



**INDEX FOUNDATION**  
99, Rakovski str. Fl.3, office  
4, Sofia 1000,  
Tel/fax: 980 22 78  
e-mail:  
indexfoundation@abv.bg;  
web site:www.index-bg.org



Estonia pst. 5a, Tallinn  
10143  
Tel. 6409 000; Fax 6409 001  
praxis@praxis.ee  
web site: www.praxis.ee

---

# **Hospital reform in Bulgaria and Estonia: What is rational and what not?**

## **Final report**

**January 2007**

The publication of this country report has been funded by the Local Government and Public Service Reform Initiative of the Open Society Institute in Budapest within the framework of the "Policy Development Program". (<http://lgi.osi.hu/>).

The judgments expressed herein do not necessarily reflect the views of the above sponsor. All rights reserved.

## TABLE OF CONTENT

Executive Summary .....	5
Introduction.....	9
Research Objectives and Contribution.....	11
Research Methodology .....	12
The Team .....	12
Time Schedule .....	12
Theoretical Framework.....	13
Methods and Study Sample .....	17
Literature Review.....	17
Study Sample .....	20
Questionnaires and Topic Guide.....	21
Study Results .....	23
Hospital Reforms: Brief Overview of the Main Developments .....	23
Health Policy and Legislation.....	30
Key Stakeholders .....	30
Hospital Reforms and Legislation .....	31
Resources and Management .....	38
Financing.....	38
Human Resources .....	40
Management.....	41
Efficiency .....	45
Competition.....	46
Responsiveness and Quality of Care.....	47
Access to Care.....	47
Quality of Care.....	48
Continuity of Care.....	48
Challenges for Hospital Management.....	49
Problems .....	49
Policy Options for Further Reform .....	50
Conclusions.....	52
List of abbreviations .....	54
References.....	55

## **In memory of Ruta Kruuda (1967-2005)**

This is the final report for the project “*Hospital reform in Bulgaria and Estonia: What is rational and what not?*” financed by the *Local Government Initiative Fund of Open Society Institute*, Budapest. The report compares hospital reform in two countries- Bulgaria and Estonia. The project was led by *Index Foundation* in Bulgaria and *Praxis - Centre for Policy Studies* in Estonia.

The report was written by *Svetla Tsoлова*<sup>1</sup> and *Dina Balabanova* (Bulgaria), *Marge Reinap*, *Triin Habicht*, *Ain Aaviksoo*, *Agris Koppel* and *Maris Jesse* (Estonia).

*All inaccuracies and mistakes are entirely the responsibility of the authors.*

The authors of the report would like to thank the team of the *Institute for Social and Trade Union Research* for their active part in conducting the field work nationally in Bulgaria. We are also grateful to the Bulgarian and Estonian hospital managers and health policy stakeholders who participated in the study.

---

<sup>1</sup> For contacts : *Svetla Tsoлова* – [indexfoundation@abv.bg](mailto:indexfoundation@abv.bg)

## Executive Summary

*“We should not rest on our laurels  
but we need courage to take the necessary steps for the future!”*  
(Estonian respondent)

The research undertaken in the framework of this project sought to contribute to the understanding of hospital reform in Bulgaria and Estonia by means of a detailed analysis of some policies implemented in both countries aimed at rationalising the provision of hospital services. An analysis of the theoretical and practical aspects of the hospital reforms in the two countries was performed. A study collecting primary data on the views and attitudes of hospital managers and stakeholders concerning the achievements and challenges in the reform of hospital care was conducted. A range of specific topics were selected to address the issues subject to research: a) review of health and hospital reform strategies in Bulgaria and Estonia; b) hospital service delivery, decentralization and level of hospital autonomy; c) measures for improving hospital efficiency. Several complementary research methods were employed: literature review, postal survey of hospital managers and supervisory boards by means of semi-structured questionnaires, and in-depth interviews with key informants using topic guides.

Reforming hospitals is a difficult process and health policy makers in most industrialised countries are facing challenges in responding to political pressures from different stakeholders in the efforts to satisfy societal demands for high quality of care, to assure financial sustainability of the public finances and to respond to the fast and radical changes taking place in the health care systems. In Bulgaria and Estonia the implementation of a radical reform of health care delivery, and particularly of the role of the hospital and its place within the wider health care system is also complicated by a process of far-reaching political, economic, and societal change.

The literature review demonstrated a significant knowledge gap in research and analysis of hospital delivery models and its reform in Central and Eastern Europe in general and in Bulgaria and Estonia in particular. There are few good quality publications, in peer-reviewed journals and those available suffer from methodological drawbacks. Some of the most relevant literature was published in non-peer-reviewed journals, in electronic format, or was not published at all and therefore difficult to access. A large part of it consists of government-commissioned consultancy reports, small studies lacking a clearly defined methodology and personal communications. No comparative research on hospital care of Bulgaria and Estonia and its reform was found, and rigorous studies on health care delivery across countries in central and Eastern Europe were found to be generally quite rare. This has reinforced the rationale for this research, namely, the importance of understanding hospital reform in relation to autonomy and the new models of care across two very different contexts and of identifying the lessons for other countries in Europe seeking to reform their health care systems.

A theoretical framework based on the World Bank approach was developed to review the determinants of the organizational behaviour of inpatient care institutions and the reforms in the hospital sector by taking into account such goals of the health system as

responsiveness, access, equity and fairness in financial contributions, as defined by the World Health Organization (WHO). It specifies the following areas explored in our study: external pressure; organizational structure and managerial instruments. Accordingly, the main topics (sections) of the questionnaires and topic guidelines for in-depth interviews for hospital managers, supervisory boards' representatives and key health policy makers are focused on health policy and hospital reform legislation; efficiency; resources (incl. financial and human), management and autonomy; access to and responsiveness of health care.

Over the past decade, which was also a decade of dramatic political and economic transition, the hospital sector in Bulgaria and Estonia underwent a series of structural, regulatory and financial changes. Though hospital reform lagged behind the reform of primary health care, it was intensified after 2000. In 2004 the share of health expenditures as a percentage of Gross Domestic Product (GDP) in both countries (in Bulgaria – 4.7%, in Estonia – 5.5%) was still below the European countries average (European Union (EU) 15<sup>2</sup>- 9.3%). The underfinancing of the health sector and the reforms in hospital care resulted in significant reduction of hospital beds. Within one decade (from 1995 till 2004) the number of hospital beds per 100 000 of population in Bulgaria (613.13) and in Estonia (581.79) fell behind the levels in the European Union average (EU 25<sup>3</sup>- 649.61)<sup>4</sup>. Somewhat different is the situation with the number of hospitals per 100 000 where a sharp reduction is observed in Estonia only (for the period 1995-2004). The current study did not find any significant reduction in the hospital capacity in Bulgaria.

There is a similarity between Bulgaria and Estonia with regard to the role and power of the key stakeholders in health policy. Indeed, the stakeholders exercise a different degree of influence over the governance and management of hospitals depending on the context in the individual countries. A significant difference is to be found in the active role of the hospital association in Estonia and its leverage on policy. In Bulgaria there is a number of hospital associations but their role is not very clear and they are still not seen as a key stakeholder.

The perceived degree of clarity of the governmental policy on hospitals varies among the different types of respondents participating in the survey. Interestingly, hospital staff is particularly critical in this respect in both countries. Although a Master plan for hospitals (a long term strategy for the period 2000-2015) has been adopted in Estonia, the managers of health facilities think that the state policy in health care and hospital reform does not have clearly defined strategic objectives. The predominant attitude in Bulgaria is similarly negative. The hospital managers in both countries believe that hospital care is not a priority on the government's health policy agenda. Opinions about influence over the reform process differ in the two countries. A relatively small part of the respondents in Bulgaria think that they can exert an influence on the reform process while, in Estonia, the majority of managers think that they are able to influence the formulation and implementation of the hospital reform.

---

<sup>2</sup> EU 15- European Union before 1 May 2004 with 15 member states.

<sup>3</sup> EU 25- European Union after 1 May 2004 with 25 member states.

<sup>4</sup> WHO Health for all data base – [www.who.int](http://www.who.int)

On the one hand, changes in the mode of financing of hospitals, legislative changes, introduction of accreditation (licensing), free patients' choice, etc. are seen by the respondents in the both countries as positive aspects of the reform process. On the other hand, the failure to fully implement some of them is seen as a negative aspect of the reform process. Shortages in funding and resources as well as poor implementation of initiatives are common negative aspects in both countries.

Staff motivation, especially good remuneration, is an important factor for good quality of care and effectiveness. The study findings show that there is a link between remuneration and performed work. Yet the two countries experience problems in the field of human resources availability and qualification.

In both countries hospitals suffer from insufficient financing, seen as a crucial factor for effective hospital care. In Estonia some hospitals reported profit, while that is rare in Bulgaria. Empowerment of clinics and wards to manage funds in ways that are completely autonomous is not very common. About half of the respondents in both countries declare that clinics and wards have no financial autonomy.

Notably, management boards in both countries are reported to enjoy sufficient autonomy to perform their function - to manage the hospital, especially in Estonia. The boards are also commonly seen to have responsibilities for all aspects of hospital operation, including managing debts. Despite the different levels of autonomy reported in the two countries, the objectives of Bulgarian and Estonian hospital managers are very similar – quality improvement, efficiency and customer satisfaction.

Health system reforms in the two countries led to creation of a market environment affecting financing and delivery of hospital care - elements of competition among providers were introduced (in 2003 in Estonia and 2004 - in Bulgaria). The majority of the respondents in both countries stated that hospital sector's environment is competitive. Estonian managers perceive the environment in which they are working as more open for competition among health care facilities than their Bulgarian colleagues. The opportunities to compete in quality of care depend very much on the conditions and resources of the hospitals. Overall, the hospital managers in both countries reported that the general condition of their buildings and equipment is acceptable. However, the Estonian managers are more critical than their Bulgarian counterparts as far as the infrastructure and the medical equipment of their facilities are concerned.

Managers in both countries think that resources in the hospital sector could be used more efficiently. Managers in Bulgaria are less critical about their own hospital compared to the hospital sector in general, while criticism in Estonia is directed against the performance of their own hospitals. Increasing control over costs and performed activities is perceived as a measure to improve efficiency in both countries. In order to achieve efficiency most hospitals outsource some services to external providers, seeking to improve the quality of services, release internal capacity and achieve cost savings.

The study findings imply that some aspects of continuity of care can be problematic. The main problem is insufficient collaboration between the different levels of care – primary, secondary, tertiary. Delayed referrals to hospitals by general practitioners, insufficient capacity for long-term (chronic) care and rehabilitation to ensure full recovery are common phenomena in both countries.

The study highlights a range of critical issues in relation to the hospital reform. While some are context-specific, there are many common organizational, legislative, financial and human resource challenges across the two countries, the last two being most problematic. Highly politicised hospital governance was also identified as an obstructive factor.

Stakeholders suggest that further hospital reform should take into account the main goals of health systems: efficiency, quality, solidarity and equity. Moreover, cooperation between stakeholders should be enhanced in view of reducing policy fragmentation due to differential lobbying power of particular groups. If the policy is directed toward delegating more freedom to hospitals, policy makers have to make sure that monitoring and benchmarking procedures are in place. Policies should be directed to such areas as strengthening continuity of care, clarifying responsibilities for capital investments and development of public-private partnerships. Implementation of standards for management and supervisory board activities is to be considered. Policy makers need to aim at achieving a balance between retaining some vital social functions and market behaviour. Elaboration and implementation of human resource strategy and integrated information systems is vital for the proper functioning of the health care system.

This research addresses the attitudes of hospital managers and stakeholders with respect to the hospital reforms. Further research is needed to examine the views and attitudes of the general population and the opinion of health care professionals from other levels of health system and from related social sectors. In both countries a comprehensive evaluation of the current and future health care needs of the population is necessary to support the policy making process. Other areas where comprehensive analysis is needed are: hospital services' markets – e.g. market concentration; hospital ownership and hospital behaviour; role of price regulations on hospital behaviour; patient flows and substitution ability among hospital providers; barriers to entry (costs, regulations, etc.) and their implications for hospital behaviour; buyer number, types and behaviour, relevant consequences for hospital services, etc. Systems for routine monitoring of hospital performance in view of needs and costs of care have to be developed to ensure adequate benchmarking and accreditation across hospitals. Health policy makers may consider strengthening the health economics capacity within the respective ministries or specialized agencies for epidemiology and economic analysis in health care.

## Introduction

Hospitals in most countries remain an important source of critical health care services, providing both basic and advanced care for the population. Despite much attention and emphasis on primary care as a first point of contact for patients, hospitals remain the most important element of health care provision with the largest share of total health expenditure. They are viewed by the public as the main manifestation of the health care system and its ability to fulfil a caring role and are, therefore, significant politically (*McKee & Healy, 2000; Wiley 1998*).

Hospitals are often the target of health sector reforms aimed at efficiency, equity, and quality improvements. They also play a key role in system-wide reforms in financing and health care delivery, health policy framework, provider payment mechanisms, and competitive market environment (*Preker & Harding, 2003; Harding & Preker, 2000*). There is consensus that they must change in response to: a) demand-side pressures such as changing demographic status and health needs of the population<sup>5</sup>, b) supply-side pressures such as scarcity of resources in the face of new technologies<sup>6</sup>, and c) changing public expectations about the role of the hospitals as a consequence of wider societal and economic change (*McKee & Healy 2002*). Scholars also pay attention to other substantial pressures on hospitals requiring fundamental change in the way they operate: increasing specialisation in health care, changes in employment practices, improved efficiency, safety, quality and volume of services, technology, and consumerism (*Edwards et al, 2004*).

Yet, reforming hospitals poses significant challenges. As *McKee and Healy (2002)* pointed out, the hospital sector proves to be difficult to change both structurally and culturally, despite the recognized need for change. Hospital infrastructure largely predetermines the capacity and opportunity for reform, and the flexibility as to reform options is often limited. Hospital functions are also resistant to change and traditionally conservative.

Hospital reforms tend to be politically sensitive and are often avoided by policy-makers. Many of the difficulties in hospital reforms have more to do with the complexity of changing clinical and managerial practice than with the actual reform content as the success of the reform is largely dependant on the ability of policy-makers to manage change. The reform debate focuses increasingly on those contextual and process factors that enable or obstruct change, including relationships between stakeholders, effective stewardship, steering implementation processes, and building institutional, human and management capacity (*Figueras et al, 2002*).

---

<sup>5</sup> In industrialised countries the evolving patterns of disease are changing with the increases in chronic conditions and localisation of infectious diseases among certain groups

<sup>6</sup> Including advances in pharmaceuticals, technology, and new organizational models transferring some of the care to the home

Once built, hospitals prove to be almost impossible to close and difficult to reform. Discussing the downsizing, privatisation or closure of local hospital is seen as politically highly charged (*Rethelyi et al, 2002*). Building and running hospitals consumes the major part of health expenditures in any country. As demand for hospital care increases and the costs of provision rise, it is essential to make more efficient use of the resources already committed to hospitals. Most countries face high demands on their health care systems and a limited budget to meet these demands. The evolution of health expenditures is a major constraint for health policy and health planning. Ageing of the population will further threaten sustainability of public spending on health care and would require measures to contain the costs.

In Central and Eastern Europe (CEE) far-reaching reform of health care delivery, and in particular the role of the hospital and its place within the wider health care system, has faced additional difficulties due to dynamic reform process after 1989. The challenges include a changing political context with its gradual shift from a highly centralised planned approach to a more pluralist model involving an increasing number of policy players. A further problem is that, to a large extent, hospitals in CEE still serve different functions than those in western Europe as they are designed as dominant providers not only of health care, but also of social care, given that community care services (apart from the family) are scarce. Yet the organizational changes in the hospital sector have been a common component of health reform throughout CEE countries during the 1990s (*Preker et al, 2002*) where hospital restructuring sought to reduce excess capacity (*Afford, 2003*). Cuts in bed numbers were made, but they have been patchy across the region. However, a strategy focused on bed closures fails to address the specific role of hospitals as tertiary and long-term care providers, with little alternative systems for social care support. The reduction in bed numbers has been easier to achieve, rather than change the functions of entire hospitals. Moreover, the reduced beds have not always led to significant savings since a considerable proportion of hospital cost is associated with buildings and other fixed costs. Decentralisation of management, combined with shifts in payment mechanisms has been also implemented in order to improve performance (*Figueras et al., 2002*).

A range of initiatives to improve hospital efficiency have been undertaken by health policy makers across Central and Eastern Europe, including:

- More efficient use of resources available across the health system by reviewing the numbers of hospitals and their distribution to see whether resources can be better allocated between hospitals and regions, for example by reducing duplication of services or closing some hospitals.
- Increasing hospital autonomy and giving managers clear responsibility for improving performance, so that they can make decisions quicker based on local conditions and priorities, rather than following centrally determined decisions and regulations.
- Introducing measures to promote a more efficient use of the resources available to the hospital sector, for example by cutting down wastage and corruption in purchasing supplies, using generic rather than branded drugs, improving

procedures and rationalising staff levels and mix to achieve more patient throughput relative to staff inputs.

These approaches are related: greater hospital autonomy with clear responsibility and accountability means that hospital managers have incentives and opportunities to introduce efficiency improvement measures in their hospitals. Whilst these approaches to improving efficiency are relatively straightforward in principle, the political and organisational realities complicate matters in practice.

The policy makers' strategies for reform and the impact of actual hospital restructuring on hospital operation, staff incentives, quality of care and on the overall health system performance, have not been evaluated comprehensively in most of the CEE countries. This study aims to assess the implementation of hospital autonomy and the rationalisation of hospital care as central elements of health reform strategies in two countries – Bulgaria and Estonia.

## **Research Objectives and Contribution**

The research seeks to contribute to the understanding of hospital reform in Bulgaria and Estonia through a detailed analysis of hospital reform policies implemented in both countries in an effort to rationalise the provision of hospital services. The main aim of the study is to review the key steps in the hospital sector reform in Bulgaria and Estonia by: a) analysing the theoretical and practical aspects, achievements and challenges of hospital reform strategies and their impact on the restructuring and improving of hospital care delivery; and b) analysing the policy for rationalisation of the hospital sector intended to lead to improvements of quality and effectiveness of hospital care. It also seeks to understand the degree of autonomy of the hospital managers and to what extent they are able and motivated to implement measures for improving the effectiveness and efficiency of hospital care. However the primary focus of this study is on institutions and individuals directly involved in managing or regulating hospitals well as on the market and regulatory environment within which they operate. Due to time and budget constraints, the views and attitudes of staff working at other levels of the health system (e.g. primary care) or in other sectors (e.g. social services), hospital users and public attitudes in general, were not examined and have to be addressed in future research endeavours.

For the analysis of the above listed issues the following topics were selected:

- Review of health sector and hospital reform strategies in Bulgaria and Estonia;
- Decentralisation and hospital autonomy reforms and their impact on actual practice, as perceived by the hospital managers;
- Review of the specific measures for improving hospital efficiency;

The study seeks to contribute to a broader understanding of the effective strategies to ensure that hospital delivery in post-communist countries can respond to changing population health needs and fit with the new economic realities, such as decreased public funding for health care. Clearly, the issues explored in this research are not unique to the countries in transition and the findings provide lessons relevant also to other countries

facing similar challenges and seeking to transform their hospital sectors. Yet, the study is the first attempt to compare two countries that had very similar starting positions 15-16 years ago (in terms of organisation, financing and legislative framework of their health care systems) but are currently at different stages of their development with respect to the hospital reform process.

