurance funds, regulate the private sector, and protect the rights of patients. There is an emerging shift in values as health is seen increasingly as a responsibility of the individual rather than the state.

**Summary**

This study establishes that public preference is for a solidarity-based health care financing system, that is transparent and accountable to the public. It is expected to be controlled broadly by the state, but not to allow the state to assume a disproportionately large say in the handling of funds.

**Which financing method**

Although, in the late 1990s, the health system in Bulgaria remains a tax-based Semashko model, its underlying principle of universal entitlement to comprehensive free health care has been undermined by economic pressures, and users now bear significant costs. Access to good quality health care has been increasingly dependent on ability to pay rather than need.

Reforms in the 1990s have sought to maintain access to free health care in a situation of falling resources, but this strategy has led to deterioration in the quality of service. The
favoured means of mobilising resources has been to transplant proven West European financing models. The pro-reform government, elected in 1997, prioritised financing reform and legislated for compulsory health insurance, to begin in 2000-01. This followed a severe economic shock in 1996-97, which led to a recognition of the importance of providing adequate social support, including access to basic health care. This is a promising step, as before 1997, health care reform in Bulgaria was hampered by the lack of a consistent strategy backed up by timely legislation. The momentum of the early phase of transition was lost. Now, however, conditions appear to favour more radical reform. There has been some economic recovery since 1997, a consensus on policy has emerged, and the government is giving a strong lead. A social insurance model has been adopted but this is likely to be supplemented by some degree of co-payments and supplementary voluntary insurance.

This study looked at the options for financing against a range of criteria: a) sustainability; b) equity; c) public, political, and professional acceptability; d) compatibility with values and beliefs; and e) compatibility with traditions.

**Criteria for choice**

**Sustainability**

Whatever system is chosen should be sustainable. *Demographic sustainability* (the ration of non-contributors to contributors) is a major challenge for design of a sustainable and equitable health financing system because of the unfavourable demographic trends in the last decade, namely negative population growth; ageing; and high mortality among men of working age. The dependency ratio is especially high in rural areas. The impact of demographic change is exacerbated by economic factors, such as unemployment and high levels of poverty. A large proportion of the working age population is either unemployed, informally employed, or if employed, paid a low wage. A third of the population are pensioners, many living in poverty and suffering from ill health. Despite currently optimistic economic forecasts and the existence of social assistance loans agreed with the World Bank, planned large-scale privatisation (with resultant industrial downsizing) is likely to increase unemployment and poverty in the short run. Weakened social protection mechanisms are compounded by the reduced capacity of family and social networks to act as safety nets.
Factors such as large-scale recession, macro-economic restructuring and low living standards threaten the macroeconomic sustainability of health financing in Bulgaria. In the early 1990s, public budgets fell dramatically due to economic collapse, exacerbated by foreign debt repayment. The increasing informal economy and unemployment resulted in a drop in tax revenue. Concurrently, pressure on health expenditure rose in the face of poorly regulated pharmaceutical supply, and the growth of new medical technology. In Bulgaria, as elsewhere in Central and Eastern Europe, the government response has been to shift costs to others (cost recovery, seeking foreign aid, tolerance of informal payments); to cut recurrent and, especially, capital expenditure; and since 1997-98, to initiate a programme of health financing reform. Prior to 1999, there was little effort specifically to improve efficiency or reduce the under-utilised infrastructure.

Given these adverse circumstances, there is limited scope to develop a sustainable health care system. The very high dependency ratio in rural areas argues for a system in which contributors can be pooled at national rather than regional level, although the burden falling on those in work will inevitably be high. Designing a realistic basic benefits package to be covered by compulsory health insurance and prioritising services may not be feasible politically. Financing reform must, however, be linked to changes in the system of delivery, so as to maximise outputs from reduced capacity. Currently, the health care system is oriented towards curative services, with an excessive infrastructure and specialised staff, and no incentives for efficiency. However, downsizing is likely to be politically sensitive.

**Equity**

This study described two major challenges to equity: first, inequalities in health; and second, marked difficulties in the population’s access to health care.

Older, poorer and less well-educated people are more likely to be unhealthy and to have long-standing illness. These groups are also less able to cope with illness-related expenses. Although outside the scope of the present studies, there is a wealth of research from other countries on why this is so. The ‘inverse care law’ (those with highest need accessing services least) was not seen, but the pattern of similar level of utilisation in the presence of considerable health inequalities indicates that the use of services by some groups is disproportionately low compared to their need.
The study of utilisation patterns paints a complex picture. Although overall the system retains some degree of equity, different socio-economic groups do access different facilities, at different levels of the system, and differ in their level of satisfaction. Poor people are particularly disadvantaged; they are more likely to use lower quality services at primary care level, where the deterioration in facilities has been greatest. Once they move beyond primary care, most users face major problems related to affordability (especially of pharmaceuticals), bureaucratic procedures, lack of choice, unresponsiveness of staff and other hidden barriers to access. This is apparent from the use of various coping strategies for obtaining better service, such as informal payments, seeking 'connections', use of emergency channels, or opting directly for private treatment. The worst off people have little choice but to use official channels, with resulting poor quality service.

Out-of-pocket health care expenditure is regressive. Although older and poorer people pay similar amounts as the rich for treatment, the sums represent a higher proportion of their income. Official user charges for pharmaceuticals or in-patient expenses are also regressive and are not linked to income. Informal payments appear relatively more equitable, physicians seeming to take into account the financial circumstances of patients. However, while poor people may not be asked to pay, they tend to receive a second-rate service.

Users increasingly bear costs through out-of-pocket payments, despite a constitutionally guaranteed right to free health care. Although reported expenditure is mainly from recurrent household income, it is often seen as unaffordable. Costs associated with in-patient care, treatment of chronic illnesses, and imported pharmaceuticals, are particularly likely to obstruct access to health care. Pharmaceuticals constitute the largest, most unaffordable, and regressive component of health care expenditure. This reflects the liberalised market, a shortage of cheaper generic products and cuts in targeted subsidies. Extensive use of self-treatment (especially among those who cannot afford to pay or do not have a 'connection'); 'after-hours consultations' with physicians of their acquaintance; combining prescribed and non-prescribed (potentially of lower quality) medication; or simply ignoring symptoms; all suggest unaffordability and deterred demand. Direct treatment-related expenses were covered almost exclusively from within the immediate household, with little support from the state or other institutions.
Taken together, these findings suggest that the task of establishing an equitable exemption procedure under a new financing system will be paramount.

**Acceptability: public, professional, political**

This study found considerable enthusiasm for wide-reaching reform, but support was uneven. There was less among the worst off, who favoured the existing tax-based model, although the planned redistributive social insurance model is designed to benefit them. Resistance to reform by the vulnerable groups (old, the poor, less educated and those in poor health) might reflect a lack of information, as shown in this study. However, lack of information may not be the only problem. Long-term poverty and income insecurity in the 1990s, and slow social sector reform, contributed to support for the few remaining social benefits, radical reform offering only unpredictable consequences. In addition, given the climate of liberalisation, many anticipate that any change of financing arrangements is likely to require higher user contributions, which are opposed by those less able to pay.

Acceptability of a financing model among the public and professionals reflects different factors, not always underpinned by a sound understanding of the principles. A model appears acceptable to the public primarily if it guarantees access to good quality care, with minimal payment at the point of use. Principles such as transparency, accountability and financial control are extremely important. For health professionals, a model is viewed as acceptable when providing adequate financial incentives, good working conditions and opportunities for professional development.

The hypothesis, that the long Bulgarian tradition of health care free at the point of use may have mitigated against willingness to pay explicitly for health care, was only partially confirmed. It was not the case among those better off, highly educated, younger, urban residents, all of whom were relatively willing to pay.

The past decade has seen the introduction of a wide range of new financing systems: earmarked social insurance tax (e.g. pension, social security); direct out-of-pocket payments; and voluntary insurance. When combined with the failures of the ‘free’ health care system, there is an emerging willingness to consider a range of alternatives.
**Compatibility with societal values**

This thesis argues that it is essential for a new health financing model to be based on shared societal values, such as solidarity, and shared responsibility for health among the state, health professionals and individuals.

Abandoning a model based on general taxation will transform the role of the state, dismantling its monopoly of health care financing. This study showed a marked preference for autonomous health insurance bodies as well as decentralisation, in effect - support for reduced state control. At the same time, there seems to be a strong case for the state to retain a significant role in maintaining equity by covering poor and vulnerable groups, financing capital investment or certain high-cost services, covering insurance deficits and guaranteeing collective rights to health care. Even the well-off favoured a public-private mix, a state-financed minimum level of basic services supplemented by a private component, which was regarded as providing incentives for quality. This shows that a collective (state) responsibility for health is seen, still, as a central value. Thus, there is a desire for health to remain a public concern while increasing the emphasis on individual responsibility.

Collectivist values in Bulgaria imply acceptance of a financing system based on solidarity, such as social insurance. Support for equal rights to free health care regardless of income, age, or health status is widespread, with little of the social variation that might be expected in a more individualistic society. In general, wealthier people are willing to pay a higher contribution, while retaining their right to free basic care.

Nevertheless, the egalitarian values are not unambiguous. Although many people support the concept of vertical equity (different payment for equal service according to ability to pay), there is a view that this need not mean care that is completely equal. A two-tier system of facilities, in which the rich obtain a luxury service at a higher cost (financed through direct payments or voluntary insurance), while the poor have access to a similar service at more basic facilities, is seen as a practical arrangement. Surprisingly, such a two-tier system was widely seen as meeting untapped demand, freeing public resources for the poor, and not detrimental to equity. There was little awareness of the message encapsulated in Titmus' comment that "A service for the poor is a poor service".
Compatibility with tradition

The historical, political, demographic and economic circumstances in Bulgaria outlined in appendix 2, should be taken into account when assessing the feasibility of health care financing options.

Historically, the state has played a major role in the economy of Bulgaria: protectionism towards industry (prior to 1944) followed by the imposition of collective ownership, and totalitarian control of all spheres of social life under the communist regime (1944-89). The state budget financed many health services before 1944 and later played a major role in covering most of the cost of the health sector. This dominance had some positive effects, such as raising living standards in the post war period, with provision of comprehensive social services and institution building.

Before 1944, Bulgaria was relatively socially and economically homogenous. Income structure was relatively flat, with a small industrial elite, small industrial workforce and a mostly rural population working on small and evenly distributed private landholdings. The development of co-operatives in the 1920s, further fragmentation of land and slow capital concentration, also maintained egalitarian structures. In these circumstances, community based solidarity initiatives emerged at local level or within extended family and social networks, rather than more widely. Despite successful promotion of industrial sickness funds in urban settings, with social insurance for state employees, on the whole, occupation-based health insurance was less prominent than elsewhere in Central and Eastern Europe (appendix 2).

The communist regime sought to reinforce pre-existing egalitarian traditions through collectivisation of land, redistribution of income and some convergence of living standards across society. Although solidarity had been deeply rooted in Bulgarian society, after 1944 the structures were damaged when the existing, diverse financing sources were replaced by a state monopoly. In the 1990s, income polarisation, insecurity, and the high social cost of macroeconomic policies borne by the population, led to a resurgence of attitudes supporting collective forms of health financing.

At the beginning of the 20th century (1887-1944) Bulgaria also had a sizeable private health care sector, based on direct payment. Its adverse effects were partly mitigated by a tradition of charity, family and community support, and state intervention. Some degree of private provision persisted during the communist period, expanding rapidly
after 1991. This suggests that some contribution involving direct user payment might not be completely out of place.

These observations indicate that social insurance and private health care financing are generally compatible with traditions in Bulgaria, but both have a less well developed institutional basis than in other Central and Eastern European countries.

**Feasibility**

Assessing the complexity of implementation of different financial systems was not the immediate objective of this study, but some indirect information was provided. One finding is that setting exemptions based on reported monetary income is likely to be invalid. Assessing individual resources is complex in a largely non-cash economy. Given that self-reported financial hardship is a better predictor of illness and affordability than income, use of income exclusively to determine exemptions may result in poor targeting and deter the worse off. The clear link between poverty and health underlines the need to target those who suffer a double burden of being both economically vulnerable and in ill health.

Second, health reform in Bulgaria, especially at this crucial stage, has to be underpinned by systematic research into patients' needs and expectations, such as levels of health; health seeking behaviour; expenditure; and how social institutions and stakeholders might respond to change; rather than on anecdotal evidence. Regular monitoring is essential during implementation, given the probability of a continuation of rapidly changing economic circumstances. In the 1990s, the implicit understanding was that a universal health insurance system is the only option available for Bulgaria given its widespread implementation in Central and Eastern Europe. Differences in economic, cultural and historical circumstances, and available funding for investment and training, were disregarded. While recognising that there is a consensus on such a system, the implications have not been evaluated systematically.

Such information should inform the necessary public debate on many politically sensitive issues, such as informal payments, co-payments, and solidarity. Policies also should be consistent with the established legal framework, a situation that has not been apparent so far.
The options

Compulsory health insurance

Despite the widespread acceptance of health insurance, there is little recognition of the associated problems. This research underlined a number of challenges that could threaten the implementation of compulsory health insurance in Bulgaria.

Income-related contributions in a social insurance system are unlikely to provide a sustainable source of financing without substantial state contributions, given the adverse demographic picture. Differences in ageing and burden of disease, coupled with selective depopulation of rural areas, will require heavy regional cross-subsidisation. The state is likely to play a key role in covering exempted groups and, potentially, financial deficits of insurance funds; ensuring capital investment; and regulating insurance funds. Other extra-budgetary sources, from the informal sector, NGOs, donors, or development agencies (e.g. the World Bank health insurance loan) also might be vital to sustain the system.

It is likely that, at least in the medium term, social insurance contributions will supplement, rather than replace, government budgets. Given that mobilisation of resources is the main objective of health insurance, renewed shortages may undermine support. It is important to agree on the precise roles of the actors in the health insurance system, and a realistic level of state commitment.

An emerging pattern of irregular or informal employment, and the resulting low compliance with tax and social insurance liabilities, raises serious concerns for the sustainability of a compulsory insurance system. The self or privately employed are among the highest earners and reputedly have always avoided tax. Thus they are likely to avoid payroll-based insurance contributions. Insufficient tax revenue will lead to higher contribution levels for those who do pay and reduce the redistributive effect of social insurance, thus perpetuating tax evasion. The Bulgarian tax system lacks effective instruments for assessing in-kind income in rural areas and has poor procedures for enforcing compliance.

Unfavourable economic and demographic trends, unemployment, and rising informal employment combined with inefficient tax collection have eroded the tax base. The need to exempt, fully or partially, a large section of the Bulgarian population might be the
single most important factor that will undermine the sustainability of health insurance funding.

Sustainability is a generic problem in systems raising revenue through general or social insurance tax. However, given the wide acceptance of compulsory insurance in Bulgaria, and provided it is operated transparently, it can be expected to mobilise more revenue than at present, especially from untapped informal sources, and therefore be more sustainable than other methods. Given the low pool of contributors, it is important to create clear incentives for the participation of high-income groups and the self-employed. Compliance could be enhanced by tying benefits to contribution rather than employment, although the latter requires a more complex records’ system, and may compromise solidarity. Alternatively, the informal sector can be captured by flat-rate contributions, levies on agricultural products, or fees based on property. Employers could be encouraged to contribute for their employees through tax incentives, potentially reducing the negative effect of insurance on the labour market.

The fiscal viability of a health insurance system in a situation of macro-economic restructuring may be also threatened by inflation and delayed adjustment of insurance premiums. Moreover, potential negative effects of social insurance are well recognised. Employer contributions, leading to high labour costs and thus higher consumer prices, could ultimately affect the competitiveness of the economy. The government can guarantee the funds against the effects of inflation but this requires additional funding from taxation, and can be very complex. Tax incentives for employers to contribute for their employees may be useful, although this is difficult given the current state of the tax system. An improving economic performance, fiscal stringency and successful control of inflation since the introduction of the currency board in 1997, gives rise to some optimism.

Another challenge is the likely increase in health expenditure typically associated with social insurance systems. In Western Europe, rising health expenditures have reflected consistently improving standards of living, less pronounced income polarisation, and rising popular expectations. Bulgaria is still suffering the consequences of a crisis among the worst in Central and Eastern Europe. A high-cost compulsory insurance system is likely to be constrained by contributors’ income insecurity and falling public budgets, on which overall health financing continues to depend. However, as current expenditure is very low by Central and Eastern European standards, a sustainable
increase under a social insurance – if distributed equally and spent efficiently - is likely to have a positive effect.

Both the public and health professionals view health insurance as reinstating universal and essentially unlimited access to a nearly comprehensive package of high-quality services, in exchange for monthly insurance contributions with no further payment at the point of use. Clearly, such an approach is unsustainable. Measures to control costs are needed, such as agreeing a realistic basic benefits package; restricting choice of provider; GPs acting as gatekeepers; restructuring of the system to improve efficiency; but have received little attention. The alternative, additional funding from co-payments or higher contribution rates, which would add to an already high tax burden, is unlikely to be acceptable.

Due to the somewhat limited experience with occupational sickness funds or third party insurance prior to 1944, and its absence thereafter, detailed preparatory work is of critical importance prior to implementation, including information campaigns, public discussion and capacity building. Although public debate has intensified since 1998, it may be still insufficient. A national insurance system is seen as a relatively simple model, and there is a danger that its complex administrative requirements may render it opaque to the population and undermine confidence.

Social insurance requires complex organisational change of the health system in terms of infrastructure; managerial guidelines; legal and administrative framework for contracting and exemptions; trained staff; accounting and audit; and information systems. It is likely to be costly. Moreover, it entails transformation of the tax-system. Some administrative integration between health insurance funds and the social security system within the National Insurance Institute might reduce operational costs and facilitate means-testing; but is currently unfeasible. The cost of compulsory insurance may exceed the cost of the present system without achieving a tangible improvement in services and outcomes in the short term, thus difficult to sustain politically. A hasty implementation of social insurance could reproduce the weaknesses of the tax-based model, while creating a high-cost non-transparent system.

Equity and social justice are important motives for the introduction of compulsory insurance. The government's long-term commitment to exempt the poor, via transparent criteria and procedures, is essential. Targeting via local level mechanisms to minimise abuse and cross-subsidisation at national level could help to ensure that state subsidies go
to those with highest needs. This is a huge task given the volume of those who need to be exempted and could be jeopardised by difficulties in establishing and sustaining exemptions. Setting affordable contributions sensitive to income differentials and variability is a challenge, while targeting is expensive, complex, and prone to abuse by staff and users. Particular groups, e.g. single-person families, are likely to remain considerably disadvantaged given the importance of intra-household support.

On the other hand, although social insurance is an intrinsically egalitarian system, it involves a major shift from collective (state or corporate) to individual responsibility for health. This shift has two dimensions: financial responsibility, given that entitlement is based on individual contribution; and responsibility to maintain one's health, giving people a more proactive role in their health and life-style decisions. This reflects a changing perception of the role of the state in the health sector. Increasingly, the state is perceived to provide a safety net within a health insurance system; or to regulate independent insurance funds; rather than the principal health care financing institution. The state is expected to exercise some control over health funds and be involved in collection and allocation of revenue, mostly due to lack of a suitable alternative. In practice, control over funds might be difficult if these are autonomous.

Although many people are familiar with the basic principles of a universal insurance system, there are many misunderstandings as to what this entails in practice. Compulsory health insurance is neither clearly distinguished from voluntary insurance nor some aspects of medical savings accounts. A key issue is that many people were unaware who would bear the cost of universal health insurance, or believed this would be solely the employer or the state. Insufficient understanding of the system often leads to unrealistic expectations (e.g. immediate rises in physicians’ income and quality of care), which could reduce the support for social insurance, once the full implications are clear.

These challenges have been recognised by Bulgarian experts, but rarely discussed in public forums or addressed in policies. The range of services in the basic benefits package, degree of choice, and mechanisms to counter user and provider hazard, have to be negotiated between main stakeholders - health professionals, public, insurers, the government - to prevent a fall in support for social insurance. Efforts to discard inherited control-and-command practices, such as consultations with stakeholders, better public information, and mobilisation of previously suppressed community initiatives, have been evident rarely in the health reform process.
Solidarity-based compulsory health insurance is considered by far the best financing option due to its perceived strengths. This model is widely accepted across socio-economic strata and by almost all health professionals. Politically, it appears the only feasible option in Bulgaria, as it reconciles the interests of users (essential treatment and lower out-of-pocket costs); health providers (improved remuneration, social status, and working conditions); and the state (increasing resources for health care). Lack of political will was seen as the main obstacle so far to social insurance, and its implementation in Bulgaria was seen as a preparatory step towards EU accession.

Social insurance is commonly perceived as an antidote to the existing tax-based model. From the individual’s point of view, a health insurance tax is similar to income tax - both are deducted at source and treatment is free at the point of use. Although income tax is progressive, while social insurance tax is a fixed percentage, in both cases net contribution increases with income, which is viewed as fair. However, social insurance is seen as ensuring accountable and flexible health care spending, better financial control and safeguarding collected revenue for health care against redirection to other sectors and misuse. Compulsory health insurance was universally viewed as more equitable and redistributive at societal level. It is also seen to provide a more reliable insurance against the risk of illness, compared to the existing model, as it ensures broad coverage and high-quality services. The perceived simplicity and transparency of the procedures for collection, handling, and allocation of revenue, is another factor for wide-spread support for insurance. Although the planned contribution level corresponds to what people in this study said they are willing to pay monthly for comprehensive insurance, and that such payment is considered legitimate - for the majority, it is rather unaffordable.

Paradoxically, it seems that those with better personal circumstances (younger, healthier, highly educated, urban residents, better off and those willing to pay for health care in general) prefer to pay regular insurance contributions, rather than fees for each episode of illness or opt for voluntary insurance, despite their lower risk of illness. This receptiveness to insurance based on risk-sharing might have been shaped by economic insecurity, widespread user payments, and increasingly unaffordable health services. Moreover, if the collecting institution is trustworthy, it is viewed as a means to save money in an inflation-prone environment, to spread payment over time, or to cover dependants. However, the rich may be unwilling to bear the costs of the universal insurance scheme if the benefits do not match expectations. The worse off, who could

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benefit most from social insurance, are less supportive of it, probably due to poor information and aversion to change.

This study found a strong preference for a national insurance system based on universal entitlement and risk sharing at societal level, suggesting a significant level of solidarity. Generally prevalent egalitarian values are reinforced by growing poverty and income inequalities, social insecurity and dissatisfaction with the health system. It also reflects support for public, but not necessarily state-dominated, health care financing solutions.

**Tax-based system**

The existing tax-based model for health financing gained the least support, although its underlying principles are similar to social insurance, and well understood. Severe underfunding of the health system in recent years has shaped the perception of the model as unsustainable and excessively bureaucratic. Insufficient budgets were often seen as a by-product of economic crisis, but also of the inherent features of the tax-based system. Some of the concerns expressed in relation to financing from general taxation are very similar to those related to social insurance: unsustainability in the face of economic collapse, weak tax collection, underreporting of income, unemployment, and tax evasion in a growing shadow economy. Problems specific to the tax-based model are the dependence on changing political priorities, fears for misuse of funds not earmarked for health care, weak accountability and overcentralised governance (in the Ministry of Health) with a lack of democratic control over the budget handling process.

Still, a sizeable share supported the existing system, while demanding an increase in the health budget. Public acceptance of a tax-based system seems to result from tradition and resistance to change, as well as lack of trust in the feasibility of radical financing reform. Among those who are undecided about health insurance there is potential to increase support through effective public information; given the familiarity with income tax, similarly egalitarian core values, and the provision of guarantees on the use of funds. Another emerging view favours a “combined” system, with the state financing capital investment, emergency care and research institutions. Strong state participation, through budgetary subsidies, is viewed to be necessary during transition.

The acceptability of the existing system is so low that it is rarely recognised that measures to improve transparency, budgetary control and management, and to introduce new provider payment mechanisms, can be implemented within the existing institutional
framework. Such policies are seen as possible only under a social insurance system and, as shown by the reforms in 1989-1997, it proved impossible to achieve consensus for reform within the tax-based model, or to provide incentives for change among key stakeholders and the public.

Voluntary insurance

Voluntary insurance appears to have a niche in Bulgaria, mainly to cover a range of elective services. It is unlikely to assume a major role due to the limited client base and low purchasing power, so that insurance premiums are likely to be unaffordable for most people. Voluntary insurance gained less support than social insurance, but was still considered far more acceptable than out-of-pocket payment. Inadequate legislation, fears of inflation, insufficient information and lack of confidence in private insurers were seen as the main constraints to expansion of private insurance. Again, the better off tend to favour voluntary insurance.

On the positive side, voluntary insurance could have a role for "luxury" services; for clinical services not covered by compulsory insurance; and for people able and willing to opt for supplementary cover on top of social insurance. Potentially it may mobilise resources, otherwise inaccessible (not spent, or spent informally) from high-income or informally employed sections and reduce the burden on the public sector. It could be promoted through diversifying the insurance packages on offer, and tax concessions, although in other countries, tax relief on contributions has been shown to have an adverse net effect on government revenue\(^{219}\). Voluntary for-profit insurance is likely to be sustainable, as premiums are risk-adjusted.

People are more familiar with voluntary insurance than with social insurance, due to a long tradition of life, accident and car insurance in Bulgaria. The absence of third party insurance and inability to pay out-of-pocket has been a major barrier to private sector expansion. A private sector based on out-of-pocket payment has a long tradition in Bulgaria, existing before 1944, and partially in the mid-1970s, and was re-introduced after 1989 in line with macro-economic liberalisation. Support for voluntary insurance, and to some extent for direct payments, indicates a preference for diversification of financing options available to the user. At the same time, declining quality and lack of choice in the officially free public sector have forced people to seek insurance cover, allowing convenient access to the more responsive private service.
Despite these potential benefits, voluntary insurance could create a two-tier service and reduce equity. Despite the predominant egalitarian values, this possibility did not face significant opposition, as long as essential (non-luxury) services are guaranteed for all, including the rich. However, retrospective reimbursement of insurance claims may be problematic during transition due to inflation and weak administrative capacity. Fee-for-service payment of providers in combination with reimbursement by a third party insurer may lead to overutilisation, overtreatment and cost escalation, requiring mechanisms for cost-containment. A clear governmental policy and legislation is needed to control standards, competitive practices, and promote investment.

**Out-of-pocket payments**

Out-of-pocket payments in the public sector, both formal and informal, were seen as a less viable option for health care financing mainly due to inherited expectations for free health care, and a lack of tangible impact on the quality of care as a result of such payments. Out-of-pocket payments for pharmaceuticals constitute a major share of treatment costs in Bulgaria, and in their present form are regressive. The main objections to user fees are that they are inequitable; deter access; and shift the burden towards older, poorer and more disadvantaged groups who are more likely to be ill; while precise targeting of exemptions is complex or susceptible to corruption. The economic crisis leading to falling health budgets has required cost-sharing, but has also reduced the population’s ability to pay. In many cases, legal co-payments add to, rather than replace, informal transactions that are largely culturally-determined. Such costs, in addition to social insurance contributions, will increase significantly the burden on users. Out-of-pocket payments are seen to cover funding gaps rather than increase total resources, and threaten access to services without providing a lasting solution.

Informal payments appear to have had a twofold effect on the acceptability of compulsory health insurance. Chaotic spread of informal and semi-formal payments and the lack of clear rules, have increased support for a national health insurance system backed by the state, among the public and health professionals. However, the first phase of implementation of social insurance in Bulgaria involves small co-payments, seen as necessary to ensure sustainability. Public resistance to co-payments or non-compliance could jeopardise the social insurance system if the policy is imposed without consultations. Wide-spread out-of-pocket payments have led to increased cost-
consciousness of the population, and a perception that 'free health care' is associated with
the past. At the same time, given the unaffordability of direct payment and the absence
of other alternatives for individuals to provide for themselves, universal social insurance
has become the most acceptable option. Since 1989 informal payments are more
frequently requested and less affordable. People strongly object to the two tier service
created in the public sector where poorer people have restricted access to elite state
facilities, expensive pharmaceuticals and better specialists. Co-payments are viewed as
only a temporary measure in transition to a fully operational health insurance system that
would have no user payments.

Nevertheless, the preference for direct one-off charges or informal payments with
immediate impact on service should not be underestimated. Direct community
participation has roots in the national tradition, not entirely suppressed by the socialist
system. Direct payments often are seen as more transparent than social insurance,
although their subsequent use is less so. They are convenient for people with irregular or
high incomes, or the healthy, as they reflect closely utilisation. Fee-for-service payments
in the private sector are deemed acceptable as they reflect individual choice.

Given the expectation that social insurance will eliminate most user payments, and the
inherited attitudes from the previously free health system, a policy of user co-payments
has to be underpinned by careful preparation. New legislation and clear administrative
guidelines on how compulsory and voluntary insurance will coexist with co-payment, are
needed.

It was unanimously agreed that if co-payments are to be introduced in state facilities,
certain groups should be exempted or subsidised. While the current system of ad hoc
charging and unofficial payments does not allow targeting, official cost-sharing should
be based on explicit and publicly supported exemptions. There was widespread
agreement that children, the disabled, socially disadvantaged people and the elderly
should be exempt from direct payment, and possibly from other contributions. Other
groups in need of support were families with young children, sole breadwinners, carers
for the disabled, students, the unemployed, and people living alone. Support for such a
wide range of groups reflects extensive poverty and vulnerability in Bulgaria. This
research found a broadly existing social consensus about which groups should be granted
exemptions, but prioritising them could pose a significant challenge.
The introduction of co-payments in the public sector, to supplement a national insurance system, is likely to be politically controversial. In the 1990s, user payments of different sorts have expanded gradually and acquired somewhat semi-official status, although these have not been explicitly part of the reform debate. There is some support for destigmatised, transparent and accountable revenue to be collected at health facilities, with visible benefits to the patient, e.g. paying for basic supplies. Some direct benefit for staff accompanied by stricter control of abuse, and a gradual change in the ‘culture of gifts’ may be essential in implementing co-payments, otherwise they might increase charges paid by ordinary users. Introduction of progressive cost-sharing for pharmaceuticals in particular, using flexible payment options and subsidies for essential drugs, may be protective in the face of liberalised retail prices that are largely thought to be unaffordable.

The incentives for informal exchanges are unlikely to be eliminated altogether by the social insurance system. Those payments that reflect tradition will continue to burden the users and interfere with the operation of the new financing systems in the short run. It is possible that some out-of-pocket payments could be channelled into the system through charitable giving or targeted investment, perhaps with tax incentives.

**Filling in the details**

This thesis provides information that can inform choices on timing, method of payment and handling of revenue, and the type of institutions involved, that are acceptable to the population. Several important questions arise.

**Compulsory or optional membership?**

It is widely agreed that a national health insurance system based on solidarity should cover the whole population, including the rich, due to difficulties in assessing income, and the need to maximise risk-sharing. However, universal coverage is seen as an opportunity rather than an obligation. Physicians, in particular, tended to support optional membership of a social insurance system. Compulsory membership, despite being desirable, was considered by many to be incompatible with a democratic society, and difficult to enforce.
Who should own / regulate the fund?

The inherited near monopoly of a single public institution collecting and managing health insurance contributions, and commissioning services, did not gain support. There was strong support, particularly among patients, for public ownership of health insurance funds. Often, the state was seen as the only institution able to collect funds. However, a degree of autonomy was also desired to improve technical capacity and reduce political pressures, provided there is sufficient accountability. There was also a marked preference for voluntary insurance to be publicly owned, specifically by the state.

Although many respondents envisaged the Ministry of Health or central government adopting a regulatory role (to collect, allocate or control funds), there was a reluctance to entrust it with full control of the health insurance scheme. Again, when discussing the finer details of compulsory health insurance, notably whether the health insurance system will be a fully independent entity, or a section within the Ministry of Health or municipalities, it was re-iterated that, regardless of design, the key principles of health financing should be transparency, accountability, and trust.

What can the funds be used for?

It was considered particularly important that health insurance revenue be used exclusively for health care, while other social needs are financed from external sources, illustrating an awareness of the main principles of a social insurance system. There was also strong support for use of revenue to finance national health programmes. Financing basic services and pharmaceuticals is seen as a primary aim, while pay increases and capital investment were viewed to be feasible only if there is a surplus of resources. There are divergent views on whether health insurance funds should subsidise pharmaceuticals for the poor, or whether this should be covered by social funds.

One or multiple funds?

A central question facing the creation of any social insurance system is whether to have one or multiple funds. A significant majority of physicians favoured creation of a single national health insurance fund, but some suggested the creation of multiple, geographically defined funds when the system matures. National funds were viewed as providing financial safeguards and ensuring regional cross-subsidisation. Significantly, enterprise-based funds were unpopular. Among the public, opinions were divided on
whether a single state health insurance fund or a more pluralistic system of multiple, competing funds, is more suitable for Bulgaria. Arguably, a national public scheme, with a single insurer collecting funds and commissioning services, is closer to the former monopoly model and so appears more feasible and acceptable at this stage than decentralised funds, or small-scale community insurance schemes. Community financing requires a high degree of grassroots community mobilisation, high social cohesion and developed community networks. Its development could be hampered by ageing, depopulation and low resources (labour or income) in rural areas, as well as large disparities across regions. It might be feasible in the long run, given advancing land privatisation, rural regeneration projects, and financial and technical support for such schemes.

