

eurohealth

Volume 7 Number 3, Special Issue, Autumn 2001

ISSN1356-1030

IMPLEMENTING HOSPITAL REFORM IN CENTRAL AND EASTERN EUROPE AND CENTRAL ASIA

Guest Editors: Judith Healy & Martin McKee



In this issue:

Managing change

The hospital sector in central and eastern Europe

Reforming hospitals in countries of the former Soviet Union

A joint publication between LSE Health & Social Care and the European Observatory on Health Care Systems

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eurohealth is published five times
a year, and provides a forum for
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issues and so contribute to a
constructive debate on public
health policy in Europe.

This Special Issue of *eurohealth*
is a joint publication by LSE
Health & Social Care and the
European Observatory on Health
Care Systems (EOHCS).

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Design and Production:
Westminster European
westminster.european@btinternet.com
Printing: Seven Corners Press Ltd



**European Observatory on Health
Care Systems**

**Series Editors: Josep Figueras, Martin McKee, Elias Mossialos and
Richard B Saltman**

Hospitals in a Changing Europe

Martin McKee and Judith Healy (eds)

European Observatory on Health Care Systems;
London School of Hygiene & Tropical Medicine

- **What roles do hospitals play in the health care system and how are these roles changing?**
- **If hospitals are to optimise health gains and respond to public expectations, how should they be configured, managed, and sustained?**
- **What lessons emerge from experiences of changing hospital systems across Europe?**

Hospitals of the future will confront difficult changes: new patterns of disease, rapidly evolving medical technologies, ageing populations, and continuing budget constraints. This book explores the competing pressures facing policymakers across Europe as they struggle to respond to these complex challenges. It argues that hospitals, as part of a larger health system, should focus on enhancing health outcomes while also responding to public expectations. Adopting a cross-national, cross-disciplinary perspective, the study assesses recent evidence on the factors driving hospital reform and the strategies used to improve organisational performance. It reviews the evidence from eastern as well as western Europe and combines academic research with real-world policy experience. It looks at the role of hospitals in enhancing health rather than simply processing patients. The book concludes that hospitals cannot be managed in isolation from society and the wider health system, and that policymakers have a responsibility to define the broader health care goals that hospitals should have to meet.

Hospitals in a Changing Europe synthesises current evidence in a readable and accessible form for all practitioners, policymakers, academics and graduate level students concerned with health reform.

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January 2002 c.288pp
0 335 20928 9 Paperback c.£22.50
0 335 20929 7 Hardback c.£65.00

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LSE Health & Social Care would like to thank the European Observatory on Health Care Systems, Merck and Co. Inc. and the European Investment Bank for their kind and generous financial support in making this Special Issue of *eurohealth* possible.

Contents

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Editorial

- 1 Hospitals in transition in central and eastern Europe
Judith Healy & Martin McKee



Managing Change

- 2 Reforming hospital systems in turbulent times
Judith Healy & Martin McKee
- 8 Eastern European hospitals in transition
Teresa Ho & Narguiz Ali-Zade
- 15 Mental health reform in eastern Europe
Rachel Jenkins, Toma Tomov, Dainius Puras, George Nanishvili, Nikolai Kornetov, Manana Sherardze, Simon Surgurladze & Wolfgang Rutz

Central and Eastern Europe

- 22 Hospitals in Hungary: the story of stalled reforms
Éva Orosz & Imre Holló
- 26 Coping with environmental change: The hospital perspective in Hungary
János Réthelyi, Eszter Miskovits & Miklós Szócska
- 29 Implementing hospital reforms in the Czech Republic
Reinhard Busse, Alena Petrakova & Roman Prymula
- 32 Hospital sector reform in Poland
Adam Kozierekiewicz & Jerzy B Karski
- 36 Reforming hospitals in Croatia: Asking the patients
Stipe Orešković
- 40 The elements of health care system reform in Moldova
James Cercone & Joana Godinho