## **Research Methodology**

### *The Team*

The study under the project “*Provision of Hospital Services in Bulgaria and Estonia – What is Rational and What Not?*” was conducted by *Index Foundation* (Bulgaria)<sup>7</sup> and *PRAXIS* (Estonia). *Index Foundation* was established in 1997 as a not-for-profit organization with a mission to promote the development of civil society in Bulgaria and contribute towards strengthening the social safety nets. *Index Foundation* works in several major areas - education and training, research, health care, prevention of drug use. A range of people provided input to the project: *Svetla Tsoleva* (Research Fellow in the *Centre for European Policy Studies*), *Dina Balabanova* (Lecturer in *LSHTM*, London), *Galina Kanazireva* (Executive Director, *Index Foundation*), *Ludmila Mincheva* – (Board Chair, *Index Foundation*), *Sylvia Duncheva* (Project Officer, *Index Foundation*), *Gergana Haralampieva* (Associate Researcher, *Index Foundation*), *Ljuben Tomev* (Director, *Institute for Social and Trade Union Research*), *Violeta Ivanova*, *Angelina Nikolova*, *Zinaida Naydenova* and *Diana Trakieva* (Researchers at *the Institute for Social and Trade Research*).

*PRAXIS Centre for Policy Studies* is an independent not-for-profit think-tank based in Tallinn, Estonia. Founded in 2000, the mission of *PRAXIS* is to improve and contribute to the policy-making process in Estonia by conducting independent research, providing strategic counsel to policy makers and fostering public debate. The team involved in the project included: *Ruta Kruuda* (who tragically perished at the very beginning of the project), *Ain Aaviksoo* (Program Director, *Praxis*), *Agris Koppel* (Analyst, *Praxis*), *Maris Jesse* (Senior Health Specialist, *World Bank*), *Triin Habicht* (*Estonian Health Insurance Fund*), *Marge Reinap* (*Ministry of Social Affairs*).

### *Time Schedule*

The study was undertaken in the period September 2005 – December 2006. The research components of the project were conducted in several steps:

- Literature review (October 2005- January 2006)
- Development of framework and research tools (questionnaires and topic guides) (February – May 2006)
- Postal survey for directors and other managerial staff of hospitals (June- August 2006)

---

<sup>7</sup> For the field work in Bulgaria *Index Foundation* collaborated with *the Institute for Social and Trade Union Research*.

- Postal survey with representatives of supervisory boards (Estonia) (September 2006)
- Interviews with key stakeholders (incl. hospital directors) (July – September 2006)
- Two national-level round tables – in Sofia and Tallinn (September and October 2006)
- International conference in Sofia to disseminate project outputs (November 2006)
- Final report (December 2006)

### *Theoretical Framework*

The theoretical framework for this study mostly draws on the World Bank<sup>8</sup> publications - “*Understanding Organizational Reforms. The Corporatization of Public Hospitals*” by *April Harding* and *Alexander Preker* (September 2000) and “*The Introduction of Market Forces in the Public Hospital Sector. From New Public Sector Management to Organizational Reform*” (June 2002) by *Melita Jakab, Aleksander Preker, April Harding* and *Lorraine Hawkins*.

The authors of these studies emphasise that the organisational reform is often a core component of health sector reform in many different settings. These changes are designed to improve the incentive environment by altering the distribution of decision-making control, revenue rights, and hence risk among participants in the health sector.

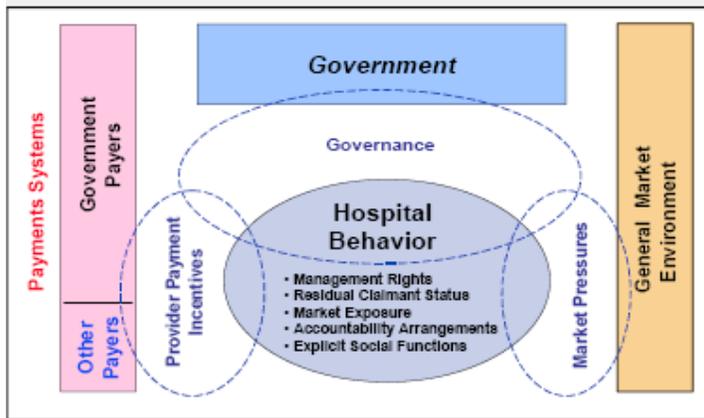
Many public hospitals and clinics operate as part of the integrated government structure, usually as a form of budgetary organisation (i.e. government department). The reforms applied to such organizations vary in magnitude, depending on where the organisation is located on the public-private continuum.

There are three sets of systemic factors jointly determining the incentive regime and hence behaviour of publicly-run health service providers undergoing such reforms: a) alterations to the relationship between health care providers and governments (governance); b) the market environment to which such organizations are exposed, and c) the incentives embedded in the funding or payment mechanisms (provider payment systems) (Figure 1) (*Harding and Preker, 2000*).

---

<sup>8</sup> Division Health, Nutrition and Population Family - HNP

**Figure 1: Key Determinants Changes in Organizational Behavior**



Source: Harding and Preker, (2000)

These three factors exert a powerful influence on the behaviour of the hospitals and create the critical elements of the incentive regime that the hospitals face: allocation of decision rights, distribution of residual claims, degree of market exposure, structure of accountability mechanisms, and provision for social functions. The organisational forms vary substantially in the amount of autonomy given to the managers, the mechanisms used to generate new incentives, and accountability. Decentralization is common organisational reform in the health sector used to shift decision-making control and often revenue rights and responsibilities from central to lower level government agencies.

Each reform can be characterised by the degree of control shifted from the hierarchy, or supervising agency, to the hospital. Critical decision rights transferred to management may include control over inputs, labour, scope of activities, financial management, clinical and non-clinical administration, strategic management (formulation of institutional objectives), market strategy, and sales. A critical distinguishing feature of the reforms is the degree to which the public purse ceases to be the “residual claimant” on revenue flows. Aligning the revenue flows and decision rights is crucial to get those in the right place to make the right decisions. A high-powered incentive is the degree to which revenue is earned in a market, rather than through direct budget allocation. The reforms are also characterised by the degree to which accountability for achieving objectives is based on hierarchical supervision of the organization versus regulation or contracting.

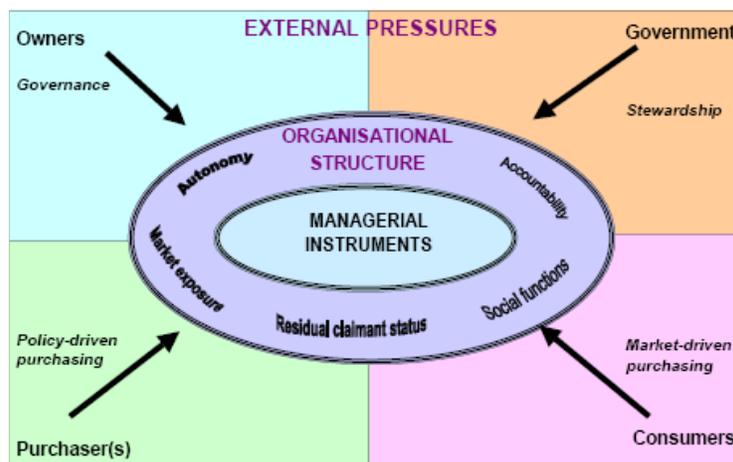
As decision rights are delegated to the organisation, the government’s ability to assert direct accountability (through the hierarchy) is diminished. Partially, accountability is intended to come from market pressures, since the market is seen as generating a non-political, non-arbitrary evaluation of organisational performance, at least of its economic performance. If the government is a purchaser, accountability will also be pursued via the contracting and monitoring process. In the health sector, markets often cannot deliver on health policy objectives, both due to market failures and due to social values. Thus, rules and regulations regarding the operation of these organisations constitute an alternative form of accountability mechanism. Strengthening these mechanisms constitutes a fourth

critical element of organisational reforms that reduces the use of traditional, hierarchical accountability mechanisms. The final critical factor characterising these organizational reforms is the degree to which “social functions” delivered by the hospital shift from being implicit and unfunded to being specified and directly funded. Two external elements strongly influence the new incentive regime: the funding or payments arrangements; and the structure of the market to which the organization is exposed (*Harding and Preker, 2000*).

A hospital’s overall incentive regime can be decomposed into pressures originating from the external environment and pressures originating from the hospital’s organisational structure. Changes in hospital organisational structure through autonomisation and corporatisation have been increasingly applied over the past decade in many countries and thus there has been an upsurge in interest in better understanding how hospital organisational structure contributes to performance.

Organizational structure consists of five key components: allocation of decision rights (autonomy), market exposure, residual claimant status, accountability structures, and social functions. The second building block of this course is to understand the pressures put on hospitals by the external environment. These pressures come from the relationship of the hospital with other actors in the health system. External pressures originate from four main sources: government oversight, organized purchasing, market pressures and ownership (Figure 2) (*Jakab et al, 2002*).<sup>9</sup>

**Figure 2: Determinants of hospital behavior**

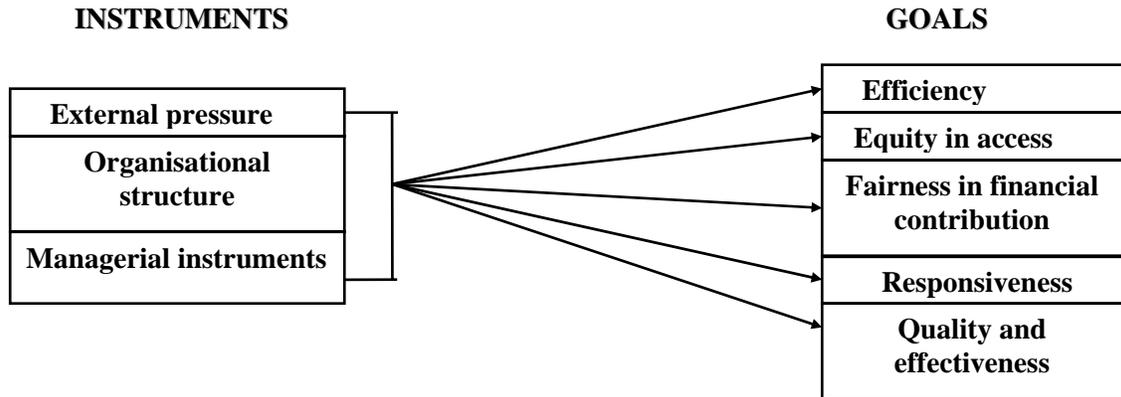


Source: *Jakab et al., (2002)*

<sup>9</sup> The basic task of government oversight in the health sector is threefold: formulating health policy by defining vision and direction for the sector; regulating the actors in the health system; and collecting and using information. The hospital’s relationship with the collective purchaser(s) determines the financial incentives embedded in the payment mechanisms and the extent of competitive pressures on hospitals from organised collective purchasers. The hospital’s relationship with its consumers (market-driven purchasing) determines the extent of competitive pressures the hospital is subject to from unorganized individual consumers exercised through choice and user fees (market pressures). Governance (ownership) is commonly defined as the relationship between the owner and management of an organization.

Drawing on the reviewed World Bank approach and seeking to incorporate the WHO health system goals - responsiveness, access, quality and fairness in financial contributions, the research team specified the following areas to be explored in the study: external pressure; organisational structure and managerial instruments. The framework for the study is presented in Figure 3.

**Figure 3: Framework of the study**



*Source: Authors*

The main areas explored in the research are operationalised into several sub-issues listed in Table 1.

**Table 1: Main areas and sub-areas of the study framework**

<b>External pressure</b>	Government oversight	<ul style="list-style-type: none"> <li>• Health policy framework and hospital sector reforms</li> <li>• Regulatory framework</li> <li>• Monitoring and evaluation</li> </ul>
	Strategic purchasing	
	Market environment	<ul style="list-style-type: none"> <li>• Barriers to entry and exit (minimum standards and licensing, selective contracting, competitive tendering of selected services, sector neutral competition)</li> <li>• Contestability (competition not for market share at any given time period but competition over time)</li> <li>• Yardstick competition (use of comparative provider performance indicators)</li> </ul>
	Governance by owners	<ul style="list-style-type: none"> <li>• Owners objectives and criteria's for management performance</li> <li>• Structure of supervisory management</li> <li>• Responsibility for supervising management</li> <li>• Monitoring and motivation of management</li> </ul>
<b>Organizational structure</b>	Autonomy	<ul style="list-style-type: none"> <li>• Decision rights over labour</li> <li>• Decision rights over capital assets</li> <li>• Decision rights over setting user fees</li> </ul>
	Market exposure	<ul style="list-style-type: none"> <li>• Hospital performance impact on revenues</li> <li>• Hospital competition in labour and capital assets market</li> </ul>
	Residual claimant status	
	Accountability	<ul style="list-style-type: none"> <li>• Accountability instruments between the hospital and patients (patient grievance procedures, community representation on hospital boards)</li> </ul>

		<ul style="list-style-type: none"> <li>• Accountability instruments between the hospital and payers (audits, contracts with performance objectives, comparative provider performance information)</li> <li>• Accountability instruments between the hospital and owners (community and business leaders representation on hospital boards, business plans)</li> <li>• Accountability instruments between the hospital and regulators (minimum standards, outcome measures)</li> </ul>
	Social functions	<ul style="list-style-type: none"> <li>• Organization of hospital social functions</li> </ul>
<b>Managerial instruments</b>	<ul style="list-style-type: none"> <li>• Financial management</li> <li>• Marketing</li> <li>• Human resources</li> <li>• Procurement</li>   <li>• Business management strategy</li>   <li>• Clinical management strategy</li> </ul>	<ul style="list-style-type: none"> <li>• hospitals intelligence on financial issues</li> <li>• e.g. client orientation</li> <li>• staff motivation, productivity</li> <li>• purchasing procedures for hospital equipment, medical and non-medical supplies</li> <li>• long term strategies linked with the performance of managers</li> <li>• quality-control reviews, clinical pathways</li> </ul>

Source: Authors

### Methods and Study Sample

In order to cover the main areas of the above specified theoretical framework, a multi-method approach was employed. The research team used several complementary research methods: literature review, postal survey for hospital managers and supervisory boards by means of structured questionnaires including some open-ended questions, and in-depth interviews with key informants using topic guides.

### Literature Review

The literature review covered a broad range of sources. These included published government documents, legislation, policy strategies, institutional plans for hospital restructuring prepared by the Ministry of Health (Social Affairs), Health Insurance Funds, Parliamentary Health Committees, regional authorities, international agency reports and loan documentation, and others. Unpublished technical assistance reports relevant to the study were also reviewed as well as strategic documents published by key stakeholders and consultancy reports presented to the government agencies. Web sites of the Bulgarian Ministry of Health, Estonian Ministry of Social Affairs, Parliamentarian Health Committees, Health Insurance Funds, the Physicians' Unions, Municipal Associations and other research and policy institutes have also been examined for policy documents, working papers and policy statements.

Literature review of relevant papers published in books and in peer-reviewed journals was also conducted. Sources were located after an extensive search of various databases, library and web resources and advices from experts. The databases included the *Social Science Research Network* ([www.ssrn.com](http://www.ssrn.com)); *RePEc – Research Papers in Economics*, (<http://econpapers.repec.org/>); the *National Bureau for Economic Research* ([www.nber.org](http://www.nber.org)) and its subsection 'health'; *Google Scholar*; *J STOR* publisher, etc. The main search terms were 'hospital reforms', 'reorganisation/rationalisation of health care

services'; 'inpatient provision of health care', 'health care reforms in CEEC', 'hospital reform in Bulgaria', 'hospital reform in Estonia', 'payment for hospital provision', 'financing inpatient care', 'accreditation of hospitals', etc. Priority was given to the academic literature and to publications of major developmental agencies such as the *World Health Organization (WHO)* (incl. the *European Observatory on Health Systems and Policies*), the *World Bank*, the *Organization for Economic Cooperation and Development (OECD)*, the *International Labour Organization (ILO)*, the *European Commission*, etc.

In the *Social Science Research Network* database there were no matches for "Bulgarian and Estonian hospital care". Two publications were listed under health reform in Bulgaria: *Managing Fiscal Risk in Bulgaria* (2004) by *Hana Polackova, Sergei Shatalov* and *Leila Zlaoui*, publication of the *World Bank (WB Policy Research Working Paper No. 2282)* and *How Does the Introduction of Health Insurance Change the Equity in the Health Care Provision in Bulgaria?* (2007) by *Nora Markova*, publication of *International Monetary Fund (IMF) (Working Paper No. 06/285)*. No publications for Estonia were found in this database.

In *RePEc – Research papers in Economics* only one broad study on Bulgarian health reform was found - *Healthcare Reforms in Bulgaria: Towards Diagnosis and Prescription* (2006) by *Konstantin Pashev*, *Center for Studying of Democracy (CSD)*. No studies on Estonia were found in this database.

There is not a single research study in *NBER database* on health care (hospital reform) for Bulgaria and Estonia.

In *IngentaConnect* database there were no articles on hospital reform in Bulgaria and Estonia. One article matched the search on health reform in Estonia: *Midwifery at the Crossroads in Estonia: Attitudes of Midwives and Other Key Stakeholders* (2005) by *Lazarus, JV., Rasch, V; Liljestrang, J*, *Acta Obstetrica et Gynecologica Scandinavica*, Volume 84, Number 4, April 2005, pp. 339-348(10). Few articles matched the search for health care reform in Bulgaria: a) *Balabanova D.; McKee M. Reforming Health Care Financing in Bulgaria: the Population Perspective* (2004, *Social Science and Medicine*, Volume 58, Number 4, February 2004, pp. 753-765(13); b) *Popova ST, Kerekovska AG. A Critical Review of Primary Health Care Reform in Bulgaria: Impact on Consumers* (2001), *International Journal of Consumer Studies*, Volume 25, Number 2, June 2001, pp. 123-131(9)

In *Health Policy* there are four articles addressing health reform in Bulgaria: a) *Balabanova D, McKee M. Understanding Informal Payments for Health Care: the Example of Bulgaria*, Volume 62, Issue 3, December 2002, pp. 243-273; b) *Pavlova M, Groot W, van Merode G. Public Attitudes towards Patient Payments in Bulgarian Public Health Care Sector: Results of a Household Survey.*, Volume 59, Issue 1, January 2002, pp. 1-24; c) *Pavlova M, Groot W, van Merode F. Appraising the Financial Reform in Bulgarian Public Health Care Sector: the Health Insurance Act of 1998.* Volume 53, Issue 3, 1 October 2000, pp. 185-199; d) *Delcheva E, Balabanova D, McKee M. Under-*

*the-Counter Payments for Health Care. Health Policy*, 1997; 42: 89-100. For Estonia there are also few articles addressing health reform issues: a) *Atun RA, Menabde N, Saluvere K, Jesse M and Habicht J. Introducing a Complex Health Innovation - Primary Health Care Reforms in Estonia (Multi-Methods Evaluation)*. Volume 79, Issue 1, November 2006, pp.: 79-91; b) *Põlluste K, Kalda R, Lember M. Satisfaction with the Access to the Health Services of the People with Chronic Conditions in Estonia* (In Press, Available online 29 September 2006; c) *Fidler AH, Haslinger RR, Hofmarcher MM, Jesse M, and Palu T. Incorporation of Public Hospitals: A “Silver Bullet” against Overcapacity, Managerial Bottlenecks and Resource Constraints?: Case Studies from Austria and Estonia*, in press, available online 17 August 2006; d) *Gibis B, Artiles J, Corabian P, Meiesaar K, Koppel A, Jacobs P, Serrano P, Menon D. Application of Strengths, Weaknesses, Opportunities and Threats Analysis in the Development of a Health Technology Assessment Program*. Volume 58, Issue 1, October 2001, pp. 27-35.