Methods of payment

There was a strong preference for indirect methods of payment for health care, with the involvement of an intermediary, such as insurance fund or health facility administration. The common view is that payments should be regulated by strict rules and handled by non-medical staff, thus minimising physicians’ workload and potential for corruption. A third party institution was seen as essential in handling risk, especially in case of catastrophic illness where costs to the user would be unaffordable. Where a preference for direct payment to staff was expressed (payments in the private sector, user fees, or informal payments), it was because of simplicity, retention of funds locally, and a perceived direct impact on the quality of treatment.

Conclusion

In broad terms, the reform dilemma in the 1990s has been whether the Bulgarian health care system should adopt the Beveridge or Bismarckian model of health financing. Although the Bismarckian model played some role in Bulgaria in the 1920s and 1930s, it was far less than in Poland or Czechoslovakia. Since 1945, the Soviet-style “Semashko” model funded through general taxation, with a state monopoly in health care financing and provision has been dominant. This model is closer to the Beveridge model, although less accountable and flexible.

In the 1990s, the Bismarck model was widely favoured by the Bulgarian government, providers’ associations and donors. It was considered to avoid the disadvantages of the
tax-based model, while maintaining equity. Furthermore, all Central and Eastern European countries and many countries of the Former Soviet Union are in a process of transition from tax-based to social insurance financing. The benefits of a health insurance system in attracting the support of the population are seen as raising health spending, transparency, solidarity, and improved relationships with patients.

Table 12.1 presents an assessment of the applicability of several methods for health financing in the circumstances of Bulgaria, as perceived by the population. Compulsory health insurance is seen as the best option in terms of potential sustainability, equity and acceptability by all stakeholders. The rationale for compulsory insurance lies partly in its resemblance to the existing tax-based model and its potential to guarantee universal coverage. Although social insurance was promoted as a model protecting the interests of vulnerable groups, in this study, it was the better off who were most enthusiastic. Those who have suffered most from transition are more pessimistic. Interestingly, despite its popularity, social insurance is seen as not perfectly compatible with values and traditions, and is unfamiliar. Conversely, out-of-pocket payments and tax-based models are familiar and have a long tradition, but are seen as unsustainable, inequitable, and thus, unacceptable.

Table 12.1. Applicability of health care financing methods in the circumstances of Bulgaria by a range of criteria (based on respondent’s views)

<table>
<thead>
<tr>
<th>Method</th>
<th>Sustainability</th>
<th>Equity</th>
<th>Acceptability (public, professional, political)</th>
<th>Compatibility with values (solidarity etc.)</th>
<th>Familiarity</th>
<th>Compatibility with tradition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory insurance</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Voluntary insurance</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Out-of-pocket payments</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Tax-based model</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

This may indicate willingness to support radical reform. Acceptance of new financing options based on their perceived benefits (transparency, accountability) and negative personal experience with the current model may raise expectations unsustainably. The observation that people appear more satisfied with models with which they are less familiar (social insurance), and disillusioned with more familiar options (tax-based
financing and out-of-pocket payment), is seen elsewhere. The wide range of informal coping strategies commonly undertaken by patients indicate a lack of trust in the existing financing model and suggest that a new system has to rebuild confidence in the public health care system.

The strong preference for public systems such as tax and social insurance and the low acceptability of voluntary insurance and out-of-pocket payments reflects persisting collective values. Nevertheless, it is now widely accepted that the population should contribute directly to the cost of their treatment, through health insurance contributions, direct payments, or even donations. When studying the value systems and beliefs, there are contradictions, due to the dynamic change during transition and different speed of change among different groups. This makes it difficult to establish what constitutes a 'dominant value set' and draw conclusions on whether a model is compatible with it.

A more open public discourse would be useful to clarify differences between methods and their practical implementation. This requires a shift from a prescriptive reform language, imposing ready-made "expert" solutions, or sensationalist mass-media accounts, to coherent and accessible analysis of financing options, creating a "more informed environment". A forum for public debate should involve not only political parties and professional organisations, but also NGOs and patient groups. The media could be used more effectively to encourage debate and to reach marginalised groups. Although it appears that many people have a good general understanding of the social insurance system, an insufficiently clear explanation of its complicated rules and exemptions could undermine support and compliance among the population.

**Contribution to the wider literature**

This research provides an example of how one can examine in-depth the system of health care financing in a country. It uses a framework incorporating a *population perspective* (health and illness behaviour; ability and willingness of users to pay for health care; values, beliefs and public preferences); and *contextual factors* (history, economy, demography, and starting conditions in the health care system) (Figure 12.1). Increasing differences between the countries in Central and Eastern Europe suggest that reform strategies cannot be transplanted mechanically and health financing reform should be informed by a comprehensive country-specific analysis. An important lesson from this
study is that it is essential that a generic health financing model is adapted to the circumstances of a country.

Figure 12.1. Framework for analysis of health financing methods

This research provides new empirical information and offers an insight into the challenges facing those who seek to restructure health care financing in Central and Eastern Europe, offering directions for comparative analysis. It seeks to inform decision-makers on the options for financing a health system and their applicability in Bulgaria, and prepare the ground for further research and public debate.

This research assumes public support for health care reform to be essential for its success. In Bulgaria, understanding of attitudes and beliefs among the population has been perceived as secondary to technical implementation of reform. Given the sizeable informal sector, and the inefficiency of the tax collection system in Bulgaria, popular compliance with a given financing scheme is likely to be crucial for its sustainability. Although elections are now free, there is little de facto accountability to the electorate, and public participation in the policy-making process remains limited.

This study provides an example of how these different dimensions may be studied, triangulating quantitative and qualitative research methods and data sources. On most issues there is a good match between qualitative and quantitative evidence, demonstrating how data collected through different methods can validate and supplement
each other. However, the different research methods employed inevitably lead to some contradictions that need to be explored further.

Individually, the chapters provide important new information on health and health-seeking behaviour, in a post-communist country, especially insights on willingness and ability to pay given the previous, formally, free-of-charge system. This could be useful for other transition economies in Central and Eastern Europe, given their common inheritance and similar direction of reform.

Attitudes to financing methods were assessed by means of two approaches: indirectly, by establishing preferences for specific procedures associated with each financing model, and directly, by asking respondents to choose between vignettes describing different financing models. Although attitudes and practice may not always coincide, the study may serve as a guide that could be used in implementing current reforms.

The research provides systematic analysis and insights on the incidence and nature of informal payments in the health sector in Bulgaria, the first time this has been explored in a representative survey. These were less than expected, very complex, organised in a chaotic, although adaptive, system, and not especially regressive. The study developed the concept of informal exchanges, suggested definitions and criteria for informal payments that could be used in international comparisons; and suggested a methodological approach for their investigation, combining quantitative and qualitative data, and a range of direct and indirect investigative techniques. Household health care expenditures, and willingness and ability to pay, remain relatively unexplored in Central and Eastern Europe.

The survey also demonstrated the use of ‘self-assessed financial situation’ as a proxy (and possibly more valid) measure for income, given underreporting of income in transition economies. Health insurance based on income-related contributions does not take into account non-monetary income, assets, social status, privileges, and access to social networks, which could be predictive of illness and ability to pay. Despite some methodological limitations generic to such studies, such as lack of validation; difficulties in measuring income; and incidence of illness; this work provides relevant new information.
Next steps

This research seeks to inform discussion on health care financing in Bulgaria and to place this debate more firmly on the policy agenda. It is timely given the implementation of the health insurance system from mid-2000. This research, by its design, provides a broad picture of factors likely to shape public and professional responses to change. The study also collected baseline data on phenomena that are insufficiently understood in Bulgaria, such as informal payments and willingness to pay. Undertaking empirical research of this scale, given the scarcity of comparable studies in Bulgaria, proved to be a huge task, consuming significant time and resources. The results of this research will be disseminated among policy-makers involved in health sector reform in Bulgaria, academic research centres, and among donors and technical advisers by means of publication of papers, seminars, and personal communication, ideally to inform directly specific health policy decisions.

The lessons from this research could be useful in two ways:

I. This study could provide an agenda for future research in Bulgaria that will examine particular issues in more detail. Given the changing context of health financing reform in Bulgaria, several broad areas for further research could be seen as a logical continuation of this study:

- It will be possible to trace the impact of reform on patterns of illness behaviour and use of different levels of the health system using the 1997 study as a baseline. The same study design, incorporating qualitative and quantitative research, is applicable, with the instruments refined taking into account experience from this and similar studies.

- Comprehensive analysis of population health care expenditure, with its formal and informal components, will be important to set levels of social insurance contributions and co-payments. Assessing expenditure in relation to household income is essential to determine affordability and fine-tune exemptions. Studies attempting to measure income and health expenditure, including this one, have faced significant methodological difficulties. It will be necessary to have a continuing dialogue with those responsible for widely used instruments, such as those used in the World Bank Living Standards Measurement Studies, and household panels maintained by the National Statistical Institute in Bulgaria.
• Another direction for research is to study the long-term sustainability of the new system, given the expected burden of disease and level of contributions, using modelling techniques. This research has emphasised the importance of detailed projections and future work should link with the 'Financial and Economic Analyses and Prognoses' department at the National Health Insurance Fund.

• Continuing in-depth analysis would help track changes in perspectives of key interest groups, as well as evolving public, professional and political views. This could be done using methodology and baseline data from this study. Data should be collected more extensively among rural populations and marginalised groups (e.g. the Roma).

II. The research, or some of its elements, can be replicated in other countries that are reforming their health financing systems amidst far-reaching socio-economic changes. This is feasible given the similarity in health financing reforms across Central and Eastern Europe and Former Soviet Union. This study has proved to be relevant directly to the work of Oxfam GB (for whom the author now works) in their Former Soviet Union, Eastern Europe and Middle East region, in several ways:

• Dissemination of results from this study has contributed significantly to an emerging interest, within Oxfam, in examining the implications of social insurance for access to basic services in countries with previously extensive state financing and provision of health care (Eastern Europe, Former Soviet Union, to some extent - Yemen)

• It has improved the conceptual understanding of health financing, refining the approach to an extensive community co-managed insurance programme implemented by Oxfam in the Transcaucasus since 1995.

• Theoretical and methodological knowledge gained in this research has contributed to improving the design of a major cost-sharing study in Yemen to be finalised by the end of 2000; and has supported the process of developing an agreed Oxfam advocacy platform on cost-recovery.

• Methodology from the Bulgarian research was replicated in a proposal for a collaborative project between Oxfam and LSHTM on 'Improving access to basic health care by the poor in Armenia', submitted for funding in 2000. In it, professional researchers and local NGOs will monitor population access to essential health care and pharmaceuticals and provider behaviour through small panel survey and in-depth interviews.
Further Oxfam research and advocacy on access to health care in relation to macroeconomic policies and debt relief are planned in 2000-01, in the framework of Poverty Reduction Strategies formulation (PRSP) being developed in a number of countries throughout the region (Albania, Yemen, the Caucasus) by the World Bank, government and civil society representatives.
APPENDICES
APPENDIX 1. BULGARIA: COUNTRY PROFILE

Geographical conditions and geopolitics of Bulgaria

This chapter seeks to place the research undertaken in the context of Bulgaria. Each country has a unique history and geography, giving rise to a particular set of norms, values, economic and political structures. A health system does not exist in isolation and, inevitably, is influenced by these factors, which affect what is or is not possible or acceptable.

Bulgaria is situated in south-east Europe, on the Balkan Peninsula and has an area of 110,994 sq. km (42,855 sq. miles). It is bordered by Romania and the Danube river to the north, Serbia and Macedonia to the west, Turkey to the south-east, Greece to the south and the Former Soviet Union (FSU) to the east across the Black Sea. Historically, the geographical location of Bulgaria has been considered strategic for the balance of power in the Balkans. At the end of the 19th century the collision of geopolitical interests between several Western European nations and Russia led to their military and political involvement in Bulgaria (the “Eastern Question”). These external influences had important consequences for the establishment of the modern Bulgarian state. Such geographical proximity to Asia and the Former Soviet Union (FSU) has had implications for the national identity. Nowadays, the strategic location of Bulgaria near the Turkish Straits determines the political role of Bulgaria in the Balkan peninsula. Its control over key land routes, from Europe to the Middle East and Asia, has equally significant economic consequences. Among these have been potential for trade relations with Europe, as well as the Middle East, development of trade and railway routes and fuel pipelines connecting Europe and Asia. The Black Sea access allowed Bulgaria recently to join the Black Sea Economic Zone. However, the advantages of its key geographical location have not been fully exploited.

Three quarters of Bulgaria is covered by mountains, Rila Mountain (2,925m /9,596 ft) being the highest in the Balkans. While these geographical conditions have not been favourable to the expansion of cultivated land, ski and hot spring resorts have provided opportunities for the tourist industry. Despite this potential, most of the mountainous regions, as well as the resorts along the Black Sea coast, are run down, due to poor maintenance and inadequate investment. Lack of legislation on foreign investment in general, and ownership of land in particular, have slowed down capital investment.

Sofia is the capital and largest city, containing an eighth of the population. The major cities are Plovdiv, Pleven, Russe (Danube port), Burgas and Varna (Black Sea ports). Bulgaria inherited an extensive road system 36,922 km (22,942 ml) (1992), providing accessibility to most areas of the country. There are three major ports and one major international airport.

Bulgaria is divided into twenty-eight administrative districts and 256 municipalities. The district administration is centrally appointed, while the municipalities are governed by elected councils and a mayor. Several ministries, including the Ministry of Internal Affairs, the Ministry of Finance and the Ministry of Health, have 28 district offices. With the Local Self-Government and Local Administration Act (1991), the municipalities were authorised to collect taxes, allocate their budgets according to their own priorities, and to finance and provide health care, social services, education and other local services.
Figure A1-1. Map of Europe
Figure A1-2. Map of Bulgaria
Brief historical overview prior to 1989

The Bulgarian state was established in 681, by Khan Asparuh. The Bulgarians are descendants of the Bulgars (nomadic people from Central Asia, who migrated to Europe in the 6th century AD) and of the local Slav population. In the 9th century AD, Eastern Orthodox Christianity was adopted as a state religion. Under Tsar Simeon (893-927) Bulgaria became a leading power and the third biggest state in Europe. During his reign, the first proto-Slavic (Cyrillic) alphabet was invented and popularised by the Greek Slavs Konstantin and Kiril. This process was supported by the Bulgarian tsars in order to facilitate the consolidation of the Bulgarian nation and to establish a church independent of Byzantium. Between 1018 and 1185 Bulgaria was conquered by Byzantium and, subsequently, the Second Bulgarian Kingdom was established.

In 1396, Bulgaria was conquered by the Ottoman Empire and occupied for five centuries, until 1878. During that time the Bulgarian nationality, language and religion was threatened by extinction and thousands of Bulgarians were massacred by Turks, in 1876, in order to suppress popular revolts. Bulgaria was liberated with the help of the Russian Tsar Alexander II’s army after the Crimean wars. The country became a sovereign kingdom in 1908. During the period of Ottoman rule, many Bulgarian intellectuals were educated in Russia and maintained close contact with the Russian intelligentsia who represented a more liberal way of thinking. The Russian empire was a source of hope and progress. Despite the pro-German orientation of the Bulgarian elite and monarchy, Russia was popularly regarded as an ally. Even during the totalitarian regime supported by Russia, policy-makers and ordinary people still considered it a natural partner for ensuring economic growth and the political security of Bulgaria. This partly explains the total compliance of Bulgaria to the Soviet model of social and economic organisation. The attachment to Russia was exploited by left-wing political parties and leaders, even after 1989, for populist aims.

Bulgaria was a German ally during both the First and Second World Wars. In 1917, the left-wing Agrarian party came to power and, in 1919, introduced land reforms with redistributive effects. It was the only peasant party ever to rule in Europe but was overthrown in 1923 by a fascist coup and authoritarian pro-monarchist government was established in 1934 under King Boris III. The communist party drew supporters mainly among the industrial working class, who were disappointed by the alliance with Germany, loss of land during the Balkan wars, and fascist crimes. Despite being a German ally in the Second World War, Bulgaria protected its Jewish population of 50,000 from the Holocaust. In 1944, the Red Army invaded German-occupied Bulgaria.

In 1946 the Bulgarian monarchy was abolished and, in 1947, a new soviet model constitution was imposed. The country was governed by a broad communist dominated alliance ('Fatherland front'). Industry was nationalised and land aggregated in agricultural co-operatives. During the 1950s, hard-line Stalinist methods were used. There was systematic repression of the elite and intelligentsia, leading to the death or imprisonment of a majority of the rich proprietors, intellectuals, artists and land owners opposed to the nationalisation of the land. Even physicians with large private practices were under suspicion. In 1954 Todor Zhivkov assumed power and remained head of state for 36 years. Uniquely among the occupied countries of Eastern Europe, Bulgaria applied for republican status within the USSR. Strict adherence of Bulgaria to the economic and political conditions set by USSR led to almost total isolation. Opposition
was repressed and private proprietorship eradicated more successfully than in other Central European countries, except Albania. In the 1980s, the established trade balance in the Council for Mutual Economic Assistance (CMEA) became unsustainable. The state started to lose control over prices and wages, and energy imports from the FSU became significantly more costly. In response to a changing political climate, specifically the USSR’s introduction of Perestroika in 1985-89, the communist party initiated evolutionary reforms to adjust the planned economy to the world economy.

Another factor that discredited the government was the forceful assimilation of the Bulgaro-muslim ethnic minority in 1984-5, which provoked international protests. These policies involved forceful adoption of Bulgarian names and curtailing civil liberties, such as banning public use of the Turkish language and closure of newspapers targeting the ethnic Turks. There is some contested evidence that Bulgaro-muslims were killed in the campaign. There were isolated terrorist bomb attacks, but beyond that the evidence of violence has remained anecdotal. Historically, some ethnic tensions have long existed in Bulgaria, but they have not been of the scale seen in other Balkan states. There were several waves of emigration. The Turkish population started leaving the country after the liberation from the Ottoman empire in 1878. Subsequently some 340,000 emigrated between 1912 and 1936, joined by another 200,000 in 1944-1980 and about 400,000 in 1989. Since 1990, most ethnic Turks who emigrated in 1989 have returned and become actively involved in political dialogue through their representative party, the Movement for Rights and Freedoms.

**Democratic reforms 1989-1997: success and failure**

The start of democratic transition in Bulgaria was officially proclaimed on 9-10 November 1989, with widespread political support. In December 1989, the right to free opposition, free speech and a free press was established, and the power of the Bulgarian Socialist party curtailed. The Union of Democratic Forces, comprising 14 opposition groups, was established in December 1989. In 1991, Todor Zhivkov was indicted on charges of corruption and abuse of power. Some commentators argue that what happened in Bulgaria was merely a coup, with a change of leadership within the ruling party encouraged by the Soviet Perestroika of 1985. Indeed, there was less evidence of popularly supported political movements, labour union activities or visible dissident groups, than in other Central and Eastern European countries.

A group of economic and political factors facilitated the fall of communism. Despite its publicised efforts, the government failed to reform the economy. Living conditions rapidly deteriorated in the 1980s. Trust in the former regime was undermined by cover-up of the Chernobyl catastrophe and chemical pollution of the town of Russe from a chemical plant across the Romanian border. These were used by a ‘green movement’ as a focus of popular discontent. The intelligentsia became more active due to influences by dissident movement and achievements elsewhere. In the summer of 1989, there was also the biggest wave of emigration of Bulgaro-muslims from agricultural areas to Turkey, with serious consequences for the year’s harvest. In addition, several political scandals occurred in the 1980s caused by revelations of the circumstances surrounding the murder in London of Georgi Markov, and the attempt to murder Vladimir Kostovm.

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m Markov and Kostov were journalists, working in the West, who exposed the Bulgarian regime. Markov was killed by a poisoned shot from an umbrella, in London, 1977
and scandals related to the lavish life-styles of party members and their families. All these factors combined to produce the population's vocal support for democratic reforms.

Important democratic changes were initiated, including separation of legislative and executive powers, creation of a functioning multiparty system and free elections. The Bulgarian Communist Party lost its control over political, social and state institutions, the Ministry of Interior's secret police department, trade unions and other communist-dominated organisations. Unfortunately the reforms and its promoters were slow to reach rural and small town populations, which was evident in the voting behaviour at the first two elections for a National Assembly (Parliament). Lack of a parliamentary majority prevented the Union of Democratic Forces from enacting legislation which would have underpinned a real reform process, health reform being a clear example. It became increasingly difficult to attract voters who were further aggravated by the deepening economic crisis.

With one of its first decrees after 1989, the new government re-legalised private farming and gradually lifted price controls (April 1990). The price of food increased dramatically and food shortages became common. In January 1991, prices of most goods were liberalised. The process of privatisation was initiated and many small businesses, especially in tourism, services and retailing, were legalised. In March 1990, strikes were legalised with the exception of health, military personnel and several other sectors. The stabilisation and adjustment programme of the government was supported by a loan of $250 million from the World Bank, agreed in August 1991 as a start of foreign assistance for reforms.

Several socialist governments, stemming from the new socialist elite, succeeded each other before the former Communist Party (renamed the Socialist Party), regained power. It won the majority of seats in the General National Assembly in the first free elections held in June 1990, as a result of better resources, experience and strength in rural areas, based on a network of local party officials. In November 1990, after mass student strikes in Sofia and a boycott of the Parliament by opposition deputies, the socialist government resigned. The democratic opposition leader Dr Zhelyu Zhelev was elected president by the National Assembly in 1990 and re-elected in a general election in 1992.

In July 1991, a new Constitution was adopted, replacing the communist constitution and reaffirming Bulgaria's determination to be a modern parliamentary democracy. The country was defined as a parliamentary republic, legislative and executive power being separated legally. The president is head of state and commander in chief of the armed forces, elected by direct vote for a five-year term of office. The legislative power is exercised by the unicameral General National Assembly (Parliament) which has 240 members, elected through proportional representation, for a four-year term. The threshold for parties to achieve representation in the Parliament is 4% of the national vote.

After a number of short-lived Union of Democratic Forces (UDF) and 'expert' governments, the inability to achieve consensus on the direction of reform led to the Bulgarian Socialist Party winning the majority of seats in the National Assembly in December 1994. The scale of their victory was most notable in the rural areas and small towns. The restoration to power of the ex-communist party could be explained by disappointment with the slow pace of economic reforms and low living standards, conservative and communist-led local administration and the lack of an entrepreneurial middle class involved in small businesses. The new image of the Bulgarian Socialist Party with their social-democratic agenda for market reforms, combined with measures
for social protection, was appealing in an atmosphere of economic decline, insecurity and pessimistic economic forecasts. These developments were similar to the “string of victories for revamped communist parties”, which occurred across Central and Eastern Europe after 1992\textsuperscript{25}.

Box A1-1. Democratic reforms in Bulgaria 1989-1998: Key events

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Nov 1989</td>
<td>Formal end of the communist regime</td>
</tr>
<tr>
<td>Nov-Dec 1989</td>
<td>Union of Democratic Forces (UDF) established, led by Zhelyu Zhelev</td>
</tr>
<tr>
<td>Early 1990</td>
<td>Round table discussions on reform priorities: political freedoms,</td>
</tr>
<tr>
<td>June 1990</td>
<td>Bulgarian Socialist Party won first free elections for General National</td>
</tr>
<tr>
<td>August 1990</td>
<td>UDF leader Zhelyu Zhelev elected president by the National Assembly</td>
</tr>
<tr>
<td>Early 1991</td>
<td>Socialist government forced to resign after mass strikes, replaced by</td>
</tr>
<tr>
<td>June 1991</td>
<td>End of Council for Mutual Economic Assistance</td>
</tr>
<tr>
<td>July 1991</td>
<td>Democratic Constitution adopted</td>
</tr>
<tr>
<td>Oct 1991</td>
<td>Parliamentary elections won by the Union of Democratic Forces</td>
</tr>
<tr>
<td>1992</td>
<td>Zhelyu Zhelev elected president in first direct presidential elections</td>
</tr>
<tr>
<td>May 1992</td>
<td>Bulgaria enters the Council of Europe</td>
</tr>
<tr>
<td>1992-94</td>
<td>Non-party cabinet of “experts” voted in by the Parliament</td>
</tr>
<tr>
<td>December 1994</td>
<td>Bulgarian Socialist Party (BSP) won early parliamentary elections</td>
</tr>
<tr>
<td>1994</td>
<td>Bulgaria joined NATO’s ‘Partnership for peace’</td>
</tr>
<tr>
<td>1995</td>
<td>Bulgaria applied for European Union membership</td>
</tr>
<tr>
<td>1996</td>
<td>Petar Stoyanov (UDF) elected president, stepped into office in 1997</td>
</tr>
<tr>
<td>1996</td>
<td>Bulgaria joined the World Trade Organisation</td>
</tr>
<tr>
<td>Feb 1997</td>
<td>Socialist government collapsed following economic and political crisis</td>
</tr>
<tr>
<td>April 1997</td>
<td>Union of Democratic Forces won the majority at general elections</td>
</tr>
<tr>
<td>June 1997</td>
<td>Currency board introduced</td>
</tr>
<tr>
<td>1997</td>
<td>Government applied for NATO membership</td>
</tr>
<tr>
<td>1997-8</td>
<td>Comprehensive assistance programme agreed with the World Bank, the</td>
</tr>
<tr>
<td></td>
<td>IMF and the European Union</td>
</tr>
</tbody>
</table>

The government failed to fulfill its election promises and, in April 1997, the Union of Democratic Forces won the majority of seats in the Parliament. The current president, Petar Stoyanov, also a candidate of the Union of Democratic Forces stepped into office in 1997. The new government included strongly pro-reform politicians. In June 1997, a currency board was introduced, as a tool for enforcing fiscal discipline and tight control over government spending, restoring confidence in the lev, and avoiding hyperinflation. Another element of the programme was large-scale privatisation with the aim of boosting economic growth and profitability. Other government priorities included land reform, reform of the banking system, and the creation of a legal environment favouring foreign and domestic investors. Totalitarian mechanisms and structures have been dismantled successfully but the new democratic mechanisms are still in the process of construction.
In 1998, a three year loan of $800 million was agreed with the IMF, aiming at development of financial markets and reform of agriculture, the tax system, and social security. The fact that the government and the president were elected by a large majority vote, for the first time provided the consensus needed to introduce painful structural adjustment and currency stabilisation in Bulgaria. Public consensus and commitment to radical reform programme on behalf of Bulgaria, as well as international support, were considered paramount.

**Bulgarian economy: structure and trends**

**Economy (1944-1989): a brief overview**

During the five centuries of Ottoman domination, Bulgaria was held in a state of feudalism and relied mainly on agricultural production. Manufacturing, trade, and extraction of raw materials started to develop during the National Revival (Renaissance) movement at the beginning of the 19th century. This growth was a response to larger demand, not only locally but also promoted by the Ottoman Empire, in order to obtain higher tax revenues and to modernise the army. Later, trade contacts with Western Europe expanded, favoured by the convertibility of Ottoman currency. Manufacturing was based on a traditional guild system and independent artisans, which did not encourage industrial development.

In the post-liberation decade, Bulgaria remained predominantly an agricultural country. During 1878-1912 agriculture accounted for about three-quarters of gross output. The economy relied overwhelmingly on grain exports (70% of exports in 1911) and thus was susceptible to the fluctuation in international grain prices, falling demand and bad harvests. Between 1926 and 1930, tobacco exports grew in significance, replacing grain. Over-dependence on certain agricultural exports and trade partners (Germany in particular), for tobacco exports, greatly reduced flexibility.

The tradition of continuous state involvement in economic life began at this time. The state assumed a major role in promoting Bulgarian industry. Among protectionist measures implemented before 1914 were import tariffs and legislation to encourage private industry, such as tax exemptions and reduction in railway freight rates. Nevertheless a consistent programme was not developed. Partly as a result of this policy, Bulgarian industry showed a higher growth rate than other Balkan states. Large-scale manufacturing in Bulgaria increased by 13% per capita between 1904 and 1911 compared to 10% for Serbia and 5.3% for Romania. Yet fixed capital was insufficient and labour scarce and expensive. During the First World War (1915-1918) the state sought to mobilise the economy using policies such as price setting for authorised exports.

After the First World War, the state continued to play a dominant role in politics and the economy. The latter involved centralisation of decision-making, initiatives to promote growth, leadership but no actual investment or ownership. Public institutions, such as ministries and banks, established a leading role over private enterprises. In 1894, the Bulgarian government enacted the first formal industrial legislation in the Balkans and, in 1903, the first state bank for agricultural credit in the region was formed. Broad state control was exercised through an extensive state bureaucracy: its size doubled within several years after the First World War and state salaries accounted for 39% of 1930 budget expenditure. 17 of every 1,000 Bulgarians were state employees, a figure 4-5 times the Western European average. This expansion increased the potential for
corruption: by 1928, almost one-quarter of all Bulgarian crimes leading to convictions were committed by state or local officials.

The high growth rate of mechanised manufacturing during the 1920s was unsustainable and did not stimulate further industrialisation and capital growth. There was a lack of foreign investment, a small domestic market, small-scale production and a backward agriculturally-oriented economy. The world economic crisis of the 1930s led to economic stagnation in Bulgaria through a sharp decline in agricultural prices, economic isolation and lack of credit from Europe. Economic necessity led Bulgaria closer to the expanding German markets. By 1926-30 Germany was already receiving a quarter of all Bulgarian exports, another quarter going to the rest of Central and North-East Europe.

These contacts were mainly of an economic nature, not ideological. There were attempts in the 1930s to reduce state control over industry and liberalise the economy. Yet support from state institutions continued to be a determining factor for the success of private initiatives. State ownership of economic enterprises grew significantly.

The communist regime, established in Bulgaria 1944-1948, engaged in radical reform of all aspects of the economy, along the Soviet model. Most of the reforms were in disregard of national traditions. Collectivisation of agriculture was accomplished during 1948-1958, although more slowly than any other initiatives undertaken in 1944-47. While, in the beginning, collectivisation was performed through voluntary activities such as propaganda and economic incentives to give up land, in the 1950s there were more aggressive measures such as intimidation and police pressure on landowners. Relatively even land distribution, general poverty, backwardness, and a historical basis for cooperative forms of organisation facilitated the collectivisation process. By 1959, only 2% of the land was still in private hands, with 0.4% by 1972.

The tendency to aggregate land in large collective farms and in vertically integrated Agro-Industrial Complexes in the 1970s was radically different from the pattern of traditionally small plots of land, small-scale production and the few large estates before 1944. Massive nationalisation of the land in Bulgaria contrasted with Poland, where private ownership of plots of land was largely preserved.

Another shift in the Bulgarian economy after 1944, was the emphasis on industrial development as opposed to agriculture, against a background of a predominantly agricultural economy. The redirection of capital investment was followed by the workforce which migrated from the rural to urban areas, starting a process which is posing problems of rural depopulation. The smaller and ageing rural workforce has been increasingly under pressure to produce agricultural products for export and for internal consumption.

The gross national product of Bulgaria is estimated to have increased by an annual average of 4.4% between 1913-73, the highest growth registered among all European countries, whose average growth was 3% per year. Contrary to the official propaganda, the high growth had actually started earlier. In the period 1913-50, despite its predominantly agricultural economy, Bulgaria's GNP grew by an annual average of 2.7%, or almost double the European average of 1.4%. These estimates, however, suffer from methodological problems among which are contradictory definitions of GNP in Bulgaria and in the West and inaccuracies in the national accounts of Bulgaria. There was general impoverishment after the Second World War, which greatly reduced the GNP of Bulgaria, but the continued industrial growth since the 1950s merely perpetuates a tendency started much earlier.
Manufacturing industry was fully nationalised in December 1947. The Soviet example was followed more closely than in any of the other Central and Eastern European countries. Large-scale investment and workforce flows were directed towards heavy industry. A system of central planning of outputs and inputs was established. As a result of these policies, the share of industry in the net material product had increased from 23% to 48% in the period 1948-60, while the share of agriculture fell from 59% to 27%\textsuperscript{125}. In terms of structure, the shares of food processing, textile and other consumer products declined and the emphasis was placed on heavy industry: machinery, metallurgy, electronics and chemicals. By 1980, these accounted for 36% of industrial production, compared with 5% in 1939 and 17% in 1952. In 1960-1980, production of machine building, electronics, chemicals and pharmaceuticals increased and was directed towards export. In response to this, labour flows were redirected towards industry and, in the 1980s, the total population involved in agriculture was only slightly above 20%, in 1948 it was estimated at 80%. This represented a major structural reform.