- 42 Hospital sector reform in Bulgaria: first steps
Evgenia Delcheva & Dina Balabanova
- 47 Restructuring hospitals in Albania
Besim Nuri
- 51 Restructuring hospitals: Bosnia and Herzegovina
Nedim Jaganjac & Elke Jakubowski
- 54 Hospital policy in post-conflict settings: Site of care and struggle
Anthony Zwi, Val Percival & Jim Campbell
- 57 Hospital reform in Romania
Reinhard Busse & Carmen Dolea

Former Soviet Union

- 61 Estonian hospital sector in transition
Toomas Palu & Reet Kadakmaa
- 65 Long term care in central and eastern Europe: The case of Estonia
Anna Howe & Agris Koppel
- 70 Hospital sector reform in Lithuania
Zeneta Logminiene
- 74 Georgia: Implementing a hospital restructuring programme
Laura Rose & George Gotsadze
- 79 Paying hospitals in Russia
Igor Sheiman
- 82 Tuberculosis hospitals in Russia
Max Kammerling & Nicholas Banatvala
- 89 Planning a hospital system for Bishkek City
Jane Haycock
- 90 Addressing informal payments in Kyrgyz hospitals: a preliminary assessment
Joe Kutzin, Tilek S Meimanaliev, Ainura S Ibrahimova, Ninell Kadyrova & Tobias Schüth

ACKNOWLEDGEMENT

The Editorial team wish to express their thanks to Caroline White for her help in putting together this Special Issue of *eurohealth*, and to the Czech Republic Tourism Office in London for kindly providing the front cover photograph of Prague.

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Hospitals in transition in central and eastern Europe and central Asia

The region covered in this Special Issue ranges across 30 countries, from the Czech Republic in the west to Kazakhstan in the east, and from Russia in the north to Bulgaria in the south. These countries are extremely varied in their geography, populations and cultures, but all, to a greater or lesser extent, entered the 1990s with Soviet style health care systems. Although each country has its own distinctive history of health reforms, their experiences of implementing changes in their health systems share many common elements.

One of the most important of these elements is the fact that hospitals dominated their health care systems. Eastern European countries at the beginning of the 1990s had over 50 per cent more hospital beds for their populations than the European Union (EU) countries (although many facilities were extremely basic). Hospitals accounted for over 70 per cent of the health care budget, compared to less than 50 per cent in most EU countries. As health budgets shrank in the mid 1990s – some to around one-third their pre-independence levels, and often to less than 3 per cent of GDP – this left little money for restructuring hospitals, for alternative primary care provision, or new initiatives such as health promotion. Shrinking funds as well as poor health outcomes prompted a search for ways to restructure hospital systems so as to free scarce resources. These strategies included varying combinations of capping the number of hospital beds, closing small village hospitals, devolving ownership to local government, introducing new payment methods, and setting criteria for licensing hospitals.

Over the last decade, most countries have embarked upon major changes to their health sectors, whether voluntary or involuntary, planned or unplanned. Overall hospital capacity has been reduced. Eastern Europe at the end of the decade, however, still had 9.5 hospital beds per 1,000 population, compared to 6.8 in central Europe and 6.7 in the European Union. Although the distribution of hospital beds has changed, it is not clear that patient management has changed; except for the worse in some countries due to severe shortages of medical supplies. Patient management in western Europe meanwhile has changed radically over the last decade. Not only do patients stay shorter times but they are treated more intensively, such that hospitals are much busier places. Hospitals in many parts of eastern Europe, however, offer social care as well as health care, while a lack of funding and technology, out-dated clinical protocols and perverse fiscal incentives, and few community-based alternatives, combine to keep patients in hospital for longer.

Hospitals in all parts of Europe are facing growing pressures. These include the impact of changes in populations, changing patterns of disease, greater opportunities for medical intervention with new knowledge and technology, and raised public and political expectations. These changes have important implications for how hospital care is provided, since new types of care require new configurations of buildings, people with different skills and new ways of working. In this vein we see that modern hospitals are

shifting more treatment to community-based alternatives, such as day clinics that can undertake the less invasive surgery techniques. And another driver for change, at least in central Europe, is the effort to meet criteria to join the European Union. While health care does not form part of the accession criteria, many aspects of European law do have implications for hospital provision.