In *Health Policy and Planning Journal* (Oxford University Press) only one article was found for Estonia: *Habicht J, Xu K, Couffinhal A, Kutzin J. Detecting Changes in Financial Protection: Creating Evidence for Policy in Estonia (2006)*. *Health Policy and Planning* 2006 21(6):421-431.

Relevant publications of the *European Observatory on Health Systems and Policies* of the WHO Regional Office for Europe ([www.observatory.dk](http://www.observatory.dk)) have informed the conception as well as key stages of the study, e.g. *Health Care Systems in Transition – Country Studies for Bulgaria (2003) and Estonia (2004)*, *Policy Brief no. 5 (2004) “Configuring the Hospital for the 21st Century”*; *Hospitals in a Changing Europe* (2002), edited by *Martin McKee and Judith Healy*, etc.

The review demonstrated that there is a scarcity of available articles on health reform in the two countries. This is particularly problematic for hospital financing and delivery, with the search on “hospital reforms” finding almost no publications in international journals. Moreover, the most relevant literature was either not published in peer-reviewed journals, or was unpublished and difficult to access. Most of it consists of government-commissioned consultancy reports, small studies lacking clearly described methodology, and personal communications.

The review of the government and consultancy reports highlights the following emerging themes: health policy framework and hospital sector reforms; challenges for hospital reform (incl. clearly stated objectives and chronology - pace of reform, political debate/implementation); regulatory framework; implementation; monitoring and evaluation (formal procedure implemented by the government for monitoring and evaluation). Evidence from the literature is incorporated thematically within the report.

The research team was not able to find any articles that refer to comparisons of the Bulgarian and Estonian health care and in particular hospital care systems, even within a broader discussion of the health care reform in Central and Eastern Europe. Given the limited availability of relevant and methodologically sound studies on Bulgarian and Estonian hospital reforms, the focus of the study fell on the collection and analysis of

primary data, in response to the study objectives. As already mentioned, the main areas of hospital reforms in both countries studied during the project are external environment, organisational structure and managerial issues. It was agreed that the literature review would cover mainly the first area – external environment, while the other two would be studied in greater depth through the survey and the interviews. The comparative approach and identifying commonalities and differences can be considered as a contribution of the research team towards a better understanding of the reform processes in these countries.

### *Study Sample*

In May 2006 a total of 83 personal questionnaires were posted to the members of the management boards in all 50 hospitals in **Estonia**. The overall number of returned filled questionnaires is 46, i.e. 55% return rate. Among the respondents 20 were heads of the management boards and 23 were management board members.

In **Bulgaria** both facility-level information and individual information on views and assessments of managerial practices and external environment (3 questionnaires for hospitals managers) were sent to 207 public hospitals.<sup>10</sup> The overall response rate for the factual (facility) questionnaire was 30% and for the full-length questionnaires - 26%.

Discussions (by means of topic guides) with a variety of stakeholders involved in the hospital reform were conducted in both countries (Table 2).

**Table 2: Study sample: summary**

<b>ESTONIA</b>	<b>BULGARIA</b>
Total number of hospitals	
50	262
Number of posted questionnaires	
83 personal questionnaires were posted to the members of the management boards in all 50 hospitals in Estonia.	One form for objective information for the hospital and 3 questionnaires for hospitals managers have been sent to 207 hospitals in Bulgaria (see the footnote).
Number of returned postal questionnaires for hospital managers	
46 completed questionnaires (55% response rate)	161 completed questionnaires & 61 forms for factual information about hospitals (about 30% response rate)
Questionnaires for supervisory board members (Estonia only)	
13 completed questionnaires (33% response rate)	
Interviews with key policy-makers, including hospital directors	
9 respondents	26 respondents (18 with hospital directors and 8 with key stakeholders)

<sup>10</sup> In 2005 in Bulgaria there were 262 hospital establishments - 125 multi-profile hospitals for acute care, 70 specialized hospitals (for acute and for long term care), 12 mental hospitals, 10 hospitals subordinated to institutions other than Ministry of Health (MoH) such as the military, transport authorities, and 45 private inpatient establishments. Questionnaires were posted to all hospitals except private ones and hospitals subordinated to authorities other than MoH .

## *Questionnaires and Topic Guide*

In order to make comparisons between the two countries the questionnaires contained about 20 questions that were identical for Bulgaria and Estonia. The main topics (sections) explored in the survey questionnaires and topic guides covered the following issues:

- Health policy, hospital reform
- Legislation
- Efficiency
- Management and autonomy
- Ownership and management
- Access to health care
- Financing
- Human resources

In summary, the team developed: a) Semi-structured questionnaires for representatives of managerial staff of hospitals (50 questions for Bulgaria, 51 questions for Estonia); b) Questionnaires for objective information – 11 questions about the type of the hospital (by profile of activity, territorial coverage, etc.), legal status, infrastructure and human resources, revenues by main sources and expenditures by main types (for Bulgaria only); c) Topics guide for semi-structured interviews with key stakeholders (20 questions for Bulgaria, 22-23 questions, depending on the position of the interviewed, for Estonia); and d) Semi-structured questionnaires for representatives of supervisory boards (for Estonia only) (35 questions).

### *Postal Survey for Hospital Staff in Senior Management Positions*

The postal survey questionnaires for hospital managers were developed, pre-tested and finalised in close collaboration between the Estonian and Bulgarian teams, to ensure cross-country comparability. The questionnaire drew on the main themes that emerged from the documentary analysis.

The questionnaires contained a mix of closed and open-ended questions allowing to elicit the respondents' own perceptions. About a third of the questions in the survey questionnaire were the same for Bulgaria and Estonia, with the rest addressing country-specific issues to inform national-level debate. For example, the Estonian survey contains few questions about number of beds, staff and financing sources as during piloting this was found to significantly reduce the response rate. Instead, such data were obtained from other sources as routine statistics and publicly available survey data. In Bulgaria, a separate questionnaire collecting data on hospital capacity, salaries, revenue and expenditure was developed and filled by a respondent with access to such data in each hospital. Three other questionnaires per hospital were completed by Bulgarian hospital managers. These required mostly information on the views and attitudes of managerial staff to hospital reform and aspects of facility management (3 questionnaires per hospital).

The surveys for hospital managers were piloted in Estonia (with three hospital managers) and in Bulgaria (with four hospital directors) and the questionnaire was revised in line

with the received comments. After piloting, the final version of the questionnaire was agreed, containing the following main sections: background information, health care policy and reforms, legislation, efficiency, resource and cost management, autonomy and management, financing, access and continuity of care and human resources. There was an effort to limit the length of the questionnaires in order to improve completion rate. The questionnaires were sent with an accompanying letter stating the aims of the study and the purpose of the research and seeking to obtain informed consent. Confidentiality procedures were guaranteed and maintained.

In Estonia questionnaires were sent to all 50 hospitals – a total of 83 personal questionnaires were posted to the members of the management boards. They were addressed to the heads of management boards and to all management boards' members of the Master Plan hospitals (19 in total). In the bigger hospitals where the management boards consist of several members, more than one questionnaire per hospital was sent. 36 questionnaires were returned, with 34 fully completed; a response rate of 43%. A second round of questionnaires with reminders was sent to 49 hospital managers who did not respond initially. The response rate of the second round was 27% (13 returned questionnaires) and only one questionnaire was not completed. In total, out of 83 targeted managers, 46 completed questionnaires were returned (55% response rate).

In Bulgaria the questionnaires (one questionnaire collecting hospital-level information, and three individual-level questionnaires per hospital) were sent to 207 hospitals (out of 262 hospitals in total). The sample covered a variety of hospitals in terms of profile, functions, and geographical coverage, but excluded private hospitals and hospitals subordinated to institutions other than the Ministry of Health. A code was assigned to the forms matching the hospital- and individual-level information for each health facility, while safeguarding anonymity of the respondents. By the end of August 2006, 61 completed questionnaire for hospital-level information were returned (response rate of 30% out of 207) and 161 individual questionnaires (response rate 26% out of 621 – 207 hospitals\*3 questionnaires for each hospital). There were efforts to increase the response rate through follow-up by telephone, but they was not successful. Instead, the research team conducted more than the initially planned in-depth interviews with hospital directors in order to compensate for the relatively low response rate in the survey.

It was agreed that separate postal survey among hospital supervisory board members would be conducted only in Estonia. Governance in the hospital sector is seen as an extremely important area to be addressed by the reform. However, this issue has less relevance for Bulgaria where few hospitals have supervisory boards (8.5% of the hospitals in the survey had an equivalent board). The questionnaire for supervisory board members in the Estonian hospitals included about half of the questions from the survey for management board members. That made it possible to compare the attitudes and opinions of hospital managers and governors. The other half of the questionnaire was specifically designed for the supervisory boards. The topics covered in the questionnaires refer to health policy and reforms; legislation, resource and cost management, hospital management and governance, financing, and responsiveness of care. The questionnaire was also shorter comparing to the one for hospital management boards. In total, 39 questionnaires were sent out in June 2006, covering 7 regional and central hospital supervisory boards. Compared to the management boards survey, the response rate was

low – only 9 filled questionnaires were received, reaching the response rate of 23%. The questionnaires were then re-sent and four additional responses were received, thus increasing the response rate to 33%. In order to retain the anonymity of the respondents the codes on the questionnaires were used only to distinguish between the respondents, and the names and the codes were never compiled in the same database.

#### *In-depth Interviews with Key Informants*

In order to analyse their role in hospital care and its reform, in-depth interviews with key stakeholders were performed. The interviews were designed to identify the factors that had facilitated or obstructed the hospital reform, allowing for new themes to emerge. A flexible interview guide was used, allowing open discussion around a pre-defined framework. In each interview, different areas were emphasised depending on the individual expertise of the respondent. The topic areas included: health policy, hospital reform, legislation; efficiency; management and autonomy; ownership and management; accessibility of medical care and financing.

In Bulgaria, 26 key informant interviews were conducted with high-level managerial staff, public health officials and national-level stakeholders involved in health policy through a semi structured topic guide. 18 interviews were held with hospital directors. Initially the team had planned less than 10 in-depth interviews with hospital directors, but this number was later increased due to the low response rate in the survey. In addition, eight interviews were undertaken with stakeholders having an active role in health policy making. These were representatives of the Ministry of Health (1), the Bulgarian Physician's Union (2), Trade unions (1), Members of the Parliamentarian Health committee (2), Hospital Association (1), the National Health Insurance Fund (1).

In Estonia, nine in-depth interviews with key informants took place, out of 10 planned. The respondents were hospital managers, hospital supervisory board members, representatives of the Estonian Health Insurance Fund and Ministry of Social Affairs. Three different versions of the topic guides were prepared depending on the position of the respondent. The main topics covered during the interviews included: the hospital sector reform, roles of the management and supervisory boards, hospital ownership and legal status with relevance to facility management, and politicisation of the hospital boards.

## **Study Results**

### *Hospital Reforms: Brief Overview of the Main Developments*

Bulgaria and Estonia had communist regimes until 1990, and since 1991 both countries have been parliamentary democracies. The health care systems have been transformed from state-owned and controlled “*Semashko*” systems to decentralised systems, financed through social health insurance with public/private mix of service delivery. The health systems of the two countries, as in all former communist countries, were based on the model characterized by the domination of hospitals accounting for about 60-75% of total health expenditure. The extended hospital infrastructure and large number of doctors

were considered essential in improving the effectiveness of health care delivery. Indeed, the national health policy was focused on quantity rather than quality of services, with political goals taking priority over public health needs. Provision was centralised, with specialised and tertiary hospitals seen as more prestigious employing the best qualified doctors, and receiving a larger share of resources compared to smaller region-based hospitals.

A brief analysis of the main issues discussed in the reviewed documents (governments and consultancy reports and strategies) shows that the health sector reforms in Estonia and Bulgaria in the past 15 years have been radical. At its initial stages, the emphasis of the health sector reform process has been on restructuring and strengthening primary care. The process of health care reform has been difficult, facing a number of challenges due to successive economic crises and political turbulence. Changes have been introduced in the areas of legislation, health financing and organisation as well as in human resources. Over the past decade, decentralisation followed by re-centralisation of certain functions has been observed in both countries. The reforms were aimed at increasing efficiency, including strengthening of primary health care and restructuring inpatient care, while maintaining access and quality of services. In both countries the reorganisation of hospital care started as a second stage, after the reform in primary health care had advanced and was aimed at optimisation of inpatient care resources and improvement of hospital performance. Yet some significant political and managerial challenges have to be met still.

The pace of change in Estonia has been rapid, starting with the introduction of health insurance in early 1990s, followed by extensive primary care and hospital reforms. Hospital sector reform was re-initiated in the late 1990s, when the Hospital Master Plan 2015 was prepared. The goal of Hospital Master Plan 2015 was to downsize hospital network capacity for acute care and to improve the efficiency of the hospital sector through mergers and restructuring.

In Bulgaria changes were introduced in ‘waves’ with some radical actions followed by periods of stagnation. Seeking to reform hospital care, in 2002 the Ministry of Health developed a hospital reform strategy (for the period 2002-2006) that was later adopted by the Council of Ministers as government policy (*Ministry of Health, 2002*). In 2006 a new strategy was developed for the period 2007-2012, that still awaits approval and adoption by the government.

The hospital sector in Bulgaria<sup>11</sup> and Estonia<sup>12</sup> underwent a series of structural, regulatory and financial changes over the last decade. Although hospital reform lagged behind the reform of primary health care, it was intensified since 2000. Some of the main reform steps are summarized in Box 1.

---

<sup>11</sup> *European Observatory on Health Systems and Policies (2003), HIT Summary: Bulgaria*, WHO regional office for Europe, WHO. [www.observatory.dk](http://www.observatory.dk)

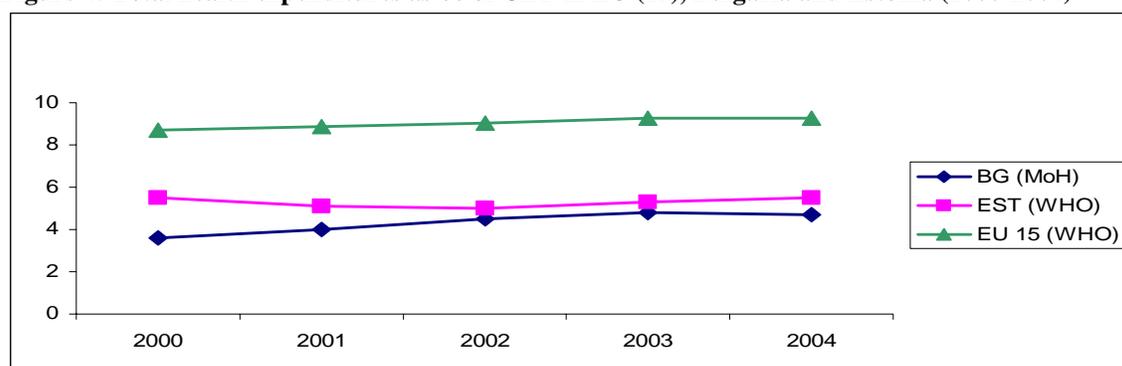
<sup>12</sup> *European Observatory on Health Systems and Policies (2004), HIT Summary: Estonia*, WHO regional office for Europe, WHO. [www.observatory.dk](http://www.observatory.dk)

### Box 1: Developments in Hospital Reform

Estonia	Bulgaria
<ul style="list-style-type: none"> <li>• Purchaser-provider split (since 1992) and transparent contractual relationship between providers and insurance</li> <li>• Clearly defined legal status (joint stock company or foundation) and governance structure since 2001</li> <li>• Seven types of hospitals with clear legal requirements.</li> <li>• Effective hospital's licensing system (first wave in 1994; second since 2001 when new Health Care Services Organization Act became effective)</li> <li>• Hospital Master Plan 2000, which sets long term development goals for hospital sector (until 2015)</li> <li>• Using EU Structural Funds for capital investments for acute care hospitals (since 2004)</li> </ul>	<ul style="list-style-type: none"> <li>• Changing mode of hospitals' financing. Hospitals are financed from a mixture of social insurance via 'clinical pathways' (1999) and from the MoH budget (2004). Since 2006 hospitals are paid exclusively by the National Health Insurance Fund based on 'clinical pathways'. Capital expenditure is financed by the owner (municipality, state, private owner).</li> <li>• Introducing (competitive) contracting-out for pharmaceuticals, food, laundry, etc.</li> <li>• Abolishing the 'regionalisation', i.e. providing patients with free choice of health care facility to stimulate competition between facilities (since 2004)</li> <li>• Liberalisation of care provision: public-private mix (creation of private hospitals)</li> <li>• Introduction of accreditation procedure</li> </ul>

Overall health expenditure as percentage of GDP in both countries is about 2-4 percentage points lower than those in EU countries, suggesting considerable underfunding and shortfalls (Figure 4).

**Figure 4: Total health expenditures as % of GDP in EU (15), Bulgaria and Estonia (2000-2004)**



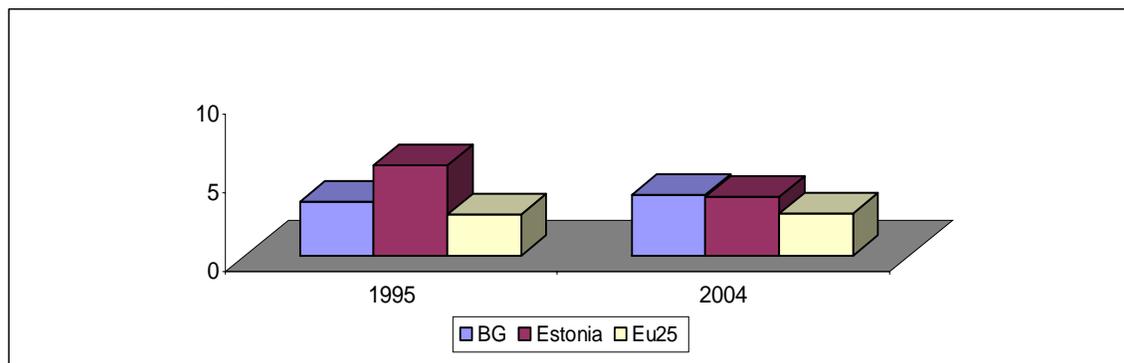
Social health insurance in both countries has become operational and the population is paying health insurance contributions (6% in Bulgaria and 13% in Estonia). Inpatient care is mostly financed through Health Insurance Funds (purchasers) on the basis of contracts signed with health care providers after negotiations. In Bulgaria the *National Framework Contract* is negotiated between the *National Health Insurance Fund* and the *Bulgarian Medical Association* on an annual basis. It comprises a package of services, methods and levels of payment, and specifies conditions for providing the services, accounting rules and control. According to the *Health Insurance Act* (1998) once the two parties reach an agreement and sign the contract, the Minister of Health also has to sign the contract. If the contract is not signed due to lack of agreement, the provisions of the previous contract continue to be in force. That was the case in 2004 and in 2007.

In Estonia, the main issues in terms of strategic purchasing in the hospital sector focuses also on the contracting process between the *Health Insurance Fund* and the hospitals as providers. The negotiating parties – the *Health Insurance Fund* and the *Hospital*

*Association*<sup>13</sup> agree on the standard conditions (in force since 2003), which are effective for all hospitals. The list of hospitals eligible for long-term investment and contracts with the *Health Insurance Fund* is ratified by the government. The Estonian health insurance system is based on strictly balanced budget principles followed in the contracting process. The process of contract negotiations can be seen in two phases. During the first phase standard contractual conditions are agreed with the *Hospital Association* representing all hospitals. In the second phase, contract volumes and average cost per case are negotiated with each separate provider. The *Health Insurance Fund* covers only costs that do not exceed the agreed contract volume and providers are responsible for any additional expenditure. Service prices and payment methods are set ex ante and are not an important part of the contracting process.