The share of overall investment in agriculture almost doubled between 1950 and 1960 as a result of an investment wave at the end of collectivisation, to reach the highest level in Central and Eastern Europe, but then declined to the original level by 1975. Despite the ideologically guided policies, the importance of agricultural production for local consumption and for export remained strong during the communist regime. In 1956-1970, crop and animal production grew at an annual average of 4.1% per capita, a higher rate than that achieved anywhere else in Eastern Europe. Since the 1960s, there has been a shift away from cash crops such as tobacco and cotton, to fruit, vegetables and vines, but growth has slowed since the 1970s. The main production since 1960 consists of livestock and feed grains (two-thirds of output) and wheat, corn, barley.

The growth of the Bulgarian economy has been highly dependent on foreign trade. The main objective was to secure exports in return for energy, which had the largest proportionate increase in the import structure. There are minor deposits of coal and oil, but Bulgaria has to import over 75% of its energy for domestic consumption. Across Central and Eastern Europe it is the most dependent on energy imports. The Soviet Union was not a significant trading partner until the 1940s, but since then trade has accounted for about half of Bulgarian turnover. West Germany accounted for 8% of Bulgarian imports in 1959, much more than from any other Western European country. Trade with the west declined further due to the low quality of Bulgarian manufactured exports, which were targeted to the less competitive Soviet market.

In 1949, the Council of Mutual Economic Assistance (CMEA) was created comprising all other Central and Eastern European countries and the USSR. The designation of countries as specialising in production, or assembling particular products, started in the early 1960s. Bulgaria does not have significant mineral sources, apart from some lignite coal, lead, iron, copper, and zinc, but the economy has specialised mainly in development of heavy industry, mining, metallurgy and chemical industry, dictated by the division of activities in the CMEA. By 1975, one-third of industrial output was for the transport sector, such as ship-building, fork-lift trucks. Bulgaria was forced to diminish its predominantly agricultural orientation. The main exports were machinery, textiles, chemicals, non-ferrous metals, timber, iron and steel products. This led to significant environmental pollution. The CMEA guaranteed Bulgaria access to a large and stable market for food and manufactured exports in exchange for raw materials and strategic energy supplies, such as oil and natural gas from the Soviet Union, at preferential prices. Gradually Bulgaria became heavily dependent on the USSR for oil,
as well on the other partners, to sell low-quality products. In 1985, Bulgaria exported 56.5% of all exports and imported 56.1% of its overall imports from the Soviet Union.

Several factors contributed to the visible improvement in living standards between the late 1950s and the 1980s. Firstly, between 1965 and 1980, the authorities promoted use of quasi-private ‘personal plots’ of land leased from the agricultural complexes, mainly for vegetables and animal feed. In Bulgaria and Hungary the state sector provides inputs and services to the personal plot sector because of their immediate effect on consumer living standards, and to channel additional working hours into the official economy\textsuperscript{119}. These personal plots did not truly represent private activities and were in a symbiotic relationship with the state. Yet distribution of surpluses among extended families, or for sale according to officially set prices, served to improve urban food supply by the 1970s. Despite this success, the share of agriculture in overall investment declined steadily from nearly 30% in 1961 to less than 10% of total fixed investment in the mid-1980s\textsuperscript{119}. At the same time, with the accomplishment of collectivisation in 1958, subsequent investment and social welfare policies, rural living standards improved significantly by the 1960s. Despite the lack of consistent investment in agriculture, improvement of living standards among the rural population has been most dramatic and, by the mid-1970s, the productivity and incomes of the previously impoverished rural population were equal to the urban population, in contrast to the Soviet model\textsuperscript{119}. In the 1970s, a number of collective agricultural farms were aggregated with industrial activities to achieve better productivity. Housing is predominantly privately owned. This led to a smaller proportion of salaries being spent on food and more on consumer goods and leisure. The share of food in personal consumption fell from 52.5% to 48.3% for 1960-8, and to 44.5% by 1977, and the average daily consumption of calories reached the Western European level of 3,500\textsuperscript{125}.

Secondly, there was a better supply of consumer goods in the market, despite their small share in the structure of the Bulgarian exports, in contrast to energy. There were some shortages of specific products at certain times. The most significant improvements in post-war living standards were achieved in the 1960s and 1970s. Lampe\textsuperscript{125} demonstrates the increase, using data on consumption of food, clothing, transportation, housing, services and durables. In 1983, the per capita consumption of all categories of foodstuffs, apart from bread, rose. Although it failed to reach UN norms, this was ahead of levels elsewhere in Central and Eastern Europe. Similar steady improvement was observed for durables and housing. Yet the hidden expenditures and price increases, the scarcity and poor quality of consumer goods neutralised the increase in industrial wages. Thirdly, between the late 1960s and the late 1970s, Bulgaria benefited most from the CMEA exchange at pre-agreed terms which led to improvement in the living standards of the population.

As a consequence of destalinisation in Bulgaria in the 1950s, some economic reforms were initiated, involving investments in agriculture and increased supply of consumer goods. The labour shortages and slower rate of aggregate growth since 1975 has intensified pressure to use labour more intensively and capital more efficiently\textsuperscript{125}. Demand for additional labour occurred in several industrial sectors as a result of low rates of population growth, full incorporation of women in the labour force, introduction of a two day week-end in 1974, and the slowed pace of migration to urban areas\textsuperscript{125}. Since the 1960s, under internal pressure to increase the productivity of labour and capital, strategies for restructuring of the economy have been explored. Farming was labour intensive but increasing inputs was difficult. Some reforms towards decentralisation of economic decision-making were initiated in the mid-1960s but, after the events in
Czechoslovakia in 1968, the hard-line policies of centralisation predominated. The Bulgarian Communist Party created a few ambitious strategies in the 1970s. It planned to improve the supplies of consumer goods and amenities, and to utilise the latest technological achievements in order to raise the quality of exports. This proved unfeasible due to isolation from the West, trading restrictions, and oil-price rises in the 1970s which increased the prices of imports. In the 1980s, several programmes aimed to raise productivity, improve the quality of manufactured goods, secure exports and apply new management strategies based on decentralisation, democratic election of enterprise leaders, competition, and self-sufficiency. Reform failed, due to foreign debt preventing high technology imports, the need to export good quality domestic products, shortage of trained staff, reluctance to participate in reform and lack of trust. In 1985-7, other attempts at economic reform took place, involving self-management and economic planning.

The growth of the economy was much slower in the early 1980s, resulting in a decline of living standards and reduced access to quality goods, even domestically produced, which ultimately undermined public confidence. The gradual process of political opening up brought a sense of democratic achievement, as well as bitterness at the sight of the economic reality of Bulgaria compared to Western Europe. Some of the economic problems stemmed from poor agricultural production and resulted in a drastic price rise in 1984-85. Some authors believe that the oil shock of 1973 which affected Western Europe did not cause significant disruptions in the economy of Bulgaria. The effect may have occurred later, in the 1980s, when the Soviet Union adjusted favourable oil prices to world levels and began to sell oil to Central and Eastern European countries on the basis of a formula derived from OPEC prices. The crises in the Soviet Union in the mid-1980s forced Bulgaria to search for internal solutions to energy needs and to increase imports from the Middle East. Bulgaria built a nuclear power station at Kozlodui on the Danube and started building another. The result was a rise in costs and energy disruptions. These, and the overall economic stagnation, made 1985 the worst post-war year for overall economic performance.

**The economy of Bulgaria post 1989: General characteristics**

A mixture of internal and external pressures on the Bulgarian economy caused a succession of economic crises during the 1990s. After 1989, the income drop in Bulgaria was one of the highest in Central and Eastern Europe and larger than for Latin America after the 1982 debt crisis. Savings and household resources declined in a situation of high inflation. Industrial and agricultural output fell more than in any other Central and Eastern European country. Subsequently, food rationing was introduced due to severe shortages of flour, dairy products and other basic products. Bulgaria had been traditionally self-sufficient, and even exported surpluses of grain, yet, in the mid-1990s, the agricultural sector was in a critical situation and the country relied heavily on international aid for regular supplies of grain and other basic products.

Part of this collapse could be explained by the 1991-92 attempt to implement comprehensive and rapid economic liberalisation (“big bang” approach), similar to Poland. In early 1991, a massive price liberalisation led to increases of about 700% in consumer goods’ prices. There is agreement that the initial conditions in Bulgaria were relatively worse than in other Central and Eastern European countries, such as a lack of developed financial and fiscal institutions, the most centralised economy in Central and Eastern Europe, low confidence and bad debt. The “shock therapy”
programme in 1991-1994/5, included liberalisation of prices, removal of most barriers to foreign trade, abolition of central planning, revival of the private sector, restitution of land and urban property, and establishment of the basic institutions needed for development of monetary and fiscal policy. Despite the initial momentum, after 1992, the reforms slowed down. However, many of these achievements were based on an undervalued currency, energy subsidies, payment arrears and soft bank credits, and proved unsustainable. The reform policies of the early 1990s lacked consistency and continuity and implementation of key legislation has been delayed.

In early 1997, the banking sector collapsed (one-third of all banks ceasing to operate), monthly inflation reached 311%, the Lev was devalued, and GDP fell dramatically, causing a budgetary crisis, with loss of confidence in economic policy. This collapse was due to macroeconomic mismanagement, slow privatisation, a growing budget deficit, an unstable banking sector, and inadequate agricultural policies. The economic collapse led to a political crisis, the fall of the socialist government, and early elections in April 1997 which led to the accession of a democratic government committed to a decisive pro-reform policy.

Among the causes of the crisis were the slow pace of reform in agriculture, specifically de-collectivisation, lack of capital investment and agricultural credit for private farms, and inadequate price and export regulations leading to cheap imports. All this led to decreased output and food shortages. In broader terms, the disproportionate fall in rural living standards in the 1980s, migration from rural regions, and lack of incentives for involvement in agricultural production contributed to these failures.

The deterioration of the social security system during transition to a market economy led to impoverishment of a large part of the population. The percentage below the poverty threshold in Bulgaria was 20-25%, taking into account disposable incomes and property ownership. Different estimates suggested that two-thirds of the population were below the minimum living standard in 1994, with growing numbers of those living in poverty. At the same time, the budget could not cope with demands for adjustment for inflation of pensions, salaries and unemployment benefits. International aid has been used to support the poorest, the elderly and disabled through earmarked benefits for heating, food and pharmaceutical bills. In this respect the social cost of transition has been high, borne by the Bulgarian population with minimal support. The National Statistical Institute estimated that real income per capita fell by 50% between 1989 and 1995.

The collapse of the CMEA, in January 1991, caused an external demand shock in Bulgaria, possibly the largest in Central and Eastern Europe. This brought to an end the guaranteed trade exchange among the Central and Eastern European countries and artificial prices. Some bilateral agreements were re-instated in 1998. While the economies of Czechoslovakia and Poland were more self-sufficient, not least in energy needs, Bulgaria was heavily dependent on the FSU for imports of energy and as an outlet for low-quality goods. The fiscal crisis, a shortage of hard currency due to falling exports, and slow foreign investment, led to a budget deficit.

The foreign debt of $10 billion (1997), and creditors’ stricter demands for servicing of the debt, constituted another serious problem. Among Central and Eastern European countries Bulgaria is the only one to be classified by the World Bank as a “severely indebted middle-income economy”, external debt being 104.8% of GNP in 1994 (debt above 80% of GNP has been considered critical). Debt repayments were rescheduled in 1993 after an agreement with the “London Club” of western commercial-bank
creditors. However, in 1996 the external debt was 89% of GNP, one of the highest in Central and Eastern Europe\textsuperscript{236}. In 1997-98 additional loans were secured from the World Bank, the IMF and the European Union. Bulgaria had the lowest rate of foreign investment in Central and Eastern Europe\textsuperscript{229}, due to an unfavourable political climate and lack of coherent economic reform.

Important external factors that affected adversely the economy of Bulgaria were the UN sanctions on Serbia and Montenegro (1992-95), and on Iraq since the Gulf War. Former Yugoslavia, Iraq and Libya were important Bulgarian trade partners, and continue to owe large sums. The situation in former Yugoslavia led to disruption in trade between Bulgaria and the rest of Europe due to the need to substitute established rail and road routes via Serbia, and use alternative slower routes via Romania. By September 1994 the cost of sanctions was calculated at $2.71 billion\textsuperscript{221}. Transit agreements with the UN proved too complex to administer efficiently. Another impact of the sanctions has been to encourage criminal activities such as smuggling of goods and petrol from Bulgaria. For its energy needs, Bulgaria relies mainly on oil and naphtha imported from the FSU or the Middle East and processed in Bulgaria. The Gulf War halted the supply of oil from Iraq, turning Iraq into Bulgaria's largest debtor and thus increasing dependency on the FSU. This entailed shortages in household and industrial supplies. In 1997, agreement was reached with the FSU for crude oil supplies. Agreement with Iraq on the settling of debt through delivery of oil was achieved much later. The war in Kosovo has had a profound impact on Bulgaria through disruption of trade routes and a fall in foreign investment, but the scale of the loss is still to be assessed.

Bulgaria faced serious shortages of power, because of problems with traditional suppliers, mainly the FSU, and frequent disruptions in the operations of the Kozloduy nuclear power station, which provides 40% of the power in Bulgaria. The European Union has expressed concerns about the safety of the Kozloduy plant and restructuring of the energy sources of Bulgaria has been put forward as a major requirement for accession\textsuperscript{237}.

In the 1990s, with the breakdown of traditional trading ties, Bulgaria sought new trading partners. In 1997, about half of the trade turnover was with OECD countries, mainly European Union countries\textsuperscript{214}. Despite contracting trade with Central and Eastern Europe and the Former Soviet Union, Russia remained the largest single partner, due to essential fuel exports to Bulgaria.

Foreign investment in Bulgaria was among the lowest in Central and Eastern Europe. Between 1991 and 1996 it amounted to $831 million, with Germany being the largest investor\textsuperscript{223}. The environment for investment was viewed as less hospitable than elsewhere in Central and Eastern Europe, mainly due to contradictory government policies; high inflation; unstable taxation rules, laws and contractual arrangements; and bureaucracy\textsuperscript{226}.

In 1996, services made the highest contribution to GDP (54%). The share of industry remained important, at 31% of GDP, with the main sectors being machine building, metalworking, food processing, chemicals, textiles, and electronics. Slow reform in agriculture led to a lower share of GDP (11\%)\textsuperscript{225}.

There was an urgent need for capital investment for energy supplies, infrastructure, and the social sector. For several years after 1989, negligence, corruption, and transfer of resources to private companies contributed to the deterioration of capital investment. Giant factories inherited from socialism continued to function although their products were expensive and non-competitive internationally. In many cases they were beyond
rescue by state subsidies but, for political reasons, could not be closed. Instead the socialist led or supported regimes had merely delayed the collapse of unprofitable enterprises by soft credits. A large part of the road and railway infrastructure deteriorated rapidly. Urban infrastructure remained in slightly better condition than the rural, due to centralised maintenance. Despite sufficient water reserves, problems with the supply system caused severe shortages and water rationing in many regions. During the winter of 1994-95, the population of Sofia had water for only 16 in every 72 hours. The breakdown in public hygiene, combined with other socio-economic factors, caused outbreaks of communicable diseases such as dysentery and salmonellosis, which were previously controlled.

In 1997 Bulgaria’s GNP was USD 1,140 per capita (Atlas methodology) or USD 3,860 adjusted for purchasing power parity. This places Bulgaria under the average level of 1,230 GNP per capita for the lower middle income economies\(^{238}\) (Table A1-1).

**Table A1-1. GNP per capita: Atlas method and PPP estimates (1997)**


<table>
<thead>
<tr>
<th>Ranking</th>
<th>Country</th>
<th>GNP per capita, Purchasing Power Parity</th>
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<tbody>
<tr>
<td></td>
<td>(WB Atlas method; US dollars)</td>
<td>(International dollars)</td>
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<tr>
<td>High-income economies (average)</td>
<td>25,700</td>
<td>22,770</td>
</tr>
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<td></td>
<td>Slovenia</td>
<td>9,680</td>
</tr>
<tr>
<td>Upper middle-income economies (average)</td>
<td>4,520</td>
<td>7,700</td>
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<tr>
<td></td>
<td>Czech Republic</td>
<td>5,200</td>
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<td></td>
<td>Croatia</td>
<td>4,610</td>
</tr>
<tr>
<td></td>
<td>Hungary</td>
<td>4,430</td>
</tr>
<tr>
<td></td>
<td>Slovak Republic</td>
<td>3,700</td>
</tr>
<tr>
<td></td>
<td>Poland</td>
<td>3,590</td>
</tr>
<tr>
<td></td>
<td>Estonia</td>
<td>3,330</td>
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<tr>
<td>Lower middle-income economies (average)</td>
<td>1,230</td>
<td>3,760</td>
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<td></td>
<td>Russian Federation</td>
<td>2,740</td>
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<tr>
<td></td>
<td>Latvia</td>
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<td></td>
<td>Lithuania</td>
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<td>Belarus</td>
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<td></td>
<td>Romania</td>
<td>1,420</td>
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<tr>
<td></td>
<td><strong>Bulgaria</strong></td>
<td><strong>1,140</strong></td>
</tr>
<tr>
<td></td>
<td>Macedonia, FYR</td>
<td>1,090</td>
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<tr>
<td></td>
<td>Ukraine</td>
<td>1,040</td>
</tr>
<tr>
<td>Low-income economies (average)</td>
<td>350</td>
<td>1,400</td>
</tr>
<tr>
<td></td>
<td>Albania</td>
<td>750</td>
</tr>
<tr>
<td>Europe and Central Asia (average)</td>
<td>2,320</td>
<td>4,390</td>
</tr>
<tr>
<td></td>
<td>World (average)</td>
<td>5,130</td>
</tr>
</tbody>
</table>

Contracting industrial output of state enterprises was among the first symptoms of economic transition. While in 1989 industrial output grew by 2.2%, in 1991 it fell by 27.8% and remained mostly negative (Figure A1-3)\(^{229}\). Rapid decline in levels of industrial production immediately after transition was observed in most Central and Eastern European countries although later reversed, in contrast to Bulgaria where output remained negative. According to other sources, the decline in industrial production in Bulgaria after 1989 is even higher\(^{239}\). The output collapse curtailed the tax base and the
ability to collect tax revenue leading to a budget deficit. It should be noted that these estimates are based mainly on the industrial output of the state enterprises, a large majority of which almost ceased functioning for political reasons and lack of a legislative basis for privatisation. After 1991, it was the informal economy, mainly in trade, that accounted for the highest growth, as indicated by expenditure. However, estimates show that since the introduction of a currency board in 1997, output may have increased, reaching about 6% in 1998.

Figure A1-3. Industrial production growth rates (percentage rates of change)

Source: TransMONEE database 3.0. UNICEF International Child Development Centre (ICDC), Florence

GDP in constant prices also declined, the greatest declines being in 1991 (-11.7) and 1996 (-10.9), caused by the shocks of price liberalisation, collapse of industrial production, hyperinflation and the latent effects of recession in previous years, particularly the crises of 1990 and 1996-7 (Figure A1-4). GDP growth was achieved only in 1994 and 1995 (1.8% and 2.1% respectively). Similar strong declines of GDP were registered also in Romania, Russia and Ukraine.

The informal economy also posed problems for Bulgaria. A sizeable informal economy is associated with loss of tax revenue through wide-spread tax evasion. According to National Statistical Institute (NSI) estimates, in 1997 the share of the 'shadow' economy was 17% of GDP, but limitations in the measurement instruments have cast doubt on this estimate. Some MPs argued that the informal economy reached 45-50% of GDP, although this was not supported by concrete evidence. These events led to the director of the National Statistical Institute being accused of manipulating figures, and dismissed, after a majority vote in the Parliament. World Bank experts have calculated the size of the informal sector based on data on labour participation and wages as two-thirds of the private sector contribution to GDP in 1993, even under the most conservative scenario. 94% (67.2% - in a conservative scenario) of the estimated operational surplus of the private sector in 1994 was from the informal sector of the Bulgarian economy and not taxed. Although most of the officially reported growth of the private sector was attributable to informal activities, the rate of investment remained low. More importantly, the wages were not as high as expected and most people working in the informal sector did not have social insurance, which may have serious implications for a universal compulsory insurance scheme.
Officially registered unemployment was 13.7% of the labour force at the end of 1997. Total unemployment as a percentage of the labour force reached its highest level of 16% in 1993 and then fell slightly (Figure A1-5). Other estimates point to higher rates, at 21% (ILO), in 1993. The unemployment rate in Bulgaria in 1996 is comparable to the rates of Hungary, Poland and Slovakia. The relatively high unemployment rate in Bulgaria could be explained partly by the weakening of the state sector and the slow take-off of the private sector. However, employment did not fall as sharply as industrial output, which caused a decrease in productivity and increase in production costs. The unemployment figures should not be taken at face value, because it is not clear how many of the registered unemployed are involved in the informal economy or whether all unemployed actually register. There is evidence that unemployment has affected disproportionately the Roma minority. For example, in Lom, a town in northwest Bulgaria with a large Roma community, over 95% of the Roma population were unemployed in 1997.
The government budget as a percentage of GDP in Bulgaria was the lowest (-14.7% budget deficit in 1992) of all the Central and Eastern European countries\textsuperscript{239}. Changing labour markets created high demands on the social security system for payment of benefits. Moreover the reduction of formally employed people (a drop of 47% in public employment), contributed to the growth of self-employment and, ultimately, the informal economy.

There was a rapid growth in the number of registered private companies (from 14,000 in 1989 to 200,000 in 1991) predominantly in the manufacturing sector (25%), services (24%) and the trade and retail sectors (15%), although a large proportion are not operational. During the 1990s, the take-off of the private sector has been generally slower than indicated by the above figures due to subsequent closure of companies, especially in manufacturing. The share of private activities increased significantly not only due to the establishment of new businesses and privatisation of state-owned assets, but also as a result of the decline in the output of the state sector\textsuperscript{243}. 70% employ fewer than 5 persons (app. 4.3% of the work force) and account for only 1% of the exports\textsuperscript{224}. More than 60% of the companies are sole proprietorships, because of tax concessions and the easier registration procedure. 60% of small businesses rely on their own resources, or informal loans, to start up and only 3% use bank loans. Real wages are set relatively low and the level of education and skill of the labour force is high.

The mass privatisation of state enterprises in Bulgaria started in January 1996, but proceeded very slowly until 1997-98. However, some spontaneous privatisation, including criminal activities, without any compensation to the state, started immediately after 1989. Privatisation faced strong political opposition. Less than 1,000 enterprises were handled by the Agency for Privatisation in the period 1993-1996. Shares of 1,150 enterprises were also transferred via voucher privatisation in the initial round of bidding at the end of 1996. Shares in the privatised enterprises have been reserved for cash privatisation, employee ownership and retention by the state\textsuperscript{243}.

Especially sensitive, because of social implications, have been decisions to privatise very large or strategic enterprises. Large unprofitable state enterprises have been receiving resources from the state budget, which has been needed urgently elsewhere. On the other hand, the private sector prior to 1989 was marginal and mainly in services, with semi-private agricultural enterprises. In contrast, in Poland, Czechoslovakia and Hungary, private entrepreneurship was relatively widespread during the socialist era. In addition, in Bulgaria there was scarcity of the credit needed to establish a private sector. Finally, legislation on foreign investment and other issues relevant to privatisation has been slow to appear. As a comparison, in the Czech Republic and Russia approximately two-thirds of aggregate output comes from enterprises in which the state no longer holds a majority stake. In Bulgaria and Ukraine the private share is estimated to be about 40\%\textsuperscript{243} but, especially in Bulgaria, it is mainly small-scale privatisation in the retail, service, tourism, and shadow private sectors.

In 1990, the government started restoring land and buildings to former owners or their descendants. De-nationalisation of land and industrial buildings proved very slow and administratively complex due to lack of consistent documentation, scattered plots and the large amount involved (98% of land was collectivised by 1958). The 'Privatisation Law', enacted in May 1992, aimed to transfer state assets to the private sector through sale of shares in state-owned enterprises to employees, at the highest possible price, with no reference to the social context of the vouchers. A law enabling purchase by foreign businesses is still under discussion due to fears that assets might be bought cheaply as
there are not enough Bulgarian businesses able and willing to buy shares and operate the large state enterprises. Privatisation involved high administrative costs.

The Union of Democratic Forces government, elected in April 1997, introduced a stringent programme for macroeconomic stabilisation. It introduced a currency board (exchange rate of the Lev fully backed by foreign currency reserves), a plan for reform of the banking sector and other restrictive fiscal and monetary policies aimed at controlling inflation guaranteeing the stability of the currency. The currency board is the framework for comprehensive policies of fiscal and structural policy reform.

The programme also involved completion of privatisation of land and the bulk of state-run near-bankrupted enterprises in 1997-8. Until 1997, privatisation had been largely small-scale, in the service sectors, through restitution of urban property, and in many cases, through spontaneous private activity. Under an IMF supported privatisation programme, 40% of Bulgaria's state owned productive assets or 1,200 companies, a third of state industry by capital, was to be privatised in 1997 through both direct cash and mass voucher privatisations. Before the autumn of 1997, 1,050 companies had been privatised, 600 had a controlling stake transferred to individuals and 92 to registered investment funds. There have been some delays in privatisation of the large enterprises due to lack of offers and complex administrative procedures. Revenues from potential large-scale privatisation were viewed as critical in financing the state budget. Negotiations for privatisation of banks started in 1997. These policies, together with enforcement of relevant legislation, aimed to attract foreign capital investment and to create a favourable climate for private entrepreneurship. In general, privatisation was slower than expected and many of the large-scale sales had to be rescheduled due to unforeseen difficulties.

Reform in Bulgaria has also been supported by the European Union PHARE programme. Between 1990-1997, Bulgaria received €605 million, or 8.5% of total PHARE funds for Central and Eastern Europe. The highest shares were spent on infrastructure (20%) and critical aid (14%). The Emergency Social Assistance Programme (1996-7) provided immediate assistance to 1.5 million poor or disadvantaged people during the crisis of early 1997.

A European Union briefing from 1999 stated that macroeconomic stability had been achieved under the currency board regime, inflation and budget deficit targets had been met, and confidence in the currency restored. Since 1998, the main priorities for preparation for European Union accession have been institution building and support for structural reform, particularly acceleration of privatisation (mainly of large enterprises and banks).

**Demographic and health status**

**Population distribution**

The total size of the population has been growing steadily from the beginning of the century until the 1990s, when this trend reversed (Figure A1-6). The shares of men and women are very similar, with the proportion of men declining only slightly.

There were major changes in population distribution between urban and rural areas. Bulgaria has traditionally been an agricultural country, between 1900 and 1946 a large majority of the population (about 80%) was living in rural settlements (Figure A1-7). Yet the share of the urban population increased steadily between 1946 and 1997 from 25% to
almost 70%. The largest increases in the urban population occurred in the 1960s and in the 1970s as a result of mass migration from rural areas provoked by collectivisation of land, and a shift towards jobs in industry located mainly in or around towns. Accelerated migration from rural to urban areas was a response to labour shortages in industry and state incentives to attract labour, as well as improved living standards in towns at the time. Urban and rural population almost equalised in the late 1960s and early 1970s. After 1970, the migration from rural to urban areas has slowed considerably. At that time overpopulation in big towns became a fact and the state enacted regulations prohibiting free migration of people and requiring residence permits. Between 1990 and 1996 there was a net migration from urban to rural areas, for economic reasons, but it is unlikely that this trend will produce major changes in rural-urban distribution.

The official religion of Bulgaria is Orthodox Christianity, the official languages are Bulgarian and Turkish. Estimates of the size of the minority populations in Bulgaria have been highly politicised and unreliable. Ethnic groups in Bulgaria have not been officially recorded since the 1956 Census, in which Bulgarians constituted approximately 90% of the population, and the remaining 10% were predominantly Ethnic Turks. The Ethnic Turks or Bulgaro-Muslims, were estimated at 8.3% of the population in 1992, with other estimates at 10%. The Roma population was estimated to be 2.6% in 1992, with alternative estimates between 3-5% and 8%, the latter supported by human rights activists. Under-representation of these ethnic minorities as stakeholders must impact on their access and use of social services, and in particular, health care.
Figure A1-6. Population of Bulgaria by sex

Panev A. Development and character of the health care in Bulgaria. Sofia, 1947
Lampe J R. The Bulgarian Economy in the Twentieth Century. Croom Helm, 1986

Figure A1-7. Population of Bulgaria by place of residence

Sources: same as Figure 6
**Births, deaths and natural growth**

Since the beginning of the 20th century, the birth rate has declined consistently (Figure A1-4; Table A1-2). Between 1990 and 1950, the lowest birth rates were during the First and Second World War (in 1916-1920 and in the 1940s) as well as in the late 1930s when the economic situation worsened. Lampe calculates that the decline started early in this century and that the decrease in overall population growth was due mainly to the lowered birth rates in the rural areas: from 42 per 1,000 in 1906-10, the highest pre-war birth rate in the Balkans, to 33 per 1,000 in 1926-30; and to 23 per 1,000 by 1936-40. He interprets this as a response to periods of worsening economic conditions. McIntyre points that the sharp decline and low levels of fertility in the 20th century were based on radical reductions in marital fertility, which is not consistent with the general European pattern.

Fertility control by married couples in circumstances where there was a high prevalence of marriage may be explained by economic difficulties, such as insufficient agricultural land and rural poverty, low living standards, education, and modernisation as well as the inheritance of a specific pattern of extended household organisation (Zadruga). The observation of low fertility in a mainly agrarian society appears surprising since other evidence shows that it is the transition to modernisation that causes similar low fertility. Since 1940, the annual percentage change in birth rate has been positive only in the 1950s and in the 1960s. The former represents a post-war peak, as in all European countries, and the latter came as result of general improvement of living standards in Bulgaria. After 1990, the birth rate declined even faster, with an average of −5.6% annually.

**Figure A1-8. Live births, deaths and natural growth (1900-1997)**

*Sources: same as in Table 2*

---

\(^n\) Patriarchal community or extended family, living together and sharing resources
Table A1-2. Live births, deaths and natural growth in Bulgaria


<table>
<thead>
<tr>
<th>Year</th>
<th>Live Births per 1,000</th>
<th>Deaths per 1,000</th>
<th>Natural Growth per 1,000</th>
<th>Infant Mortality per 1,000 live births</th>
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<tbody>
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<td>33.7</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>1898</td>
<td>39.5</td>
<td>n/a</td>
<td>n/a</td>
<td>142.0</td>
</tr>
<tr>
<td>1900</td>
<td>42.2</td>
<td>22.5</td>
<td>19.7</td>
<td>131.0</td>
</tr>
<tr>
<td>1901-1905</td>
<td>40.7</td>
<td>22.5</td>
<td>18.2</td>
<td>143.0</td>
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<tr>
<td>1906-1910</td>
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<td>23.8</td>
<td>18.3</td>
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</tr>
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<td>22.3</td>
<td>16.3</td>
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<tr>
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<td>23.1</td>
<td>3.5</td>
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<td>20.8</td>
<td>18.2</td>
<td>156.6</td>
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<td>1926-1930</td>
<td>33.1</td>
<td>17.9</td>
<td>15.2</td>
<td>146.5</td>
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<td>1931-1935</td>
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<td>8.1</td>
<td>128.1</td>
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</tr>
<tr>
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<td>17.8</td>
<td>8.1</td>
<td>9.7</td>
<td>45.1</td>
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<td>1970</td>
<td>16.3</td>
<td>9.1</td>
<td>7.2</td>
<td>27.3</td>
</tr>
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<td>1975</td>
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<td>10.3</td>
<td>6.3</td>
<td>23.1</td>
</tr>
<tr>
<td>1980</td>
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<td>11.1</td>
<td>3.4</td>
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<tr>
<td>1985</td>
<td>13.3</td>
<td>12.0</td>
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<td>15.4</td>
</tr>
<tr>
<td>1990</td>
<td>12.1</td>
<td>12.5</td>
<td>-0.4</td>
<td>14.8</td>
</tr>
<tr>
<td>1991</td>
<td>11.1</td>
<td>12.8</td>
<td>-1.7</td>
<td>16.9</td>
</tr>
<tr>
<td>1993</td>
<td>10.0</td>
<td>12.9</td>
<td>-2.9</td>
<td>15.5</td>
</tr>
<tr>
<td>1995</td>
<td>8.6</td>
<td>13.6</td>
<td>-5.0</td>
<td>14.8</td>
</tr>
<tr>
<td>1997</td>
<td>7.7</td>
<td>14.7</td>
<td>-7.0</td>
<td>17.5</td>
</tr>
</tbody>
</table>

In general, the crude mortality rate has been declining since the beginning of the 20th century, peaking during the First World War. Mortality reached its lowest level in the 1960s (8.1 per 1,000), probably reflecting the post-war improvement in living conditions, and widespread public health interventions undertaken at the end of 1940 and in the 1950s. Since 1965 the death rate has grown steadily until the present. The highest average annual increases in mortality were registered in the 1970s and in the 1990s. The reasons for the increase in the death rate since the 1960s have not been studied specifically in Bulgaria but this was a phenomenon common to the Central and Eastern European countries and detailed analysis has been undertaken of the situation in several other countries, such as Hungary, Poland and Czechoslovakia. There, death rates rose most among young and early middle aged men, especially those who were unmarried. Mortality rates in the transition period, especially since 1992 (2.2% average annual increase) are much higher than those in the West, above the CEE average, and unlike the Czech Republic, Hungary and Poland, have not improved since the transition. In the 1990s, male mortality increased at one of the highest annual rates registered in Bulgaria, while female mortality has stagnated since the beginning of the 1990s, lagging behind...
CEE levels, and far behind the EU average. This seems likely to be related to economic and social problems, but more research in Bulgaria is needed.