The experiences of hospital reform in central and eastern Europe thus warrant more attention for several reasons. First, hospitals consume a substantial proportion of very limited health care budgets. Second, their position at the apex of the health care system means that the policies they adopt – which determine access to specialist services – have a major impact on overall health care. Third, the specialists who work in hospitals provide professional leadership. Finally, technological and pharmaceutical developments, as well as more attention to evidence-based health care, mean that the services hospitals provide can contribute significantly to population health. If hospitals are ineffectively distributed and organised, therefore, their potentially positive impact on health will be reduced or even be negative.

Hospital systems in all parts of the world have proved very difficult to change. Even where a policy is based on clear evidence, any change encounters many barriers. Hospitals are remarkably resistant to change, both structurally and culturally. They are, quite literally, immovable structures whose designs were set in concrete, often many years previously. Their configuration often reflects the practice of health care and patient populations of bygone eras, while their place in the health care system reflects both political and cultural values. The implementation of hospital reforms and their outcomes have been very variable across central and eastern Europe, but a common experience is the considerable barriers encountered. These health systems were designed, and their staff trained, to treat people in hospital not in the community. And powerful vested interests in the health bureaucracy and medical profession are often opposed to change. Central plans drawn up within a bureaucratic tradition have not taken sufficient account of the many actors in the policy process, the steps required to implement change, and the need to involve more people in the new and more pluralist context.

This Special Issue of *eurohealth* gathers together papers on experiences of restructuring hospital systems in central and eastern Europe and central Asia. While high hopes and grand plans receive a good deal of attention in the policy literature, the actual experience of implementing change in these transition countries has generally been neglected. That these experiences have often proved disappointing should not be surprising given the constraints on putting plans into action. *Inter alia*, these papers address questions such as: What was the context for hospital reform? Was there agreement on the policy? Who were the stakeholders? Were they winners or losers in the proposed reforms? How complex was the plan? Were the necessary resources available? What were the expected effects and was the policy, in fact, appropriate for the country?

Judith Healy & Martin McKee

Reforming hospital systems in turbulent times



Judith Healy



Martin McKee

The countries of central and eastern Europe and central Asia have embarked, on a varying extent over the last decade, on a process of restructuring their hospital-dominated health care systems. In doing so, they have, however, encountered considerable barriers. Hospitals are, literally, large immovable objects, frequently designed to meet the needs of a long-gone era. Their cultures are often equally rigid, dominated by powerful medical specialists who resist challenges to their dominance. Even under the best of circumstances implementing change is difficult, but some of these countries have been doing so under the worst of circumstances: near economic collapse; social upheaval; in the midst of re-building their political and civil institutions; while facing war or civil conflict; and the reduction of health budgets.

Their task is made more difficult by the weak evidence base on which they can draw. Change is often driven more by ideology than by evidence of effectiveness, and despite massive restructuring of hospital systems across western Europe, the determinants of success or failure are in fact poorly understood.¹ Many of the reforms in eastern European countries to-date were based not on good evidence of what works, but rather on a rejection of the past; that is, the centralised Soviet model health system based on 'command and control'. In so doing, a more 'western' decentralised, market and consumer-oriented model was seen as the only possible solution. Unfortunately, even when such policies do work in high-income countries with established and regulated market economies and

strong civil institutions, the same is not necessarily true in the conditions that prevail in eastern Europe.

A final problem is the so-called 'implementation gap': even policies based on good evidence and a firm commitment to change can fail in implementation. As we argue elsewhere,² in the rush to devise new policies in the early stages of independence in central and eastern Europe, insufficient attention was paid to how plans would be implemented. The international organisations lacked knowledge of organisational structures and capacities within each country, and the national ministries of health had little experience in implementing change after decades of static normative planning.

The countries of central and eastern Europe, including those of the former Soviet Union – some 30 countries – are considered altogether here because, despite individual cultural and historical differences, they share the legacy of a Soviet model health care system.³ Of course, central European health systems have many features that place them midway between west and east. This paper will show, therefore, that there are three very different hospital patterns across Europe: that of the European Union countries, that in the central European countries, and the eastern Europe pattern. We analyse trends in the supply and utilisation of hospital services over the last decade in Europe. We also consider the considerable obstacles in central and eastern Europe to implementing new hospital policies in turbulent times. These challenges include the changing policy context, with its gradual shift from a highly centralised approach to policy and planning to a more pluralist approach given the increasing numbers of policy players.