However, the collected funds are not sufficient to cover the needs of the health care system and particularly of hospital care. The hospital network is still relatively extensive in the two countries. In Estonia, there has been a significant progress towards achieving the reform objectives envisaged in the Master Plan, with the number of acute care hospitals falling from 143 in 1980 to 50 in 2003. Thus over one decade (1995-2004) the number of hospitals decreased dramatically in Estonia. However, a further optimisation of hospital sector may be needed to use the available resources more effectively. In Bulgaria the number of hospitals actually increased due to legalisation allowing public – private provision of care and leading to the emergence of private hospitals (Figure 5).

**Figure 5: Hospitals per 100 000 in Bulgaria, Estonia and the EU 25 in 1995 and 2004**

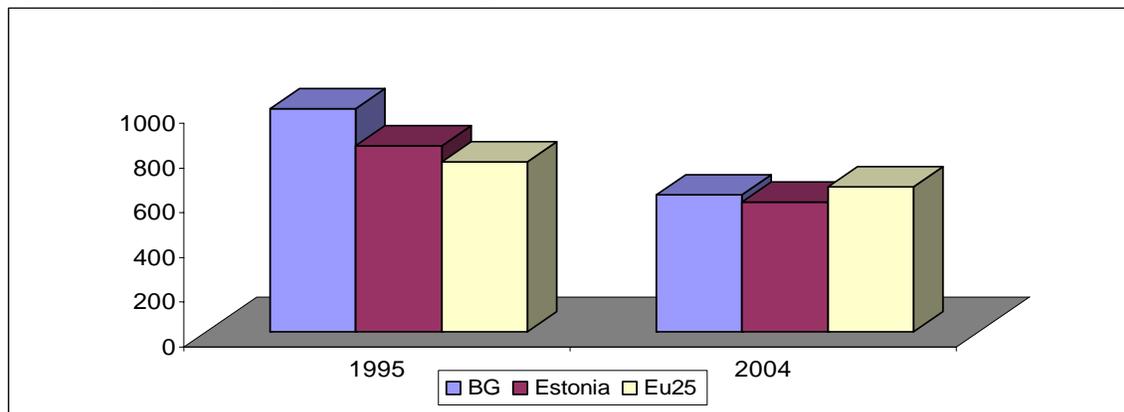


*Source: WHO, HFA Database*

Bulgaria has also a much higher ratio of hospital beds to population compared to many countries in Europe. Bed numbers continued to increase during the first half of the 1990s, and peaked in 1996–1997 at 10.5 per 1000 population. They fell again, amounting to 7.5 in 2000. In Estonia the number of inpatient beds per 1000 population has fallen from 9.62 in 1980 to 4.50 in 2002 (Figure 6). Since the establishment of a licensing system the number of hospitals and acute inpatient beds has continued to fall, mainly because many small hospitals providing predominantly long-term care lost their acute care status and were turned into nursing homes. In recent years the reduction in the number of acute beds was due to hospital mergers.

<sup>13</sup> Which represents the hospitals outlined in the Hospital Master Plan 2015

**Figure 6: Hospital Beds per 100 000 in Bulgaria, Estonia and the EU 25 in 1995 and 2004**



*Source: WHO, HFA Database*

The bed reductions came as a result of the deliberate efforts of the governments in recognition of the huge cost savings that could result from such measures. In Estonia, while the number of beds has fallen, the number of admissions per 100 populations has remained stable. In Estonia the average length of stay declined to 6.2 days in 2004, compared to 8.8 days in 1998. In Bulgaria the average length of stay (11.5 days in 2000) is still higher than in most countries in the WHO European Region, though it has been dropping steadily since 1980. The occupancy rate for Bulgarian hospitals (66.3% in 2000) is below the European figures suggesting the existence of various barriers to more effective care and utilisation. The occupancy rate in Estonia is in the same range (64.6% in 2002).

Inpatient care in the two researched countries is provided by facilities on different levels and specialization. In Estonia inpatient acute care is provided by regional, central and general (or local) hospitals, as well as by some specialized hospitals. In Bulgaria there are geographical levels too: national, inter-regional and municipal, as well as different types of hospitals depending on the type of care provided (multi-profile and specialised). Over the past 5 years both countries have adopted legislation allowing hospitals to operate under market environment (joint-stock companies or non-for-profit foundations in Estonia; companies with limited liability in Bulgaria). The key share holders (owners) are the Ministry of Health (Bulgaria) and the Ministry of Social Affairs (Estonia) and/or the municipalities. In the early 1990s some “parallel” systems providing health care to the police, railway workers, political elite and others were abolished in Estonia and the services were integrated into the national health system (with some small exceptions). This process however was not undertaken in Bulgaria where “parallel” systems are still fully operational. The private hospitals existing in both countries only focus on providing specialized services, such as gynaecology, obstetrics, ophthalmology, etc.

Prior to the reform, payment for hospital services in Bulgaria and Estonia was based on historical budgets. The health care reform involved gradual introduction of new payment mechanisms allowing hospitals to be paid according to performed clinical activities, to

replace the old “inefficient system” of fixed budgets based on historical data. Yet the adopted approaches differ in some degree.

In Estonia the payment of inpatient care providers specified in the purchaser/provider contracts is based on the volume and average cost of cases treated in each specialty. Payment is based on service prices set out in the price list, which is similar for all inpatient providers, e.g. all providers are paid the same prices and there is no adjustment for hospital characteristics (e.g. teaching status). The price list of services was established at the beginning of the 1990s and was based on the German health system significantly adapted to the Estonian context. Currently, the price list contains about 1800 different items. Some prices are set on a fee-for-service basis, while others are complex prices for specific procedures. There is no system of bonus payments. The list of services and prices is updated at least once a year. In 2004, a Diagnostic Related Groups (DRG) payment system for inpatient services was introduced in Estonia.<sup>14</sup> In addition to its use as a payment mechanism, the DRG system was also introduced as a classification mechanism that allows an overview of hospital activity, benchmarking of providers and resource allocation with the aim of increasing productivity based on cases rather than individual procedures. The DRG system is introduced gradually and therefore it is used in combination with other payment methods already in place.

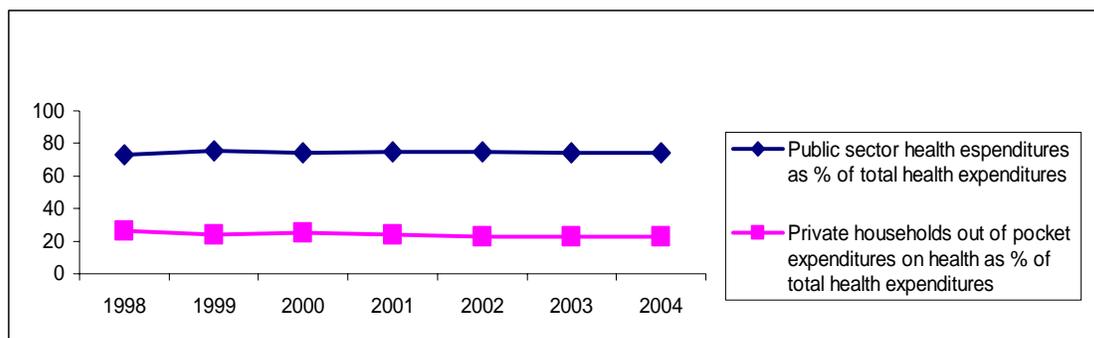
In Bulgaria, payment is based on diagnoses, generally grouped in so called “clinical pathways”. The clinical pathways have been defined on the basis of the most widespread cases of hospitalisation. Every year, the number of clinical pathways is gradually increasing. The *National Health Insurance Fund* pays a fixed price for each clinical pathway and therefore it is not engaged in active purchasing. The price includes the costs of the medical activities defined in the different packages; auxiliary services provided to a patient during hospitalisation, up to two outpatient consultations after the patient’s discharge from the hospital, etc. The *Fund* does not pay for partial completion of the activities under a clinical pathway, or for re-hospitalisation with the same diagnosis within a specified period (different for each diagnosis). Purchaser/providers contracts specify the maximum number of cases in each category of clinical pathways. This may be renegotiated if necessary and the Fund reimburses up to 20% more than the maximum number of contracted cases per package, but at a lower price than the one initially agreed in the contract. For several years now work has been done to develop a DRGs system that would replace the clinical pathways in the country, but its introduction is still pending.

Hospitals in both countries receive additional revenues from user fees, as well as from fees for services not covered by the insurance funds. Possible emerging inequalities associated with higher out-of-pocket payments can be observed when reviewing the share of public versus private health care expenditure in the EU (Figure 7), Bulgaria and Estonia (Figure 8). The figures clearly show that the share of private expenditures in Bulgaria is higher compared to both Estonia and the EU 25 Member states.

---

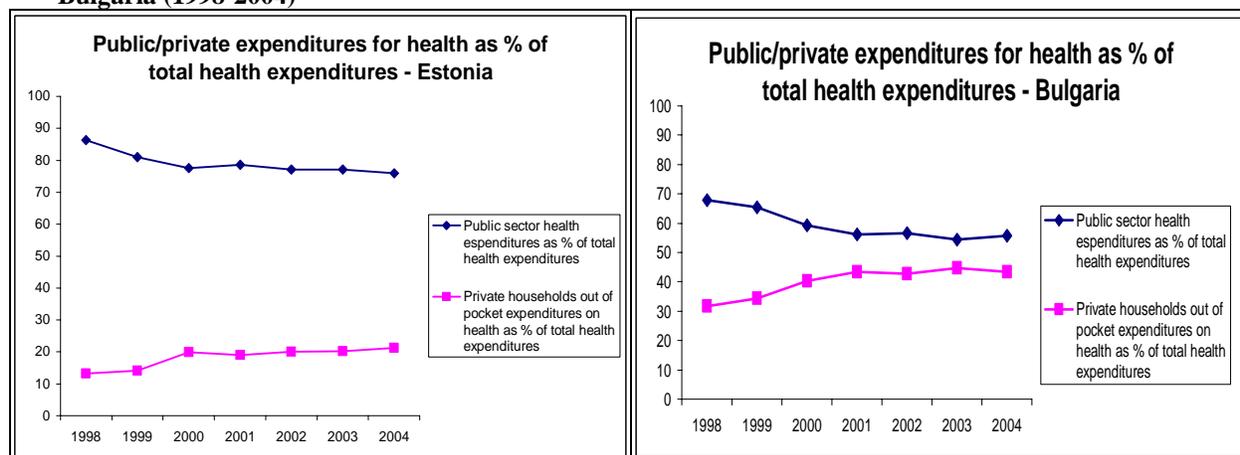
<sup>14</sup> In 2001, the EHIF began work on adapting the Nordic DRG system (NordDRG) by identifying areas of variation in activity between Estonian and Scandinavian hospitals, calculating prices for reimbursement in Estonia and providing hospitals with feedback on their activity by NordDRG group.

**Figure 7: Public/Private Expenditures for Health as % of Total Health Expenditures - EU 25 Member States (1998-2004)**



Source: WHO, HFA database

**Figure 8: Public/Private Expenditures for Health as % of Total Health Expenditures – Estonia and Bulgaria (1998-2004)**



Source: WHO, HFA database

Capital investment has been a problematic area for both countries. Prior to 2000, financing of capital costs was the responsibility of hospital owners – usually the state or the municipalities. However, as capital funding of hospital facilities competed with other claims on state and municipal budget spending, it was often deprioritised. In Estonia, the problem of not having a systematic approach to capital investment was acknowledged by the government, and in 2000/2001 a new system was established, e.g.: investments to be the responsibility of the autonomous institutional providers; the insurance fund’s price list to cover capital costs; a capital charge to balance the providers’ different starting positions and capital investment decisions in public hospitals to be controlled. Notably, since July 2003, capital costs have been included in the prices paid to providers by the insurance fund.<sup>15</sup> However funds for capital costs are now allocated on the basis of activity without a clear link to capital investment needs. In Bulgaria the costs for capital investments are theoretically the responsibility of the owners (e.g. the Ministry of

<sup>15</sup> Capital costs have been added to the price list for ambulatory specialist visits, operations, provider per diems and complex prices. Capital costs have also been added to primary and long-term care prices. The mark-up has been calculated according to providers’ optimal capacity per bed (which includes a standard number of square meters per bed that will produce an optimal occupancy rate).

Health/municipalities). Yet, due to the shortage of financial resources both on central and local levels, the issue of capital investments is often neglected.

In the process of health system reforms in the two countries, a market environment for the hospitals has been created. Elements of competition among providers were introduced (in Estonia - 2003<sup>16</sup>, in Bulgaria – 2004). Yet the market environment in the hospital sector is still not very well developed. Although barriers to entry into the market (minimum standards) and limitations to entry into a contract with *the Health Insurance Fund* were introduced, they do not significantly influence the competitive behaviour of providers and consequently have a limited impact on hospital performance.

### Health Policy and Legislation

#### **Key Stakeholders**

There is a similarity between Bulgaria and Estonia with respect to the key stakeholders in the health policy field. The stakeholders exercise a different degree of influence over the governance and management of hospitals (Table 3). One significant difference can be emphasised, namely, the active role of the *Hospital Association* in Estonia. The *Association* is closely involved in negotiations and contacting process together with the insurance fund with respect to the package of services, payment methods, quality of care, control, etc. In Bulgaria there is a number of hospital associations, but their role is relatively limited and they do not act yet as a key stakeholder in the hospital care.

**Table 3: Key health care stakeholders in Bulgaria and Estonia**

<b>Estonia</b>	<b>Bulgaria</b>
Parliamentary Committee on Social Issues	Parliamentary Health Committee
Ministry of Social Affairs	Ministry of Health
Ministry of Finance	Ministry of Finance
Estonian Health Insurance Fund <sup>17</sup>	National Health Insurance Fund
Hospital Association	Hospital Associations (limited role)
Estonian Medical Association <sup>18</sup>	Bulgarian Medical Association <sup>19</sup>
Estonia Nurses' Union	Bulgarian union of paramedical staff
Hospital owners	Hospital owners
Municipalities/ County Governments	Municipalities
	Voluntary insurance funds (limited role)
State Agency of Medicines	National Drug Agency
	Trade unions
International organizations	International and donor organizations
Citizens and patients organizations	Citizens and patients organizations
Suppliers of medical equipment and medicines	Suppliers of medical equipment and medicines

<sup>16</sup> In Estonia, historical utilization data and needs assessment data are used to estimate potential patient movement, and the numbers are finalized at the end of the budgetary year. Providers can also agree to prices that are lower than those set out in the price list, enabling a degree of price competition.

<sup>17</sup> In 2001, the EHIF obtained its present status as a public independent legal body, replacing the Central Sickness Fund and 17 regional sickness funds.

<sup>18</sup> Voluntary membership

<sup>19</sup> Compulsory membership

The majority of hospital managers in both countries report being in most active interaction with the *Health Insurance Funds*. In Estonia, next to the collaboration with the *Health Insurance Fund* comes the collaboration with the *Hospital Association* – 60% and the *Ministry of Social Affairs* – 51%. In contrast, in Bulgaria the communication with Hospital associations (limited role) does not receive recognition. However, contacts with the *Ministry of Health* are performed on a regular basis. A more explicit dialogue and exchanges between stakeholders are seen as necessary in both countries.

### ***Hospital Reforms and Legislation***

In both countries the hospital reform has intensified since 2000. The adopted legislative frameworks allowed implementation of organisational changes (Table 4). There are at least two reasons why the legal systems of the Central and Eastern European countries undergoing transformation had to be changed. First, the old norms did not comply with the new political principles accentuating a democratic decision-making process. Second, legal norms were required as a tool for reorganisation and introduction of new market-oriented mechanisms. This twofold change in the health sector legislation signified a departure from the centralised ‘Semashko’ model (BASYS, 1998).

**Table 4: Legislation Related to Hospital Reform**

<b>Estonia</b>	<b>Bulgaria</b>
<ul style="list-style-type: none"> <li>• Public Health Act, 1995</li> <li>• Medicinal Products Act, 1996</li> <li>• Psychiatric Care Act, 1997</li> <li>• Health Insurance Fund Act, 2001</li> <li>• Health Services Organization Act, 2002</li> <li>• Law of Obligations, 2002</li> <li>• Health Insurance Act, 2002</li> <li>• Commercial Code, 1995</li> <li>• Foundations Act, 1995</li> <li>• Public Procurement Act, 2000</li> </ul>	<ul style="list-style-type: none"> <li>• Law for Health Insurance, 1998</li> <li>• Law for Physicians' &amp; Dentists' Professional Associations, 1998</li> <li>• Law for Health Care Facilities, 1999</li> <li>• Law for Medicines and Pharmacies, 2000</li> <li>• Law for Control Over Drug Substances, 1999</li> <li>• Law for Transplantation of Organs, Tissues &amp; Cells, 2003</li> <li>• Law For Blood, Blood Donation &amp; Transfusion, 2003</li> <li>• Public Health Act, 2004</li> <li>• Trade Law, 2002</li> <li>• Public Procurement Act, 1999</li> <li>• Labour Code, 1990</li> <li>• Privatization Law</li> <li>• Competition Law</li> <li>• State Budget Act (annual)</li> <li>• National Framework Contract (annual)</li> </ul>

In Bulgaria, by 2005 there were already a number of laws directly or indirectly addressing hospital care, but only some of these were specifically intended to facilitate the implementation of the hospital reform. The most pertinent laws are the *Law for Health Insurance* and the *Law for Health Care Facilities*. Hospital facilities are also subject to general company legislation and other regulations outside the scope of the health system, as hospitals are commonly given the status of limited companies.

In Estonia, the *Health Insurance Act* of 1991 and the *Health Services Organization Act* of 1994 established a system of social health insurance based on multiple sickness funds and a purchaser–provider split. The parallel health systems of health care delivery were

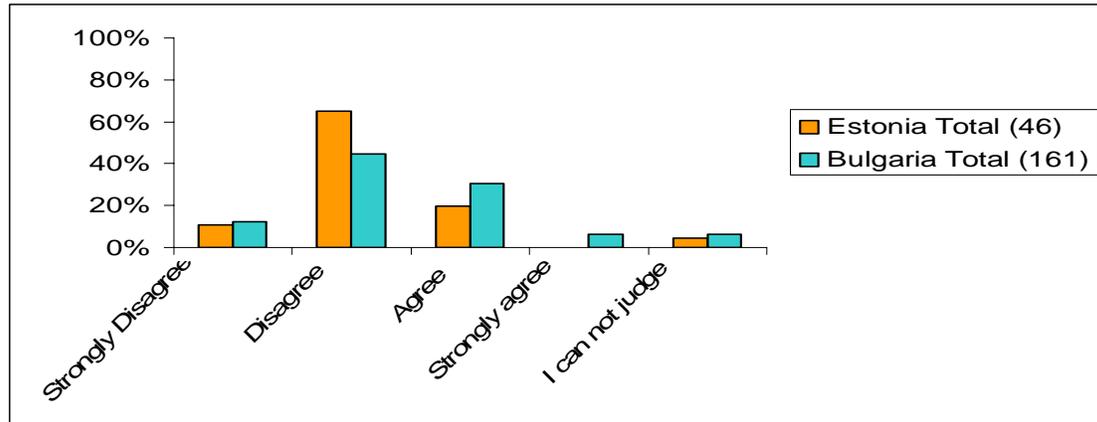
abolished (with the exception of primary care for the armed forces, and primary and some secondary care in prisons). A further reform involved changes in the legal status of the Estonian health care providers. The 1994 the *Health Services Organization Act* had not specified provider status options, giving rise to some uncertainty about legal rights, responsibilities and accountability in relation to hospital management. According to the new version of the Act, (which came into force in 2002), health care providers shall operate as private entities under the civil law, as limited liability joint-stock companies (for profit), foundations (not for profit) or private entrepreneurs (self-employed individuals). However, in the case of institutions, the founders or stock-owners are to be public. Indeed, the reform strategy can be more accurately described as one of “corporatisation” rather than privatisation. The aim of this strategy was to create efficiency incentives through increased decision rights at the hospital management level, while maintaining representation of the public interest through having the state and the municipalities appoint members of hospital supervisory boards.