These increases are, in fact, somewhat obscured if only overall mortality is examined, as there was a steady improvement in infant mortality. The causes contributing to the rises in mortality were largely cardiovascular disease and accidents, and evidence from other countries in the region show that social exclusion, alcohol, tobacco, poor nutrition and lax enforcement of safety legislation are likely to be particularly important factors.

As a consequence of the falling birth rate, combined with rising mortality described above, natural population growth declined between 1930 and 1940, but recovered in the 1950s (15 per 1,000) and in the 1960s (9.7 per 1,000). Following stabilisation in 1965-70s, the natural population growth declined consistently. The slow population growth and low fertility levels were not considered a problem by the communist government until 1956-1960, triggered by concerns about labour shortages. In the 1960s, the government introduced positive (economic incentives) and negative measures (restriction on abortions) to raise the fertility level, but these had little effect. These were combined with efforts to raise productivity since the mid-1960s. By the 1980s, the issue was regarded as a serious threat to future economic growth and a comprehensive state policy was formulated including not only more restrictions on abortions, but also family allowance payments, enhanced maternity leave, and other benefits.

Since 1990, for the first time in this century, population growth has been consistently negative. Importantly, in the 1990s, the pace of decline of the natural population growth accelerated. Between 1990 and 1997, the average population growth was -4 per 1,000, compared to an average growth of 6 per 1,000 in 1950-90.

The overall negative growth obscures the rural-urban differences, growth in the villages contributing most of the decline. Thus in 1997, the negative growth was -3.7 per 1,000 in urban and -13.9 per 1,000 in rural settings, with the average being -7. It is apparent that the demographic situation in the rural areas is much more catastrophic, with problems such as rural depopulation, ageing and thus, higher burden of disease, particularly cardio-vascular mortality, and has implications for the regional structure of health financing. This negative population growth, since 1990, has been attributed to the combined effect of long-term trends in birth and mortality rates. Several waves of emigration of younger people, and other factors related to transition, which might have contributed, have not been examined in Bulgaria.

**Age-specific causes of death**

Cardiovascular diseases are the main cause of death in the Bulgarian population and their relative share of total mortality has increased constantly, accounting for 63.6% of all deaths in 1994. Mortality from cardiovascular diseases among males in Bulgaria is among the highest in Europe, above the CEE average and diverging further from the EU, where rates are declining steadily. Mortality from neoplasms has increased to be the second major cause of death, accounting for 14.1% of all deaths in 1995.

When considering the age-specific causes of death, cardiovascular diseases are the main cause of death among those above the age of 35, particularly among men (Table A1-3). In the 0-14 age groups, the main causes of death are congenital anomalies, conditions originating in the perinatal period, and respiratory diseases, followed closely by injuries. The main causes of male and female mortality in the 15-34 age group are injuries.
Table A1-3. Age-specific death rates per 100,000 population: main causes (1994)

Source: estimates based on Health for All Data Base. European Region. World Health Organisation, Regional Office for Europe, June 1999

<table>
<thead>
<tr>
<th>Main causes of death (Males)</th>
<th>Mortality rate</th>
<th>Main causes of death (Females)</th>
<th>Mortality rate</th>
</tr>
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<tbody>
<tr>
<td>0-14</td>
<td></td>
<td>0-14</td>
<td></td>
</tr>
<tr>
<td>Congenital anomalies</td>
<td>0.29</td>
<td>Congenital anomalies</td>
<td>0.27</td>
</tr>
<tr>
<td>Conditions originating in the perinatal period</td>
<td>0.29</td>
<td>Respiratory diseases</td>
<td>0.23</td>
</tr>
<tr>
<td>Respiratory diseases</td>
<td>0.27</td>
<td>Conditions originating in the perinatal period</td>
<td>0.23</td>
</tr>
<tr>
<td>Accidents</td>
<td>0.26</td>
<td>Accidents</td>
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</tr>
<tr>
<td>Other</td>
<td>0.38</td>
<td>Other</td>
<td>0.31</td>
</tr>
<tr>
<td>Total</td>
<td>1.49</td>
<td>Total</td>
<td>1.16</td>
</tr>
<tr>
<td>15-34</td>
<td></td>
<td>15-34</td>
<td></td>
</tr>
<tr>
<td>Accidents</td>
<td>0.92</td>
<td>Accidents</td>
<td>0.21</td>
</tr>
<tr>
<td>Cardiovascular diseases</td>
<td>0.23</td>
<td>Cardiovascular diseases</td>
<td>0.16</td>
</tr>
<tr>
<td>Cancer</td>
<td>0.15</td>
<td>Cancer</td>
<td>0.12</td>
</tr>
<tr>
<td>Other</td>
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<td>Other</td>
<td>0.11</td>
</tr>
<tr>
<td>Total</td>
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<td>35-64</td>
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<td>Cancer</td>
<td>1.59</td>
</tr>
<tr>
<td>Accidents</td>
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<td>Accidents</td>
<td>0.30</td>
</tr>
<tr>
<td>Other</td>
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</tr>
<tr>
<td>Total</td>
<td>12.27</td>
<td>Total</td>
<td>4.91</td>
</tr>
<tr>
<td>65+</td>
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<tr>
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<td>9.31</td>
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</tr>
<tr>
<td>Respiratory diseases</td>
<td>4.01</td>
<td>Signs, symptoms and ill-defined conditions</td>
<td>3.72</td>
</tr>
<tr>
<td>Other</td>
<td>9.86</td>
<td>Other</td>
<td>2.23</td>
</tr>
<tr>
<td>Total</td>
<td>72.49</td>
<td>Total</td>
<td>56.64</td>
</tr>
</tbody>
</table>

**Overall mortality rate** | **15.02** | **Overall mortality rate** | **11.52** |

Since the 1980s, standardised death rates from circulatory diseases per 100,000 population have increased sharply above the CEE average, in contrast to declining rates in the EU (Figure A1-9). The increase is less marked among women, but the level remains two and a half times higher than the EU rates. The death rate from cancer remains below the EU and CEE averages, although some increase in male deaths (35-64) from cancer has been observed in the 1990s (Figure A1-10). While in the EU deaths from injuries have declined steadily, the opposite trend was registered in Bulgaria, though the death rate from injuries remains below the CEE average (Figure A1-11).
Figure A1-9. SDR circulatory diseases, all age/100,000 (male/female)

Source: Estimate based on Health for All Data Base. European Region. World Health Organisation, Regional Office for Europe, June 1999

Figure A1-10. SDR Malignant neoplasms, all ages/100,000 (male/female)

Source: same as above

Figure A1-11. SDR Injuries, all ages/100,000 (male/female)

Source: same as above
Age-specific trends in mortality show differences which are concealed by the total rates. Since the second half of the 1980s, the age-adjusted mortality from cardiovascular diseases among men above 65 has started to fall, while that of the 35-64 group grew most. Among women, mortality from cardiovascular disease fell in all age groups. In 1980-1994 the mortality rate from cancer (all ages) also increased among men, by the most in the 35-64 age group, remaining almost constant among women. Deaths from injuries for men and women increased in the 1990s among those between the ages of 15 and 64, with male deaths from injuries rising steeply above the EU levels. There are a few positive changes, for example, female mortality rate from respiratory diseases has fallen dramatically since mid-1980s, and halved in the over 65 age group. However, in 1994, it still was the third most important cause of death for men.

Infant mortality rates show a significant improvement throughout the 1970s and 1980s, with rates notably lower than the CEE average. While in 1989-1994 infant mortality rates continued to fall in the West and in CEE, Bulgaria and Albania were the only countries where infant mortality increased. By 1994, Bulgaria had the third highest infant mortality rate in Central and Eastern Europe, after Albania and Romania.

The trends in maternal deaths per 100,000 live births were closer to the Western European than the CEE average. There was some increase in maternal mortality in the early 1980s, but in the 1990s it continued to fall.

Although the factors responsible for the deterioration in adult mortality are still poorly understood, one factor was the failure to sustain the gains in health status achieved in the 1950s and 1960s. The emphasis on prevention in government regulations did not translate into an efficient system of health promotion, with co-ordinated strategies against unhealthy lifestyles and the effects of alcohol, diet and smoking. Even in areas where there had been significant successes, such as childhood immunisation, deterioration was seen during the mid-1990s when shortages were at their worst. This may have affected ethnic minorities to a larger extent but no official data are available. One reason for the drop in vaccination levels was the need to import vaccines. In one region, polio immunisation of the Roma population was halted, due to shortage of vaccines, and resumed only after the arrival of foreign aid.

There are several newly emerging challenges for the Bulgarian health system in the 1990s, such as the rise in reported cases of tuberculosis, STDs and other communicable diseases. While in the 1990s the incidence of tuberculosis in the West continued to decline, in Bulgaria the number of new cases has increased (Figure A1-12). The incidence of syphilis also increased in the 1990s, in contrast with the EU and CEE figures which remained stable.

There was inadequate information on whether the system was responding to need and on the quality of care provided, especially for rural areas. Socio-economic problems after 1980, and especially after the start of the economic transition in 1989, were associated with a dramatic fall in the birth rate which, in the presence of a rising death rate, caused negative population growth. The absence of family planning facilities together with socio-economic factors in the early 1990s, contributed towards one of the highest abortion rates in Europe. Only 23% of women of childbearing age used contraceptives in 1992-94.

In addition, some sources have suggested that environmental pollution, consequent on obsolete technologies, might have imposed a threat to the health of the population in certain areas of the country, although there is no conclusive evidence for this and
pollution levels have decreased due to de-industrialisation at a time when adult death rates have continued to rise.

**Figure A1-12. Tuberculosis incidence / syphilis incidence (cases per 100,000)**

*Source: Health for All Data Base. European Region. World Health Organisation, Regional Office for Europe, June 1999*

**Life-expectancy**

As with other demographic indicators, life-expectancy improved dramatically in the post-war years. Between the late 1950s and the early 1970s, life-expectancy at birth achieved an unprecedented increase of 17.6 years for men and 21.3 years for women. The life-expectancy patterns are notably different for men and women (Figure A1-13). Although there is a growing body of research on trends in mortality in neighbouring countries, the reasons have not been studied in Bulgaria. The peak in male life expectancy in Bulgaria was reached in early 1970s, when it almost converged with the EU average and was higher than the Central and Eastern Europe average. While in the West male life-expectancy improved steadily, in Bulgaria it stagnated through the 1970s and 1980s, although it was always much higher than in the Soviet Union.

In the 1990s, male life-expectancy experienced a decline, in 1994 reaching levels seen in the 1960s. Between 1989-91 and 1995-97, it fell from 71.2 to 70.4 years, lagging significantly behind western European levels, although not comparable to the massive drop observed in Russia. Female life expectancy remained constant throughout the 1970s, and has improved only slightly since. It did not decline in the 1990s, as did male life-expectancy, but still remained below the CEE average and at much lower levels than Western Europe. It should be noted that a composite measure such as life-expectancy at birth obscures the scale of the problem as continuing improvements in infant mortality counterbalanced a marked deterioration in adult mortality. The failure to improve life-expectancy at birth, in Bulgaria after 1989, has not been systematically explored.
Figure A1-13. Life expectancy at birth in Bulgaria (male/ female)

Source: Health for All Data Base. European Region. World Health Organisation, Regional Office for Europe, June 1999

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Age structure

The Bulgarian population is ageing, as are most other Central and Eastern European countries, creating economic and social problems (Figure A1-14). Between 1965 and 1997 the 0-14 age group fell by 30% overall (-1.5% annually), the share of over 60 increased by 64% (1.5% annual growth), while the 15-59 group remained relatively stable over the same period. In 1997, 22% of the population was over 60.
There are significant differences in age distribution in rural and urban areas (Table A1-4). Between 1970-1997, the share from the 15-59 age group remained relatively stable with only small decreases (-2.7% in urban and -6.8% in rural areas). The share from the 0-14 age group fell more quickly in rural areas (by a total of -33.3% in 1970-1997) compared to a fall of 20.9% in the urban population, caused mainly by much lower birth rates and migration to towns. In 1997, the age group over 60 was about 32% of the rural, and 17% of the urban population. Clearly migration of younger generations to urban areas and abroad is a very strong factor contributing to ageing of the population in rural areas. However, it should be noted that between 1970 and 1997, the share of the population over 60 grew slightly faster in the cities (total growth of 61.8%; 1.8% annually) than in the small towns and villages (a total growth of 58.1%; 1.6% annually). This might have been a consequence of past migration waves. Over the same period, the average annual pace of change in rural and urban areas has been similar in all age groups.

Table A1-4. Age structure of the population in Bulgaria (percentages)

<table>
<thead>
<tr>
<th>year</th>
<th>Total population</th>
<th></th>
<th></th>
<th></th>
<th>Urban population</th>
<th></th>
<th></th>
<th></th>
<th>Rural population</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-14</td>
<td>15-59</td>
<td>60+</td>
<td></td>
<td>0-14</td>
<td>15-59</td>
<td>60+</td>
<td></td>
<td>0-14</td>
<td>15-59</td>
<td>60+</td>
</tr>
<tr>
<td>1965</td>
<td>23.9</td>
<td>62.9</td>
<td>13.2</td>
<td></td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td>N/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>1970</td>
<td>22.7</td>
<td>62.4</td>
<td>14.9</td>
<td></td>
<td>21.7</td>
<td>68.0</td>
<td>10.3</td>
<td></td>
<td>23.8</td>
<td>56.0</td>
<td>20.2</td>
</tr>
<tr>
<td>1975</td>
<td>22.3</td>
<td>61.6</td>
<td>16.1</td>
<td></td>
<td>22.6</td>
<td>65.9</td>
<td>11.5</td>
<td></td>
<td>21.7</td>
<td>55.7</td>
<td>22.6</td>
</tr>
<tr>
<td>1980</td>
<td>22.1</td>
<td>62.0</td>
<td>15.9</td>
<td></td>
<td>22.9</td>
<td>66.0</td>
<td>11.1</td>
<td></td>
<td>20.8</td>
<td>55.4</td>
<td>23.8</td>
</tr>
<tr>
<td>1985</td>
<td>21.5</td>
<td>60.8</td>
<td>17.7</td>
<td></td>
<td>22.8</td>
<td>64.1</td>
<td>13.1</td>
<td></td>
<td>19.1</td>
<td>54.8</td>
<td>26.1</td>
</tr>
<tr>
<td>1990</td>
<td>20.1</td>
<td>60.3</td>
<td>19.6</td>
<td></td>
<td>21.2</td>
<td>63.8</td>
<td>15.0</td>
<td></td>
<td>17.9</td>
<td>53.1</td>
<td>29.0</td>
</tr>
<tr>
<td>1993</td>
<td>18.6</td>
<td>60.6</td>
<td>20.8</td>
<td></td>
<td>19.3</td>
<td>64.6</td>
<td>16.1</td>
<td></td>
<td>17.1</td>
<td>52.4</td>
<td>30.5</td>
</tr>
<tr>
<td>1995</td>
<td>17.7</td>
<td>61.0</td>
<td>21.3</td>
<td></td>
<td>18.2</td>
<td>65.1</td>
<td>16.7</td>
<td></td>
<td>16.5</td>
<td>52.3</td>
<td>31.2</td>
</tr>
<tr>
<td>1997</td>
<td>16.8</td>
<td>61.7</td>
<td>21.6</td>
<td></td>
<td>17.2</td>
<td>66.2</td>
<td>16.7</td>
<td></td>
<td>15.9</td>
<td>52.2</td>
<td>31.9</td>
</tr>
</tbody>
</table>

The dependency ratio (ratio of non-working age to working age population) was 0.68 in 1996. Estimates based on data from the National Statistical Institute show that it may
have been 0.74 in 1997, with higher values in rural populations. 15% of men and 29% of women are of pensionable age (60 and 55 years respectively). However, 29% of the population receives pensions, including social, disability or other type of pensions. The pensioners are the bottom end of the income distribution, with the average pension 27% of the average salary in 1997. In effect, most pensioners are unable to pay for health care whether in tax, insurance premiums or user fees, and will need coverage by the state.

Recent changes in marital status also may affect equity. The crude marriage rate per 1,000 fell by half between 1985 and 1997, one of the highest drops in Central and Eastern Europe, with the exception of the Baltic states and former east Germany. Between 1992 and 1997, the proportion of those over 15 who were married declined from 74% to 61%. There is evidence from the early 1990s that household size is not related to being in poverty in Bulgaria. However, due to sharing of resources within extended households, those who are divorced, single or living alone, in general are in a more vulnerable position and more likely to be faced with financial barriers to health care.

In summary, it is important that the specific demographic and health characteristics and trends in Bulgaria are taken into consideration when assessing the applicability of health care financing solutions.

**Income distribution**

After the liberation from Ottoman occupation at the end of the nineteenth century, Bulgarian society was relatively homogenous in terms of income and status divisions. The old aristocracy disappeared and a new elite was slow to appear. A higher income class started to emerge among those engaged in trade and land cultivation, but income and social stratification developed slowly. Much employment was based on extended family and social networks. This was reinforced by conservative traditions in the agricultural society. Many of the land-owners worked on their own land. In towns, manufacturing guilds were created, based on a rigid hierarchy, but their organisation was based more on collective responsibility and mutual help, than on purely economic principles. Formation of a wealthy elite involved in large-scale industry in the 1920s was interrupted by the communist accession to power in 1944.

Bulgaria remained an agrarian economy through the first half of this century, and private ownership of land could be used as a proxy measure for income distribution in the years before 1944 (Table A1-5). By the turn of the century, the majority of private holdings were typically small, scattered and fragmented. The absence of modernisation in agriculture resulted in widespread rural poverty. By the end of the nineteenth century the ownership of private land was relatively evenly distributed, with only 10% of the population owning more than 50 hectares of land. Roughly half of the landowners had less than 10 hectares. Consolidation was slow to develop despite the fact that the holdings were often divided into scattered plots, or away from the villages or too small to produce a surplus that could be sold. In the 1920s, the predominance of smaller plots was reinforced by the Agrarian Party’s policy of radical land reform, which restricted the size of the holding which one peasant household could work. Maximum ownership allowances for certain types of land were specified and families possessing under 1 hectare were provided with land. As a result of land redistribution, the percentage of

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9 The official figure for Bulgaria is 0.48, with 0.40 in towns and 0.67 in villages (1997), but details on methodology are not provided.
private plots over 30 hectares decreased at the expense of categories with lower holdings. Although the programme had certain equalising effects in terms of ownership, it did not promote the consolidation of existing holdings because the redistributed land was scattered. These policies were largely retained after the fascist coup and demise of the government in 1923.

Table A1-5. Distribution of private land by year (percentage of the land)

<table>
<thead>
<tr>
<th>Category</th>
<th>1897</th>
<th>1908</th>
<th>1926</th>
<th>1934</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5 ha</td>
<td>22.0%</td>
<td>23.8%</td>
<td>23.6%</td>
<td>30.0%</td>
</tr>
<tr>
<td>5-10 ha</td>
<td>26.6%</td>
<td>29.4%</td>
<td>34.5%</td>
<td>36.5%</td>
</tr>
<tr>
<td>10-20</td>
<td>26.4%</td>
<td>26.6%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>20-50</td>
<td>14.7%</td>
<td>13.4%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>10-30 ha</td>
<td>n/a</td>
<td>n/a</td>
<td>36.6%</td>
<td>n/a</td>
</tr>
<tr>
<td>over 30 ha</td>
<td>n/a</td>
<td>14.3%</td>
<td>5.3%</td>
<td>n/a</td>
</tr>
<tr>
<td>over 50</td>
<td>10.0%</td>
<td>6.8%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>


The communist regime built on pre-existing egalitarian traditions. A form of cooperative was introduced by the Agrarian Party in the 1920s. Egalitarian orientation, mutual help and voluntary participation in community initiatives were perceived as qualities of the Bulgarian national character since the National Revival (Renaissance)\(^\text{290}\). As discussed elsewhere, the state has been a stakeholder in the economy since the 1878 liberation. Under communist governments, state intervention expanded into all spheres of social life. A lack of visible social, economic and occupational divisions promoted a general sense of equality. Comparison of Bulgaria and Greece in the mid-1970s shows that the ratio of household income of the 95th income percentile to the 5th percentile was 11:1 in Greece and only 5:1 in Bulgaria\(^\text{198}\). This and other research suggest that the income structure in Bulgaria under the communist regime was generally flat and uniform. There were marginal income differences between the white collar, blue collar and agricultural workers but this effect was neutralised through transfers within extended households. The rural and urban areas were equalised in terms of basic living standards although many consumer services and the choice of products varied between regions. Yet the nationalisation of economic activities, unparalleled in Central and Eastern Europe led to the opposite effect. Research shows that it alienated large sectors of the population, reduced participation in state and community life and led to withdrawal into the family\(^\text{216}\).

Values and norms, concerning socio-economic divisions have far-reaching consequences for the compliance of users with any financing of a health system. The curtailing of private activities and private ownership of land have inhibited the development of civil society and personal responsibility as well as entrepreneurial attitudes. These circumstances do not provide a strong basis for acceptance of a model based mainly on voluntary insurance. On the contrary, solidarity and mutual help, especially cost-sharing in extended families, has been rooted in the culture of the society. However, after 1944, these values were emptied of their content.

After 1989, the previously egalitarian wealth distribution was reversed due to effects of macroeconomic restructuring and lack of policies neutralising its social effect. Income
polarisation and the diminishing sense of social security led to a resurgence of attitudes supporting collective forms of provision. In the first years of transition it was shown that income inequality was low compared to other lower middle income economies, with Gini coefficient at 0.26 (1992), although comparisons of the bottom 40% to top 20% suggest a higher income discrepancy. The Human Development Report also demonstrated that the richest 10% of the population received 24% of the total resources, while the poorest 10% received about 3% in 1995. In the light of these findings, the officially promoted social insurance model based on solidarity may not be unambiguously consistent with current societal values and preferences. Further research is needed to determine which socio-economic groups would support introduction of this model.

**Bulgaria among other countries of Central and Eastern Europe**

The Central and Eastern European countries, in political terms, were seen as indistinguishable during the Cold War. Soviet policies most often addressed the region as a whole. Their economic, cultural and historical differences were poorly understood in the West, since they displayed uniform policies, common ideology, institutions and values.

After the democratic transformation throughout the region, beginning in 1989, hidden differences were quick to emerge. This process had started earlier, with the revolts in East Germany in 1953, in Hungary and Poland in 1956, in Czechoslovakia in 1968, and in Poland in 1980, which demonstrated different attitudes. In the course of the 1990s, the differences, contradictions, and national specificities showed a new division in Europe. Central Europe (the Czech Republic, Hungary, Poland, Slovenia) and the Baltic states drifted apart from Eastern Europe, politically and economically, towards western Europe. This group of countries diverged from the rest of Central and Eastern Europe in the speed and scope of economic and political reforms, degree of privatisation, and commitment to reform. Moreover, there is a view that the central European countries, “from an older historical perspective” have experienced a process of cultural, historical and geopolitical identification with deeply rooted values of Western European civilisation, and have moved away from the rest of the former socialist partners. This coincided with a reduction of Soviet influence. The financial and political support these countries received from Western Europe (an example being rapid NATO membership for Poland, Hungary and the Czech Republic, and a fast-track procedure for European Union accession) was due to economic factors but also to “values and shared historical experience,” cultural compatibility, and being part of a European Union member’s “traditional sphere of influence.”

Bulgaria received less favourable treatment in Europe. It was categorised with Romania, the FSU, Macedonia and Albania as lagging behind in its economic recovery, reluctantly abolishing socialism and slow to accept European democratic values and institutions. There was a lack of support for radical reform from the electorates. One of the important differences was the pace of privatisation. While Russia achieved rapid privatisation of above 70% of all productive enterprises, and in the Czech Republic large numbers of state-owned enterprises were privatised via a voucher scheme, the pace of privatisation in Bulgaria was far slower (see previous section). Politically, the possibility of being integrated with Western European structures such as NATO was remote before the elections in 1997. Until 1996-1997, Bulgaria was not welcomed by the European Union in terms of business investments, promotion and aid. Investment, training, building
democratic institutions, and exchange of knowledge of democratic structures was small-scale and sporadic.

For Bulgaria, this situation started to change in 1997 when international support for reform took the form of loans and partnership projects, outpacing the earlier humanitarian aid and mechanical imports of know-how from the industrialised countries. Although Bulgaria has been a member of the ‘Partnership for peace’ initiative since 1994, its formal application for NATO membership was not submitted until 1997. Bulgaria has had an Association Agreement with the European Union since 1994 and formally applied for full membership in 1995, but progress in negotiation prior to 1997 was slow. It was recognised that what is likely to work more effectively is an ‘equal democratic partnership’ and an exchange of information and experience between Eastern and Western Europe.

It has been argued that there are several reasons why the situation in Bulgaria was especially unfavourable towards the development of a pluralist society. Emergence of civil society was obstructed by the systematic extermination of the elite in the post-World War decade and the total political control exercised by the Communist party and police forces. Most observers agree that the early consolidation of power of the Bulgarian Communist Party “was the most brutal in post-war Eastern Europe”119. There were strikes by Plovdiv tobacco workers in 1953, but they lacked strong leadership and were easily suppressed. In other Central and Eastern European countries, institutions such as the church, labour unions, and other civil society organisations retained a degree of independence from the state. For example, in Poland the church provided an alternative philosophy, in Bulgaria it was fully suppressed and attendance was punished. The Bulgarian communist party functioned as a mass party, enrolling one of the highest proportions of the population of any ruling communist party in Central and Eastern Europe119.

The existing middle class has been eliminated gradually and all potential for entrepreneurial activities removed. While in Poland farming remained wholly private88, by 1958 Bulgarian agriculture was fully nationalised following the Soviet example. A number of small-scale private businesses were preserved across Central and Eastern Europe, most notably in Hungary, in Bulgaria, such activities were driven underground. In Bulgaria the transition to central planning was facilitated by government involvement in economic life which had increased since the beginning of the century; undeveloped agriculture; and the existing egalitarian pattern of landholding; all of which gave the landowners less motive to resist collectivisation119. Compared to the 1920 and the 1930s, the economic achievement of the regime in raising living standards was undeniable. Soviet type institutions worked relatively well for Bulgaria, producing rates of economic growth and structural change that are among the highest in the world for most of the period from 1945 to 1975119. Crompton notes that “...at least in the years up to about 1970, the regime, quite literally, delivered the goods”221. A survey conducted in the 1970s indicated optimism about a range of topics such as economic conditions, social mobility, expectations for the future, and quality of health care. The high satisfaction with the way of living was explained by more subtle forms of control during that period, stable improvement of living standards, and egalitarian policies198.

Historically, Bulgaria does not have the pattern of popular anti-Russian or anti-Soviet opinion seen in other Central and Eastern European countries. Traditionally, Russia has been seen as a liberator, in particular because of its role against the Ottomans. Links
with Russia have been of central importance to the establishment of the modern Bulgarian state (1908) and for economic exchange in 1940-1990. Although the Bulgarian Communist Party was formed on Leninist principles prior to 1917, it never received wide-spread support prior to 1944. On the other hand the BCP came to power in a society where, with few exceptions, anti-communism was not a well-rooted popular political ideology\textsuperscript{119}. Other authors explain the passivity of Bulgaria before 1989 by national characteristics such as the legacy of the Bogomil movement\textsuperscript{9}, preaching withdrawal in the personal sphere and rejection of any political activity\textsuperscript{221}. These remain debatable.

\textsuperscript{9} The Bogomil movement was a widespread heresy in twelfth century Bulgaria which condemned all worldly activities as evil and preached asceticism, equality among people and withdrawal into rural communities

This chapter examines the health system in Bulgaria, including its historical development, organisational features, structure, and the reforms it has undergone since 1989. The analysis will broadly adhere to the framework developed to describe health systems by WHO for the Health Care in Transition (HiT) reports. The health status of the population will also be discussed. In the light of the objectives of the current research, more attention will be given to the finance side of the health system, current situation and reform trends being considered in detail.

Historical background

Establishment of the health care sector before 1944

During the Ottoman domination (1396-1878), there were three parallel strands of health care provision in Bulgaria. The Ottoman Sanitary Administration introduced “town doctors” and quarantine services to control plague and other epidemics, but these were far from satisfying the needs of the population. There were also attempts by more progressive Turkish officials to organise health services for the populations for which they were responsible.

The second strand arose in the early 19th century, when enlightened Bulgarian communities, influenced by the National Revival movement, endeavoured to organise their own health care provision and establish secular primary schooling. Those Bulgarian towns which were more developed culturally and economically, and which had greater autonomy, took the initiative to appoint a “town doctor” (on a subscription basis) to serve the Bulgarian population. This was subsidised by municipal resources and by charity. Funds were raised at community and village levels also, with the better-off giving a higher share of their income. These practices were based on a tradition of mutual help and solidarity. The funds covered recurrent costs such as basic materials, physicians’ salaries and treatment of the poor, on a one-off basis. Most often, payment to physicians was as fee-for service, in cash or in kind, including exchange of services. In cases of inability to pay, patients had to use savings, take a loan from a professional money-lender or receive help from extended families and networks.

The third strand arose in the second half of the 19th century when some social and health insurance policies were offered, mainly by Western firms. They were attracted by large markets in the Ottoman Empire for the outputs of European industry, availability of raw materials and cheap labour, and concessions for building, mining, and industry.

While industrial workers’ movements were active in claiming social protection in Western Europe, hired labour in the Bulgarian territories consisted of poverty-stricken peasants, former artisans and apprentices, who were not experienced in protecting collective interests. It was the firms themselves, aiming to manage the staff efficiently, which established some basic health care activities and organised social insurance.

\[a\] In 1865, Mithad Pasha, who ruled the Dunav vilayet, promoted building of hospitals for migrant Tatars and Circassians. Several Turkish civil hospitals appear in the period 1865-1867.
health care was the only type of social protection available at the time and it varied in volume and type. Two French engineers reported (1848-1849) that a mining firm in Samokov, at its own expense, hired a doctor to look after the health of their workers, and also, in 1860, opened a hospital. There are other examples from the 1860s of mainly French companies employing physicians and providing free health care in their own hospitals and pharmacies. In 1869, the "Statutes of ore-mining" envisaged health benefits, specifically access to an on-site health centre and a doctor, and monetary benefits in case of disability or death of workers. The law was not strictly enforced, but it influenced the development of similar legislation in post-liberation Bulgaria.

Development of a Bulgarian national health system began during the Russian-Turkish wars (1877-1878). After the liberation of Bulgaria (1978), the foundations of a state social insurance system were established with the Turnovo Constitution (1879). Coverage was limited to civil servants, the military and other state employees. Health insurance was not differentiated within the framework of social insurance. There is evidence of considerable Russian influence on institution building and health system organisation after 1878. Russian representatives appointed regional doctors. The position of 'general-inspector' (equal to health secretary) in 1881-1983 was occupied by a Russian military physician and the newly created Medical Council consisted of physicians trained mainly in Russia. The first city hospitals began to be built at that time.

The first regulation targeted specifically at the health system was the “Temporary Rules for Organisation of the Health Administration in Bulgaria” (1879) which bore a strong Russian influence (Box A2-1). This decree established the statutory basis of the health system, created a Medical Council at the Ministry of Interior, and regulated certification of privately practising physicians and pharmacies. The “Temporary Rules...” allowed communities to appoint their own 'town or village physicians' if they had a population of fewer than 8,000 and were able to support a physician. Out-patient health care and pharmaceuticals in the hospitals were to be provided free of charge for all. The poor received free hospital treatment and some pharmaceuticals if they presented a certificate of poverty. These provisions continued democratic practices established during the National Revival, the difference being that the costs of health care were covered by the state rather than by communities through charity. The most important provision was the delegation of authority to local, directly elected bodies. Municipalities became responsible for hospital management, public health functions and allocation of health budgets. This, in effect, decentralised decision-making and increased democratic tendencies in the administration of state health care. A negative effect was that, in practice, this involved shifting medical costs to the municipalities.

The "Police Rules for Public Health" of 1879 set out the basis of public hygiene. They attempted to combat communicable diseases and to enforce sanitary control. Large factories were required to employ a physician on an annual salary or if not, to ensure visits by district physicians, including preventive check-ups. District medical authorities were entrusted with a range of responsibilities for health care and sanitary provision, and epidemic control. However, the “Police Rules” were inadequate given the shortage of trained staff and the lack of explicit criteria for action.