Central and eastern European hospital systems

Central and eastern European countries at the beginning of the 1990s all had an extensive and expensive supply of hospitals that dominated the rest of the health care sys-

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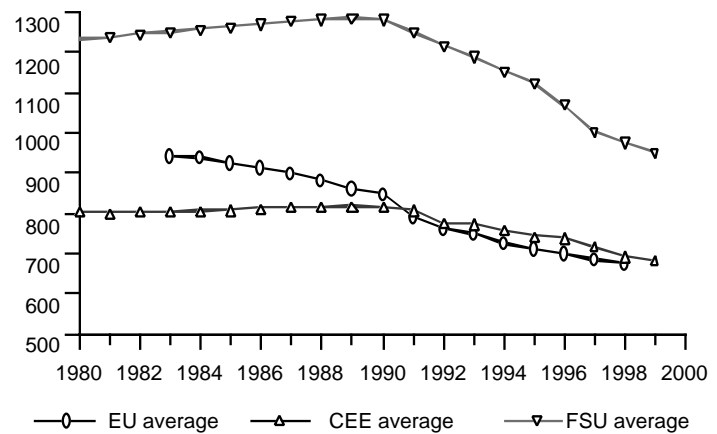
tem.³ A plentiful supply of hospitals and hospital beds was (and still is) regarded as the main measure of a good health care system. This was a legacy of the Semashko All-Union Research Institute of Social Hygiene and Public Administration in Moscow that drew up normative planning standards (such as the number of hospital beds per 1,000 population) that were applied across the Soviet Union (hence the term 'Semashko model'). Hospitals were funded and medicine was practised across these health care systems in such a way as to keep beds full.² While not bound by these standards, the Soviet satellite states were heavily influenced by them, and we can identify three main characteristics which they share.

The first characteristic of eastern European hospital systems, therefore, is their large number of hospital beds. In 1990, the 15 republics of the Soviet Union had, on average (population weighted), over 50 per cent more hospital beds for their populations than the 15 European Union (EU) countries and 12 central and eastern European (CEE) countries (Figure 1). Since then, the supply of beds in all types of hospitals has fallen steadily, although a substantial but unknown part of this reduction is on paper only – for since hospitals were funded in part according to the number of beds, hospital staff had a substantial fiscal incentive to maximise this count. In 1998, there were 6.7 hospital beds per 1,000 in the EU, 6.9 in the CEE and 9.7 in the Newly Independent States (NIS).⁴ Of course, the use of bed numbers is somewhat misleading. A bed in a village hospital in Siberia, for example, is a very different proposition to a bed in a high-technology tertiary care hospital in Paris.

Turning to acute hospitals (offering active medical treatment and excluding long-stay psychiatric, tuberculosis and geriatric hospitals), in 1990 the Soviet Union had nearly twice the number of acute hospital beds than the EU (Figure 2). Three patterns are evident. Acute beds fell steadily in the EU from the 1980s, after 1990 in central Europe, and from the mid 1990s in former Soviet Union countries. By 1998 there were 4.6 acute hospital beds per 1,000 population in the European Union, compared to 5.8 in central Europe, and a sharp reduction to 7.1 in the former Soviet Union.⁴

One reason for this high bed capacity was fragmentation and specialisation. In the Soviet Union there was – and in these countries still is – an extensive network of