In 2000, the *Estonian Ministry of Social Affairs* developed and adopted a Hospital Master Plan 2015 where some projections about the future hospital capacity were made. The plan noted that Estonia’s geographically decentralised hospital system resulted in excess capacity. In 1991, Estonia had about 120 hospitals with about 18 000 beds. Since then, the number of hospitals and the number of beds fell dramatically and by 1995, there were 83 hospitals with about 12 000 beds, and by 2001, there were only 67 hospitals with about 9100 beds. By 2002, many hospitals had merged, and by the beginning of 2003, the number of hospitals had fallen to no more than 40. The Hospital Master Plan 2015 recommends that the number of acute hospitals and beds be further reduced, to 21 acute hospitals and 2 acute beds per 1000 population respectively.

In Bulgaria a strategy for hospital restructuring has been discussed for several years, with a draft made available for public debate only in 2006. The hospital restructuring strategy is still not adopted officially by the government. However, some partial attempts were made by policy makers to speed up the restructuring process through introduction of changes in the hospitals financing mechanisms.

Interestingly, most of the hospital managers included in the survey in both countries were critical concerning the clarity and the existence of strategic objectives for hospital reform (Figure 9). Although Estonia has adopted a Master Plan for hospitals, the majority of the health facilities managers think that the state policy in the field of health care has no clearly defined strategic objectives to perform hospital reform. 76% are of the opinion that the long-term objectives of the hospital reform are not clear and well defined. In Bulgaria the majority of respondents also think that the state health policy has no clear strategic objectives for hospital reform (57%; disagree to a certain extent; 37%). agree

**Figure 9: To what extent you agree with the statement that there are clear strategic objectives in state health policy, in relation to hospital reform?**

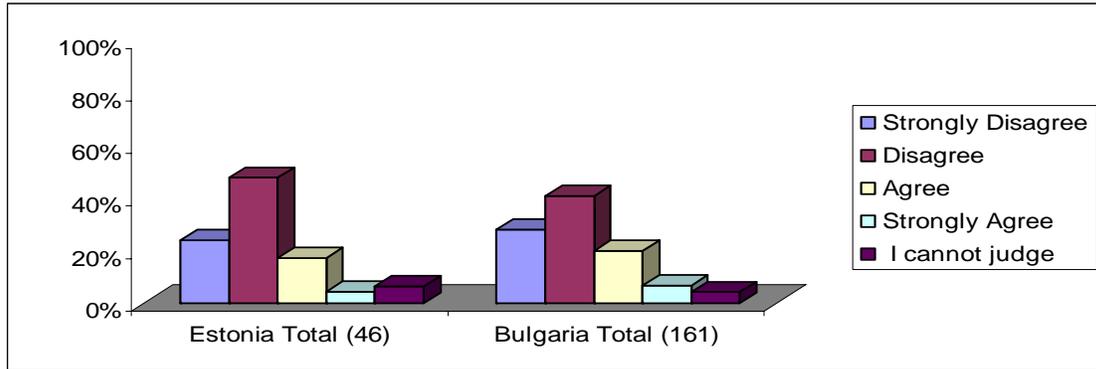


Indeed the higher the level of the respondent's position, the better the understanding of the government intentions for hospital reform.. In Estonia the heads of the management boards are more aware of the strategic objectives of the national health care policy than the members of the management boards. Similarly, in Bulgaria, the heads of clinics/wards tend to have more negative views regarding the clarity and consistency of hospital reform compared to the directors/managers.

There is small difference in perceptions of the Bulgarian managers of the smallest hospitals (district/municipal) and those of the regional hospitals who have slightly higher negative attitude (53% and 57% respectively) toward the state strategic objectives as compared to the national hospitals (47%). In Estonia, the objectives of hospital reform are least clear to the managers of general hospitals as compared to the others. On average the objectives are more understandable to managers from foundation type hospitals as compared to those of limited companies (30% of managers from foundations and 6% from limited companies thought the objectives to be clear).

A significant majority of hospital managers in both countries feel that hospital care is not a priority in the government's health policy (Figure 10). In Estonia 72% of respondents admit that hospital sector is not the priority of national healthcare policy. In Bulgaria, the negative answers (69%) prevail over the positive ones (27%).

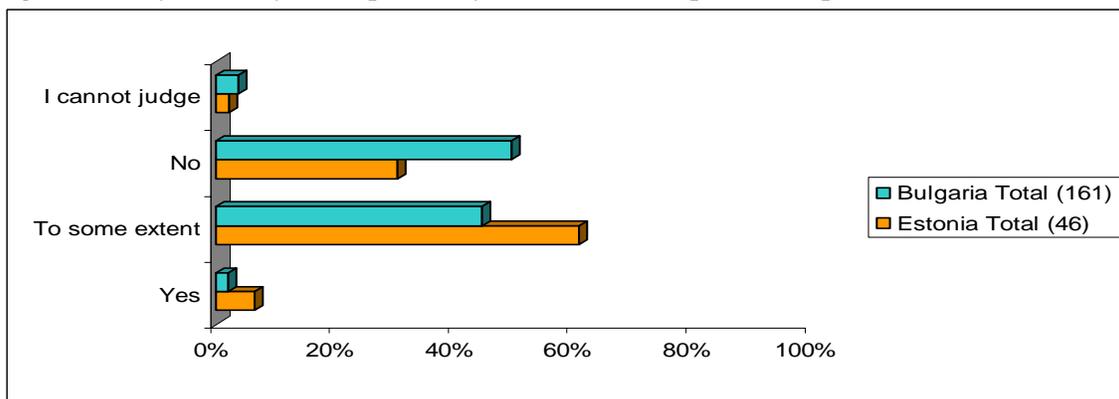
**Figure 10: Would you agree that the hospital care is a priority within the government’s health policy?**



The central and regional hospitals’ managers are the least likely to report that hospital sector reform is a priority for the Estonian health care policy. The managers from other hospitals agree more often with the statement that the hospital sector is prioritised. In Bulgaria, heads of departments are less likely to consider hospitals to be a priority as compared to senior management levels. Municipal district-based hospitals are also less convinced that the hospital care is a government priority as compared to the national and regional hospitals.

When asked if they can influence the reform process, hospital managers are divided in their opinion (Figure 11). In Bulgaria only 2% think that they definitely can influence the reform process, while almost 45% think that they can influence it “to a certain extent”. In Estonia, on the contrary, the majority of managers (68%) think that they can influence the formulation and implementation of hospital reforms (7% - definitely and 61% - to some extent). 30% of respondents in Estonia and 50% in Bulgaria believe that they have no influence over the reform process and content.

**Figure 11: Do you think you can personally influence some aspects of hospital reform?**



One can observe a significant diversity of opinions when looking at the responses by hospitals’ types. Surprisingly, respondents from municipal hospitals in Bulgaria thought that they have more influence on health policy compared to respondents working at national and inter-regional hospitals, possibly because they have strong, often informal

contacts with the local community and regional policy-makers. In Estonia the managers of general, central and regional hospitals are more confident in the perception that they can influence the hospital reforms. On the other hand, managers from other hospitals i.e. from special, rehabilitation and long-term care hospitals are relatively uncertain in their ability to influence reforms.

The hospital managers in Estonia pointed out that the main channels to influence the reforms are formal ones at national level and informal ones via personal contacts. Both of these were mentioned in nearly half of the completed questionnaires (51% and 49% respectively). The managers from general hospital use more intensively personal and political channels than managers from other hospitals. The managers from limited companies use different channels more frequently, mostly informal and formal channels at national level. The members of the management boards play more political games, but head of the management boards try to influence the reforms at the regional level.

In Bulgaria the mood is more pessimistic as 50% think that they have no means to influence the reform process, almost a third consider informal channels (personal contacts) as a possibility to exercise influence. Bulgarian managers tend to be more confident in their ability to make a difference in the reform process on regional level (29%) rather than on national level (9%). Two-thirds of the directors think that they may have influence over the health policy reform process compared with just over a third of the heads of clinics. However, despite their higher-level position, 32% of the directors express the opinion that they cannot influence the reform. Younger managers (under 45 years of age) or those who have been at their position for less than five years are less likely to feel empowered for active participation in the policy process.

The three positive steps most frequently noted in the process of Estonian health reform in the past decade were: the establishment of the health insurance system and changes in the financing system, the elaboration of standards for different hospital types and the elaboration of long-term development plans. In Bulgaria changes in financing, improvements in hospital management and legislative framework were listed as most important (Table 5).

**Table 5: Positive Aspects of Hospital Reform in Estonia and Bulgaria**

<b>Estonia (last 10 years)</b>		<b>Bulgaria (last 5 years)</b>
<i>Hospital Managers</i>	<i>Supervisory Board</i>	
Establishment of health insurance system (incl. contracting) and certain revenue base	Development of Hospital Master plan	Financing and accounting issues
Requirements for hospital types	Capital investments, renovation of buildings	Some improvement of hospital management
Development of Hospital Master plan	Optimization of hospital network	Legislative framework

The free patient choice of a hospital facility was considered as another important aspect in the reform process. Accreditation (licensing) procedures and certification have been introduced in the two countries. This is perceived as a positive development by the

hospital management bodies as the new requirements encourage quality improvement and responsiveness of care. Yet, the procedures are not performed by independent public agencies but by divisions of the corresponding ministries (in Estonia – by the *Health Care Board* which operates under the *Ministry of Social Affairs*; in Bulgaria – by accreditation committees subordinated to the *Ministry of Health*).

The changes of the hospital financing and payment mechanisms (e.g. the introduction of social health insurance system and of a payment to providers based on performed activities) have also been evaluated positively by the respondents in both countries.

The changes in the legislative and regulatory framework are commonly seen as positive achievements in both countries. In Estonia, there are laws (Accountancy Law and Pharmaceutical Law) that are not well harmonised with the general legislation and cause concerns for the managers. The respondents are divided in their opinion as whether the legislative and regulatory framework is supportive enough for running the hospital. Many Estonian managers express the view that the legislative framework could be more supportive than it is at the moment. For example, changes are to be made in labour legislation (specifically the frequently mentioned Work- and Recreation Law) that will impose unrealistic restrictions on staff working hours. According to the managers, there is a significant contradiction between the civil law, the regulations stimulating entrepreneurship and the public interests.

In Bulgaria, there was considerable criticism of the lack of consistency and even contradictions between some of the existing laws. Indeed, the respondents mention the legislative framework mainly in terms of its obstructive role to their work. The public health law is mentioned as being among the legislative acts with many drawbacks and lack of synchronisation with other normative documents. The *National Framework Contract* is the most criticised document as it has to be annually renewed after long and sometimes fruitless negotiations. The Labour Code and the collective agreements signed for a particular branch of the economy (health care, education, etc.) are also perceived as a challenge by the hospital managers in Bulgaria.

The regulations and changes of hospital ownership as more corporative are seen by some managers as affirmative changes. Yet the Bulgarian managers argue that due to some legislative inconsistencies they are not able to manage their hospitals independently (as autonomous bodies).

Other differences between the perceptions of the Bulgarian and Estonian managers occur with respect to the long-term development plans for hospitals. In Estonia the elaboration of long-term development plans was emphasised as a positive side of the reform, particularly the elaboration of the hospital Master Plan. Given that no such long-term planning document exists in Bulgaria, the managers are critical about the lack of government vision on the hospital care development. The reduction of hospital capacity - consolidation (reorganisation and/or closure) of small and ineffective hospitals is considered by some Estonian managers to be a progressive step. In Bulgaria the lack of

political will to undertake radical steps towards restructuring of the hospital sector, or even to initiate debate around these issues is subject to criticism.

Another major difference observed in the two countries is the hospital managers perception of the continuity of care. In Estonia the hospital sector managers indicate positive attitudes towards the formation of the General Practitioners' (GPs) system and the emergency care reform.. In Estonia too, the building of integrated services (between primary care and hospitals) is seen as a problem to some extent , but not as severe as in Bulgaria, where hospital managers declare that the communication within the health care system is rather poor and therefore the continuity of care is often disrupted. The GPs are frequently seen as non-cooperative and not acting in the best interest of the patients. The rapid decrease of the average length of stay in hospitals without prior preparation of ambulatory and social services has led to a “*weak link between the primary care and hospitals*” and fragmentation of care. Regarding emergency care, severe coordination and financial problems are mentioned by the Bulgarian respondents.

It is interesting to observe that in both countries the same aspects of hospital reform are listed both as positive and as negative, with the latter being emphasised more strongly. Shortages in funding and resources as well as poor implementation of reform initiatives are common negative aspects for both countries (Table 6).

**Table 6: Negative aspects of hospital reform in Estonia and Bulgaria**

Estonia (last 10 years)		Bulgaria (last 5 years)
<i>Hospital managers</i>	<i>Supervisory board</i>	
Health financing system, incl. shortage of resources	Poor implementation of Hospital Master plan	Insufficient funding of hospitals
No clear agreement on long-term objectives in hospital sector	No clear agreement on long-term objectives in hospital sector	Multiple aspects of hospital reform
Closure of hospitals/departments	Hospitals acting under private law	Imperfect legislative and administrative framework

The respondents in the two countries have been critical with respect to the instability and lack of clarity in the hospital reforms and objectives, politicisation, monopolisation<sup>20</sup>, insufficient attention to long term care, altered ownership relations, etc. The main problems are under- and instable financing of the health care sector as well as unclear financial responsibilities (e.g. lack of responsibility for capital costs and investments). Consequently the gap between public expectations and the possibilities to meet these expectations is widening.

Expressions like “*the objectives of the reform are not clearly formulated*” and “*the absence of agreement between different political parties on the reorganization and financing of the health care system, and the absence of clear perspectives*” can be found in the respondents’ answers in both countries. On the negative side is also the perception

<sup>20</sup> Existence of monopolistic structures such as the *National Insurance Funds*

that hospital reforms seem to have de-prioritised long term care (e.g. lack of planning for long term care beds and lack of resources for this type of care).

The introduction of market elements is seen as a contradictory step in both countries. On the one hand, “*the hospitals have turned into the commercial organisations*”, while on the other hand the liberalisation of the hospital sector and the introduction of some market principles such as competition is perceived to be a positive reform initiative. Clearly, most reform initiatives are not assessed as positive or negative per se, yet obtaining a balance between the market and the social function is seen as important by the hospital managers.

Initiatives to train personnel and to encourage improvements in staff qualifications were mentioned as positive steps taken by the stakeholders to improve hospital efficiency. However the respondents in both countries are very vocal in their concerns regarding the lack of qualified staff at places. Other human resource related problems refer to the staff dissatisfaction with respect to wages, work conditions and career opportunities which are considered as the main reasons for doctors and nurses to leave the profession. Lack of consistent government policy on human resources is heavily criticised by the hospital managers.

Overall, in both countries hospital managers participating in the survey mentioned that hospital reforms tend to be inconsistent, slow, and poorly implemented, with little monitoring and learning. There is a fear of changes due to frequent changes in political power and politicisation of institutions (interference with hospital management). The capacity of the state institutions - ministries of health is perceived by the hospital managers as poor. In the opinion of the hospital managers, all these factors may lead to misuse or inefficient use of scarce resources and generate confusion among managers and front-line practitioners concerning the long term prospects for hospital care development.

### *Resources and Management*

#### ***Financing***

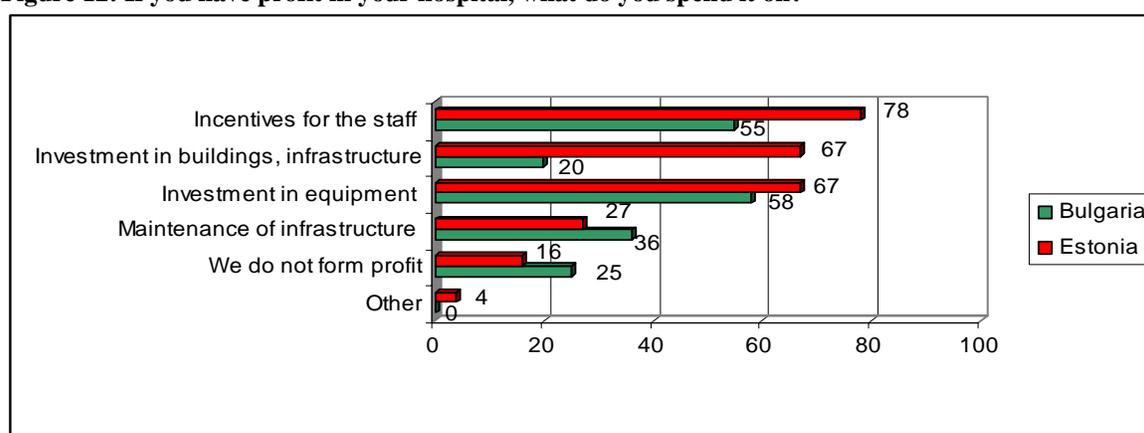
The mode of financing and appropriate level of resources is crucial for the successful work of hospitals as they are dependent on expensive equipment and infrastructure. In both countries hospitals suffer from insufficient financing. In Bulgaria the majority of hospitals have accumulated huge debts in several years. Asked “Who has to bear the responsibility for the losses (depths) of hospitals?” the respondents in the two countries share almost the same view, i.e. “the management board has to bear the main responsibility for the losses and debts of hospitals” (Table 7). Surprisingly, the owners (*Ministry of Health* - in the case of Bulgaria) come second, followed by the national health insurance funds. In Estonia, the *Ministry of Social Affairs*, the *Ministry of Finance* (state budget) and the municipalities were mentioned as responsible institutions but not as frequently as the first three bodies listed below. In Bulgaria some respondents express the opinion that there is a need of state intervention through subsidies or via the state budget.

**Table 7: Who should take the main responsibility for the losses (debts) of the hospitals?**

Estonia	Bulgaria
Management board	Hospitals themselves /management board
Owners	Ministry of Health
Estonian Health Insurance Fund	National Health Insurance Fund

Hospital managers point out that most hospitals do not form profit and if they do, it is spent to stimulate staff and to invest in equipment and infrastructure (Figure 12). Spending on maintenance is less frequent in Estonia as compared to Bulgaria. In Estonia, profits are used for investments in infrastructure.