The “Public Administrative Statute for Contracting and Obligations of Entrepreneurs” (1882) regulated the monetary and in-kind benefits from health insurance. Each enterprise was required to create a mutual insurance fund to support workers in case of

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The “Temporary rules...” were an almost literal translation of the Russian sanitary laws.
accident or illness or death. The funds were to be raised from employers and represented 2% of the wage bill, which were then repaid to the employer by the state. This system created perverse incentives as the employers received back sums taken from them and not used for health care. In addition there was no regulation of the volume, type and time period within which the benefits were provided.

In 1882, several laws called “Civil Medical Laws” were passed, regulating the preventive tasks of district and town doctors, sanitary control in schools and enterprises, health education, STD control, frontier health controls, and compulsory notification of communicable diseases such as diphtheria, scarlet fever and typhoid. The position of ‘general-inspector’ was curtailed and health care placed under the auspices of the Ministry of Interior through the Civil Sanitary Direction, which became a central institution managing health care. The Interior Ministry Secretary was head of the Medical Council. The decision-making role of the Medical Council was reduced, retaining roles that were more consultative than executive. With the “Sanitary Law” in 1888, health care was incorporated into the state administrative structure. Local regional, district, and municipal institutions and doctors became fully subordinated to the local administrative authorities. District governors and mayors were responsible for the health care in their areas. The law introduced free hospital treatment for certain categories of patients, but in general curtailed earlier access to free care for the population. There were state-provided funds for medicines for the poor, bought locally by district doctors or other local bodies, but in many rural areas there were only more expensive private pharmacies, leading to a shortage of free medicines. Free drugs for the poor were supplied through some charity initiatives on an irregular basis. Several draft laws, proposed in 1897, but not enacted, recognised that the burden on the population should be reduced and suggested the establishment of three categories of hospital with different payment regimes in each category or even entirely free hospital care. The Russian influence tended to diminish with the beginning of the withdrawal of their representatives from Bulgaria in 1879. The “Sanitary Law”, enacted in 1888, drew extensively on contemporary Romanian and French medical laws.

The “Law for Protection of Public Health” (1903) takes a step in the same direction by further extending the responsibilities of the village health centres to include every aspect of health and hygiene for their respective populations, including sanitary control, health services’ provision and administration and preventive measures. The law regulated an earlier process of development of a network of health catchment areas, which set the basis of village health care and improved access. Municipalities with a population of more than 4,000 were obliged to have physicians and district medical committees and were expected to expand their staff and earmark resources to assist the government in improving public health. In practice this meant reducing the state’s role in financing and providing health services locally. Private practice by doctor’s assistants (feldschers) in the village health centres was permitted. The health services increased their share of the municipal budgets. What is overlooked is that many poorer municipalities lacked specialised facilities, staff and equipment. In the 1903 law, health care is perceived as hospital-based and there is no provision for primary care services. Soon afterwards another regulation addressed infectious diseases, and especially smallpox, requiring compulsory notification of STDs, and introduced regulation of prostitution, prisons, psychiatric and maternity hospitals, and introduced the concept of social medicine. No effort was made to introduce immunisation, to enforce hygienic control, or to combat the causes of disease. NGOs and other charitable associations were pro-active in addressing the needs of specific groups, providing leadership and funding. In 1910 the first
tuberculosis dispensary was opened by the Society Against Tuberculosis, while the first government-sponsored dispensary opened in 1927. In 1924 the Red Cross established maternity consultation rooms.

Building the foundations of state-provided health care in Bulgaria, at the end of the 19th and beginning of the 20th century, focused mainly on the expansion of health services and hospitals, and training of physicians. The larger state hospitals were opened during the Russian-Turkish war, and served initially as temporary military hospitals. They had many Russian staff and medical supplies were provided by the Russian Red Cross and the Slavic Charity Society. At the end of the 19th century, there were 18 hospitals, only 5 of which had existed before the liberation of Bulgaria in 1877. In 1893, there were 300 physicians, 405 doctor’s assistants (feldschers) and 14 dentists; in 1903 there were 559 physicians, and in 1921 this rose to 900 physicians in Sofia. Medical staff were unequally distributed and, in 1903, only 20.7% of the population had direct access to medical care. Partly as a result of staff shortages, the role of the feldschers was expanded. They performed a similar role to feldschers in Russia and were employed mainly by the state. They were considered the backbone of state health care at the time and had a leading role in the provision of out-patient care.

Leading authors at the time saw this staff category as more adequate for the circumstances of Russia, but not of Bulgaria. In a report from three hospitals, the number of patients treated increased 5 times between 1879 and 1881. The first maternity hospital was built in 1903 in Sofia, and in 1918 became a university hospital. A number of hospitals were built with contributions by the local population. Evidence for the diminishing Russian influence was the falling number of physicians educated in Russia. In 1903, more Bulgarian physicians were educated in France (37%), than in Russia (18.8%), in marked contrast to the situation in the 19th century.

In 1903, there were 79 hospitals which fell into the following categories by ownership: 1) state supported facilities: first-grade state hospitals and second- and third-grade municipal hospitals; 2) facilities created at the initiative of public or charitable organisations (hospitals, ambulatories, charity-supported child consultation rooms, Red Cross dispensaries etc.); 3) private clinics and consultation rooms, including those owned by foreign firms. Among the foreign hospitals were the “Klementinska” hospital, opened in 1891, under the patronage of Princess Klementine (a member of the Tsar’s family), whose staff consisted of members of Western European Catholic orders. Another “Catholic hospital” was built in 1882, in Plovdiv. These hospitals offered high standards of care and attracted patients from other Balkan countries. In 1905, in the Troyan hospital, the first sanatorium for tuberculosis patients in the Balkans was opened. In the first 10-15 years after independence, the number of hospitals increased rapidly, a quarter of which were private. The share of private hospital beds was small, probably due to the lower ratio of beds to staff, compared to the state hospitals. There was a two-tier system, in which the state hospitals had the worst conditions in terms of staff and equipment. State-provided health care failed to provide cover for a significant portion of the population and, especially in the late 1920s, in combination with falling standards of living and high levels of private provision, did little to address the health care needs of the population.

A series of laws (Box A2-1) enacted in the first decade of the 20th century, concentrated on setting standards for labour conditions, health and safety regulations, and, to a lesser extent, on accidents and illness insurance. The first two laws were the “Law for Women’s and Child’s Labour in the Industrial Enterprises” (1905) and the “Law for
Mutual Aid Funds of Workers in the State Enterprises and for Privileges of their Wages" (1905); followed by the “Law for Aid of State Workers in Case of Disability and Illness” (1906) and the “Law for Inspection of Labour” (1907). The “Law for Aid...” envisaged free treatment for workers, with monetary compensation amounting to 100% of the salary if the illness was less than 3 months, and a pension if it was longer. Working hours for teenagers were limited to 10 hours daily and one month maternity leave was introduced for the period immediately after birth. The right to free healthcare could not be exercised due to a shortage of public facilities. These laws were not strictly enforced. Only small fines were given to employers who breached the law. These issues were brought to the attention of policy-makers by the growth of industry and the rapid increase in the numbers of hired labourers, often working in extremely unhygienic conditions. Data from 1904 show that, in large scale industry, only 2% of workers worked 8 hours per day, 36% worked 8-10 hours, 47% - 10-12 hours and 15% - 12-15 hours and more. Exploitation of children and women was common, with 12% of the workforce being children under 15. Women were paid significantly less than men. Mortality in female workers in Gabrovo was found to be 40 times higher than in men.

Wages of manufacturing workers were often insufficient to cover even basic needs. In 1894-1907 repeated strikes by workers in the more unionised branches of the economy (such as printers, weavers, tobacco workers and miners), pressed for higher wages, better working conditions, and insurance against illness and accidents, especially for the state-employed. The main objectives of the workers were extension of state coverage and the creation of professionally-based mutual insurance funds. The first friendly society was created in the 1880s in the printing industry, with active involvement of the Czech printers working in Bulgaria, who recreated the principles of corporate social insurance. The society sought to provide support in case of illness or leaving work. The owner was sympathetic, being acquainted with similar initiatives by Austrian workers. Another successful workers' organisation was the ‘Bulgarian Typographic Society’, established in 1883 in two cities. It provided cover against old age, illness, accident and unemployment, but was very selective, had high membership fees and targeted the “elite workers” in the branch. Similar societies were created by teachers (1882), employees (1884), shoemakers (1891) and others. The Bulgarian State Railways introduced their own network providing in-kind health benefits in 1889. Yet such successful initiatives remained the exception rather than the rule. Their example failed to spread even within the same industry. The main reasons were the lack of unanimity between the labour unions, Communist Party and other workers' organisations. There was a lack of unity even within sectors. The industrial workforce remained small compared to agriculture, and compared to other countries. The workforce was inexperienced, and this affected the maturity of leadership and organisational structures. In 1905, after a strike by printers in Sofia, the first collective contract was signed.

Development of the health care system took another direction, with a number of laws regulating health insurance and, in particular, mutual insurance funds involving workers in industry. These were the “Law for Integration of Funds for Workers' Insurance” (1915), the “Law for Hygiene and Safety of Labour” (1917), “Law for Insurance of Workers and Employees in Case of Disability and Illness” (1918), “Law for Social Insurance” (1924) and “Law for Finding Jobs and Insurance in Case of Unemployment” (1925). These laws obliged employers to provide safe and hygienic conditions for labour. These developments led to integration of the ten health funds existing within different Ministries. The “Law for Social Insurance” (1924), introduced compulsory insurance against accidents and illness for all employed in the public and private sector,
and covered maternity benefits and retirement pensions. There was a single fund into which all contributions were made, similar to Bismarck’s “krankenkassen”\textsuperscript{139}. An 8-hour working day (6 hours for teenagers) was introduced. Health insurance coverage through mutual insurance funds was extended to the self-employed. By 1948, 69\% of the population was covered by health insurance. Forms of sickness funds were organised by labour unions in more developed industries such as mining, printing, and the railway. These provided coverage against specific accidents and work-related risks, where coverage was provided mainly by the state or the employers, but did not provide cover against the wide spectrum of other health risks. In 1920, the mayor of Sofia suggested that free health care should be extended to all the population of Sofia. The Communist Party was against the initiative since free health care was to be financed mainly through taxes levied on workers; and suggested that instead, high income groups should be excluded from free coverage\textsuperscript{257}.

The “Law for Public Health” introduced in 1929, and valid until the 1950s, created facilities for control of tuberculosis, STD and alcoholism, as well as managing maternal, child and school health care. Despite attention to health promotion, the law did not envisage creation of primary health care facilities. The Law promoted the private sector and furthered the state’s withdrawal from ambulatory care, which was to a larger extent delegated to the municipalities\textsuperscript{256}. Hospitals had to organise small-scale ambulatories, sometimes even in their waiting rooms, in order to deal adequately with the patient flows. Some village authorities ran their own public consultation rooms for the poor. Where private doctors were employed, there was a tendency to redirect patients to their private practices.

In 1918, in response to increased demand for physicians during the First World War, the Faculty of Medicine was established. Heath centre midwives delivered about 30\% of births\textsuperscript{246}. Low numbers of educated doctors handicapped development of the private sector, on which health care was then based. In 1901, the Bulgarian medical and dental associations were created. Membership of the Bulgarian Physicians Union was made compulsory with the 1929 law.

The transfer of responsibilities from the central state institutions to local authorities continued. The municipalities had to determine their population needs, health care budgets, and organisation of facilities. While, in 1921-22, 60\% of health centres were financed from the state budget, in 1930 this percentage was 9.2\%. In 1921-1926, the municipalities financed 10\% of the health centres, in 1930 this was 59.6\%\textsuperscript{246}. However, state involvement in policy and institution building was significant. Hospitals remained largely state-run. Public hospitals were financed from the state budget supplemented by donations from wealthy citizens or charities. Health administration was scattered between different Ministries and each provided services free of charge at, for example, the Workers Hospital, or Transport Hospital. There was a shortage of beds in the public sector, and a quarter of all beds were private (23.7\%).

The lack of a unified Ministry of Health and a de-centralised administration of the health system did not operate efficiently or encourage the formulation and implementation of consistent health policy strategies. A key area requiring state intervention was regulation of sanitary conditions. For example, 77\% of drinking water supplies came from wells and other local sources, the 23\% from modern water mains was of unknown quality. It also encouraged regional disparities in access to health services. The development of the health care system had benefited the urban population to a larger extent, while the population in rural areas often had limited access to adequate health care and thus commonly sought the services of traditional healers, midwives and other unqualified
persons. However the barriers to access were mostly geographical and, until 1944-48, tended to decrease with the extension of the network of facilities.

Through the period 1887-1944 the private sector played an essential role in health care provision. The Medical Council, at the end of the 19th century, consisted mainly of private physicians, who continued to be powerful\textsuperscript{287}. Out-patient care relied almost entirely on private physicians, since the state placed less importance on primary compared to hospital care. The "Law for Protection of Public Health" (1903) regulated private health establishments and established the right to create them\textsuperscript{256}. In 1903, only about half of Bulgarian physicians worked in the public sector. In Sofia, in 1927, there was a total of 20 hospitals, of which 4 were state owned, 1 public, and 15 private. Of 33 ambulatories, only 3 were state ones, 7 were municipal, and the rest private. Despite the state's focus on hospitals, some 62 private hospitals existed in 1931\textsuperscript{246}. However, most were small private out-patient practices, with one or two "family doctors" (GPs) or specialists. In many cases two generations of physicians from the same family worked together. Payment to physicians was on a fee-for-service basis, but the sums involved were deemed affordable at least by urban lower-middle class\textsuperscript{5}. Insurance coverage for medical costs was not widely available apart for some industrial workers. Hospital treatment was paid, mainly, out-of-pocket and directly to physicians and other staff, with a small percentage going to the clinic. People, who would otherwise use state health services, sought private physicians in case of emergency or for home visits. Informal mutual support and community networks continued to play a vital role in enabling patients to pay for health care.

In summary, the main characteristics of the Bulgarian health care system from independence until 1944 were: 1) a well developed private sector dominating all levels of health care; 2) a weaker public sector focusing mainly on treatment, but not prevention of illness, although there were promising initiatives in preventive care and safety at work; 3) state priority to secondary and tertiary health care and an absence of primary care facilities; 4) social insurance coverage was limited mainly to state employees, albeit with some tendency to gradually extend the coverage; 5) improvements in health and social benefits affected almost exclusively industrial workers and not other groups such as peasants, who were disadvantaged because they were not organised; 6) inequity of access existed between urban and rural areas and between regions; 7) the supply of qualified physicians, facilities, and number of beds was inadequate for the needs; 8) health districts were entrusted with too many functions and had limited motivation to follow national strategies; 9) a lack of a consistent national policy as well as of institution such as the Ministry of Health setting hygienic and sanitation standards; 10) undeveloped social medicine and lack of statistics on the determinants of health in the population.

\textsuperscript{4}In-depth interviews with people living during this period reveal little awareness that insurance existed
Establishment of the health care system in Bulgaria: 1878-1944: Key events

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1879</td>
<td>Temporary Rules for Organisation of the Health Administration in Bulgaria</td>
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<td>1893</td>
<td>Law for Preservation of Public Health</td>
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<td>1905</td>
<td>Law for Women’s and Children’s Labour in the Industrial Enterprises’</td>
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<td>1905</td>
<td>Law for Mutual Aid Fund of Workers in the State Enterprises and for Privileges of their Wages</td>
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<td>1906</td>
<td>Law for Aid of State Workers in Case of Disability and Illness</td>
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<td>1907</td>
<td>Law for Inspection of Labour</td>
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<td>1910</td>
<td>First tuberculosis dispensary opened by the Society Against the Tuberculosis</td>
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<td>1915</td>
<td>Law for Integration of Funds for Workers’ Insurance</td>
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<td>1917</td>
<td>Law for Hygiene and Safety of Labour</td>
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<td>1918</td>
<td>Law for Insurance of Workers and Employees in Case of Disability and Illness</td>
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<td>1919</td>
<td>Faculty of Medicine created</td>
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<td>1924</td>
<td>Law for Combat of Malaria</td>
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<td>1924</td>
<td>The Red Cross opened maternity consultation rooms</td>
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<td>1927</td>
<td>Law for Social Insurance</td>
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<td>1927</td>
<td>Law for Finding Job and Insurance in Case of Unemployment</td>
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<td>1929</td>
<td>Governmental tuberculosis dispensary opened</td>
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<tr>
<td>1929</td>
<td>Law for Public Health (abolished 1951)</td>
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Establishment of the Semashko model (1944-1989)

From the previous section, it is clear that the health care system of Bulgaria before 1944 had many inherent problems, which provided a basis for the introduction of the Semashko system. These included inadequate coverage of the population by the state-supported health services and the subsequent inequities between high- and low-income groups. Facilities and staff were scarce and unequally distributed between rural and urban areas, hampering access. In addition, health status suffered from the effects of war and the global recession in the 1930s.

The socialist Semashko model originated in the Soviet Union and was imposed in the countries of Central and Eastern Europe. The socialist health care system in Bulgaria was established in three stages, which will be discussed briefly, followed by analysis of the strengths and weaknesses of the system.

The main objectives of the first stage (1944-1949), were to extend health insurance coverage to more sections of the population and to achieve rapid health gains through emergency measures to deal with the immediate health problems of the post-war period. The government faced the task of reducing the burden of illness on society caused by war and poverty. Health was considered a state priority to a degree unprecedented in Bulgarian history. The state aimed at mainly quantitative improvements benefiting the majority of the population. The emphasis on health by the first communist governments could be explained by the need to ensure a steady supply of workers needed for economic recovery and to increase working capacity in order to raise the productivity of the socialist economy. The Decree for Universal Free Health Care (1951) eliminated social insurance coverage and established a budget financed health system, free at the point of use.
The first step in nationalisation of health care consisted of a ban on private ownership of large-scale health facilities and pharmacies. The newly created Ministry of People's Health aimed to eradicate communicable diseases, such as tuberculosis, malaria, and parasitic diseases, which were widespread prior to 1944. In this it was largely successful but, due to inefficient management, some of the achievements were not sustained. The first action of the Ministry of People's Health was to start building a network of ambulatory, outpatient and hospital units; to improve hospital care; to introduce health and social protection of mothers and children; to address social problems causing disease; and to extend health care provision in the villages and for workers in industrial enterprises. Building health centres and maternity clinics in the villages involved the active participation of the local authorities (People's Councils) and the public, and was regulated by the “Law for Co-operative Building of Hospital Facilities”. These policies led to a dramatic increase in the number of health facilities and qualified staff. A second Medical Faculty was created in Plovdiv, along with 15 schools for auxiliary staff, and curricula were restructured. The Constitution of Bulgaria (1947) defined the main responsibilities of the state in the area of health care: “The state looks after public health, through organising and managing health care...”. The state was also the primary agent in health education, mass physical education, protection of maternity and childhood, and public insurance.

In contrast to the mainly quantitative achievements of the first stage development of the post-war Bulgarian health care system, the second stage (1950-1970) aimed at qualitative improvements. In this stage, the basis of the socialist health care system was established, following closely the principles of the Soviet Semashko model. The state and party apparatus introduced the principle of free health care for the whole population in 1951, and this policy outpaced the economic capacity of the state at the time. The objective of stable improvement in the health status of the population was addressed through extending health care facilities, capital infrastructure investments and better supplies. The quality of health care was enhanced through use of new technologies and hospital mergers. In the 1960s and 1970s there was extensive construction of new facilities, mainly high-cost hospitals. Ambulatory health care provided at polyclinics became more accessible: annual visits per doctor increased from 1.06 in 1950, to 5.25 in 1971. A referral system was introduced in primary care and dispensaries, and professional health care for workers expanded. After 1956, in line with economic growth and rising living standards, prevention was emphasised.

The 83 dental care stations in 1944, had increased to 3,270 by 1970. The decision-making power of the Ministry of People's Health was increased. In accordance with the Soviet model, a State Sanitary Inspection and network of sanitary-epidemic stations, working in the area of infectious diseases' prevention and control, supplemented by research institutes and societies, were created. A new Faculty of Medicine was opened in 1960 in Varna. In 1950, the Health-Resort Office was opened, responsible for recreational facilities related to health. Between 1950 and 1970 the Semashko system was fully established and achieved major successes, as measured by demographic and health indicators. Infant mortality was reduced and life expectancy greatly increased. Tuberculosis rates declined and malaria and typhoid were eradicated. The achievements of the system seem likely to have been due to a combination of socio-economic and health care factors. In the Constitution of 1971, state involvement in health was set out in conjunction with public insurance, a pension system, and other social security benefits ("The state serves the people through creation of conditions for improvement of well-being,
education and health of the population... Every citizen has the right to free health care. The state and the public institutions look after the health of the children and adolescent").

During the third period (1970-1989) further change was incremental, but failed to build on the achievements of the previous stages. A major characteristic of this period was full nationalisation of health care. In 1972, private out-patient practice, which continued to exist on the margins, was eradicated. This measure aimed to protect the interests of the population, remove the material transaction between doctor and patient, improve the standard of care and enforce the principle of free and accessible health care. In 1972 the State Council created the Medical Academy, a teaching hospital with integrated research functions, specialised training and tertiary care. In the 1970s, another four Medical universities were created along similar lines. Medical training was re-organised and centralised. In 1973, the Moral Code of the Physician in Bulgaria was introduced, addressing, among other ethical issues, under-the-counter payments. It is clear that the main improvements in life expectancy were achieved in the 1940s, since the late 1960s the total life-expectancy of the population, especially of men, has not improved further (Figure A2-1).

**Figure A2-1. Life expectancy at birth in Bulgaria (1955-1995)**


The “Law for People’s Health” was passed in 1973, replacing the “Law for Public Health” (created 1929 and abolished in 1951). There was no law on public health between 1951 and 1973, and the health system was regulated mainly through governmental decrees and Ministry of People's Health regulations. The Law created a legal basis for the development of the health care system and functioned, with some amendments, until the present. The Law summarised the achievements of the previous stages: the right to free health care, a preventive orientation, environmental protection, an increase in birth rates, raising of the status of the medical profession etc. The Law emphasised the public characteristics of socialist health care and the right to free, accessible and qualified health care for all citizens, through a network of health establishments. Control was consolidated at the Ministry of People's Health, and the health facilities at local level were jointly controlled by Ministry of People's Health and People’s Councils. Only three Ministries were allowed to maintain their own health facilities: the Ministry of Interior, the Ministry of Transport and the Ministry of Defence. It was recognised that the health system interacts with a complex of economical, medical,
and educational factors. For that reason Ministries, People's Councils, social services, and labour unions, were required to collaborate in order to produce consistent strategies. The Law gave a central role to prevention in a broad sense, including environmental protection, reduction of smoking and alcoholism, nutrition and workplace hygiene. The law defined certain obligations of citizens and public organisations to protect their own health by means of prevention and education activities. These were not achieved because of the characteristics of the public organisations, their lack of initiative and total subordination to the state and the communist party.

For the purposes of this analysis, the advantages and disadvantages of the socialist model (1944-1989) will now be discussed in general, without separating the developments in each stage. This is possible due to the continuity of the model.

As applied in the Bulgarian context, the Semashko model had several advantages, which contributed to its popular support. The most significant achievement of the early communist regime was the entitlement to a comprehensive package of health services for the entire population. The right of every citizen to free and accessible health care was defined in the Bulgarian constitutions (1947, 1971) and in the “Law for People’s Health”. Universal coverage was achieved in the 1950s, together with general improvements in living standards and introduction of a comprehensive social insurance system for all groups in the population. However, industrial workers situated in urban areas had privileged access to a broader range of health services, which was one of the reasons for accelerated migration from the rural areas. A continued tendency to protect industry at the expense of agriculture perpetuated certain inequities between the rural and urban areas. State commitment to universal provision was undermined by economic problems throughout the period.

The shift in ideology in the wider society, after 1944, affected health care provision in several important ways. The socialist health system was based on egalitarian principles rooted in Bulgarian national culture and values. During the National Revival through the 19th century, health became a collective concern at local community or family level. In the phase of capitalist development before 1944, health care was considered an individual responsibility and the state sought only to provide a safety net for those in need. Yet the tradition of mutual help was largely preserved in the rural communities. According to the communist doctrine, the state was responsible for financing and providing a wide range of welfare benefits, including free health care. The sphere of collective rights was extended at the expense of individual rights, such as civil and political rights. According to a sympathetic commentator, collective responsibility was the only way to apply public health policies, hygiene and sanitary control:

“Improvement of the living standards of the population...as well as improvement of conditions of labour...is not and cannot be a personal concern”

Although a public health care sector existed before 1944, it was denounced by the authorities:

“Free-of-charge out-patient care of poor and ill people should not and cannot be perceived as publicly-organised help. It is an expression of state charity, which characterises each authority...a means to rule and lead the economically weak.”

From 1944 to 1989 the state held a monopoly in financing and providing health services. The public insurance system prior to 1944, which provided combined social and health coverage, was abolished. The health sector, similar to other social sectors, was financed directly from the state budget and managed by central government. The transparency of the tax-based finance system was extremely low. Although the stable flow of budget
resources allowed for long-term investment in infrastructure and planning, the health system was generally underfunded, as other governmental priorities emerged. The state failed to guarantee a consistently good quality of care, sufficient supplies and equipment, or to provide adequate incentives for staff.

The Semashko model radically transformed the pre-1944 structure of the health care system by focusing on extensive provision of primary health care. Health policies dramatically improved geographical access to care. Without this, the claim for universal coverage would have been meaningless. Primary care and first level specialist health care was provided mostly through a network of polyclinics. These were primary care facilities employing physicians with a general medical background and a few types of specialists. Polyclinics controlled referral to hospitals (also known as ‘phased’ care), but their ‘gate-keeping functions’ gradually deteriorated and most patients were able to bypass them. Some of the higher rated polyclinics were integrated with hospitals. Among other first-level providers were village workers and school health centres, specialised dispensaries for management of chronic diseases and stations for emergency health care. A major achievement was the introduction of far-reaching public health campaigns for compulsory immunisation, screening and other prevention strategies.

Administratively, since 1950, primary care in Bulgaria was based on district (raion) and smaller catchment areas (uchastak/ neighbourhood) divisions within an integrated primary care polyclinic network. The district system was introduced in Bulgaria under Soviet influence. Before 1950 it covered mainly villages, but later it was extended. Each polyclinic covered an area divided into therapeutic, paediatric and obstetric-gynaecological districts, and each district was divided into a number of territorial sections. ‘District physicians’, together with nursing staff (‘district teams’) provided care for a designated number of people. Most typically the district therapist covered up to 3,000 people\textsuperscript{249}. In this system, patients were allocated to physicians according to their address\textsuperscript{139}, aiming to establish long-term contact between the district physician and the patient\textsuperscript{249}. Among the duties of the district physician were to treat and prevent diseases, to monitor the health status, causes of illness and environmental hazards of their population and provide health education. Family physicians, mostly in the private sector, had been familiar in Bulgaria from the beginning of the century. The difference from the pre-1944 period was that in the socialist system free choice of primary care physician was not allowed. Lack of choice of physician and facility were among the major reasons for distortion of the district and catchment areas system\textsuperscript{249}, with most users trying to bypass the primary care level.

The administrative division of the territorial units, the referral system, and the long-term contact between district physicians and patients facilitated full coverage of the population and ensured access to health care. However, there were a number of disadvantages of the primary care system. Among these were lack of personal choice of physician, high-cost health care due to oversupply of polyclinic specialists, division of responsibilities among physicians and other medical staff, lack of users’ influence on the quality of care\textsuperscript{249}, bureaucratic referral procedures, and low incentives for physicians. Primary care provision favoured urban areas which led to regional disparities. The inefficiency of primary care services, coupled with excessive specialisation of staff and staff imbalances, gradually shifted the emphasis to curative specialist health care.

As a consequence of a range of factors, the health status of the population improved radically. Morbidity rates from many diseases, widespread in the past, such as tuberculosis, typhoid, scarlet fever, whooping-cough, fell sharply. For example, the
incidence of tuberculosis fell considerably, from about 1,658 cases per 100,000 population annually in the 1920s to 379 per 100,000 in 1970 and to 129 in 1985. Many diseases, such as polio, diphtheria and malaria were eradicated. The average life-expectancy at birth increased from 51.75 in 1939 to 71.66 in 1976 and there were significant decreases in mortality in all age groups. These improvements occurred mainly in the first 35 years (until the 1980s) according to certain authors; while according to others these held for a shorter period after 1944. Many of the positive trends regarding health and demographic status stagnated or were reversed in the 1970s and there is still uncertainty about the causes of this.

The Ministry of People's Health, created in 1944, assumed most functions in health policy, control and budgeting. Initially, this centralisation produced positive results by establishing relevant institutions, consolidating existing experience and creating national policies and standards in health care, hygiene and health education. The central planning mechanism, co-operation between health units and the centralised reporting of data on the health of the population, in theory allowed formulation of national health strategies using a rational approach. However, a number of shortcomings made the over-centralised management inefficient. This process was contrary to the pre-1944 trend of democratic self-government and delegation of power to local administrations. After 1944, local People's Councils initially retained some control over health care, but this was soon curtailed. The subsequent centralisation led to inability to manage local facilities. The Ministry of People's Health was supported by a heavy, hierarchical bureaucratic apparatus, which delayed decision-making. Most centralised structures were politicised, with control by the Communist Party. Policies were rarely based on analysis of available data on the state of the health sector and health status, and were often misreported for ideological or political purposes. In many cases the Ministry of People's Health had to follow the party line, against its better judgement.

Another feature of the health care system between 1944 and 1989 was the package of strategies to promote extensive growth, in order to overcome the inherited undersupply of capital investment and staff. Accordingly, budgets were calculated according to the numbers of beds and staff, not according to the needs of the population. This created incentives for maintaining inefficient levels of staff and beds, high admission rates, and long hospital stays. There was widespread overconsumption and overtreatment in order to justify inputs. Inputs also grew through unrealistic admission rates in the higher medical universities. Similar strategies to achieve growth were observed in other economic sectors. Extensive growth also served the purposes of providing 'hard evidence' when reporting to a higher authority. Initially, the socialist system achieved quantitative improvements, but failed to reform when saturation levels were reached.

As discussed in the previous section, the private sector was prominent in health services provision in Bulgaria before 1944. This situation changed dramatically after 1944, when large-scale nationalisation was undertaken. However, nationalisation of private health care occurred more slowly than in other sectors. Private operations were performed until 1951, when nationalisation of the wider economy was already completed. This may have been perceived as a political risk for the Communist Party which was still consolidating its powers in the Parliamentary coalition. Out-patient private practice was not banned until 1971. It consisted of single-doctor private practices of specialists and dentists that were closely monitored by the tax authorities. While in Bulgaria there was a niche for

existence of small-scale private practice until relatively late in the period of communist rule, in the Czech Republic, private practice by physicians was restricted by laws in 1951 and 1952 and closed down in 1954, and private practice by dentists was allowed only until 1972. This tolerance of private practice in Bulgaria might be explained by the initial state priority for primary care provision and the shortages of specialists in secondary care until the 1970s. Private practice by specialists fitted well with the framework of facilities and provided a means of offering specialised care at low-cost. It supplemented, rather than replaced, the parallel state services. Nevertheless, strategy documents showed that the underlying policy was an ultimate abolition of the private sector.

Another characteristic of the Semashko system was that it underestimated the administrative and organisational needs of the system. There was a shortage of trained managers and administrators who could provide support for the clinicians, who most often managed large facilities. The overt effect was bureaucratic management, inefficiency and waste. Despite waiting lists being officially non-existent, shortages of supplies, specialised hospital beds and staff were common. Lack of control over resources and unaccountability led to two-tier services, preferential treatment and corruption.

The system also aimed to ensure that health care was closely linked to medical research, and collaborated with other institutions with an indirect impact on health, such as educational authorities. This was achieved by top-down rule by decree from the Socialist Party, and although some joint campaigns were initiated, in many cases the collaboration remained purely formal.

A few studies conducted in the 1970s indicated high levels of satisfaction with the performance of the health care system. The studies suggested a correlation between positive assessment of the health care system and the overall living standards of the population which improved in the post-war period until the 1970s, prompting optimistic views about current social conditions and the future in general. Moreover, perceived equity of access to guaranteed state health care, universal entitlement, easy access to health services and health promotion measures, and health gains, may have accounted for the positive attitudes towards the health care system registered in the 1970s. The lower levels of satisfaction registered among users and health professionals in the 1980s, also identified in the in-depth interviews forming part of this thesis, may have been caused by shortages, unresponsiveness to consumer need and lack of choice.

The totalitarian state exerted full control over the representation of the medical profession. The national medical association and other professional societies were replaced with a single trade union, with mostly formal functions. There was no forum for the discussion of issues related to health policies, contributing to a lack of transparency. This limited research to what was deemed ideologically correct.