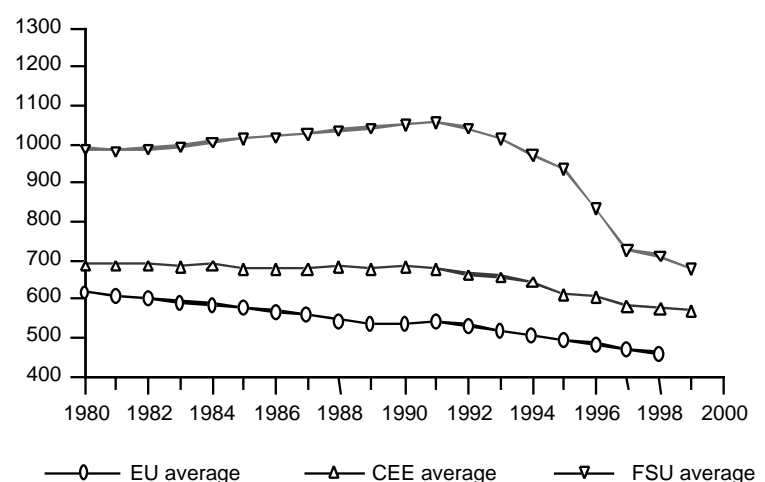
Figure 1
NUMBER OF HOSPITAL BEDS PER 100,000 POPULATION



Source: World Health Organization, 2001⁴

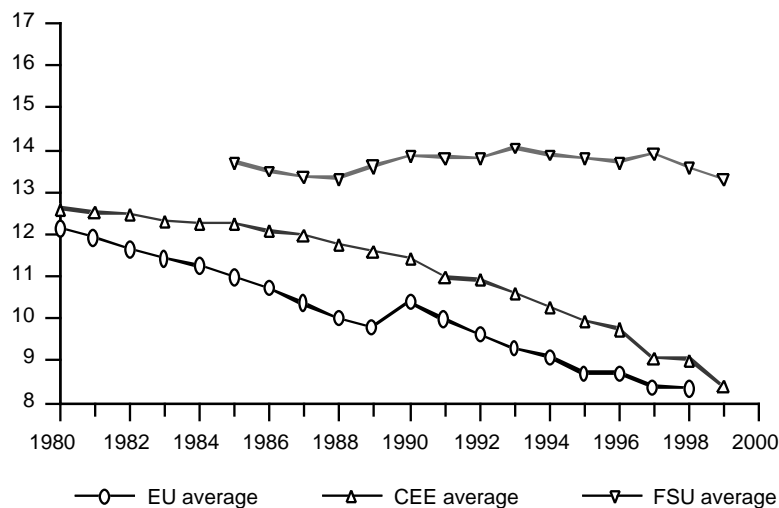
specialist hospitals, with maternity, paediatric, psychiatry, tuberculosis, cancer, dermatology, sexually transmitted diseases and ophthalmology hospitals at national, regional, and sometimes district level. Hospitals were vertically organised into tiers according to the level of public administration. At the bottom were the rural village hospitals. One step up were the district (*rayon*) hospitals in the main town, followed by the city hospitals and then the regional (*oblast*) hospitals. Finally were the national (tertiary care) hospitals. In parallel, at district, regional and national levels, were the specialist hospitals, as well as dispensaries (long-term care hospitals) for conditions such as tuberculosis. There were also parallel health systems – often with their own hospitals – for senior party members and for the main government depart-

Figure 2.
BEDS IN ACUTE CARE HOSPITALS/100,000 POPULATION



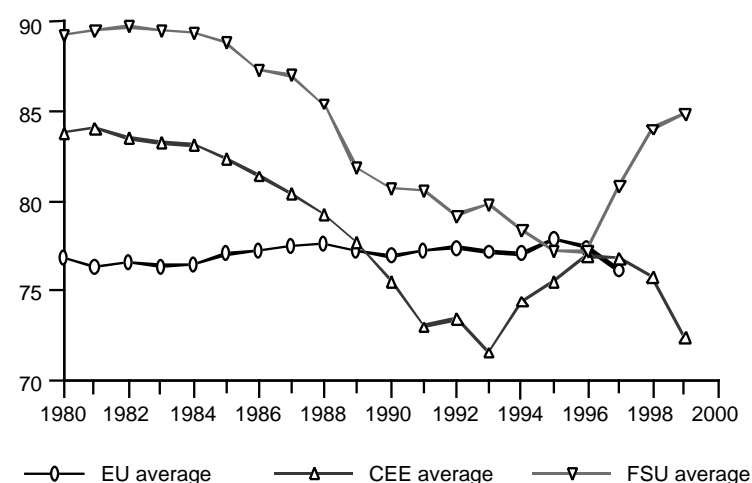
Source: World Health Organization, 2001⁴