**Figure 12: If you have profit in your hospital, what do you spend it on?**



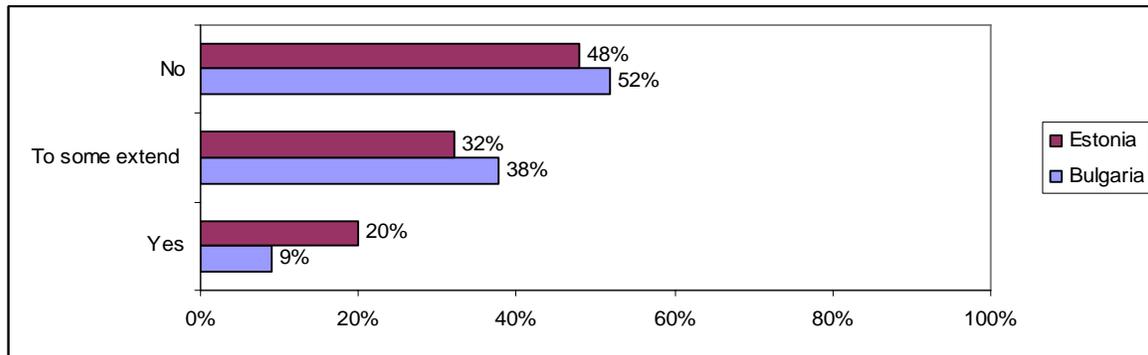
In order to estimate the level of autonomy our team asked the respondents what approaches they apply to manage funds internally. There are significant differences in the two countries (Table 8). In Estonia, the costs are being allocated to departments mainly according to planned activities (66%). Other approaches include allocation of funds based on historical costs (from previous years) or based on performed activity. In Bulgaria, the approach most frequently used is allocation based on actual volume of work (81%). Yet, for a significant number of respondents the methodology of allocation is not clear. There were mixed views on the necessity to cross-subsidise departments that do not form profit (or surplus) but are vital for the hospital as a whole (e.g. pathology).

**Table 8: Allocation of Funds between Clinics/Wards**

	Estonia	Bulgaria
Based on actual volume of work	39%	81%
Not known/ not clear	14%	10%
Based on the costs in previous years	43%	4%
Other	5%	3%
Based on planned activities	66%	2%
No specific criteria	14%	-

It is not very common for clinics and wards to manage the allocated funds independently. About half of the respondents (48% in Estonia and 52% in Bulgaria) in both countries declare that clinics and wards have no financial autonomy (Figure 13). About a third claimed that there is some autonomy (“to some extent”). In Estonia the percentage of those who perceive autonomy of wards and clinics is twice as high (20%) as in Bulgaria (9%).

**Figure 13: Do clinics/wards manage the allocated funds by themselves?**



### *Human Resources*

The motivation of staff and good remuneration are important factors for achieving good quality of care and effectiveness of work. The results of our study show that there is a link between remuneration and performed work. In Estonia, 76% of respondents report to have different pay grades for different positions in their hospital. That is much more the case for the medical and high level administrative staff than the technical staff at lower levels in both countries. According to the respondents the remuneration of physicians is mostly linked with the work performed (Table 9).

**Table 9: Linkage between Remuneration and Work Performed**

	<b>Estonia</b>	<b>Bulgaria</b>
For physicians	52%	76%
For nurses and other medical staff	48%	72%
For administrative staff	22%*	62%

\*excluding management board

In the Estonian central and regional hospitals included in the survey there are pay grades for the different positions. In the other hospitals two-thirds of respondents reported implementation of pay grades. Indeed performance related payment is quite widespread among hospitals.

In Bulgaria, staff payment is increasingly linked with staff activities and there are some fluctuations (decrease in real terms) in the level of salaries in the last year caused by the introduced changes. Overall, the low level of salaries in the health care sector in Bulgaria is expected to drive a number of medical staff and particularly nurses from their jobs and promote migration to the EU. However, the current study showed that there is very little

change in staff availability over a 5-year period (2000-2005) despite acute under-financing. Aging of staff is considered as a serious human resource problem - by the end of 2005 the average age of hospital staff in the surveyed Bulgarian hospitals was 45.4. The average age among physicians only was even higher – 46.7 years.

In Estonia and in Bulgaria, hospitals have plans for additional training of their staff. In Estonia, 73% of respondents stated that their hospital have written plans and objectives for clinical training of the staff. One third of the Estonian respondents reported that there are objectives and plans for management training. Respondents reported intentions for introducing training programs in other areas such as: food management, communication skills, IT, customer services; etc. In Bulgaria, 75% of respondents were aware of the existence of plans for training in clinical skills, 16% pointed out that some training in managerial skills is foreseen and 9% - that some other type of training is planned.

Communication between the management body and the staff is of importance for the hospital environment. The good level of information of the staff increases employees' satisfaction and may contribute to increased efficiency and quality of performed tasks. Personal communications as well as regular departmental meetings are seen as most important channels of internal communication. Other channels such as Intranet also gain importance while staff newsletters (bulletins) are perceived as the least important source of information.

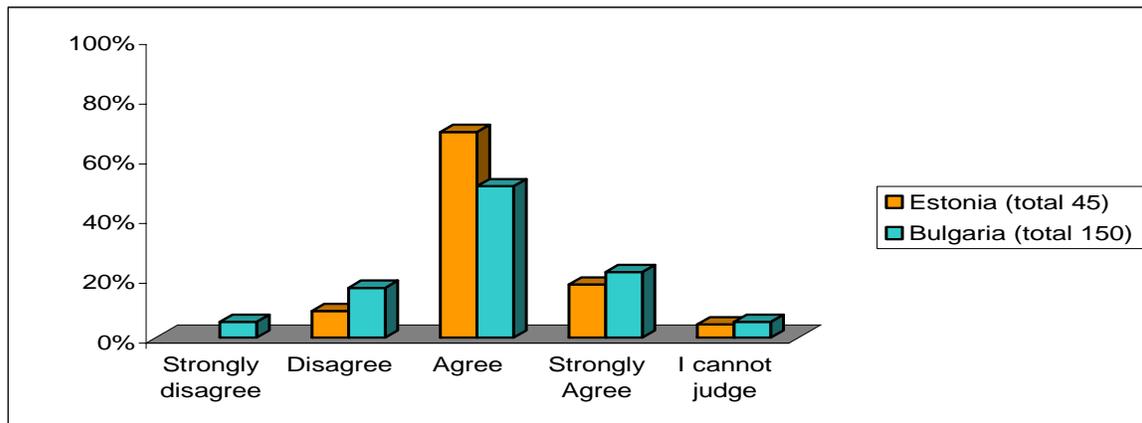
### ***Management***

Hospital governance is an area of growing interest in the two countries. Due to the importance of this area and the limited evidence available in the literature, we have paid specific attention to this topic in the survey.

Most of the Estonian hospitals operate under private law - i.e. even when the ownership is in a public sector (state or municipal) their legal environment is as private companies. The Estonian hospitals have management boards that are overseen by multi-representative supervisory boards, where mainly owners' interests are represented. However, there are ongoing discussions about what should be the appropriate composition of the supervisory boards whether they act in public interests as expected, and what should be their role and responsibilities. In Bulgaria, hospitals also act according to the Commerce Act as joint stock companies (with public interest). Management boards consist of representatives of owners, professional associations, local communities, etc. In contrast to Estonia, few Bulgarian hospitals have supervisory boards (8.5% of the sample).

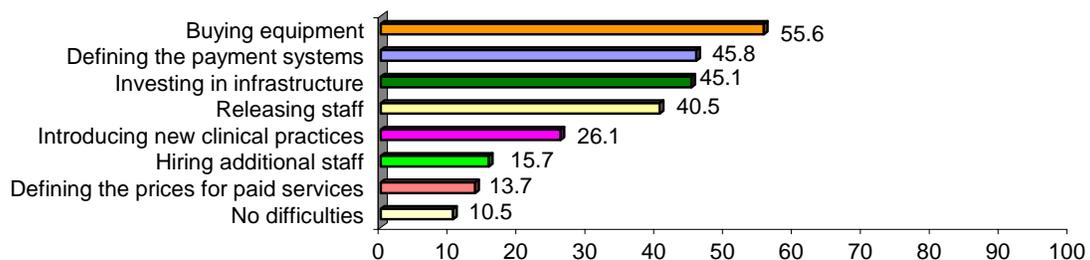
In both countries a majority of the hospital managers have expressed the view that management boards have sufficient autonomy to manage their hospitals. Survey results show that in Estonia the chances for autonomous health establishment management are more pronounced than in Bulgaria (Figure 14).

**Figure 14: Do you agree that the management council (board) of your hospital enjoys sufficient autonomy to manage the hospital?**



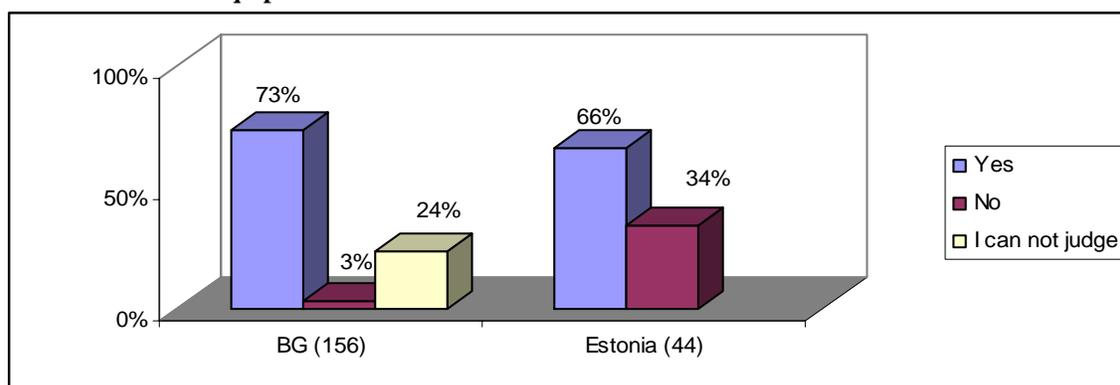
According to the Bulgarian managers, the most important functions of the management board are: planning, taking decisions for and control over the activities as well as financial management. Yet, the managers are faced with a number of difficulties when making autonomous decisions in managing their hospitals (Figure 15). However, significant variations are observed when analysing the answers of the respondents across different types of hospitals: larger/national hospitals are less autonomous in investing in equipment and infrastructure, but more autonomous in deciding on prices for paid services and provider payments mechanisms.

**Figure 15: Difficulties to take decisions on hospital level (Bulgaria)**



The majority of hospitals in Estonia (66%) and in Bulgaria (73%) have business plan or investment strategy with respect to capital assets and medical equipment (Figure 16). In Estonia, it is mandatory for hospitals to have a general development plan. In Bulgaria, the established accreditation procedure has gradually set requirements for the hospitals to prepare business plans and strategies. Yet, 24% of the Bulgarian respondents declare that they do not know about such documents.

**Figure 16: Does your hospital have a business plan or investment strategy with respect to long-term assets and medical equipment?**



The state of the infrastructure and equipment in the hospitals is important for achieving the health system’s goals – high quality, effectiveness and patient’s satisfaction. Overall, Estonian managers are more critical than the Bulgarian ones regarding the state of the infrastructure and the medical equipment in their facilities (see the section on the quality of care).

Most hospitals have developed documents stating the vision and mission of their facility and its strategy for development. However, about 30% of the respondents in Bulgaria stated that these documents are not publicly available. According to the respondents, almost all hospitals also have documents related to quality improvement and encouragement of good medical practices (Table 10).

**Table 10: Existence of documents regarding vision, mission and long term development of hospitals**

In your hospital, do you have:						
	a written document stating its vision and mission?		a long-term strategy for its development?		have written document/standards for improving quality of care and encouraging good medical practice?	
	Estonia (43)	Bulgaria (155)	Estonia (44)	Bulgaria (156)	Estonia (45)	Bulgaria (153)
Yes it is publicly available	79%	65%	80%	44%	82%	57%
it is not publicly available		23%		37%		36%
No	21%	2%	18%	5%	18%	2%
I cannot judge		10%	2%	14%		5%
	% of the total					

In the documents describing the mission, vision and development strategies hospital managers define the internal aims in the health care facilities as achieved. The review of the answers show that the objectives of Bulgarian and Estonian hospital managers are very much the same – quality improvement, efficiency, customers’ satisfaction, etc (Table 11).

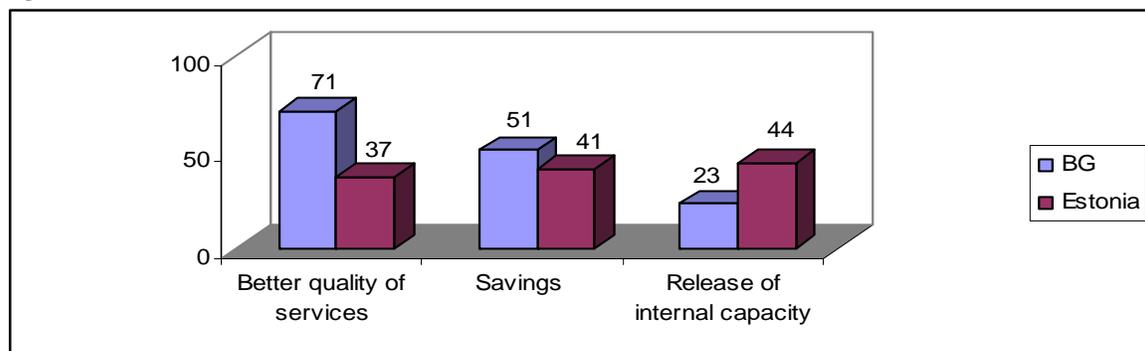
**Table 11: Internal hospital aims, ranked by importance**

	<b>Estonia</b>	<b>Bulgaria</b>
1	Quality improvement of medical services	Quality improvement of medical services
2	Improving client services	Improving efficiency
3	Improving efficiency	Transformation of the hospital into a centre of excellence

In order to achieve efficiency most of the hospitals contract out services to external providers. The main services marked to be outsourced in Estonia are: laboratory tests, pharmaceuticals and radiology. In Bulgaria those are: maintenance of medical equipment, laundry, laboratory tests and food. Other items mentioned by the respondents are services for transportation and maintenance of transport vehicles, maintenance of buildings, construction and reparation, security services, outdoor cleaning and waste management, PR-consultations, specific laboratory analyses, pathology, etc.

The main reason for outsourcing is to achieve better quality of services, to release internal capacity and to save funds as well as to allow the hospital staff to focus on the main activities (Figure 17).

**Figure 17: Reasons to outsource**



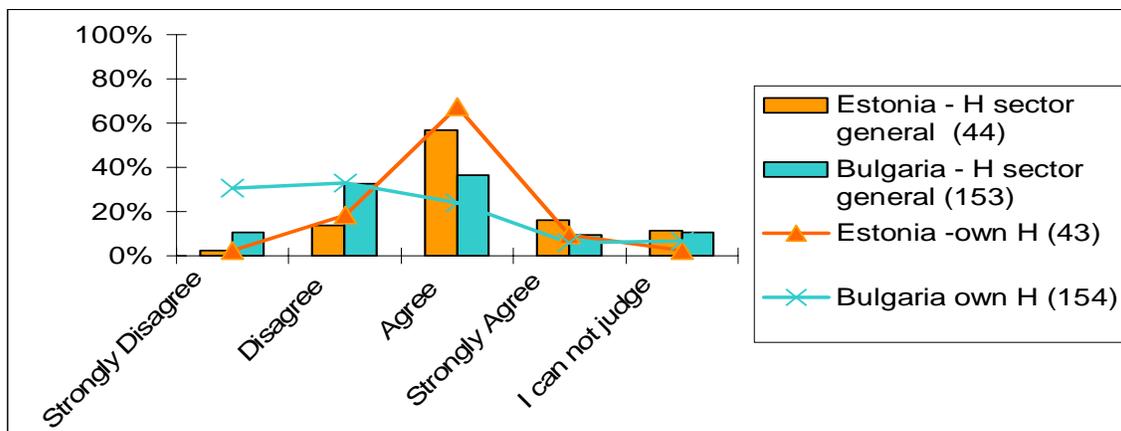
Other reasons listed by respondents are some historical relationships or legislative requirements (in Bulgaria), economies of scale and the higher manufacturing cost (in Estonia).

As already mentioned, the survey on the role of supervisory boards was performed for Estonia only. Overall, the supervisory boards have strong influence over the decision making process in the hospitals. Least influential are the supervisory boards in the general hospitals. More than half of the managers disagree with the statement that “the supervisory board has a strong influence over decision making process”. The supervisory boards seem to have more influence on the decision making process in the limited companies. The supervisory board is largely involved in the elaboration of the long-term strategy of the hospitals – 77%. 85% of the surveyed managers report that their management board provides feedback to the supervisory board on the implementation of the long-term strategy of the hospital. 69% of supervisory board members think that supervisory boards should have a bigger role in hospital policy making.

## Efficiency

In Estonia managers think that it is possible to use resources in the hospital sector more efficiently. 73% of respondents believe that it is possible to increase the efficiency of hospital sector. 63% expressed the opinion that resources can be used more efficiently in their own hospitals. 26% could not judge if there are ways to use resources more efficiently. 23% of the managers from central and regional hospitals strongly disagree (or disagree) that hospitals in general could utilize their resources more effectively. In Bulgaria 53% of the directors, 30% of deputy directors and 46% of head of clinics think that the resources in hospital sector are used inefficiently and there is room for improvement. However, when asked about their own hospital, the Bulgarian managers seem to be less critical compared to their Estonian colleagues, who are openly critical regarding the performance of their own health facilities - 77% of respondents agree or strongly agree with the statement that it is possible to use resources more efficiently in their hospital (Figure 18).

**Figure 18: To what extent you agree with the statement that in hospital sector generally, and in your hospital, the resources are used inefficiently?**



Increasing control over costs and performed activities is perceived as a necessary measure to improve efficiency in both countries (ranked first in Estonia and 3rd in Bulgaria) (Table 12). Optimizing clinical pathways is a tool for improving efficiency in the opinion of the managers, although the understanding of clinical pathways has a different meaning in Bulgaria and Estonia. Moreover, hospitals in Bulgaria are financed based on clinical pathways and the managers are anxious to receive full rather than partial reimbursement for the clinical pathways.

**Table 12: What in your opinion can increase the efficiency in your hospital?**

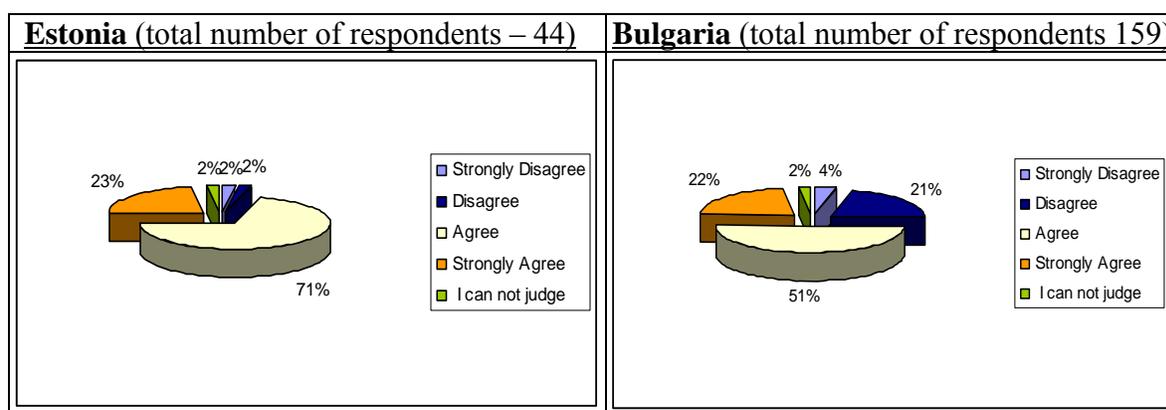
<b>Estonia</b>	<b>Bulgaria</b>
Increase of the control over costs and performed activities	Optimizing the clinical pathways, incl. real costing/reimbursement
Optimizing the clinical pathways	Implementation of new clinical practices (day care, home care...)
Other (better co-operation with other providers, staff restructuring)	Increased control over costs and performed activities

In addition both countries have tried to optimize the number of staff and beds as well as the drug supply, which are seen as important measures to improve efficiency. In Bulgaria restructuring, renovation of buildings and equipment as well as introduction of public supervisory boards are also regarded as necessary steps. Indeed in Estonia where supervisory boards are established the attention is focused on improvement of their efficiency. Other common issues emphasized by the hospital managers is the improvement of the co-operation with other providers and assuring continuity of care and the integration of different services (primary, long term and social care). In Estonia, increasing revenues and volume of chargeable services is also seen as a possibility to increase efficiency.