In summary, the main principles underlying the Semashko system were: 1) nationalised care provided free-of-charge 2) monopolistic funding and provision; 3) comprehensive coverage of the population; 4) centralised management and planning; 5) accessible (geographically and financially) and equitable health care; 6) priority of prevention and primary health care provision; 7) broad public participation; and 8) close collaboration between institutions, and between health care and research. In practice, however, these were not always achieved.
The Bulgarian health care system in the 1990s: Inheritance and reform

Health care reform 1990-1997: an overview

After 1989, following the democratic transition, the dismantling of the totalitarian state affected most sectors, including the health system. In the 1990s, health care reforms in Bulgaria mostly attempted to transform the Semashko system along the lines of the pre-1944 health care organisation, which seemed a logical process of returning to the traditions in health care. Thus, the main reform directions were re-establishment of the private sector in health care and in pharmaceutical trade, development of family medicine, strengthening the role of medical organisations and transformation of health financing.

Among the first reform developments was the start of liberalisation of the health care system, in line with the general economic restructuring. In 1991, out-patient private practice in the health sector was re-legalised by an amendment to the Law for Public Health from 1973 and with a Decree for the Conditions and Procedure for Private Medical Practice260 (Box A2-2). The Decree regulated out-patient private practice for legally qualified medical specialists and set the conditions for licensing private facilities. Apart from provision for private health care, the 1991 amendments to the Law for Public Health reinforced the right of users to free health care:

"Every Bulgarian citizen has a right to free medical care in the state-owned health establishments under the conditions of this Law" (article 2 (1))

In a parallel development, in July 1991, the entitlement of every citizen to free health care in the state facilities was reaffirmed in the new democratic Constitution:

"Citizens are entitled to health care which shall guarantee accessible medical aid and to free medical care in accordance with provisions and procedures defined by law. The health care of the citizens shall be financed from the state budget, employers, personal or joint insurance payments and other sources in accordance with provisions and procedures defined by law" (article 52)

In response to the rapidly developing market for pharmaceuticals and the entrance of the large pharmaceutical companies, new legislation was introduced. The Law for Pharmaceuticals and Pharmacies in Human Medicine (1995) regulated drug licensing, registration, import and export and retail trade, and supplemented the Decree for the Conditions and Procedure for Coordination of Export and Import of Pharmaceuticals (1995).

The private sector, although for out-patient services only, grew at a fast pace. Quality of care was substantially enhanced in the small-scale private out-patient establishments, thus increasing demand. In 1992-5 there was a process of vertical and horizontal integration of private practices into group practices, private polyclinics and health centres, mainly in urban areas. Of the privately practising doctors, 35% now have contracts to perform private consultations in public health facilities. The remainder work in private rooms, private polyclinics or at home. The market for private health care is concentrated mainly in Sofia and the other large cities.

Private services could not expand further relying only on out-of-pocket cash payments and in the absence of any insurance mechanisms. The market for physicians' services has lagged behind the markets for pharmaceuticals and dental services, with official
payments for private services at only 1-3% of health expenditure\(^4\). Large-scale privatisation of hospitals was hampered by unsuccessful attempts to pass a health insurance law, slow privatisation in the wider economy, insufficient investment and worsening macro-economic conditions. After an initial peak, the demand for private services stagnated and started to fall. The periodic economic crises, translating into falling living standards, meant that users were increasingly unable to pay out-of-pocket for private health care.

In December 1995, the Health For the Nation, a National Health Strategy prepared in collaboration with WHO, was launched by the Socialist government, a year after their return to power. The 1997 elected democratic government commissioned a more comprehensive policy document in 1999. This outlined current health status and health system priorities, and presented a broad framework for reform and implementation steps, in agreement with the WHO "Health for All by the Year 2000".

The Draft Law for Health, which would replace the Law for Public Health from 1973, was submitted to the Parliamentary Commission, but has not been enacted since. Instead, there have been numerous amendments required by the reform process.

Another reform achievement was the dismantling of the communist-dominated labour union of physicians and re-establishment of the Bulgarian Medical Association and the Bulgarian Physicians' Union in 1990\(^{139}\). Several other professional organisations emerged, such as the Bulgarian Stomatological Association, the Association of Private Pharmacists, the Association of Hospital Directors, and the Nurses Association, as well as three labour unions. Finally, the Law for the Professional Organisations of Physicians and Dentists was passed by Parliament in 1998. It established the functions and organisation of the Physicians' and Dentists' associations, in which the participation of all practising health professionals is compulsory.

A number of NGOs representing the interests of patients suffering from specific diseases (diabetes, blindness, deafness) were established, although organisations protecting the rights of wider patient groups were slow to emerge. Some have developed links with foreign NGOs such as the British Diabetic Association. In 1995, it was the Bulgarian Physicians Union that proposed the introduction of a Charter for the Rights of Patients.

In 1992, the Medical Academy, a national body providing highly specialised care and medical training, was closed down by a Law. The regional branches were granted independence as Higher Medical Institutes.

Under the socialist government (1994-1996), several reform initiatives in primary care were undertaken. It was recognised that there is a need for general practitioners (similar to the 'family physicians' of before 1944) to provide more personal service, to act as 'gate-keepers', and to substitute for large numbers of narrow specialists at primary care level. In 1994, the Higher Medical Council defined the status and functions of general practitioners. A pilot training programme for GPs was initiated with the support of the EU PHARE programme and later, 90 hours of teaching in family medicine were incorporated in the curricula of the Higher Medical Institutes. A programme for postgraduate specialisation in general medicine also has been approved by the Higher Medical Council. Other schemes include a PHARE-funded one-year course in family medicine for specialists in general medicine, an eighteen-month course for specialists or short-term courses for already practising district practitioners in polyclinics\(^{139}\).

The reform also sought to improve staff motivation, in two ways. Firstly, in 1996, a performance-related component was added to physicians' salaries, taking into account the number of patients registered with the respective physician, work qualifications and
other indicators. In effect these bonuses were set too low and paid retrospectively, which resulted in inflation further undermining their value. The second step was to introduce choice of ‘family physician’, exercisable annually at the state polyclinics.

Steps were undertaken to transform the tax-based model of health financing. With the participation of different stakeholders, several proposals for a health insurance law were prepared. In 1993, a Draft Law on Health Insurance gained wider support, was reviewed by the government and submitted to the Parliamentary Commission, where it was debated, but subsequently side-lined, in 1995. It proposed a compulsory health insurance scheme administered by 28 district branches of the Ministry of Health.

The democratic government elected in 1997 showed commitment to speed up the financial reform and, in June 1998, the Health Insurance Law was passed. The compulsory insurance scheme will become fully operational in 2000. The Law envisages a Bismarck-type insurance system, with a single statutory insurer (the National Health Insurance Fund) with 28 regional offices. The NHIF will be an independent body, directly accountable to Parliament and governed by a board appointed every four years. Contributions will be based on a payroll tax and deducted at source. Employer and employees will each pay 3%, the self-employed will pay 6%. The contributions of pensioners will be paid by the state budget and those of the unemployed or poor, by the municipalities. The NHIF will purchase health services from public and private providers. Payment to staff will be based on capitation, with a fee for service component.

A project to support implementation of a health insurance system was agreed with the PHARE programme of the EU in 1994. The first phase of the project involved developing procedures for measuring the costs of a range of treatments taking into account duration, intensity and outcome of treatment, and introducing information systems similar to the DRG concept. In 1993-94 the Ministry of Health commissioned research from the National Centre of Public Health, involving comprehensive pricing of different treatments, according to duration of treatment, volume of work, pharmaceutical consumption etc. as a preparatory step to introduction of performance based payment methods. This work was later used to set the levels of user fees in the public sector, which were legalised in 1997.

Throughout the 1990s, the health system has continued to be financed entirely from general tax revenue. Despite a declining share of GDP spend on health care, both in relative and real terms, the reform has sought extra-budgetary sources of financing, rather than transforming the financing mechanisms. The systematic underfunding of the health sector caused shortages of essential drugs, including antibiotics, insulin and analgesics. In 1994-8 a chaotic introduction of semi-official user fees and informal under-the-counter payments supplemented budgetary revenue at the state facilities. In December 1997, user fees for an extensive list of services were regulated with the Decree for the Conditions and Procedure for Payment of Health Care of Patient’s Choice.

In the 1990s, foreign aid was essential to sustain the health care system. During the crisis of 1996-7, the Emergency Social Assistance Programme funded by the EU PHARE programme provided pharmaceuticals or reimbursement of pharmaceutical bills to the poorest section of society. In many hospitals, most basic supplies were donated from international agencies, some even from other CEE countries.

Another set of reform policies aimed to improve the management of existing resources. Attention was focused on restructuring of the health system, hospital closures, lay-offs of staff, training of managers and reduction of the administrative costs of the bureaucratic
apparatus. Since 1992, health care facilities have been recognised as legal entities, with the right to participate in a contract. Moreover, following a governmental decree in 1994, they have been allowed to contract out auxiliary and support services, and food and drug supplies on an annual basis. Under the second phase (1995-1996) of the EU PHARE project, the testing and implementation of various payment systems, information systems, managerial options and staff training were initiated in two pilot districts (in Smolyan and Gabrovo). This phase also envisaged conducting a survey of the population and health care staff in order to test the acceptability of various reform options. The second phase of the project came to a halt due to delay in establishing a legal framework, and decisions regarding financial and managerial arrangements, and the survey was not carried out. Another EU PHARE project involved restructuring of the emergency care network.

More recent legislation supporting the implementation of health insurance was the Law on Health Care Facilities enacted in 1999. Under the provisions of this Law, health institutions will be legally and financially independent, with fully autonomous and flexible management, including responsibilities for hiring staff, entering contractual agreements with the national insurance bodies, handling costs and implementing internal restructuring. Hospital and primary care will be clearly separated and a process of accreditation of hospitals, which is likely to lead to closure of facilities, will be initiated. The Law also envisages a performance-related payment to physicians and facilities.

Donor agencies were instrumental in most reform developments through provision of emergency aid, technical and financial assistance. In 1996, a joint loan for $47 million was agreed between the World Bank, Council of Europe Social Development Fund, the PHARE programme and the Bulgarian government (participating with $7.7 million), aiming to restructure health policy and management, primary health care, emergency services, and blood transfusion. The European Commission's PHARE Programme alone has provided €40.5 million for a comprehensive reform programme. Restructuring of health financing has been recognised as an essential component of reform along with structural reform of health care, with emphasis on primary care development (pilot projects in 1999 sponsored by the WB in 24 municipalities), training of GPs, establishment of information systems, and pharmaceutical regulation.

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>The Bulgarian Medical Association and the Bulgarian Physicians' Union re-established</td>
</tr>
<tr>
<td>1991</td>
<td>New Constitution and an amendment to the Law for Public Health from 1973 guaranteed the citizens' rights to free health care</td>
</tr>
<tr>
<td>April 1991</td>
<td>Decree for the Conditions and Procedure for Private Medical Practice</td>
</tr>
<tr>
<td>1992</td>
<td>Law for closing down the Medical Academy</td>
</tr>
<tr>
<td>1992-95</td>
<td>National Centre of Health Information created</td>
</tr>
<tr>
<td>1993-94</td>
<td>Vertical and horizontal integration of private practices</td>
</tr>
<tr>
<td>1993</td>
<td>Evaluation of volumes and types of medical activities began</td>
</tr>
<tr>
<td>Oct 1993</td>
<td>Draft Law for Health introduced in the Parliament</td>
</tr>
<tr>
<td>Dec 1994</td>
<td>The Higher Medical Council introduced &quot;General Practice&quot; speciality</td>
</tr>
<tr>
<td>Dec 1995</td>
<td>National Health Strategy launched</td>
</tr>
<tr>
<td>1995</td>
<td>Decree for the Conditions and Procedure for Registration of Pharmaceuticals</td>
</tr>
<tr>
<td></td>
<td>Law for Pharmaceuticals and Pharmacies in Human Medicine</td>
</tr>
<tr>
<td></td>
<td>Decree for creation of 28 district centres for health care under the MoH</td>
</tr>
<tr>
<td></td>
<td>Decree of the Ministry of Health curtailed the power of economic directors</td>
</tr>
<tr>
<td></td>
<td>Hospital budgets to be determined according to the volume of work, not size</td>
</tr>
<tr>
<td></td>
<td>Charter for the Rights of Patients suggested by the Bulgarian Physicians Union</td>
</tr>
<tr>
<td>1996</td>
<td>Decree on a new procedure for determining health professionals' salaries</td>
</tr>
<tr>
<td></td>
<td>Decree on the organisation of the primary health care of the population</td>
</tr>
<tr>
<td></td>
<td>Introduction of free choice of ‘family physician’</td>
</tr>
<tr>
<td>Dec 1997</td>
<td>Decree No.22 from 9 December 1997 for the Conditions and Procedure for Payment of Health Care of Patient's Choice, amended in Feb 1998</td>
</tr>
<tr>
<td>1998</td>
<td>The Law for the Professional Organisations of Physicians and Dentists</td>
</tr>
<tr>
<td>June 1998</td>
<td>The Law for Health Insurance enacted</td>
</tr>
<tr>
<td>1999</td>
<td>The Law on Health Care Facilities enacted</td>
</tr>
<tr>
<td></td>
<td>Draft Health Strategy prepared by the Ministry of Health</td>
</tr>
</tbody>
</table>
Organisational structure of the health care system

The main stakeholders in the Bulgarian health care system are the Ministry of Health and municipalities (local government) (Figure A2-2). The influence of health professionals has been increasing through re-establishment of professional organisations and their representation in the Higher Medical Council. NGOs have become more active.

Figure A2-2. Organisational chart of the health care system


Despite the tendency for decentralisation since 1992, the Ministry of Health is the main decision-maker and regulator in the health sector. It is largely responsible for the financing and provision of a basic package of health care services, formulation of national health policies and development of draft legislation. The direction of reform is largely determined centrally. The Ministry of Health supervises networks of health care facilities, tertiary care centres involved in research and training, specialised research centres (psychiatric, pulmonary etc.), the regional hygiene and epidemiology inspectorates, a national network of 28 regional emergency care centres and 72 sanatoria and balneological institutions. The Ministry of Health also controls, jointly with the
Ministry of Education, five Medical Universities and affiliated university hospitals, and two faculties of dentistry, but these are financed directly by the Ministry of Finance.

The activities of the Ministry of Health are de-centralised to 28 Regional Health Directorates created by a Decree in 1995. The regional Ministry of Health offices are, in effect, information centres (branches of the National Centre of Health Information founded in 1992) which collect and analyse the health-related data published in bulletins of the Ministry of Health. Other research centres affiliated to the Ministry of Health are the National Centre of Health Promotion, and the National Centre for Public Health (former Centre for Health Insurance). However, there is no evidence that the reform process has actually drawn on detailed analysis of any of these data.

Municipalities are locally elected government bodies. The Local Self-Government and Local Administration Act (1992) gave them a greater independence in decision-making. The Ministry of Health retained control over only 30% of health provision. Municipalities own, finance directly and manage the majority of health facilities (mainly polyclinics, regional hospitals, specialist pulmonary, paediatric, gynaecological and psychiatric hospitals and specialised dispensaries139) and also have responsibilities for sanitation and environmental control. In some areas they offer better quality of care and improved working conditions than those financed by the Ministry of Health. The appointment of directors of municipality-owned facilities is agreed between the district offices of the Ministry of Health and the local authorities. The municipal health facilities are supervised by both municipal councils and the Ministry of Health, with their director being accountable to both bodies. This Ministry of Health involvement in the management of the municipal health facilities, and the resulting diffusion of responsibility, has often caused tensions.

Although the municipalities are the main policy-making bodies in relation to health care, the district authorities (28 former local government units) control the district integrated hospitals, providing hospital treatment to the population of its municipalities or as a referral hospital for other municipalities. On the negative side, the lack of clear national policies have resulted in local authorities taking ad hoc decisions, creating disparities between regions.

The Higher Medical Council is an independent institution chaired by the Ministry of Health including representatives of other Ministries, physicians’ and dentists’ associations, and the medical universities. It advises on health policy, health care organisation and postgraduate medical training, and licensing of the private health sector139.

The Pharmaceutical Council exists within the Ministry of Health and defines the requirements for the production, storage, usage and sale of pharmaceuticals and medical equipment, and functioning of pharmacies. The council comprises representatives of the Ministry of Health, the professional associations, and the National Drug Institute.

Parallel systems of health care have a long tradition in Bulgaria. In the absence of an independent Ministry of Health before 1944, every Ministry provided health services for their employees. After 1989, in addition to the Ministry of Health, the Ministry of Internal Affairs, the Ministry of Transport and the Ministry of Defence continued to own, finance and manage their own health facilities. The Ministry of Defence owns fourteen hospitals139, the Ministry of Transport owns five. The Ministry of Internal Affairs and the Ministry of Defence (the Military Medical Academy) have, altogether, 3 teaching hospitals with 2,000 beds, providing comprehensive treatment, the largest and best equipped hospital complex in Bulgaria. 40% of all patients at the complex are civilians,
such as officials, diplomats, or referred patients. The Ministry of Health has not attempted to take control of these facilities because of their high cost and volume of services they provide.

**Decentralisation of the health care system**

The socialist health care system in Bulgaria was characterised by highly centralised control and planning. The first initiatives of the transition (1989-91), involving market liberalisation and privatisation, followed from a strong reaction against central planning in the economy.

Formally, the Ministry of Health is responsible for planning the health care system, based on comprehensive data and collaboration among structural units. Since 1992 devolution of administrative power and transfer of ownership, to local government, of a large part of the health facilities has led to municipalities assuming a leading role in the financing and provision of health services. The increasing responsibilities and independence of the local authorities led to erosion of the regulatory capacity of central government and its authority to implement national policies. Although the regional health administrations are formally accountable to the central level, it is only in areas where local governments are weak that the centralised bureaucracy continues to dominate the health care administration, though not to the same extent as before 1989. Even though the Ministry of Health has the power to regulate all facilities, even the ones owned by local government, its role is largely advisory.

The consequences of decentralisation have had advantages and disadvantages. Among the negative effects have been inability to introduce reform in the face of local vested interests, unclear responsibilities and local government’s lack of experience in health care management. On the positive side, decision-making at local level was strengthened and more flexible local health policies were applied, including some innovative approaches to financing of health facilities. For these reasons, in 1994-5, there were considerable pressures for centralisation from the Ministry of Health (leading to creation of local MoH branches), but with no lasting success.

**The main system of health financing**

The health care sector in Bulgaria is financed from general government revenues. Registered tax payers pay General Income Tax which is approximately 15% of payroll costs and is deducted at source. In addition, private employers pay 35% above the employee’s salary for ‘state-public insurance’. General Income Tax is accumulated in state insurance funds, and partly transferred to the municipalities. The separation of the funds for social insurance from the state budget was made possible by the Law for the Social Insurance Fund (1996). The social insurance funds are managed by the National Insurance Institute.

Every fiscal year a national budget for health care is determined by the government and voted by the Parliament (the State Budget Law), allocating shares to health care, education and other sectors, according to politically determined priorities. The largest items of expenditure are interest payments, defence and security, and transfers to municipalities. The Ministry of Finance allocates part of the health budget to the Ministry of Health and the municipalities. Some teaching hospitals and tertiary care centres receive their budgets directly from the Ministry of Finance.
Municipalities are allocated funds from central government budget according to 26 criteria, including local income, population, and health care provision. In addition to transfers from the state budget, municipalities also collect local tax. Thus, in 1998 the overall health budget was formed from a 55% contribution from the municipal budgets and 45% from the republican budget. Of their total budget, the municipalities allocate on average 34% to health care, which is then distributed among municipal-owned facilities. There is considerable disparity between municipalities in resources dedicated to health due to variations in municipal budget revenues and non-transparent allocation of subsidies from republican budget.

In recent years the budgetary resources have been insufficient to cover the whole year, and many facilities have accumulated debts for electricity, pharmaceuticals etc. Funds usually arrive late making planning difficult.

Complementary sources of finance

Apart from the state-provided budget, the health care sector in Bulgaria has some limited revenues from tuition fees from foreign medical students, out-of-pocket expenditure for pharmaceuticals sold in pharmacies, and payments for health care by foreign citizens.

In the circumstances of economic crisis and health budgetary decrease after 1989, universal entitlement to health care benefits was not sustainable. Extra-budgetary sources of financing have been sought. A range of user payment mechanisms emerged as a means of saving the system from collapse (Table A2-1). These have had a detrimental effect on universal access and equity. In the absence of clear regulation and uniform standards, such out-of-pocket payments have created confusion among users. Other rationing devices have been waiting lists and cancellation of planned operations.

Table A2-1. Type of payments reported in state health facilities in 1997

<table>
<thead>
<tr>
<th></th>
<th>Given to</th>
<th>Compatibility with the Constitution</th>
<th>Compatibility with other legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under-the-counter payments for staff services</td>
<td>To medical and/or auxiliary staff</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>User fees for:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>To the administration of the health facility (receipt not always provided)</td>
<td>yes</td>
<td>Use of legislation regulating donation of property or other goods, but not specifically health care</td>
</tr>
<tr>
<td>Tests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food, bed linen etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital admission/stay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff services (limited)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sponsorship, donations</td>
<td>Administration of the health facility Individual staff members</td>
<td>yes</td>
<td></td>
</tr>
</tbody>
</table>

Semi-official user fees started to be used in particular health facilities as an alternative source of funding, between 1994 and 1997. They were viewed as an emergency measure during the transition to a national health insurance system. Initially, official user fees were charged only for pharmaceuticals and on what were deemed to be “optional” or “luxury” services, such as dental care with more expensive materials, eye-glasses, abortions, infertility treatment, physiotherapy, and balneotherapy. In 1995, it was
already routine practice for hospital patients to pay for pharmaceuticals, dressings and other materials if these were in short supply.

In 1997, by Decree, user fees were extended to cover a larger proportion of treatment costs including, typically, pharmaceuticals and consumables, and in many cases tests, food, hotel fees (including luxury rooms) and bed linen in some hospitals. Revenue was collected in extra-budgetary accounts and spent on basic supplies and drugs. However, user fees provided few additional resources (1-2%), insufficient for substantial improvements in infrastructure and quality of care. In general, user fees did not supplement physicians’ remuneration.

Pharmaceutical costs increased disproportionately and posed the largest burden on users. It should be noted that although many ambulatory drugs were paid for out-of-pocket during the socialist era, the state subsidised a wide range of groups. After 1989, the level of subsidies was narrowed, while at the same time the cost of pharmaceuticals rose due to extensive imports, unavailability of cheaper local products, privatisation of the pharmaceutical sector and inadequate regulation. Between 1990 and 1998 government expenditure on pharmaceuticals rose from 12.3% to 23.7%, but the true cost for the users is likely to be higher. In general, the supply of drugs was improved by expansion of private companies and the presence of international pharmaceutical firms. At the same time, the decline in local production of pharmaceuticals and thus, shortages of low price generic equivalents, made users increasingly reliant on imported brands sold at liberalised prices. State subsidies covered only some vulnerable groups (chronically ill, children, war veterans) and some expensive pharmaceuticals such as those for cancer chemotherapy, and cardiac disorders. The regulation of prices of pharmaceuticals and definition of maximum profit margins was not sufficient to contain the costs of the pharmaceutical market. The price liberalisation of medicines made them inaccessible to the majority of the population, and many hospitals were unable to purchase pharmaceuticals and supplies for in-patient care.

Collection of user fees was legally justified as “voluntary donations”. Before 1997, when user fees for a large range of services were legalised by governmental decree, they were semi-legal and set at the discretion of the individual health facilities. There are only general guidelines for the size of payments. Strong support among users for legalisation of user fees has been registered in 1994, long before their legalisation, with 65% of respondents in a survey conducted among 1000 respondents aged 18+ in 1994 stating that they were in favour of the introduction of official user fees for health services. In many cases the fees aimed not so much to improve quality of care, but to make treatment possible at all. The underlying assumption is that the official payment will cover all user costs and make illegal payments unnecessary.

Another type of out-of-pocket payment is under-the-counter payment (UCP). In contrast to official user fees, collected and accounted for by the administration of the health facility, UCP are given directly to physicians and for a particular service. They are illegal. In a survey conducted in Bulgaria in 1994, 42.9% of the respondents reported having paid in cash for officially free services in a state medical facility (UCP) in the preceding two years. The research in this thesis aims to provide more extensive data on the scale and characteristics of UCP, using a variety of techniques.

An increasingly common extra-budgetary source of funding is voluntary charitable contributions and sponsorship by individuals, firms and foundations which resurged after 1989. There are no data on their size, but it is unlikely that they will bring a steady flow of funds into the system, unless tax incentives are introduced. Subscription contracts
between employers and state health providers for a certain volume of services are seen as another potential source of funds. Foreign aid was also important for coping with funding crises in the health sector.

In the established market economies, voluntary health insurance offers an additional type of coverage. This form, although expanding, does not attract significant resources due to the small size of the high-income tier in Bulgaria who might be able to afford it. Lack of legislation, and fiscal problems such as the difficulty of reimbursement in the presence of high inflation, have deterred potential clients. Confidence in insurance companies has been undermined due to adverse experiences in the past.

**Health care expenditure**

Public expenditure allocated to health care, as a percentage of GDP, fell after 1992 as a consequence of the low priority placed on the health care sector and competing demands from other sectors. In 1992, health care expenditure reached its highest point of 5.4% of GDP\(^26\) or, according to other sources, 6.8% of GDP\(^16\), compared to the EU average of 8.4% and CEE average of 5.1% (Figure A2-3). Within only two years, the per capita expenditure on health in Bulgaria was reduced almost by a half, from USD 70 in 1992 to USD 38 in 1994. However, data from the Ministry of Finance and Ministry of Health in Bulgaria show that in 1994-1998, the share of GDP spent on health remained stable, at 3.5% on average. This is low in view of EU and CEE spending and closer to the NIS levels.

Per capita health expenditure in Bulgaria (USD PPP) in 1996 was also estimated to be lower in view of the EU and CEE values: $150 PPP per capita in Bulgaria, compared to $1,645 PPP in the EU, $749 in the Czech Republic and $219 Hungary\(^14\). There appear to be significant differences in resources dedicated to health care among the Central and Eastern European countries (Figure A2-4). In Bulgaria, Albania, Romania and Poland, which retain a tax-based system, there is a decline or stagnation in the level of health financing and expenditure as a percentage of GDP. Their expenditures in 1994 were below the CEE average of 6% of GDP\(^17\) (4% for Bulgaria). In contrast, in countries which adopted national health insurance systems after 1990 (Croatia, Slovenia, the Czech Republic, Slovakia, Hungary and Lithuania), expenditure on health tended to grow considerably. It is difficult to determine the reasons for these increases, but they have been attributed to cost-escalation effects of the universal insurance systems. However, data also show that, at the end of the 1980s, the Czech Republic, Hungary and Slovakia, which had tax-based models at the time, still spent more on health than the other CEE countries. It is notable that the highest level of spending, before 1989, was registered in Croatia which had a variation of a health insurance model.

Data on health expenditure covers mainly budgetary spending by central and local government. The out-of-pocket payments, such as official user fees and informal payments are beyond the scope of existing health expenditure estimates. There is no comprehensive information on spending incurred in the private sector.
Figure A2-3. Health expenditure as a percentage of GDP: comparison

Source: Health for All Data Base. European Region. World Health Organisation, Regional Office for Europe, June 1999


Ministry of Finance and Ministry of Health, Bulgaria

Figure A2-4. Health expenditure as a percentage of GDP (1990/1994): comparison

Primary health care

Primary care in Bulgaria is organised through a network of polyclinics. In contrast to some western countries, in Bulgaria primary care, as the first point of contact with a health facility, is actually out-patient care provided by specialists. Each polyclinic covers a designated area (raion) and has three main types of practitioners: a district therapist (serving population of about 2,500-3,000 inhabitants over 15), a paediatrician (for 800-1,200 children below 15) and an obstetrician-gynaecologist (for 16,000-18,000 women). There are 1,650 districts (uchastak) in Bulgaria. The district physicians are not sufficiently trained to provide a full range of primary care services. The polyclinics provide immediate access, not requiring referral, to a number of narrow profile specialists. There is an emphasis on specialisation in internal medicine and thus about 40% of polyclinic specialists are internists.

The polyclinics are distributed geographically according to the size of population served. They are divided into five categories according to the size of settlement and specialities represented. Thus, type I to III are located in towns and big cities and provide the full range of specialised care. They may be integrated with teaching or other hospitals. Types IV-V are present in small towns and in large villages with populations of 6,000-20,000 people, offering only two or three specialities, including paediatrics if there are at least 1,000-1,200 children under 15 in the area. There are also rural health centres and posts, the latter covering smaller populations, served by a district doctor or feldscher.

Other features of the Bulgarian primary care system are the urban concentration of highly qualified staff, lack of GPs (until recently), and shortages of auxiliary staff. There is an excessive specialisation among doctors, 84% being specialists. This has led to underutilisation of primary care services, low motivation of staff and high costs of primary care. This is a common problem across the CEE countries, reflecting inefficient manpower planning. Despite the oversupply of specialists in Bulgaria, there are shortages of specialised staff in rural areas, and in more than 1,000 settlements there are only feldschers.

Problems in the primary care system, such as long waiting times, low standards of care, and the unfriendly attitude of staff have discouraged utilisation (Table A2-2). Although the annual per capita number of out-patient visits and attendances at dentists has steadily increased since the 1970s, some drop in utilisation rates is observed in the 1990s. This fall may have neutralised some of the overutilisation associated with the Semashko model or the ‘unnecessary demand’, but it is likely that some of the deterred utilisation may have negative implications for the health of the users. However, the general level of outpatient utilisation in Bulgaria is among the lowest in CEE (Table A2-3).

Table A2-2. Average number of outpatient activities per person

<table>
<thead>
<tr>
<th>Year</th>
<th>Out-patient visits per person (including visits at home)</th>
<th>Ambulatory attendance of dentists</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>5.4</td>
<td>1.3</td>
</tr>
<tr>
<td>1980</td>
<td>7.0</td>
<td>1.9</td>
</tr>
<tr>
<td>1985</td>
<td>7.9</td>
<td>2.2</td>
</tr>
<tr>
<td>1990</td>
<td>7.2</td>
<td>2.0</td>
</tr>
<tr>
<td>1995</td>
<td>5.9</td>
<td>1.3</td>
</tr>
<tr>
<td>1996</td>
<td>6.3</td>
<td>1.4</td>
</tr>
</tbody>
</table>
At present, reshaping of the polyclinics system is envisaged, although there is still no clear strategy. Among debated options are the introduction of capitation payments to family physicians, partial privatisation and self-management of health facilities. Current training of GPs under the EU PHARE programme is likely to have far-reaching consequences for the long term radical restructuring of the system.

Secondary and tertiary care

The current health care system still bears the influence of the extensive growth strategies and oversupply of inputs advocated by the communist government in the 1970s. In 1997, Bulgaria had the highest ratio of beds to population (10 per 1,000) in Central and Eastern Europe (CEE average of 7) \( \text{(Figure A2-5).} \) Between 1980 and 1994, while the overall tendency in the CEE and CIS was towards a decline in the number of beds, Bulgaria was the only country where the bed numbers actually increased. This may be a result of the restrictions imposed by the municipalities on reduction of beds, and of the large proportion of "social beds" \( ^{140} \). Comparisons are problematic, however, as different data sources cite different figures, presumably because of definitional differences. For comparability, in the following discussion, WHO data are used.

In terms of hospital utilisation, Bulgaria shows a considerably lower admission rate than the other CEE countries (\textbf{Table A2-3}) despite the high number of beds. Higher admission rates appear likely to be associated with the effects of universal health insurance systems (e.g. Czech Republic, Hungary). The average length of stay in 1997 (12.9 days) is in the middle of the range for the CEE (CEE average of 11.2). However, the bed occupancy rate in acute hospitals, at 64% (1996) is somewhat lower than in CEE, NIS and the EU\(^{186} \). The share of hospital inpatient expenditure in the total health expenditure of Bulgaria is among the highest in CEE, demonstrating the system's orientation towards curative services.

The health system overlaps with some social care activities, such as sanatoria, nursery schools and old age homes, institutions for mentally and physically disabled etc (in 1997, 199 altogether, with 50,596 places\(^{139} \)). The role of these facilities is unclear. They are financed by the municipalities, but in many of them, users are currently required to pay fees.