### **Competition**

Altogether, 94% (in Estonia) and 73% (in Bulgaria) of the respondents agree (or strongly agree) that there is competition in hospital sector. In Bulgaria 25% think that there is no competition compared to 4-5% of the Estonian respondents (Figure 19).

**Figure 19: Do you agree that there is competition in the hospital sector?**



Overall, Estonian hospital managers perceive the environment in which they operate as more open for competition between the health care facilities compared to their Bulgarian colleagues. When measuring on a scale from 1 (lowest) to 10 (highest) how competitive the hospitals are, hospital managers in both countries rank the competitiveness of their hospitals in the range between 6 and 7 (for Estonia the mean number is 6.8, for Bulgaria - 6.6).

In Estonia, the managers from central and regional hospitals rate their hospitals' competitiveness higher (average 7.4) than managers from general and other hospitals where the average rating is 6.8 and 6.4 respectively. The ratings for competitiveness are quite similar for foundation and limited company types. The head of the management boards give lower ratings than the members of management boards. In Bulgaria the evaluation of hospitals' competitiveness is 6.6 on average, with the highest score of 7.5 for national and interregional hospitals and the lowest score of 6 for municipal hospitals. Competition is considered beneficial in promoting quality improvement and implementing measures for effectiveness. Nonetheless some hospital managers express doubts as to the existence of a competitive environment in practice as they consider the consumers to be too weak economically to make their free choice, so *“they use the closest available hospitals and therefore there is no real competition”*.

### Responsiveness and Quality of Care

#### *Access to Care*

Responsiveness of care, access and quality are the most important issues for the society as far as the provision of health care is concerned and in particular with respect to hospital care. In both countries hospital managers list a number of problems patients are faced with in order to receive hospital care (Table 13). In both countries the high number of emergency cases, which in some occasions is the fastest way to enter the hospital, is pointed out. Yet, admission as an emergency case means that the treatment has been significantly delayed and may cause much higher costs for the health establishment to treat the case.

**Table 13: What are the problems the patients faced when seeking hospital care?**

	<b>Estonia</b>	<b>Bulgaria</b>
1	Waiting lists for admission or treatment	Many patients have no health insurance
2	High external costs (for instance costs on transportation)	Insufficient number of referrals available to Primary health care staff/ GPs
3	The GP-s do not refer patient in time	Lack of timely & appropriate referrals

In Estonia, 80% of the respondents indicated that the waiting lists for admission or treatment are the biggest problem patients are faced with. Other problems are high external costs and the fact that GP-s don't refer patients in time. Furthermore, the respondents quoted problems with long term care availability and funding. Other problems listed by the hospital managers are: extensive use of the emergency care; insufficient health insurance resources and reserves; low prices of clinical services; increasing shortage of doctors; short medical treatments after illnesses, etc.

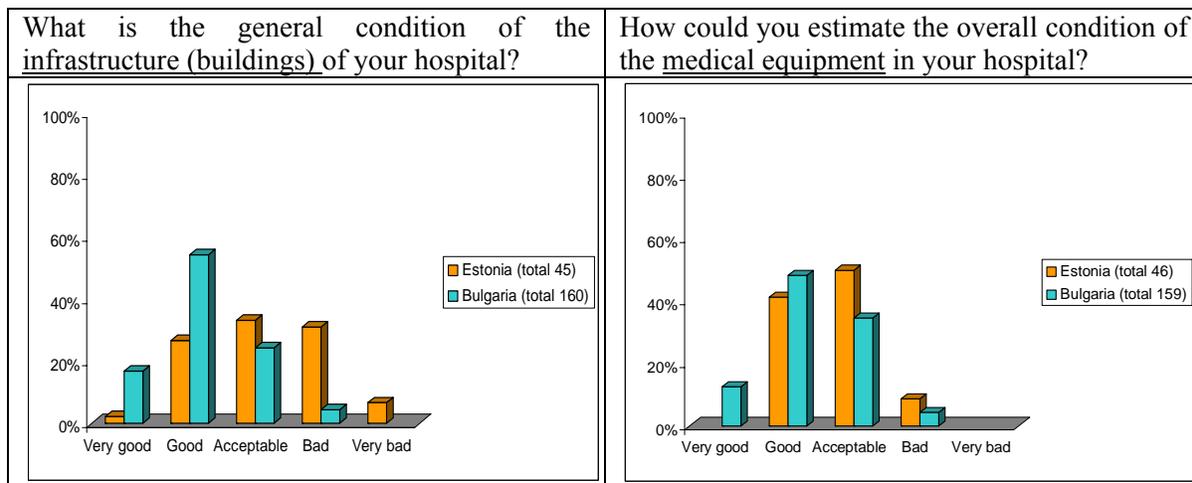
In Bulgaria the main problems concerning access to care in the perceptions of hospital managers are related to the high number of uninsured patients, delays in obtaining referrals, additional coats for transport (far location of specialized hospitals), additional costs for consumables and medicines (covered by patients). Waiting lists in Bulgaria are

not ranked so high as in Estonia. 67% of Bulgarian respondents report that no payment is necessary in their health facilities. Nevertheless, even the hospital managers consider that the additional payments that patients have to make for consumables (18%), tests (9%), drugs (8%), other informal (4%), other formal (4%) are a problem.

### *Quality of Care*

Provision of care on the highest possible level constitutes an objective for any health establishment. Quality of care is one of the important factors for competitiveness. The provision of high quality of services depends to a large extent on the conditions in the hospitals – their general infrastructure and equipment supply. Overall, the hospital managers in both countries consider the general state (condition) of their buildings and equipment as good and/or acceptable (Figure 20).

**Figure 20: Condition of infrastructure and equipment in the hospitals participating in the survey**



The procedures for licensing (accreditation) are tools implemented in hospitals in Estonia and Bulgaria to assure a high level of quality of the provided care. In this respect hospital managers have started to use surveys and questionnaires as feedback from patients in order to implement changes and to improve quality. Complaint procedures are gradually established on the level of health facilities as a way to observe quality and eliminate shortcomings in the health facilities. International quality standards have been applied and governments require management bodies to regularly update these standards.

### *Continuity of Care*

The results of the survey in the two countries indicated problems with respect to the continuity of care. The severity of problem is different for Estonia and Bulgaria. However, it is important to emphasize that both countries are affected by insufficient collaboration between the different levels of care – primary, secondary, tertiary. Indeed, respondents reported collaboration with specialists in outpatient care in order to assure the continuity of care which still seems to be insufficient. There is a perception among hospital managers in the two countries that the general practitioners delay referral of

patients to hospitals. Another problem reported by the respondents is the insufficient number (or even lack) of long term care facilities. Thus the continuity of care is interrupted as hospitals have to discharge patients who have no place to go for further long term care. The mode of hospital financing is seen as a reason (in Bulgaria) why long term care facilities are not established.

### Challenges for Hospital Management

#### **Problems**

We have grouped the main problems listed by the majority of respondents in both countries in several subgroups: organizational, legislative, financial, human resources, other (Table 14). The most severe problems are associated with the human and financial resources.

**Table 14: Main problems for hospital management**

	<b>Estonia</b>	<b>Bulgaria</b>
Organizational	people lack interest (inactivity) and responsibility	red tape, bureaucracy and difficulties in reporting & administration
	bureaucracy	complex procedures and difficult communication between institutions
	progress takes place only in bigger centres	poor linkages with primary care
Legislative	the law of working- and recreation time (too restrictive in terms of working hours)	lack of coherent long-term legislation
	constantly changing legislation	contradictory and uncoordinated regulatory and legislative acts
	law on procurement	lack of clear strategy - balancing market mechanisms and social functions
Financial	low prices paid by health insurance fund	poorly financed clinical pathways
	low contract volumes	disparities between university/ national and regional hospitals
	under-financing of capital costs	chronic lack of funds for consumables, equipment, capital investments
Human resources	shortage of educated and qualified personnel	lack of qualified staff - problem for small hospitals
	quality of the staff	poor motivation, problems with staff specialization and qualification
	ageing of the staff	high workload (staff works in public and private sector)
Other	personal communication problems	increasingly negative attitudes of patients and society towards doctors
	insufficient competence in the management	poor relationships within hospital teams
	small hospitals are considered as less important	poor capacity of the owner /municipal council/ and the health care committee

Other issues raised by the respondents refer to highly politicized hospital governance. This is emphasized by Estonian respondents, particularly with respect to the supervisory board level. The frequent political and health policy changes and lack of clarity leads to uncertainty among managers that affects their daily work and rapidly influences staff motivation.

### ***Policy Options for Further Reform***

The project team made an effort to reflect the international developments<sup>21</sup> and experience of other countries<sup>22</sup> in hospital reform in order to list some possible options for further reforms in Estonia and Bulgaria. In all cases the stakeholders' actions toward further reform of hospital care should be in keeping with the main goals of health systems: efficiency, quality, solidarity and equity. Furthermore, enhanced and stronger coordination and collaboration between stakeholders should be encouraged.

Although the model of governance may be different (decentralization versus centralization and re-centralization), the responsibilities of different stakeholders have to be made clear. If the policy is directed toward giving a higher degree of freedom to hospitals, the policy makers have to ensure strong monitoring and bench marking process in place. On principal **autonomous** hospitals have: a) obligations stipulated in annual contracts; b) more flexible planning; c) easier access to additional financing; d) possibility to finance investments and development projects by loans; e) more flexible staff policy and incentive systems; f) increased decision rights over inputs and processes in health care delivery.<sup>23</sup> However the balance between steering and autonomy is usually unstable because hospital structures remain a burning political issue, e.g. closure and mergers of hospitals are a very sensitive issue for the society. On the one hand the capacity of Ministries of health to steer the process (when higher autonomy is established) is not always strong enough, which sometimes may cause tensions between management and political rationale. On the other hand, in the case of government (public) ownership politicians at central and local level have stronger incentives to be closely involved in the hospital care governance.

We have observed similar problems and challenges in both countries. Indeed there are also some specific issues to be tackled by health policy makers in accordance with the particular country context (Table 15). Hospital policy in future has to be targeted on a number of critical issues raised by the respondents.

Further actions, seen as common for both countries are:

- Improvement of continuity of care (links between GPs/outpatient specialists/emergency care/other hospitals; optimizing referrals);

---

<sup>21</sup> Presentation by *Pascal Garel* - Chief Executive of *HOPE* (European Hospital and Health Care Federation) during the International Conference organized under the project in November 2006, Sofia.

<sup>22</sup> Presentation by *Per Lægveid*, *Bergen University*, Norway during the International Conference organized under project, November 2006, Sofia.

<sup>23</sup> e.g. better responsiveness to local needs and condition; incentives to increase efficiency; flexibility to do needed changes quickly; increased accountability and responsibility for outcomes

- Clear responsibilities for capital investments. Increased role of owners in strategic planning. Public private partnerships;
- Implementation of standards for management and supervisory board activities;
- Achieving a balance between retaining some vital social functions and increasing income from for-profit services. Effective licensing/accreditation which links quality of care & financing;
- Elaboration and implementation of human resource strategies;
- Implementation of integrated information systems;
- Training of hospital managers, supervisory boards and owners in health economics and management issues;

The respondents have listed a number of actions, specifically addressed for their own country's context (Table 15).

**Table 15: Specific actions for further hospital reforms in Estonia and Bulgaria**

<b>Estonia</b>	<b>Bulgaria</b>
Updating the Hospitals Master Plan taking into account recent developments	Participation in the negotiation process as a separate stakeholder, e.g. increased role of hospital associations
Development of long term and nursing care to enable further optimization of acute care hospital network	Evaluation of the role of different types of hospitals (small hospitals or those in remote areas) and development of a strategic plan for further development
Development of quality assurance systems; introduction of providers' accreditation system to award good performance	De-monopolization of the <i>National Health Insurance Fund</i> and diversification
Enhancement of non-medical services (e.g. client services) in hospitals to increase patients satisfaction	Increase health expenditures as share of GDP
Development of performance monitoring systems for hospitals	Establishment of supervisory boards and strengthening their role
Increase of case based (DRG) payment share as a hospital's remuneration system and introduction of performance related payments and contracts (e.g. quality bonus)	Financing outpatient care provided in the hospitals
Ensure sustainable and optimal long term financing for hospital sector, i.e. investments to infrastructure	Political decision on medical equipment purchasing and funding of capital investments (tax relieves and incentives)
Increase the competences of hospital's management and supervisory boards by training and sharing best practices	Clear definition of benefit package covered by the national health insurance fund and regulations for co-payment of services, medicines and consumables
	Establishment of an independent agency for the accreditation procedures
	Reestablishment of the linkages between hospitals and emergency care and between hospitals and outpatient care
	Elaboration of human resource strategy
	Continuity of care, incl. funding long-term care

## Conclusions

The opinions about what are the strengths and weaknesses of the hospital reforms in Bulgaria and Estonia vary among different respondents and within countries. In Bulgaria, the lack of a long-term development strategy for hospital restructuring is causing uncertainty for the future and hampers the willingness of frontline managers and practitioners to actively implement change. In Estonia, the implementation of the Hospital Master Plan is considered to be a positive step, although for the majority of respondents (especially these in the general hospitals whose status has been mostly changed) the reform objectives remain unclear. In both countries it is suggested that governments and health ministries (*Ministry of Health* in Bulgaria and *Ministry of Social Affairs* in Estonia) should develop a strategy, define clear and specific objectives, and ensure that implementation is carefully monitored.

Both countries have transformed their hospital financing models, moving from a planned budget to financing linked to performed activity, and this is viewed as a positive development. However the insufficient financing of the hospital sector is seen as obstructing factor in achieving the main objectives of the health care system: quality, access and financial sustainability. While the transformation of hospitals in separate juridical entities (trade companies) leads to more freedom and operational independence, the social functions of the health care system previously fulfilled by hospitals are a matter of concern. The problem is even more pronounced as in practice there is no alternative provision of longer-term care. Thus, there is a perception of emerging conflict between public interests and hospitals acting under the civil law (as a market entity).

Hospital managers in Estonia and Bulgaria judge their autonomy to be sufficient for running their facility, though the Bulgarian managers are slightly more cautious in their perceptions. However, it is clear that the managerial cadres accept their new rights (to allocate resources, spend profit etc.) and responsibilities (manage debt etc.). Yet, the departmental autonomy within hospitals remains limited in both countries, which is likely to constrain efficiency. According to hospital directors and other stakeholders, the competition in the hospital sector is already a fact and ideally this should lead to efficiency improvements. However, most Bulgarian respondents suggest that there is a room for improving efficiency in the hospital sector generally, but not in their own hospital, indicating that not all steps that need to be done are taken on board. Frequently hospital efficiency and competitiveness is undermined by legislation, bureaucracy and red tape. Patient's free choice of physician and hospital is only a theoretical possibility as in reality most people cannot exercise choice due to the existence of multiple barriers relative to their ability to pay at the hospitals and mobility. The high level of out-of-pocket and informal payments for hospital care is recognized as a barrier to care, especially in Bulgaria.

The sign of politicising of hospital governance is perceived to be a growing problem. In this context the roles of management and supervisory boards are not fully understood and the supervisory boards do not achieve their full potential (in Estonia) or are not fully functional (in Bulgaria). In both countries the inconsistent reform process and the two-

speed reform - in hospital- and primary- care, has led to antagonism between these two areas; between small (municipal) and large (university) hospitals; between hospital care providers and managers implementing reform initiatives, etc.

Hospital reform appears to be a very sensitive public issue and therefore more proactive debate and public consultations are needed to ensure involvement of all stakeholders, in order to pursue long term agreement on the further steps and their prompt implementation. Hospital managers believe they have a certain degree of influence but this is not often put in practice beyond local or regional level. All stakeholders need to be more active in seeking innovative and context-specific solutions for restructuring inpatient care in the line with European and international trends. Development and implementation of long-term strategies (as the Estonian Hospital Master Plan), development of a human resource strategy and establishment of integrated hospital services linking to other levels of the system, and to other sectors are of immediate priority for the health policy makers.

Exchange of best practices is of vital importance for the health policy makers in order to learn from the experience of other EU and industrialized countries which have decades of experience in hospital reform (e.g. European Union aims to introduce health in all policies<sup>24</sup> and encourage investments in health). The governments' policies in Bulgaria and Estonia should be based on comprehensive evaluation and analysis of the current and future health needs of the population. In our study we have analyzed the views and attitudes of the relevant stakeholders involved in the hospital reforms across two very different contexts. Further research is necessary to reflect the attitudes of the general population and the opinion of the practitioners working at other levels of health system, and from other sectors, with regard to the hospital reform.

Rigorous economic analysis is needed in both countries focusing on the market features of the hospital services – e.g. market concentration, patient flows and ability to substitute among hospital providers, barriers to entry (e.g. costs, regulations) and their implications for the behaviour of hospitals, number, types and behaviours of buyers and respective consequences for hospital services. A comprehensive analysis has to be performed in both countries of hospital ownership and hospital behaviour, the role of prices and regulations on hospital behaviour, and the effects of introducing integrated health service delivery systems. Systems for routine monitoring of hospital performance in view of needs and costs of care have to be developed to ensure adequate benchmarking and accreditation across hospitals. Health policy makers may consider strengthening health economics capacity within the respective health ministries or specialised agencies for epidemiology and economic analysis in health care.

---

<sup>24</sup> This idea has been revived by the Finish government during Finish presidency of the EU through the publication of a book: *Health in All Policies*.

### **List of abbreviations**

CEE	Central and Eastern Europe
CSD	Center for Studying of Democracy
DRG	Diagnostic Related Groups
EC	European Commission
EU	European Union
GDP	Gross Domestic Product
ILO	International Labour Organization
IMF	International Monetary Fund
OECD	Organization for Economic Cooperation and Development
WB	World Bank
WHO	World Health Organization

## References

- Aakvik, A and Holmas, T. (2004) The relationship between Economic Conditions, Access to Health Care and Health Outcomes, Working paper series No 61, Centre for Economic Studies in Social Insurance, Department of Economics, University of Bergen, Norway.
- Aas, I. (1999) Organizational Change: Decentralization in Hospitals, *International Journal of Health Planning and Management*, vol. 12, pp103-114.
- Afford, C.W. (2003) Corrosive Reform: Failing Health Systems in Eastern Europe, ILO, Geneva.
- Andreev, G. (2003) Hospital Financing, A Challenge With Many Contingencies (Newspaper article) in *Capital Weekly* 4-10 October 2003.
- Balabanova, D. and McKee M. (2002a) Access to Health Care in a System Transition: the Case of Bulgaria. *Int J Health Plann Mgnt*; 17(4):pp.377-95.
- Balabanova, D. and McKee M. (2002b) Understanding Informal Payments for Health Care: the example of Bulgaria. *Health Policy*; 62(3):pp.243-73.
- Balabanova, D. and McKee M. (2004) Reforming Health Care Financing in Bulgaria: the Population Perspective. *Soc Sci Med Feb*;58(4):753-65.
- Balabanova, D., Tsoleva S., Delcheva E (2005), Analysis of Hospital Reform Policy in Bulgaria. Final report. Prepared for the British Academy, South East Europe Joint Projects, June 2005.
- Barnum, H. and J. Kutzin (1993) *Public Hospitals in Developing Countries*. Baltimore, Johns Hopkins University Press.
- BASYS (1998) Consultancy final report, Phare project, Technical assistance for support to the definition and creation of the health insurance system in Bulgaria (Phase II).
- BASYS (1998) Implementation of Health Insurance in Bulgaria, Consultancy report BMWi/KfW.
- BASYS (1998) Proceeding from Conference 'Recent Reforms in Organization, Financing and Delivery of Health Care in Central and Eastern Europe in Light of Accession to the EU', Brussels, May.
- Bearing point (2003) Gabrovo Region Hospital Assessment, Draft Report April, USAID Bulgarian health project.
- Borissov V. and Rathwell, T. (1995) Health Care Reform in Bulgaria: an Initial Appraisal. *Social Science and Medicine*, 42 (11):1501-1510.
- Buchmueller, T, Jaconson, M and Wold C. (2004) How Far to the Hospital? The Effect of Hospital Closures on Access to Care, NBER working paper No 10700, National Bureau of Economic Research, [www.nber.org/papers/w10700](http://www.nber.org/papers/w10700).
- Collins Ch. and Green A. (1994) Decentralization and Primary Health Care: Some Negative Implications in Developing Countries. *Intern J Hlth Services*, 24: 459 - 75.
- Constitution of the Republic of Bulgaria (1991), State Gazette No 56, amendments St. G. No 85/2003.
- Curative Establishments Act (1999) State Gazette No 62, amendments St. G. No 70/2004.
- Davidov, B and Griva, H. (2000) Method: Average Costs per Diagnosis, Content, Results and Possibilities for Application, National Centre for Health Information, Ministry of Health, Sofia, Bulgaria (in Bulgarian).
- Delcheva, E. (1997) Contemporary Development of Case Mix Approach" in Case Mix- New Dimension in Health Care Management, Ministry of Health, NCHI, Bulletin No 2, pp. 22 (in Bulgarian).
- Delnoij DM, Klazinga NS, van der Velden K. (2003) Building Integrated Health Systems in Central and Eastern Europe: an Analysis of WHO and World Bank Views and their Relevance to Health Systems in Transition. *Eur J Public Health*. Sep;13(3):240-5.
- Dimitrov D. (2003) Analysis of the Expenses for Drugs in the Stationary Departments of the United Regional Hospitals. *Boll Chim Farm*. Apr;142(3):112-4.
- Edwards, N. Hensher, M and Werneke U. (1998) Changing Hospital Systems, in Saltman RB,

Figueras J and Sakellarides C. (eds). *Critical Challenges for Health Care Reform in Europe*. Open University Press.

Edwards, N., Wyatt, S., McKee, M., (2004) *Configuring the Hospitals in the 21<sup>st</sup> Century*. Policy brief No 5, European Observatory on health systems and policies, WHO; [www.observatory.dk](http://www.observatory.dk)

Erikson P., D. V, et al. (2002). *Health Sector Reforms: What about Hospitals?* Gotenberg, The Nordic School of Public Health.

European Commission (2003) *The Health Status of the European Union Narrowing the Health Gap*, DG Health and Consumer Protection.

Figueras J., McKee M., Cain, J., Lessof, S. (2004) *Health Systems in Transition: Learning from Experience*. European Observatory on Health Systems and Policies, WHO.

Figueras, J., McKee, M. & Lessof, S. (2002) *Ten years of health sector reform in CEE and NIS: An Overview and Chapter 1, Health systems in transition*, Papers from the USAID conference *Ten years of health systems transition in Central and Eastern Europe and Eurasia*: [http://www.eurasiahealthtransitionconference.org/Health\\_systems-Overview.pdf](http://www.eurasiahealthtransitionconference.org/Health_systems-Overview.pdf).

Freeman, R. (1998) *Competition in context: the politics of health care reform in Europe*, *International Journal for Quality in Health Care* 10 (5) 395-401.

Freeman, R. (1999) *Institutions, states and cultures: health policy and politics in Europe*, in Clasen, J (ed) *Comparative Social Policy. Concepts, theories and methods*, Oxford: Blackwell.

Freeman, R. (2000) *The Politics of Health in Europe*, Manchester: Manchester UP.

Freeman, R. and Marmor, T.R. (2003) *Making sense of health politics through cross-national comparison: Odin Anderson's seminal essay*, *Journal of Health Services Research and Policy* 8 (3) 180-182.

Freeman, R. and Moran, M. (2000) *Reforming health care in Europe*, *West European Politics* 23 (2) 35-58.

Fuenzalida-Puelma, H. (2002) *Health care reform literature review*, Local government and Public service reform initiative, Open Society institute, Budapest, Hungary.

Garcia, C. and Pardo, I. (2004) *Strategies and performance in hospitals*, *Health policy* 67, pp1-13.

Goldstein, E., Preker, A.S., Adeyi, O. and Chellaraj, G. (1996) *Trends in Health Status, Service and Finance: The Transition in Central and Eastern Europe*, World Bank Technical Paper No. 341, Social Challenges of Transition Series. Washington, DC: World Bank.

GSF Medis/BASYS (1993) *Consultancy final report, Phare project, Technical assistance for support to the definition and creation of the health insurance system in Bulgaria*.

Hager, W. (2001) *A European Bargain: Investing in CEEC Health*. CEPS Task Force report, Centre for European Policy Studies. Brussels.

Halbwachs, H. (1999) *The technical and financial impact of systematic maintenance and repair services within health systems of developing countries*. *HealthEstate* 53(4): 6-8, 10-1.

Ham, C. (ed.) (1997) *Health Care Reform. Learning from international experience*, Buckingham: Open UP.

Harding, A. and Preker A. (ed.) (2003) *Innovations in Health Service Delivery. The Corporatization of Public Hospitals*, The International Bank for Reconstruction and Development/The World Bank Washington, D.C., USA.

Harding, A. and Preker, A.S. (2001) *A conceptual framework for organizational reforms of hospitals*, in A.S. Preker and A. Harding (eds) *Innovations in Health Care Delivery: The Corporatization of Public Hospitals*. Baltimore, MD: Johns Hopkins University Press.

Harding, A., and Preker A. (2000) *Understanding organizational reforms. The corporatization of public hospitals*, HNP discussion paper, The International Bank for Reconstruction and Development/The World Bank, Washington DC, USA.

*Health care systems in transition – country studies for Bulgaria* (2003),

*Health care systems in transition – country studies for Estonia* (2004)

*Health Insurance Act* (1998) State Gazette No.70, amendments St. G. No 111/ 2004

Healy, J. and McKee M. (ed.) (2001) *Implementing Hospital Reform In Central And Eastern*

Europe And Central Asia, Eurohealth Volume 7 Number 3, Special Issue, Autumn. The European Observatory on Health Care Systems ([www.observatory.dk](http://www.observatory.dk)), WHO Regional Office for Europe.

Ho, T. and Ali-Zade, N. (2001) Eastern European hospitals in transition, in Eurohealth Vol 7 No 3 Special Issue Autumn, WHO.

IMF (2002) Supplementary memorandum of economic policies of the government of republic of Bulgaria and the Bulgarian national bank.

Jakab, M., A. S. Preker, A. Harding and L. Hawkins (2002) The Introduction of Market Forces in the Public Hospital Sector: From New Public Sector Management to Organizational Reform. HNP Discussion Series. Washington.

Jakab, M., Preker, A., Harding, A. and Hawkins, L., (2002), The Introduction of Market Forces in The Public Hospital Sector. From New Public Sector Management to Organizational Reform. Health, Nutrition and Population (HNP) Discussion Paper, the World Bank.

Kolehmainen-Aitken R. L. (1999) Decentralization and Human Resources: Implications and Impact, Management Sciences for Health. Human Resources for Health Development 2(1): 1-16.

Kotilainen, H. (2001) Rehabilitation of the hospital infrastructure in a developing country. World Hosp Health Serv 37(2): 25-8, 34, 36.

Koulaksazov, S., Todorova, S., Hristova S., Tragakes, E. (ed.) (2003) Health care systems in transition: Bulgaria. Copenhagen, European Observatory on Health Care Systems, WHO.

Local Self government and Administration Act (1991) State Gazette No 77, amendments St.G. No 69/2003.

Matthies S., Lissiyski, D., Montel, I., Crelia S., and Alexandrova L. (2002) Comparative Study of Selected Topics in Health Policy Part I, USAID, Bulgarian Health project.

McKee M. and Healy J. (eds) (2002) Hospitals in a changing Europe. The European Observatory on Health Care Systems World Health Organization, Open University Press.

McKee, M. (2003) What are the lessons learnt by countries that have had dramatic reductions of their hospital bed capacity?, Health evidence network, WHO Regional Office for Europe.

McKee, M. and J. Healy (2000) The role of the hospital in a changing environment. Bulletin of the World Health Organization 78(6): 803-810.

McKee, M. and J. Healy (2001) Implementing hospital reform in central and eastern Europe and central Asia. Eurohealth 7(3), WHO.

McKee, M., MacLehose, L. and Nolte, E. (2004) Health policy and European Union Enlargement. European Observatory on Health Systems and Policies, WHO.

Miller WL, Grodeland AB, Koshechkina TY. (2000) If you pay, we'll operate immediately. J Med Ethics. Oct;26(5):305-11.

Mills A. (1994) Decentralization and accountability in the health sector from an international perspective: what are the choices. Public administration and development, 14: 281-92.

Mills, A (ed) (1990) Health System Decentralization: concepts, issues and country experience, Geneva: WHO.

Mills, A. Bennett, S, Russell, S., (ed.) (2001) The challenge of health sector reform. What must governments do? Palgrave, N.Y.

Ministry of Health (2000) Ordinance №1 for criteria, indicators and methodology for accreditation of hospital establishments and diagnostic and consultative centres, St. G 38, amendment St.G 58/ 2001.

Ministry of Health (2001) National health strategy "Better health for better future. Sofia, April.

Ministry of Health (2002) Strategy for restructuring hospital care in Bulgaria 2002-2006.

Ministry of Health (2003) Ordinance No 13 for criteria, indicators and methodology for accreditation health establishments, St. G.No 80., amendments St.G. 28/2004.

Ministry of Health (2003), Agreement between ministry of health and NHIF for division of tasks for gradual changes of hospital financing (in Bulgarian)

Ministry of Health (2004) Methodology for subsidising hospitals with state and municipal shares in 2004, MoH, Bulgaria (in Bulgarian).

- Ministry of Health (2004) Report on the health of the nation at the beginning of 21 century. Analysis of the health care reform. June. Sofia (in Bulgarian).
- Ministry of Health (2006) National health strategy 2007-2013
- Ministry of Health (1997) National conference: health financing, proceedings, Sofia, Bulgaria.
- Moran, M (1999) *Governing the Health Care State*, Manchester: Manchester UP.
- Mossialos, E, Dixon, A., Figueras J and Kutzin J. (2002) *Funding health care: options for Europe*. European Observatory on Health Systems and Policies, WHO.
- Navarro, V. (2002) Exploring health policy development in Europe, *Social Science and Medicine* 54 (6) 993-995
- Neubauer, G. (1993) Case mix and funding, the German approach, Proceedings from workshop on case mix and resource management, Sofia, Bulgaria.
- Normand, C. and Weber, A. (1994) *Social Health Insurance. A Guide book for planning*, WHO.
- NSI (2004) *Health care*, National Statistical Institute of the Republic of Bulgaria. Sofia.(www.nsi.bg).
- OECD (1994) *The Reform of Health Systems. A review of seventeen OECD countries*, Paris, OECD
- Orosz, E. and Hollo, I. (2001) *Hospitals in Hungary: The story of stalled reforms*. Eurohealth Vol 7(3). Special Issue Autumn.  
<http://www.lse.ac.uk/collections/LSEHealthAndSocialCare/pdf/eurohealth/vol7no3.pdf>.
- Oxley, H. and MacFarlan, M. (1995) *Health care reform: controlling spending and increasing efficiency. How can OECD countries achieve their health-care goals while keeping rising expenditure under control?* OECD Economics Studies No. 24.
- Parliament of the Republic of Bulgaria (2004) *Legislative survey on the accreditation of health care establishments in EU member states and Accession countries*. Program: stagiers in the parliament, Series No 91. Sofia, Bulgaria (in Bulgarian).
- Pavlova M, Groot W, van Merode G. (2002) *Public attitudes towards patient payments in Bulgarian public health care sector: results of a household survey*. *Health Policy* 59:1-24.
- Physicians' and Dentists' Professional Associations Act, St. G No 83, amendments St.G. No70/2004.
- Policy brief no. 5 (2004) "Configuring the hospital for the 21st century"; *Hospitals in a changing Europe*" (2002), edited by Martin McKee and Judith Healy, etc.
- Popov, M. and Golemanova J. (1998) *Development of municipal health policy – necessity and possible solutions*, in *Health Reform in Bulgaria, II part*, Macedonia press, Sofia (in Bulgarian).
- Popov, M. (1997) *Introduction in the theory and practice of health policy*, in 'Health reform in Bulgaria', I part, Macedonia press, Sofia, pp 50 (in Bulgarian).
- Preker A, and Harding, A. Ed. (2000) *Understanding organizational reforms, The Corporatization of Public Hospitals*, The World Bank, Washington, D.C., 2000 The International Bank for Reconstruction and Development / The World Bank.
- Preker, A, Jakab, M and Schneider, M. (2002) *Health financing reforms in Central and Eastern Europe and the former Soviet Union*, in *Funding health care: Options for Europe*, Mossialos et al, Ed., European Observatory on Health Case Systems, WHO, Open University press.
- Preker, A. S. and A. Harding (2003) *Innovations in Health Service Delivery: The Corporatization of Public Hospitals*. Washington, World Bank.
- Reich, M. (1994) *Political mapping of health policy. A guide for managing the political dimensions of health policy*. Harvard School of Public Health, Boston, USA.
- Reich, M. (1996) *Applied political analysis for health policy reform*. *Current issues in Public health* 2:186-91.
- Rethelyi, J., Miskovits, E., and Szocska, M. (2002) *Organizational Reform in the Hungarian Hospital Sector*, HNP discussion paper, The World bank.
- Roberts, M., Hsiao, W., Berman, P., and Reich, M. (2004) *Political analysis and strategies, in Getting the health reform right*. Oxford university press, pp.71.

- Roemer, M. (1973) Hospital legislation and hospital systems. Geneva, World Health Organization.
- Rondinelli, D. (1981) Government decentralization in comparative theory and practice in developing countries. *Intern review administrative sciences*, 47:133-45.
- Salchev, P. (2004) The New challenges of the healthcare reform in Bulgaria, presentation for Economist intelligence - 24 Feb. 2004, Sofia, Bulgaria.
- Saltman, R. (2003) Meeting public-private boundaries in European health systems. *European Journal of public health*, 13:24-29.
- Saltman, R. and Figueras, J. (1998) Analyzing the evidence on European health reforms, *Health Affairs* 17 (2) 85-108.
- Saltman, R., and Figueras J., (1997) The process of implementing reform, in *European health care reform. Analysis of current strategies*, WHO. Copenhagen.
- Saltman, R., Busse R. and Figueras J. (2004) *Social health insurance systems in western Europe* Open University Press, European Observatory on Health systems. WHO.
- Saltman, R., Figueras, J. and Sakellarides, C. (eds) (1998) *Critical challenges for health care reform in Europe*. Open University Press.
- Schaapveld, K., Krleza-Jeric, K., Stiphout, J. (1995) *Management Aspects of the Bulgarian health care reform*, TNO report PG 95.075, TNO Prevention and Health division Public Health and Prevention, Leiden, Netherlands.
- Schneider, M., Gediminas, C. and Murauskiene, L. (2000) *Health systems of Central and Eastern Europe*. Basys.
- Semerdjiev I. (2003) *Healthcare In Bulgaria*, The International Healthcare and Health Insurance Institute, Sofia (in Bulgarian).
- Semerdjiev, I. (1998) General parameters of health reform in Bulgaria, minutes from National conference on health reform in the Republic of Bulgaria, 25-25 April 1998, Sofia, pp 50. (in Bulgarian).
- Shakarishvili, G., ed. (2005) *Decentralization in health care. Analysis and experiences in Central and Eastern Europe in the 1990s*. Open Society Institute, Budapest.
- Shaw, C. (2004) *Toolkit for Accreditation Programs*, The International Society for Quality In Health Care, Australia ([www.isqua.org](http://www.isqua.org)).
- Shaw, J. (1998) *Hospital Management: Training and Professional Development*. Geneva, World Health Organization.
- Tafardjiysky B and Firestine R. (2002) *Municipalities And Hospital Capital Spending In Bulgaria (Draft)*, Local Government Initiative, Club Economica 2000, Submitted to USAID/Bulgaria, Prepared by RTI , April. Sofia.
- Todorova I, Baban A, Balabanova D, Panayotova Y, Bradley J. Providers' constructions of the role of women in cervical cancer screening in Bulgaria and Romania. *Soc Sci Med*. 2006 Aug; 63(3):776-87.
- USAID (2000) *Broadening the benefits of reform in Central and Eastern Europe and the New independent states. A social transition strategy for USIAD*. Bureau for Europe and Eurasia. Washington DC.
- USAID (2002) *Attitudes and expectations to Bulgarian insurance system and voluntary funds, Bulgarian health project*.
- USAID (2002) *Comparative study of health policy, part I, Bulgarian health project*.
- USAID (2002) *RESEARCH RESULTS: Health information needs of Bulgarian citizens*, USAID, Bulgarian health project, Keith Cherry, Sally Crelia, Barents Group of KPMG Consulting, Inc., Sofia, January.
- Vitoshka research (2001) *Notions and expectations toward health insurance system and voluntary health funds. Analysis of results from discussion in focus groups*.
- Walford V., and Grant K. (1998) *Health Sector Reform. Improving Hospital Efficiency*. DFID Health Systems Resource Centre. Institute for Health Sector Development Limited Health Systems

Resource Centre, UK.

Walt, G. (1994) Health policy. An introduction to process and power. Witwatersrand University press, Johannesburg.

Walt, G. (1998) Implementing health care reform: A framework for discussion. in Saltman RB, Figueras J and Sakellarides C. (eds). Critical challenges for health care reform in Europe. Open University Press.

WHO (1990) The Role of the hospital in the district: delivering or supporting primary health care? Geneva, World Health Organization.

WHO (1992) The Hospital in rural and urban districts: report of a WHO Study Group on the Functions of Hospitals at the First Referral Level. Geneva, World Health Organization.

WHO (1997) European health reform: Analysis of current strategies and health trends in Europe, WHO Regional publications series No. 72, 15-22.

WHO (1999) The world health report - making a difference. World Health Organization.

WHO (2000) The World Health Report 2000: health systems: Improving Performance, WHO

WHO (2001) Highlights On Health In Bulgaria, European Communities and World Health Organization 2001, Health Information Unit, WHO Regional Office for Europe, Denmark.

WHO (2004-2006) Health for All Database, WHO Regional Office for Europe.

Wiley, M. (1998) Financing operating costs for acute hospital services, in, in Saltman RB, Figueras J and Sakellarides C. (eds). Critical challenges for health care reform in Europe. Open University Press.

World Bank (2000) Project appraisal document on a proposed loan to the republic of Bulgaria for a health sector reform project. Report No 20339 BUL, The World Bank Europe and Central Asia Region.