\( ^{1} \) Hospitals beds used for longer term stays of elderly, poor or other socially disadvantaged groups
The most significant change which occurred in secondary care (in Bulgaria, after 1989) was the legalisation of the private sector. The private sector has grown rapidly and by the end of 1998, there were 16 small private hospitals, 97 private polyclinics, and 16 laboratories licensed by the Ministry of Health and the Medical Council and 10,000 private practices licensed by the Municipalities.
Table A2-3. In-patient utilisation and performance in selected countries (1997)

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of outpatient contacts/ person/ year</th>
<th>Average length of stay in days 1997</th>
<th>In-patient care admissions per 100 population</th>
<th>Hospital inpatient expenditure/ % of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>1.7</td>
<td>7.9</td>
<td>7.7</td>
<td>44 c</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>5.9 a</td>
<td>12.9</td>
<td>15.6</td>
<td>59 b</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>15.1</td>
<td>12.3</td>
<td>20.2</td>
<td>26.1</td>
</tr>
<tr>
<td>Estonia</td>
<td>7</td>
<td>10.9</td>
<td>18.3</td>
<td>n/a</td>
</tr>
<tr>
<td>Hungary</td>
<td>18 a</td>
<td>11</td>
<td>23.7</td>
<td>32.4 f</td>
</tr>
<tr>
<td>Latvia</td>
<td>4.5</td>
<td>12.9</td>
<td>21.7</td>
<td>56.7</td>
</tr>
<tr>
<td>Lithuania</td>
<td>7</td>
<td>12.9</td>
<td>21.8</td>
<td>n/a</td>
</tr>
<tr>
<td>Poland</td>
<td>5.2</td>
<td>10.4</td>
<td>11.6 b</td>
<td>n/a</td>
</tr>
<tr>
<td>Romania</td>
<td>8</td>
<td>10</td>
<td>20.9</td>
<td>63</td>
</tr>
<tr>
<td>Russia</td>
<td>9.1</td>
<td>16.6</td>
<td>20.6</td>
<td>73.6 d</td>
</tr>
<tr>
<td>Slovakia</td>
<td>11.8 b</td>
<td>12.1</td>
<td>19.9</td>
<td>32.1 e</td>
</tr>
<tr>
<td>Slovenia</td>
<td>6.8</td>
<td>10</td>
<td>16.2</td>
<td>48.9</td>
</tr>
<tr>
<td>FYR Macedonia</td>
<td>3</td>
<td>13.4</td>
<td>10</td>
<td>29.4 a</td>
</tr>
<tr>
<td>EU average</td>
<td>n/a</td>
<td>11.1 a</td>
<td>19 a</td>
<td>n/a</td>
</tr>
<tr>
<td>CEE average</td>
<td>8.3</td>
<td>11.2</td>
<td>16.8</td>
<td>n/a</td>
</tr>
<tr>
<td>NIS average</td>
<td>8.2</td>
<td>15.9</td>
<td>18.6</td>
<td>n/a</td>
</tr>
</tbody>
</table>


Health care staff

In 1997, Bulgaria had 3.5 physicians per 1,000 population, which is equal to the EU average, above the average for the CEE (2.5 per 1,000), but lower than NIS (4 per 1,000) (Figure A2-5). Between 1980 and 1990, the number of physicians and auxiliary staff in the public sector increased (Figure A2-6). Since 1995, this tendency has reversed, not least because of some restriction on the number of students admitted to medical schools in the early 1990s, and physicians leaving the system, disenchanted with the conditions offered in health care. The numbers of dentists remained stable. Bulgaria has 5.7 nurses per 1,000 population, which is equal to the CEE average and lower than in the NIS (8.7 per 1,000). The Ministry of Health has planned a 10% reduction in staff followed by a 30% cut in hospital staff over five years through early retirement and transfers.

The number of privately practising medical professionals in Bulgaria has increased dramatically. Since 1991, when private out-patient practice was legalised, the number of registered privately-practising physicians rose sharply until 1994 (from 4,124 in 1992, to 9,424 in 1994). Increases were less significant for dentists and for nurses, paramedics and other auxiliary staff who saw few opportunities in the private sector. In 1997, 30% of all physicians were providing private services as well as working in state facilities, while 80% of dentists were entirely in the private sector. The numbers of registered physicians fell after 1994. It is likely that this drop was related to policies of the socialist government which opposed physicians practising in both private and public facilities. Given that most registered private physicians were using private practice to supplement their state job, often sharing the same premises; and the weak position of the out-patient private sector; many physicians chose to keep their state jobs. At the same time a
succession of economic crises in 1995-6 created insecurity and discouraged entrance to the private market among many state physicians and investors.

Figure A2.6. Medical staff in the public sector per 1,000 of population and in the outpatient private sector


Payment of hospitals and staff

Health care facilities' budgets are determined annually on the basis of historic data such as numbers of beds and staff, available equipment, patients treated, and fiscal projections for subsequent years (inflation rates, economic growth etc.). The procedure for allocating funds is inefficient, with only a weak relation between funding and activities. It favours urban hospitals. The budget is organised along separate lines (for salaries, food, pharmaceuticals etc.) and managers cannot shift resources between lines.

Staff in public health facilities in Bulgaria are paid salaries. Despite the introduction of a small performance related component, remuneration does not reflect quality, complexity or volume of work. Physicians in Bulgaria have among the lowest incomes among all state employees who have higher education\(^\text{13}\). The average salary is fixed through collective bargaining for each sector. Salaries have been raised periodically and adjusted for inflation by the government, but inflation prior to 1998 increased much faster than salaries could be updated. Payment by salary has not created adequate incentives for providing high-quality treatment and for professional development. Attitudes towards users have been formal due to the lack of feedback expressed through free choice of physician in the system.

In addition to their salaries, physicians could receive official income from private practice. In the private sector physicians are commonly paid on a fee-for-service basis if they own the practice, and through capitation if they work for a private facility. Alternative unofficial payment mechanisms include income from ‘after hours practice’ or from under-the-counter payments, in cash or in-kind.
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Section A: Household description

6.1. How many people does your household consist of, including yourself?

Please write down the codes of the respective household members (up to 2):

A4_A. 1st member
A4_B. 2nd member

A5. Usually in your household who is the person, who makes the decisions for bigger purchases?

Please write down the codes of the respective household members (up to 2):

A5_A. 1st member
A5_B. 2nd member

A6. Let's suppose that you are ill, and you have to take a medicine. It is possible that you buy a Bulgarian medicine, at a price of 1000 leva, or an imported brand-name, which is better, but at a price of 4000 leva. Normally who participates in deciding such matters?

Yes No
A6_A. 1st member 1 2
A6_B. 2nd member 1 2
A6_C. 3rd member 1 2
A6_D. 4th member 1 2
A6_E. 5th member 1 2
A6_F. 6th member 1 2
A6_G. Not an issue; buy only Bulgarian medicines 1 2

Section B: Health status

B1. How would you describe your own health status over the last 12 months on the whole?

One answer

1. Good
2. Rather good
3. Rather bad
4. Bad

B1. Do you have any long-standing (chronic) illness, disability, or infirmity? By (1) long-standing (chronic) mean anything that has troubled you over a period of time that is likely to affect you over a period of time?

Note: the codes of the respective group of diseases for the first three mentioned, in the order they are mentioned.

1. Yes 1-st mentioned: B2_A
2. No

B2. CODE  

CODES of the disease groups

1. Hemorrhages
2. Cold
3. Eye diseases
4. Trauma/trauma-positioning
5. Skin diseases
6. Cardiac vascular diseases
7. Neoplasms (incl. lymphoma, cancer)
8. Kidney diseases, nephrological pyelonephritis
9. Disease of bones and joints, arthritis
10. Infectious disease
11. Psychiatric
12. Endocrinological diseases (diabetes, others)
13. Metabolic diseases (diabetes, others)
14. Dental

B3. Does this illness or disability (illnesses or disabilities) bother you in any way in your daily life?

One answer

Yes No
B3A. 1-st mentioned: B3_C
B3B. 2-nd mentioned: B3_C
B3C. 3-rd mentioned: B3_C

467
Do you smoke?

One answer:

1. Yes, every day
2. Sometimes
3. No

If yes, on average how much cigarettes per day do you smoke?

Yes

No

Does your doctor know you smoke?

Yes

No

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much tobacco cigars per day do you smoke?

Cigarette pack

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much whisky per week do you drink?

Yes

No

If yes, on average how much wine per week do you drink?

Yes

No

If yes, on average how much beer per week do you drink?

Yes

No

If yes, on average how much spirits per week do you drink?

Yes

No

If yes, on average how much alcohol per week do you drink?

Yes

No

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much tobacco cigars per day do you smoke?

Cigarette pack

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much whisky per week do you drink?

Yes

No

If yes, on average how much wine per week do you drink?

Yes

No

If yes, on average how much beer per week do you drink?

Yes

No

If yes, on average how much spirits per week do you drink?

Yes

No

If yes, on average how much alcohol per week do you drink?

Yes

No

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much tobacco cigars per day do you smoke?

Cigarette pack

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much whisky per week do you drink?

Yes

No

If yes, on average how much wine per week do you drink?

Yes

No

If yes, on average how much beer per week do you drink?

Yes

No

If yes, on average how much spirits per week do you drink?

Yes

No

If yes, on average how much alcohol per week do you drink?

Yes

No

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much tobacco cigars per day do you smoke?

Cigarette pack

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much whisky per week do you drink?

Yes

No

If yes, on average how much wine per week do you drink?

Yes

No

If yes, on average how much beer per week do you drink?

Yes

No

If yes, on average how much spirits per week do you drink?

Yes

No

If yes, on average how much alcohol per week do you drink?

Yes

No

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much tobacco cigars per day do you smoke?

Cigarette pack

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much whisky per week do you drink?

Yes

No

If yes, on average how much wine per week do you drink?

Yes

No

If yes, on average how much beer per week do you drink?

Yes

No

If yes, on average how much spirits per week do you drink?

Yes

No

If yes, on average how much alcohol per week do you drink?

Yes

No

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much tobacco cigars per day do you smoke?

Cigarette pack

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much whisky per week do you drink?

Yes

No

If yes, on average how much wine per week do you drink?

Yes

No

If yes, on average how much beer per week do you drink?

Yes

No

If yes, on average how much spirits per week do you drink?

Yes

No

If yes, on average how much alcohol per week do you drink?

Yes

No

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much tobacco cigars per day do you smoke?

Cigarette pack

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much whisky per week do you drink?

Yes

No

If yes, on average how much wine per week do you drink?

Yes

No

If yes, on average how much beer per week do you drink?

Yes

No

If yes, on average how much spirits per week do you drink?

Yes

No

If yes, on average how much alcohol per week do you drink?

Yes

No

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much tobacco cigars per day do you smoke?

Cigarette pack

If yes, on average how many cigarettes per day do you smoke?

Cigarette pack

If yes, on average how much whisky per week do you drink?

Yes

No

If yes, on average how much wine per week do you drink?

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Yes

No

If yes, on average how much spirits per week do you drink?

Yes

No

If yes, on average how much alcohol per week do you drink?
B19A. What was the main reason for you to interrupt the prescribed course of proteinaceous treatment? And what about the non-prescribed? (Yes/No)

<table>
<thead>
<tr>
<th>Prescribed</th>
<th>Non-prescribed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

B19B. The treatment/medicines didn't help

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

B20. The medicines were two insufficient

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

B21. I haven't taken time

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

B22. The circumstances at the health establishment prevented me from completing the treatment

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

B23. The medicines/treatment were not available in the pharmacies

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

B24. I haven't interrupted

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

B20. Do you start a new course of treatment of the same illness (new medicines, new procedures, herbs)?

<table>
<thead>
<tr>
<th>Prescribed</th>
<th>Non-prescribed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

B21. Would you pay 50% more than usual, for foods, you are assured are occasionally eaten?

Yes

No

DK/NA

B22. Do you think the salaries of medical professionals are low, about right, or wrong?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

B27. What happened at your last visit/consultation? What did the physician (other staff) do?

All mentioned answers:

B27.1. Conversation with medical staff

B27.2. Physical examination (specialized)

B27.3. Check-up

B27.4. Check-up (post treatment)

B27.5. Blood pressure measuring

B27.6. X-ray (EKG /...)

B27.7. Blood test (Laboratory test)

B27.8. Minor operation

B27.9. Operation

B27.10. Prescribing of medicines

B27.11. Vaccination

B27.12. Other

B27.13. OK/NA: Has never attended physician/health worker

B28. How much time did you spend for each of the following activities?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
<th>Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>B28_A</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

B28_B | 1     | 2       |

B28_C | 1     | 2       |

B29. Where was the last consultation?

<table>
<thead>
<tr>
<th>Place of consultation</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>In my settlement</td>
</tr>
<tr>
<td>2</td>
<td>In a settlement up to 50 km from mine</td>
</tr>
<tr>
<td>3</td>
<td>In a settlement from 50 to 100 km from mine</td>
</tr>
<tr>
<td>4</td>
<td>In a settlement from 100 to 200 km from mine</td>
</tr>
<tr>
<td>5</td>
<td>In a settlement more than 200 km from mine</td>
</tr>
<tr>
<td>6</td>
<td>Abroad</td>
</tr>
<tr>
<td>7</td>
<td>Other</td>
</tr>
<tr>
<td>8</td>
<td>DK/NA</td>
</tr>
</tbody>
</table>

B30. Were you satisfied with the quality of the health service received at your last consultation?

One answer per row. Ask for each element of the service and record the answer according to the scale given below:

1. Satisfied
2. Rather satisfied
3. Neither satisfied, nor dissatisfied
4. Rather dissatisfied
5. Dissatisfied
6. DK/NA: Not to be read

<table>
<thead>
<tr>
<th>Service/Quality</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>B30_A</td>
<td>Waiting time</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>B30_B</td>
<td>Length of consultation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>B30_C</td>
<td>Attitude of staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>B30_D</td>
<td>Outcome of the treatment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>B30_E</td>
<td>Confidentiality</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>B30_F</td>
<td>Cost of treatment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>B30_G</td>
<td>Length of service</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>B30_H</td>
<td>Hygiene</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>B30_I</td>
<td>Apparatus, medicines, consumables</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Section C.

C1. PLEASE DESCRIBE THE EXPENSES ACCOMPANYING YOUR LAST CONSULTATION (WITH PHYSICIAN OR OTHER HEALTH WORKER) AND THE FOLLOWING TREATMENT (IF ANY)

Add separately for each type of expenditure, whether they have had such (L) or not (N), and if yes, how many Lev.

<table>
<thead>
<tr>
<th>Type of expenditure</th>
<th>Yes</th>
<th>No</th>
<th>Lev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel-expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Car</td>
<td>12</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Coach</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Public transport</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Bus</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Car (expenses for petrol, km travelled, or lease petrol)</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>12</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Medications, consumables/Inc. spectacles and lenses</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>12</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Herbs / other traditional remedies</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Payment for procedures/services</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>From the total, are there any part covered by the state, municipality, employer etc. (L) or (N)?</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>12</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Payment for food/bed linen, laundry</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>12</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Payment for nursing services of nurse / hospital attendant</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>12</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Payment for the services of physician / other medical staff incl. healer etc</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Loss of wage</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>12</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

C4. ON THE OCCASION OF THIS LAST CONSULTATION / TREATMENT, DID YOU HAVE TO SEARCH FOR ADDITIONAL MEANS TO PAY THE REQUIRED AMOUNT?

One answer:

1. No. I paid from the recurrent monthly income budget of the household
2. I used investments / savings
3. I sold property or goods / house or land etc.
4. I borrowed
5. No expenses insignificant

C5. TALKING ABOUT THE EXPENSES FOR THE SAME LAST EPISODE OF ILLNESS, AVERAGELY WHAT PERCENTAGE OF THE MONTHLY INCOME OF YOUR HOUSEHOLD WERE THEY?

Write in percentage:

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>966</td>
<td>Can't judge</td>
</tr>
<tr>
<td>999</td>
<td>No expenses</td>
</tr>
</tbody>
</table>

C6. IN YOUR OPINION, DID THE QUALITY OF THE HEALTH SERVICES IN THIS CARE JUSTIFY THE EXPENSES INCURRED?

One answer:

1. Expenditure were low in view of the level of service
2. About right
3. Expenditure were high in view of the level of service
4. Can't judge
5. No expenses insignificant
6. Other
7. DKNA

C7. DURING YOUR LAST TREATMENT, HAS ANY SERVICE / MEDICATION ETC. BEEN REFUSED OR DELAYED DUE TO SOME OF THE FOLLOWING REASONS?

One answer:

1. Was refused/delayed, because I could not pay
2. Was refused/delayed for other reasons
3. Was refused/delayed, and I am not sure for the reason, but suspect that it was because I could not pay
4. There was not such case
5. DKNA

C8. HAVE YOU EVER PAID IN FULL (UNDER THE COUNTER) OR OPEN-SHOT BEFORE AT A STATE HEALTH ESTABLISHMENT / CLINIC? WHAT DID YOU PAY FOR? (MONEY, SERVICES, MEDICATION ETC.)

Not all of the mentioned answers. Their sum should be no more than 100%.

<table>
<thead>
<tr>
<th>% of expenses</th>
<th>% of expenses</th>
<th>% of expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yourself</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other household members</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Relative/friend outside the household</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>State/municipality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Insurance company</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Employer</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

C9. FROM HOW MUCH DID THE TREATMENT IN THE STATE HEALTH ESTABLISHMENT COST YOU? (TOWARDS PAYMENTS TO SERVICES / MEDICATION ETC.)

Write in the sums and dates, if payments or presents are given several times, write in only the highest payment / present.

<table>
<thead>
<tr>
<th>Date</th>
<th>Payment</th>
<th>Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C10. HOW WOULD YOU ASSESS THE TOTAL SIZE OF THE TREATMENT AND THE PRICE OF THE PRESENT?

One answer in each column (for payment and for present)

<table>
<thead>
<tr>
<th>Date</th>
<th>Payment</th>
<th>Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C10A. WHERE DID YOU TAKE THE MONEY TO PAY TO GIVE PRESENT FROM?

One answer in each column (for payment and for present)

<table>
<thead>
<tr>
<th>Date</th>
<th>Payment</th>
<th>Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section C13.

C13A. Have you ever paid (in cash or in kind) for some of the following reasons:

Present, abnormal (C11A). One answer per row.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section D

D1. Do you think the state should provide free or charge health care?

One answer:

1. Yes, for all
2. Yes, only for people who cannot themselves pay for health care
3. Yes, but for certain other groups (than in 2.)
4. No
5. Not sure
6. NA

D2. According to you, should all people pay equally for a certain health service?

One answer:

1. Yes
2. No
3. Not sure
4. NA

Section E

E1. How would you assess the payment?

One answer per column. The answers are not to be read.

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C19. In your opinion, do the fees at the private health facilities respond to the service received by the people?

One answer:

1. The fees are low in view of the level of health service
2. About right
3. The fees are high in view of the level of health service
4. Not sure
5. NA

D4A. I am going to tell you several conditions, when people are generally willing to pay for treatment. You personally would you pay for in some of these cases?

Show card D4A. Write to the chart the number of the three most important cases using the answers from D4A.

E4. In case you have to pay for certain health services, how would you do it?

One answer:

1. Directly to the physician
2. To the administration of the health establishment
3. To an intermediary: insurance company/health fund/other institution
4. Other
5. I would not like to pay at all. Not to be read.
6. OKNA.

D4B. If you have to pay for health care, what is your preferred option?

One answer:

1. To pay a charge at the point of use for each visit to physician/examination, last
2. In the beginning of each month to contribute certain sum and in case of illness to pay nothing
3. If it happens to you to get a, to pay a small percentage of all expenses during the treatment
4. Other
5. I would not like to pay at all. Not to be read.
D11A. In case that compulsory health insurance is introduced in Bulgaria, would you pay monthly health contributions?

One answer:
1. I am willing to pay even if I do not get ill at all, for the security. That in case of illness I would not have to pay.
2. I am willing to pay if there is a chance that I get ill.
3. I am not willing to pay.
5. NA.

D11B. It’s thought that the health insurance contributions made by each person should be the same each month, no matter whether he/she is ill or healthy. Other people feel that these contributions should vary with the changes in their health status. Which of these two opinions is closer to yours?

One answer:
1. Fixed contributions, no matter whether the person is ill or healthy.
2. Varying contributions, according to the health status.
3. NA.

D11C. Let’s assume that compulsory health insurance is to be introduced in Bulgaria. There are different opinions as to how to use the individual contributions in the health funds of people, who have not seen illness. You personally align with which of the following opinions would agree in a larger extent? Please rank them according to their importance.

Up to 5 answers: One answer per each column.

One answer:
1. My contributions in health funds, which have not been used for me, must be returned to me at regular intervals.
2. My contributions, which have not been used for me, may be used, with my permission, for the treatment of my dependants/members of my household.
3. My contributions, which have not been used for me, may be used for charity, subsidies for social security.
4. My contributions, which have not been used for me may be returned to the state budget.
5. My contributions, which have not been used for me to be used from the Ministry of Health in case of epidemics, health prophylaxis etc.
6. My contributions, which have not been used for me to be used by the municipality (e.g. for infrastructure).

D12. In your view, what percentage of your monthly income are you personally willing to pay as health contributions?

Write in percentage of income.

D17. According to you, is it acceptable for a physician in a state health establishment to require payment for consultation from the patient?

One answer:
1. It is acceptable, because the physicians are poorly paid.
2. It is acceptable, because the state health establishment do not have the necessary medication/consumables/apparatuses.
3. It is acceptable, because it is right to pay for service.
4. It is acceptable, because of other reasons.
5. It is not acceptable.

D18. In your view, if some charges/fees/payments in the state health facilities are going to be introduced, should people pay at lower prices?

One answer:
1. Yes.
2. No.

D19. Would you agree any of the following social groups to have price reductions?

Just for each group. One answer per row.

D19A. Children

Yes No DKNX

D19B. People with low income

Yes No DKNX

D19C. People with special needs

Yes No DKNX

D19D. People with disabilities

Yes No DKNX

D19E. People of old age

Yes No DKNX

D19F. People with special needs

Yes No DKNX

D19G. People who pay to directly a much higher fee than the official one

Yes No DKNX

D19H. People who look after elderly relatives

Yes No DKNX

D19I. Chronically ill people

Yes No DKNX

D19J. Other

Yes No DKNX

D1. In your opinion, are the following acts of a patient acceptable?

One answer per row. Read each answer to the respondent:

1. Acceptable.
2. Acceptable only sometimes.
3. Unacceptable.
4. DKNX. Not to be read.

D1A. Patient, who is satisfied with the treatment, but do not express his/her gratitude to the physician with presents/flowers.

D1B. Patient, who gives money to physician in a state health facility in case of successful outcome of treatment.
**E8. IN THE LAST WEEK IN YOUR HOUSEHOLD DID YOU CONSUME ANY OF THE FOLLOWING TYPES OF FOOD AND IN WHAT QUANTITY:**

**Work following each line. For the respective type of food record “Yes/No”, consumed quantity, price and the available reserves**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>total (number, g, jar 800mg, etc.)</td>
<td>Of which, completely home produced (own or donated products)</td>
<td>Of which, home tinned with bought products</td>
<td>Completely bought foods</td>
<td>Price per unit (kg, jar 800 mg, l) IF KNOWN</td>
</tr>
<tr>
<td>1 Eggs (number)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Meat and meat products (kg)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Yoghurt (pot / jar 500 ml)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Milk (l)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Fetta cheese (kg)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Fresh vegetables: tomatoes, cucumbers, cabbage, carrots, etc. (kg)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Redishes, lettuce, spring onion (bunch)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Onion (kg)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Fresh fruits (kg)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Potatoes (kg)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Pasta (kg)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Tinned fruits and vegetables (number of tins)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Pulses: lentils, rice (kg)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Grape-brandy (l)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Wine (l)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Beer (l)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Bread (number)</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WHAT IS YOUR RELIGION?

A. To WHICH ETHNIC COMMUNITY DO YOU BELONG?

ONE PERSON ONLY. Do not READ.

ETHNIC GROUP

1. Bulgarian
2. Ethni Turk
3. Republika-mahajadars
4. Roma
5. Other

WHAT IS YOUR RELIGION?

ONE PERSON ONLY. Do not READ.

1. Eastern Orthodox
2. Catholic
3. Protestant
4. Islam
5. Judaism
6. Eastern Orthodox
7. Muslim
8. Other

TYPE OF INCOME

Month ly Income

<table>
<thead>
<tr>
<th>Type of Monthly Income</th>
<th>Yes</th>
<th>No</th>
<th>Sum (lv)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Central heating &amp; hot water</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Telephone</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Hot water</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Cold water</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Residential services (electricity at the stairs, lift, such support)</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Taxes (home, property, TV licence, car)</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

E10. As a Whole, how Would you assess the financial situation of your household in the last month?

1. Very good
2. Rather good
3. Neither good nor bad
4. Rather poor
5. Very poor
6. Don't know / No answer

E11. Do you or any other household member own your place of residence?

ONE PERSON ONLY. Do not READ.

1. Yes, rent to owner
2. Yes, rent to private company
3. Yes, to the State / municipality
4. Yes, to employer
5. No, free (state, municipality, relatives)
6. Don't pay, because it's property of the organisation where I work
7. Other

E12. Do you pay to live in your place of residence?

ONE PERSON ONLY. Do not READ.

1. Yes, rent to owner
2. Yes, rent to private company
3. Yes, to the State / municipality
4. Yes, to employer
5. No, free (state, municipality, relatives)
6. Don't pay, because it's property of the organisation where I work
7. Other

E13. What is the approximate market value of your main place of residence at the moment?

Write in lv or in USD

E13A. Write the amount divided by 100

E13B. Write the market value in USD

DON'T KNOW 900000

E14. How big is your place of residence?

1. Up to 50 sq. m
2. 51-100 sq. m
3. 101-150 sq. m
4. Above 150

E15. How many rooms altogether are there in your main place of residence, including attic, and how many of them are being used by your household?

Write number excluding bathrooms, corridors, storage rooms, etc.

E15A. Number total

E15B. Number used by the household

E16. What is the name of the other person you are living with?

ONE PERSON ONLY. Do not READ.

1. Yes
2. No

E17. Do you or any other member of your household own second house / villa and land in town / village?

ONE PERSON ONLY. Do not READ.

1. Yes
2. No

E18. In the last year did you or any other member of your household do any work abroad on excursion, visit?

ONE PERSON ONLY. Do not READ.

1. Yes
2. No

E19. Do you or any other member of your household own any of the following items?

ONE PERSON ONLY. Do not READ.

1. Colour TV set
2. Refrigerator with freezer
3. Separate freezer
4. Automatic washing machine
5. Video
6. Video-camera
7. Hi-fi without cd player
8. Hi-fi with cd player
9. Microcomputer
10. Computer
11. Dish washer
12. Microwave
13. Vacuum cleaner
14. Bicycle
15. Car (up to 2,5 tons)
16. Satellite dish

E20. TO WHICH ETHNIC COMMUNITY DO YOU BELONG?

ONE PERSON ONLY. Do not READ.

1. Bulgarian
2. Ethni Turk
3. Republika-mahajadars
4. Roma
5. Other

E21. WHAT IS YOUR RELIGION?

ONE PERSON ONLY. Do not READ.

1. Eastern Orthodox
2. Catholic
3. Protestant
4. Islam
5. Judaism
6. Eastern Orthodox
7. Muslim
8. Other

E22. ARE YOU BELIEVERS?

ONE PERSON ONLY. Do not READ.

1. Yes
2. No

E23. THE ENTERPRISE / COMPANY WHERE YOU WORK IS

ONE PERSON ONLY. Do not READ.

1. State
2. Private
3. Mixed (state and private)
4. Cooperative
5. Municipal
6. Other
7. I don't work

E24. DO YOU HAVE ANY MANAGERIAL FUNCTIONS IN THE ENTERPRISE / COMPANY WHERE YOU WORK?

ONE PERSON ONLY. Do not READ.

1. Yes, partial
2. Yes, mehrpart
3. Yes, extensive
4. None
5. I don't work

THE INTERVIEWER RECORDS WITHOUT ASKING THE RESPONDENT.

E25. TYPE OF RESIDENCE.

1. One-family house
2. Semi-detached
3. Block of flats (up to 20 flats)
4. Block of flats (above 20 flats)
5. Other

E26. DATE OF INTERVIEW.

ONE PERSON ONLY. Do not READ.

1. Dated

E27. TYPE OF SETTLEMENT.

ONE PERSON ONLY. Do not READ.

1. Sofia
2. City former district centre
3. Town
4. Village
### Size of Settlement

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 999</td>
<td>1</td>
</tr>
<tr>
<td>1000 - 4,999</td>
<td>2</td>
</tr>
<tr>
<td>5,000 - 19,999</td>
<td>3</td>
</tr>
<tr>
<td>20,000 - 99,999</td>
<td>4</td>
</tr>
<tr>
<td>100,000 - 499,999</td>
<td>5</td>
</tr>
<tr>
<td>Sofia</td>
<td>6</td>
</tr>
</tbody>
</table>

### Region

- Sofia city
- Bourgas region
- Varna region
- Lovech region
- Montana region
- Plovdiv region
- Rousse region
- Sofia region
- Haskovo region

---

**NUMBER OF RESPONDENT IN THE SAMPLING UNIT:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Number of Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MUNICIPALITY:**

**SETTLEMENT:**

---

**To be filled by the team leader:**

**NUMBER OF SAMPLING UNIT:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Number of Sampling Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CODE OF THE INTERVIEWER:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Number of Region</th>
<th>Number of Interviewee in the team</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**B1. WHEN WAS THE LAST TIME THAT YOU HAVE EXPERIENCED ILLNESS?**

In the box below, write the answers for each illness.

<table>
<thead>
<tr>
<th>Code</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>B11-1a</td>
<td>1997</td>
</tr>
<tr>
<td>B11-1b</td>
<td>1997</td>
</tr>
<tr>
<td>B11-1c</td>
<td>1997</td>
</tr>
<tr>
<td>B11-1d</td>
<td>1997</td>
</tr>
</tbody>
</table>

**B15. HOW DO YOU CONSIDER? WHEN YOU WERE LAST TIME?** IF YOU HAD CONTACT WITH physician/other health worker, please answer the following questions.

<table>
<thead>
<tr>
<th>Code</th>
<th>November</th>
</tr>
</thead>
<tbody>
<tr>
<td>B21-1</td>
<td>1997</td>
</tr>
<tr>
<td>B21-2</td>
<td>1997</td>
</tr>
<tr>
<td>B21-3</td>
<td>1997</td>
</tr>
<tr>
<td>B21-4</td>
<td>1997</td>
</tr>
</tbody>
</table>

**C1. PLEASE DESCRIBE THE EXPENSES ACCOMPANYING YOUR LAST CONSULTATION/WITH A PHYSICIAN OR OTHER HEALTH WORKER AND THE FOLLOWING TREATMENT (IN LEVA)?**

<table>
<thead>
<tr>
<th>Type of expense</th>
<th>Yes</th>
<th>No</th>
<th>Leva</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1-2A</td>
<td>Travel expenses</td>
<td>1</td>
<td>2</td>
<td>C1-2A</td>
</tr>
<tr>
<td>C1-2B</td>
<td>Medications/consumables inc. spectacles and lenses</td>
<td>1</td>
<td>2</td>
<td>C1-2B</td>
</tr>
<tr>
<td>C1-2C</td>
<td>Other remedies</td>
<td>1</td>
<td>2</td>
<td>C1-2C</td>
</tr>
<tr>
<td>C1-2D</td>
<td>Payment for procedures/tests</td>
<td>1</td>
<td>2</td>
<td>C1-2D</td>
</tr>
<tr>
<td>C1-2E</td>
<td>Payment for food/bed-in-home</td>
<td>1</td>
<td>2</td>
<td>C1-2E</td>
</tr>
<tr>
<td>C1-2F</td>
<td>Payment for nursing care</td>
<td>1</td>
<td>2</td>
<td>C1-2F</td>
</tr>
<tr>
<td>C1-2G</td>
<td>Payment for the services of physiotherapist or medical staff incl. nurse etc.</td>
<td>1</td>
<td>2</td>
<td>C1-2G</td>
</tr>
<tr>
<td>C1-2H</td>
<td>Hospitalization charge</td>
<td>1</td>
<td>2</td>
<td>C1-2H</td>
</tr>
<tr>
<td>C1-2I</td>
<td>Absence from work (days)</td>
<td>1</td>
<td>2</td>
<td>C1-2I</td>
</tr>
<tr>
<td>C1-2J</td>
<td>Has a medical certificate been acquired?</td>
<td>1</td>
<td>2</td>
<td>C1-2J</td>
</tr>
<tr>
<td>C1-2K</td>
<td>Gift, donation for medical or administrative staff</td>
<td>1</td>
<td>2</td>
<td>C1-2K</td>
</tr>
<tr>
<td>C1-2L</td>
<td>Other expenditure Please record</td>
<td>1</td>
<td>2</td>
<td>C1-2L</td>
</tr>
<tr>
<td>C1-2M</td>
<td>What proportion of the total expenses are covered by the state municipality</td>
<td>1</td>
<td>2</td>
<td>C1-2M</td>
</tr>
</tbody>
</table>

**C3. WHAT PROPORTION OF THE EXPENDITURE ON YOUR LAST CONSULTATION/VISIT OF THE MEDICAL SERVICES IN YOUR MUNICIPALITY IS COVERED BY THE MUNICIPAL COUNCIL?**

<table>
<thead>
<tr>
<th>Type of expense</th>
<th>Yes</th>
<th>No</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3-1A</td>
<td>Yourself</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>C3-1B</td>
<td>Other</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>C3-1C</td>
<td>No expenses</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>C3-1D</td>
<td>Unknown</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**C4. PREFERENCE FOR THE HEALTH SERVICE RECEIVED AT LAST CONSULTATION**

<table>
<thead>
<tr>
<th>Code</th>
<th>Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>C4</td>
<td>Satisfied</td>
</tr>
<tr>
<td>C4</td>
<td>Neither satisfied, nor dissatisfied</td>
</tr>
<tr>
<td>C4</td>
<td>Dissatisfied</td>
</tr>
</tbody>
</table>

**C5. AMOUNT OF THE EXPENSES SPENT ON EACH TRAVELING, WAITING TIME, ADMINISTRATIVE FORMALITIES, LOOKING FOR DRUGS ETC.?**

<table>
<thead>
<tr>
<th>Type of expense</th>
<th>Yes</th>
<th>No</th>
<th>Leva</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>C5-2A</td>
<td>Travel expenses</td>
<td>1</td>
<td>2</td>
<td>C5-2A</td>
</tr>
<tr>
<td>C5-2B</td>
<td>Medications/consumables inc. spectacles and lenses</td>
<td>1</td>
<td>2</td>
<td>C5-2B</td>
</tr>
<tr>
<td>C5-2C</td>
<td>Other remedies</td>
<td>1</td>
<td>2</td>
<td>C5-2C</td>
</tr>
<tr>
<td>C5-2D</td>
<td>Payment for procedures/tests</td>
<td>1</td>
<td>2</td>
<td>C5-2D</td>
</tr>
<tr>
<td>C5-2E</td>
<td>Payment for food/bed-in-home</td>
<td>1</td>
<td>2</td>
<td>C5-2E</td>
</tr>
<tr>
<td>C5-2F</td>
<td>Payment for nursing care</td>
<td>1</td>
<td>2</td>
<td>C5-2F</td>
</tr>
<tr>
<td>C5-2G</td>
<td>Payment for the services of physiotherapist or medical staff incl. nurse etc.</td>
<td>1</td>
<td>2</td>
<td>C5-2G</td>
</tr>
<tr>
<td>C5-2H</td>
<td>Hospitalization charge</td>
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<td>2</td>
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<tr>
<td>C5-2I</td>
<td>Absence from work (days)</td>
<td>1</td>
<td>2</td>
<td>C5-2I</td>
</tr>
<tr>
<td>C5-2J</td>
<td>Has a medical certificate been acquired?</td>
<td>1</td>
<td>2</td>
<td>C5-2J</td>
</tr>
<tr>
<td>C5-2K</td>
<td>Gift, donation for medical or administrative staff</td>
<td>1</td>
<td>2</td>
<td>C5-2K</td>
</tr>
<tr>
<td>C5-2L</td>
<td>Other expenditure Please record</td>
<td>1</td>
<td>2</td>
<td>C5-2L</td>
</tr>
<tr>
<td>C5-2M</td>
<td>What proportion of the total expenses are covered by the state municipality</td>
<td>1</td>
<td>2</td>
<td>C5-2M</td>
</tr>
</tbody>
</table>
HAVE YOU PAID (IN CASH OR IN KINO) FOR SOME OF THE FOLLOWING REASONS:

1. In case of serious illness
2. For consultation with a prominent specialist (doctor)
3. Because I knew that I will receive a high-quality service
4. Because I knew that I will be treated immediately
5. Because I had enough money
6. Because I was satisfied with the successful treatment
7. Because my chiropodist was very close to me, were I lived
8. To be treated close to my home
9. Because I had enough money
10. Because I was satisfied with the successful treatment
11. Because I had enough money
12. Because my chiropodist paid me special attention
13. Because the attitude of staff was very good
14. To be treated close to my home

IF YOU HAVE TO PAY FOR HEALTH CARE, WHAT IS YOUR PREFERRED OPTION?

1. To pay a charge at the point of use for each visit to physician (examination, test...)
2. In the beginning of each month to contribute a certain sum in case of illness to pay nothing
3. If it happens to you to get ill, to pay a small percentage of all expenses during the treatment
4. Other
5. DKNA

IF YOU HAVE TO PAY FOR YOUR TREATMENT OR FOR TREATMENT OF YOUR CHILD OR CLOSE RELATIVE, HOW MUCH WOULD YOU PAY FOR:

- Consultation with internist in hospital
- One-day stay at hospital
- Operation of appendicitis
- Birth
- Physician on call
- For what sum per year would you take an insurance with full coverage/subsidy
- Can't say
- Don't want to pay at all
- Don't know/no answer

Write it to be vice versa (or vice versa depending on the respondent's answer)
Focus Groups Guide

I. Warm-up

II. General discussion: The current health care system

- Strengths and weaknesses (positive / negative changes)
- Is the system free at the points of use? (hurdles of informal payments)
- What has changed in the last year?
- What are the decisive factors for people to receive high-quality service (satisfaction of expectations) at present? What should be?
- Who benefits and who loses under this system? (not only to compare physicians and patients, but also groups of patients, who have advantages/private under this system)
- Trust what words?

III. Private practice (doctors, dentists)

- Attitude towards public-private in the area of medicine: strengths and weaknesses
- Responsibility of public-private in health system
- Business and medicine. Can there be something in common?
- What is your attitude towards entrepreneurs, owners of companies, traders with pharmaceutical and equipment, and towards newly established larger private clinics?
- What should these activities exist outside the state control? To what extent should the government control the private business in this area?
- Why benefits and who loses?
- Should be a paid element in the state health care, for what is acceptable?
- Experience, when some people are treated differently due to their financial status

IV. Voluntary Insurance

- Should people take insurance and provide for themselves in the areas of health and life, those who should look after them?
- If you take insurance, what would be your motivation?
- Trust: What type of companies do you trust more and would you take insurance with (accept for Bulgarian foreign)?
- Financially, how much should the allowable pay for the specific illnesses?
- To whom should you pay the insurance? (the insurance hospitals)

V. National health insurance

- How would you imagine such a HI system? An ideal system?
- Trust / distrust in the system, what would you expect?
- At what level should the HI funds be established (national, regional, municipal, labour unions, at enterprises)?
- Trust / distrust in the civil servants, who will manage the revenue collected into funds?
- What is your idea about democratic handling of the money (delegating of rights for making decisions to non-state institutions etc.)?
- Equal contributions or differentiated for different groups?
- How to pay: monthly premiums / for each consultation, % of treatments

VI. Focus on the willingness to pay

- In what situations would you pay for health services? Scenario: imagine that there is free health care up to a certain limit per year, on what would you spend it?
- If you are admitted to hospital, for what would you pay:
  - pharmaceuticals
  - medicines
  - food
  - bed
  - medicine
  - transport
  - for what would you pay to the hospital stay and hotel bed
  - What is the system?

VII. Statements to be finished (see individual sheep for each participant)

- If I had the power to make a difference in the health care...
- Private physicians are more... (qualified / responsible)
- If paid user fees are legalised, some alleviations should be given to... (elderly, poor)
- Patient who is satisfied with higher treatment in a state facility...
- Physician in state facility, who requests money, is...
- Right to unconditional free-of-charge treatment should be given to... (the health services for wealthier people should be...)
- The best option for the Bulgarian health care should be...

VIII. Assumption test: With what would you associate the following words? (individual or group on a board)

- National health insurance
- Voluntary health insurance
- Health fund
- Private clinic
- Physicians
- Gifts for the doctors

IX. Game (split the group into two)

You are responsible for establishment of health insurance fund, whose main is to support people in case of illness. You personally participate in the fund too.

- How would you establish this fund? (only people... working together, living together, other quality, profession)
- And if people from other groups want to be included? (degree of openness: whether comes close to national level) At what criteria will people be admitted? (e.g. healthy, decent, suffering from certain illness)
- Imagine 100 people agreed to become members of the fund.
  - How to collect the initial sum: whether everybody to give equal sum, or different for each person in relation to income, age, have children etc.
  - How much would the money be marginal if no spending is required for 3 months? (business, investment etc.)
  - Using the collected revenue what would the members pay in the existing health facilities for treatment, medical insurance in another company, hiring a doctor or other?
  - How would they be supplied with medicines (to buy every time; buy larger quantities; establish revolving drug fund etc.)
  - How often to contribute (monthly, single contribution etc.)?
  - Who could pay higher premiums than the other?
  - Who should make the decisions? (elected leader, economist, manager). Should the decision-maker also be a member?
  - Should the contribution of people who have not been ill for quite some time, be used for their relatives as well as for their members?
  - Do you think that the fund, having separate funds, should help some of its members who have immediate financial problem, unrelated to health?
  - Do you think that a small percentage of the funds should be given to the municipality or to other local organisations for health care? Would agree to cover some of the deficit of the national/regional fund, which covers the health care of other people in the area.

Key words: security, trust, flexibility, choice

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I. INTRODUCTION: General attitudes towards the current situation in the Bulgarian health care system

- How would you, personally, assess the situation in the Bulgarian health care, 6-7 years after start of the economic reforms in Bulgaria?

[PROBES: now is worse or better, despite the difficulties, are there any grounds for optimism]

- Do you think that the state should provide medical care, free of charge? Should private initiative be expanded in this area?

[PROBES: test connections free vs "paid": "Yes" vs "state-provided"]

- Should the patient contribute personally for receiving a good health care level? How?

[In your view, which is more important in the health care reform in Bulgaria: to follow the national characteristics or to aim at modern ways of organisation of health care in Europe and in the world?]

- Despite disagreement in opinion among politicians and the mistakes that were made, do you think that most of the politicians and experts in Bulgaria are trying to do what is best for the Bulgarian health care?

- Do you think that despite the difficult economic situation at present, physicians are trying to do their best to provide good health care for the patients?

- Are the health status and morbidity of the population related to the problems of the environment? (CONTINUE BELOW IF "YES")

[OPTIONAL: Do you think that there are serious ecological problems in Bulgaria in the past few years?]

-Given the situation in Bulgaria at present, do you think that preserving the environment should be given priority, even if it leads to slow down of the economic development and less jobs? Would you agree with the introduction of "ecological tax", which provides clean environment? What size?

-Would you buy goods that are e.g. 20% more expensive, but you are sure that are ecologically clean?

-Do you think that Bulgaria alone, without contacts with international organisations, can and must solve its ecological problems?

II. EXPECTATION AND OPINIONS FOR CHANGES IN THE HEALTH FINANCING IN BULGARIA

What methods of financing of a health care system do you know?

[IF THE RESPONDENT LIST AT LEAST TWO]

- Which of these methods do you consider more transparent and understandable for the public? Is that good?

- Which method is easier to implement (accounting, trained personnel etc.)?

- Which one do you personally consider more suitable for Bulgaria? Why?

- Which method, according to you, could be accepted easier by the public in Bulgaria? Why?

- According to you, what is the main difficult in functioning of the health financing method?

- Would you assess [NGO/PATIENTS]: your impressions from the current financial situation in the waste health facilities? [FOR DOCTORS: ... in the health facility where you work?]

- Under this financing system is there a fair treatment of ordinary citizens? Why yes/not?

- [FOR PHYSICIANS/EXPERTS: Under the current conditions, what could be done so that the health sector or separate health facilities to become self-financed? [FOR PROBES: Where to get money from? budget, user fees, managerial savings etc.]]

- In practice do some health establishments have additional revenues, apart from the state budget? [PROBES: E.g. payments from by patients for officially free medical services, purchase by patients of drugs, materials, food during hospital stay, etc.]

- Does this way of organisation of the system stimulate sufficiently quality of service provided by the medical staff? Is that good?

- On what does the motivation of the physician for high-quality service depend? On what should it depend, in your view?

- On what does the successful treatment of a given patient depend?

[OBJECTIVE FACTORS ONLY]

Would you describe the typical situation, in which a ordinary citizen visits physician for a health service. What happens? Why?

- In what cases people most often seek health professionals? [For prevention?] According to you, is the health education of the population high or low?

- [FOR PHYSICIANS: How would you rate the size of your salary?]

Sufficient for a good standard of living

Sufficient only for basic needs

Insufficient for a normal existence

- Go back to the recruitment questionnaires (Senior Physicians/Experts) If A13, the respondent has selected option 1 or 2, ASK: You determined your income as sufficient for normal existence, and your salary - as insufficient, you must have sources other than your salary to add to your income. For those, who have answered 3 at A13 and 1 or 2, ASK: Do you see any opportunities for you to obtain additional income?]

- [FOR PHYSICIANS/NGO/PATIENTS: How would you rate the size of a physician's salary?]

Sufficient for a good standard of living

Sufficient only for basic needs

Insufficient for a normal existence]

- How would you assess the incomes of physicians/dentists, in comparison to other professionals? Are their income really so low? [PROBE: What about salaries plus gifts]

- [FOR EXPERTS: What about the incomes of people working in the area of the health administration?]

- [FOR NGO/PATIENTS]: Do you think that the physicians have opportunity to obtain additional income?

- Which physicians are the most privileged in this respect? Why?

[PROBES: Sofia-small towns/villages; type of health facility, type of service.]

- [<1%>According to your view, are the people suffering from ....... (the respective disease related to the activity of the NGO) less or more willing to pay for health care than other patients? Why yes/no?]

- How do you see the situation, in which a physician in an ordinary health facility work? Which are the daily difficulties in the physician's work?]

[FOR EXPERTS: <<<<How do you see the situation, in which an expert/economic director works.]]

- Do you think the health facilities [FOR PHYSICIANS: and administrative institutions] have sufficient budget in order to provide the patients with the services they need?

- On what does the physician's behaviour depend? On material interest?

- Whether the low or delayed payment stimulate the physicians to expect presents?•
Are you interested in the issues related to the situation and organisation of health care system?

Do you follow the political debates, regarding the health care reform?

Under what conditions could consensus on these issues be reached?

Which political forces stay behind them?

According to you, is the reform in the method for health care financing necessary? Is such reform realistic in the present conditions?

Which institutions, organisations, should be involved in the reform?

In your opinion, should those suffering from ..................... (the respective illness)

for treatment in the state.

In our conditions, what is more appropriate: integrated well organised controlled health insurance funds or multiple funds?

To what extent could competition between the funds for attracting patients?

What do you think, should the membership in a health insurance fund be compulsory?

Should the users have a right to choose in which fund (if more than one) to enrol?

In a good idea that the very rich people should be excluded from participation in a health insurance system and required to pay directly for medical services at substantially higher prices than the people who a members of, health insurance funds?

What could the NGOs do to support the organisation and the implementation of the health care reform?

Are you going to use connections (friends, colleagues)? Why?

What sum do your think affordable for you to pay for admission to hospital?

To pay directly to the administration.

To pay monthly for the convenience the respondent has illness ask only for his/her personal choice?

To pay in private, or go to polyclinic/hospital, private practice.

How much do you think is affordable for you to pay for or consultation at present?

Are you paying for the public benefits (breads, colleagues)? Why?

How would you return the favour of the physician, who treated you?

Would you think of taking insurance?

What sum could you allow for such insurance?

What sum are you willing to pay monthly for the convenience the physician is at your disposal 24 hours per day?

Another hypothetical situation: if we assume that your child, or a person very close to you, is ill. Please, describe step-by-step what would you do?

Do you have any other health problems in general?

How would you resolve the issue with people, IF NGO from your organisation, who cannot pay for health care (in private, or in the state health facilities) for pharmaceuticals?

To be covered entirely by the state, to be covered by the patient, but with subsidies for those in need.

What is the most appropriate way for the patient to pay, either in private, either in state facilities? To whom? Is it necessary to have an intermediary between the patient and the health organisation?

How should the revenue from the health insurance be used?

Are you going to use connections (friends, colleagues)? Why?

What would be the effect of the introduction of paid services (user fees) in the state health facilities?

Would you think of taking insurance?

What sum are you willing to pay monthly for the convenience the physician is at your disposal 24 hours per day?
VI. PERSONAL EXPERIENCE

regarding what problems and suggestions (related to your work), did you have 
you enter an argument with your physicians colleagues, nurses, patients, etc. in 
the past year? [PATIENT: What problems related to the quality of health care, 
did you have to enter...]

[PROBES: presents, informal payments, financial shortages, shortages of drugs, 
repeatedly promised budgets, poor management etc.]

[PROCEED CASE THE RESPONDENT HAS A CASE TO REPORT; 
what was your experience in these arguments - positive or negative? What 
happened? How did you feel;
was your opinion accepted? If not, were you explained why;
what was the attitude of your opponents towards you personally in this argument? 
why? [PROBES: fair, unfair, special;]

in your opinion what is most important to find the common language with the 
others in other similar arguments: clearly to present your position or to try to 
understand the position of your opponent;
what did you do? Are the measures that you took effective? What would you do 
sow in a similar situations;
[PROBES: insurance for your opinion to be considered 
refer to issues to higher authorities 
publications in the press 
ask to evade the particular employee 
ask to influence the decision-makers through 
quote the law 
threatening the employee in the certain way 
offering of services, gift (or other - describe)]

<< What expenses did you incur during your last visit to a physician or 
dentist;
[PROBES: expenses on serum, procedures, food, rent, loss of worktime, gifts, etc. ] 
were these resources a problem for you? If yes, did you take a loan;
[PROBES: for the salary, savings, loan, sale of goods etc.]

<< You know that in other countries people use health insurance to cover 
expense made during illness. Have you ever taken health insurance for yourself 
or other member of your family? Why yes/no? [FOR NGO: Have you ever 
advise/decides to make this issue with people from your organization?]
[ANSWERS "NO:" If some day you have to take health insurance, where 
would you do it: in state or private company? Why? In the current situation 
would you take insurance?]

What kind of insurance do you use at present: life insurance, property 
insurance, car insurance, accident insurance etc.?

<< Did it ever happen to you personally to pay or to give gift on occasion of 
being treated in health facility? [FOR NGO: Has it happened to people from 
your organisation?]

[PROBES: Would you describe in what circumstances?
Was that for the services of physicians, nurses, or for drugs, materials etc. 
How would you assess the fare;
What impressions were you left with;
Would you go again?]

V. ASSESSMENTS AND SUGGESTIONS FOR FINANCING REFORMS 
IN THE BULGARIAN HEALTH CARE SYSTEM

• Do you think that there is a change in the motivation of the physicians now 
compared to before 1989? Is there a change in the social prestige of the 
medical professionals? [FOR EXPERTS: motivation and prestige of the health 
administrators/experts-economic directors]

• What measures could be taken to improve the situation of the Bulgarian 
health care? Imagine that you have the power to change things? [FOR NGO: to 
introduce reforms that will benefit the members of your organization]; what are 
the three things that you would do first;

[PROBES: radical change in the system of health financing; 
introduction of compulsory health insurance system 
more resources in the budget for health care 
Law for health (better arrangements for the private practice; 
better payment of the medical professionals 
taught control by the Ministry over the work of the physicians 
morer professional information for those working in the health system; other]

• [FOR EXPERTS: Do you think about decentralization of the health care 
management at municipality level? Do you think that there are enough good 
examples at regional level?]

• Do you think that a system of health care financing which to achieve better results 
for the ordinary citizens [FOR PHYSICIANS: for the health professionals; FOR 
EXPERTS: for the citizens and for the health professionals; FOR NGO: for the 
person you represent/member of the society] is possible at all?

• [FOR EXPERTS/PATIENTS/NGO: Do you think that in the health care system 
there are informal payments by patients? What is the reason for their existence? 
Who benefits mostly from them?]

• Is this a wide-spread practice in your opinion? Is it a serious problem?
[PROBES: is it rather culturally determined, tradition, economic reasons]

• [FOR EXPERTS: Do you think that there are incidents of corruption in the health 
administration or this is just a myth?]

• What do you think for a system for financial independence of the state health 
facilities, e.g. to support themselves through collection of user fees? Is it possible 
in the current conditions?

Showcard 1: Factors Influencing willingness to pay

Which are important?
• type of health facility (hospital/polyclinics)
• seriousness of the illness; how threatening it is
• how much are the patient value it own health
• the type of health service / product, e.g. pharmaceuticals, consumables, 
payment to physicians, hospital admission
• the behaviour and attitudes (good manners) of patient
• whether the patient is satisfied with the service / is getting higher-quality 
service, or quick and convenient contact with a physician
• whether the patient is has money and is able to pay
• the way and moment of payment (large/small sum, money or in-kind, before or 
after the treatment)
• whether the treatment is in Sofia or in small towns/villages

Please select the 5 most important factors

Showcard 2: What is the most appropriate way for you/any patient to pay for 
health care? To whom?

• Directly to the physician
• To the administration of the health establishments
• Contributions to health insurance company
• Contributions to health fund
• To state institution
• Other
A12. Since when were you at your current position? (Write in years)

A13. What is the income of your family?
- Sufficient for a good standard of living: 1
- Sufficient only for basic needs: 2
- Insufficient for a normal existence: 3

A14. Approximately in which of the following groups does your income (of the past month) fall?

- Below 15,999: 1
- 15,999 - 39,999: 2
- 40,000 - 59,999: 3
- 60,000 - 79,999: 4
- 80,000 - 99,999: 5
- 100,000 - 119,999: 6
- 120,000 - 139,999: 7
- 140,000 - 159,999: 8
- 160,000 - 179,999: 9
- Above 300,000: 10

A15. Do you practice any religion? If, yes, which one? (Write in)

A16. Do you engage in sports?
- Yes, actively: 1
- From time to time: 2
- No: 3

A17. Are you a member of any organisation? If, yes, in what kind?
- Cultural: 1
- Labour union: 2
- Political party: 3
- Professional organisation: 4
- Other organisation: 5 (Write in)

A18. Do you smoke? (If they answer that smoke rarely, circle “Yes”)
- Yes 1
- No 2

A19. How often do you drink (per week)?
- Drink almost every day: 1
- Drink only at special occasions/ not every week: 2
- Never drink: 3

A20. How would you describe your own health status on the whole?
- Good: 1
- Rather good: 2
- Neither good, nor bad: 3
- Quite poor: 4
- Very poor: 5

A21. What is the highest educational degree attained?
- Postgraduate degree: 1
- Degree level education (university): 2
- Vocational/technical college: 3
- Secondary general: 4
- Lower than secondary: 5 (TERMINE THE INTERVIEW)

A22. What is your profession?
- Physician (incl. physiotherapist, etc.): 1
- Nurse (midwife): 2
- Dental: 3
- Pharmacist: 4
- Other: 5 (TERMINE THE INTERVIEW)

A23. Only for physicians and nurses: What is your field? (e.g. dermatologist, etc.) (Write in)

A24. What academic degree do you have?
- Assistant professor / lecturer: 1
- Senior assistant professor / senior lecturer: 2
- Associate professor / reader: 3
- Professor: 4
- None: 99

A25. In which health establishment, medical university, or other institution do you work?
- No: 2

A26. What is your position at present?
- Physician working in a ward: 1
- Head of surgery / specialised consultation room: 2
- Head of ward / department: 3
- Senior nurse / ward nurse: 4
- Chief physician / senior nurse of clinic: 5
- Chief physician / senior nurse of hospital, polyclinic: 6
- Economic director: 7
- Other: 8 (Write in)

A27. Do you have staff directly subordinated to you?
- Yes: 1 (Write in number of subordinates)
- No: 2

A28. What is your main occupation at present?
- Full-time university student: 1
- Freelance: 2
- Owner-owner of private company: 3
- Farmer employed in agriculture: 4
- Employee: 5
- Unemployed: 6
- Pensioner: 7
- Housework/maternity leave: 8
- Other: 9 (Write in)

A29. Where do you work? (name of the organisation/institution/company) (Write in)

A30. What is the position of the respondent in the organisation/institution/company?
- State: 1
- Private: 2
- Other: 3 (Write in)

A31. Do you have staff directly subordinated to you?
- Yes: 1 (Write in number of subordinates)
- No: 2

A32. Since when were you at your current position? (Write in years)

A33. What is the income of your family?
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A36. Do you engage in sports?
- Yes, actively: 1
- From time to time: 2
- No: 3

A37. Are you a member of any organisation? If, yes, in what kind?
- Cultural: 1
- Labour union: 2
- Political party: 3
- Professional organisation: 4
- Other organisation: 5 (Write in)

A38. Do you smoke? (If they answer that smoke rarely, circle “Yes”)
- Yes: 1 (cigarettes weakly)
- No: 2

A39. How often do you drink (per week)?
- Drink almost every day: 1
- Drink only at special occasions/ not every week: 2
- Never drink: 3

A40. How would you describe your own health status on the whole?
- Good: 1
- Rather good: 2
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- Employee: 5
- Unemployed: 6
- Pensioner: 7
- Housework/maternity leave: 8
- Other: 9 (Write in)

A48. Where do you work? (name of the organisation/institution/company) (Write in)

A49. What is the position of the respondent in the organisation/institution/company?
- State: 1
- Private: 2
- Other: 3 (Write in)

A50. Do you have staff directly subordinated to you?
- Yes: 1 (Write in number of subordinates)
- No: 2

A51. Since when were you at your current position? (Write in years)
Information to be recorded prior to the Interview

A2. Age

A3. In what kind?

A4. Are you a member of any organisation? (If yes, in what kind)

A6. What is your profession?

A8. In which health establishment, medical university, or other institution do you work?

A9. In which settlement is it?

A10. What is your position at present?

A11. Do you have staff directly subordinated to you?

A12. Since when are you at your current position?

A13. What is the income of your family?

A14. Do you practice any religion? If, yes, which one?

A15. Do you engage in sports?

A16. Are you a member of any organisation? If Yes, in what kind?

A17. Do you smoke? (If they answer that smoke rarely, circle “Yes”)

A18. How often do you drink (per week)?

A19. Do you have any long-standing (chronic) illness or disability? (If Yes, and they say what is THE ILLNESS, WRITE BELOW)

A20. Do you consult a doctor/nurse health worker in a state health establishment regarding your last illness in the past 12 months? (If or in private)

A21. How would you describe your own health status on the whole?

A22. Do you have any kind of health insurance?

A23. Would you take insurance (of the past illness) of all?

A24. How much income (in leva) would you pay for your treatment or for treatment of your child/ close relative, is some payment is necessary?

A25. How do you usually pay for your treatment?

A26. Are you a member of any organisation?

A27. Do you practice any religion?

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A71. Do you practice any religion?

A72. How much income (in leva) would you pay for your treatment or for treatment of your child/ close relative, is some payment is necessary?

A73. How do you usually pay for your treatment?

A74. Are you a member of any organisation?

A75. Do you practice any religion?

A76. How much income (in leva) would you pay for your treatment or for treatment of your child/ close relative, is some payment is necessary?

A77. How do you usually pay for your treatment?

A78. Are you a member of any organisation?

A79. Do you practice any religion?

A80. How much income (in leva) would you pay for your treatment or for treatment of your child/ close relative, is some payment is necessary?

A81. How do you usually pay for your treatment?

A82. Are you a member of any organisation?

A83. Do you practice any religion?

A84. How much income (in leva) would you pay for your treatment or for treatment of your child/ close relative, is some payment is necessary?

A85. How do you usually pay for your treatment?

A86. Are you a member of any organisation?

A87. Do you practice any religion?

A88. How much income (in leva) would you pay for your treatment or for treatment of your child/ close relative, is some payment is necessary?

A89. How do you usually pay for your treatment?

A90. Are you a member of any organisation?

A91. Do you practice any religion?

A92. How much income (in leva) would you pay for your treatment or for treatment of your child/ close relative, is some payment is necessary?

A93. How do you usually pay for your treatment?

A94. Are you a member of any organisation?

A95. Do you practice any religion?

A96. How much income (in leva) would you pay for your treatment or for treatment of your child/ close relative, is some payment is necessary?

A97. How do you usually pay for your treatment?

A98. Are you a member of any organisation?

A99. Do you practice any religion?

A100. How much income (in leva) would you pay for your treatment or for treatment of your child/ close relative, is some payment is necessary?

A101. How do you usually pay for your treatment?

A102. Are you a member of any organisation?

A103. Do you practice any religion?

A104. How much income (in leva) would you pay for your treatment or for treatment of your child/ close relative, is some payment is necessary?

A105. How do you usually pay for your treatment?

A106. Are you a member of any organisation?

A107. Do you practice any religion?

A108. How much income (in leva) would you pay for your treatment or for treatment of your child/ close relative, is some payment is necessary?

A109. How do you usually pay for your treatment?

A110. Are you a member of any organisation?

A111. Do you practice any religion?
RECRUITMENT QUESTIONNAIRE FOR IN-DEPTH INTERVIEW
Version II: EXPERTS, ECONOMIC DIRECTORS

B1. Interview Code

B2. Sex (M/F)

B3. Age (in years)

B4. Which is the highest educational degree attained:
   a) Postgraduate degree
   b) Degree level education (university)
   c) Vocational/technical college
   d) Secondary general
   e) Lower than secondary

B5. What is your profession?
   a) Physician, medical specialist, etc.
   b) Nurse/auxiliary medical assistant
   c) Engineer
   d) Other

B6. In which health establishment, medical university, or other do you work?

B7. In which settlement is it?

B8. What is your position at present?
   a) Economic director
   b) Expert in the MOH
   c) Expert in the Regional Office of Health Care
   d) Other

B9. Do you have staff directly subordinated to you?
   Yes
   No

B10. Since when are you at your current position?

B11. What is the income of your family?
   a) Sufficient for a good standard of living
   b) Sufficient only for basic needs
   c) Insufficient for a normal existence

C1. Interview Code

C2. Sex (M/F)

C3. Age (in years)

C4. Which is the highest educational degree attained?
   a) Postgraduate degree
   b) Degree level education (university)
   c) Vocational/technical college
   d) Secondary general
   e) Lower than secondary

C5. What is your profession?
   a) Physician, medical specialist, etc.
   b) Nurse/auxiliary medical assistant
   c) Engineer
   d) Other

C6. Where (organisation/inst/department) do you work?

C7. Where (organisation/inst/department) do you work?

C8. Are you paid for your work?
   a) Main job
   b) Second job

C9. Do you have staff directly subordinated to you?
   a) Main job
   b) Second job

C10. What is your position at present?
   a) Main job
   b) Second job

C11. Since when are you at your current position?
   a) Main job
   b) Second job

C12. Approximately in which of the following groups does your income (of the past
     month) fall?

   1. Below 19,999
   2. 20,000 - 29,999
   3. 30,000 - 39,999
   4. 40,000 - 49,999
   5. 50,000 - 59,999
   6. 60,000 - 69,999
   7. 70,000 - 79,999
   8. 80,000 - 89,999
   9. 90,000 - 99,999
   10. 100,000 - 119,999
   11. 120,000 - 139,999
   12. 140,000 - 159,999
   13. 160,000 - 179,999
   14. 180,000 - 199,999
   15. 200,000 - 219,999
   16. 220,000 - 239,999
   17. 240,000 - 259,999
   18. 260,000 - 279,999
   19. 280,000 - 299,999
   20. 300,000 - 319,999
   21. Above 320,000

C13. Do you practice any religion? If, yes, which one?

C14. Do you engage in sports?
   Yes
   No

C15. Are you a member of any organisation? If yes, in what kind?
   a) Cultural
   b) Labour union
   c) Political party
   d) Professional organisation
   e) Other

C16. Do you smoke? (If they answer that smoke rarely, circle "Yes")
   Yes
   No

C17. How often do you drink (per week)?
   a) Almost every day
   b) Not every week
   c) Never drink

C18. How would you describe your own health status on the whole?
   Good
   Better
   Neither good, nor bad
   Quite poor
   Very poor

C19. How often do you drink (per week)?
   a) Almost every day
   b) From time to time
   c) Never drink

C20. How would you describe your own health status on the whole?
   Good
   Better
   Neither good, nor bad
   Quite poor
   Very poor

C21. Do you suffer from any disability associated with an illness?
   Yes
   No

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RECRUITMENT QUESTIONNAIRE FOR IN-DEPTH INTERVIEW
Version IV: PATIENTS

<Information to be recorded prior to the interview!!!>

D1. Interview Code

D2. Sex (male/female)

D3. Age (in years)

D4. Which is the highest educational degree attained?
   - Postgraduate degree
   - Degree level education (university)
   - Vocational/technical college
   - Secondary general
   - Lower than secondary

D5. What is your profession?

D6. What is your main occupation at present?
   - Full-time university student
   - Freelance
   - Owner/manager of private company
   - Farmer employed in agriculture
   - Employee
   - Unemployed
   - Pensioner
   - Housewife on maternity leave
   - Other

D7. What is your position at present?

D8. Since when are you at your current position(s)?

D9. Do you have staff directly subordinated to you?
   - Yes
   - No

D10. Do you engage in sports?
   - Yes, actively
   - From time to time
   - No

D11. Do you practice any religion? If, yes, which one?

D12. Are you a member of any organisation? If, yes, in what kind?
   - Cultural
   - Labour union
   - Political party
   - Professional organisation
   - Other organisation

D13. Do you smoke? (If they answer that smoke rarely, circle "Yes")
   - Yes
   - No

D14. How often do you drink (per week)?
   - Drink almost every day
   - Drink only at special occasions/ not every week
   - Never drink

D15. How would you describe your own health status on the whole?
   - Good
   - Rather good
   - Neither good, nor bad
   - Quite poor
   - Very poor

D16. Do you have any long-standing (chronic) illness or disability? (IF YES, AND THEY SAY WHAT IS THE ILLNESS, WRITE BELOW)

D17. In which settlement do you live?