Figure 3
AVERAGE LENGTH OF STAY, ACUTE HOSPITALS (DAYS)



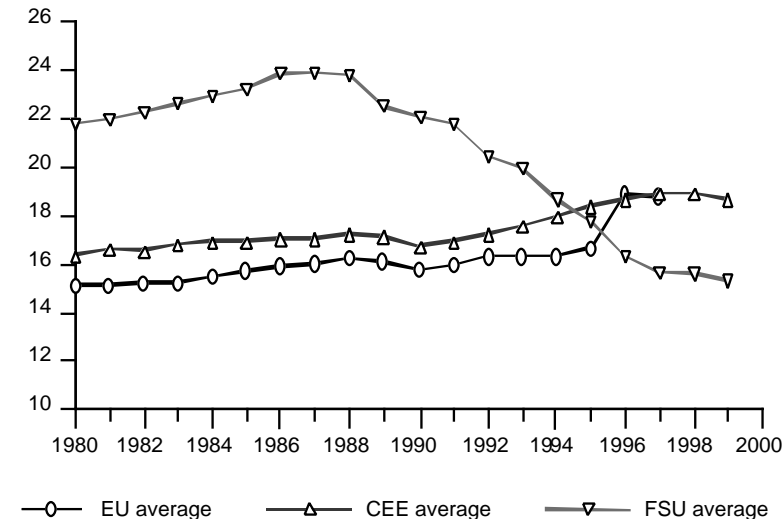
Source: World Health Organization, 2001⁴

Figure 4
BED OCCUPANCY RATE (%) IN ACUTE HOSPITALS



Source: World Health Organization, 2001⁴

Figure 5
ACUTE CARE HOSPITAL ADMISSIONS PER 100 POPULATION



Source: World Health Organization, 2001⁴

ments, such as ministries of internal affairs, railways, and defence forces. This duplication and fragmented administration still greatly adds to the surplus capacity and to the difficulties in rationalising the hospital system in these countries.

A second characteristic is the slower throughput of hospital patients compared to western Europe (although in all countries there are issues of data validity and completeness). While the average length of stay (ALOS) in acute care hospitals had dropped steadily to 8.3 days by 1998 in the European Union, and 9 days in central Europe, it has remained at over 13 days in the former Soviet countries (Figure 3). Much treatment is still determined by centrally devised clinical protocols that typically require long stays in hospital. Also, hospitals have financial incentives, through funding methods based on numbers of beds or patient days (plus informal payments by patients to physicians) that reward hospitals and staff for lengthy patient stays, while adequate substitutes for hospital care are generally unavailable. Thus, the pattern of utilisation reflects both the financial incentives and the absence of opportunities for alternative or more streamlined care.

Occupancy levels fell dramatically in central and eastern Europe and the former Soviet Union in the early 1990s but have since climbed back to higher levels in central Europe, though continuing to fall in eastern Europe (Figure 4). In contrast, occupancy levels in the EU generally remain stable at between 75–80 per cent. The complex pattern both in central and eastern Europe suggests excess capacity and reduced resources to run hospitals, while both very high and very low occupancy levels suggest system management problems. Consequently, there is a need for improved strategies to manage the flow of patients through hospitals.

Admission rates to acute hospitals in former Soviet countries fell dramatically between 1990 and 1998 (Figure 5). The initially very high admission rates reflect several factors. Primary care was poorly developed, while physicians had limited capacity (whether in terms of knowledge, skills or resources) to manage even minor illnesses, such that many patients were referred to hospital. Central hospitals had larger budgets, the most skilled physicians and a better supply of equipment and drugs. These factors still remain, but admission rates have now collapsed as many patients can no longer afford to pay either formal or

informal hospital charges and there is less reason to attend hospitals that lack pharmaceuticals, medical supplies and functioning equipment.

The third characteristic is the fiscal burden placed upon shrinking health sector budgets by the dominance of hospitals. Health expenditure has dropped below 5 per cent of GDP in many countries, in many cases exacerbated by a shrinking economy and a collapse in production. In contrast, health care expenditure in real terms is rising steadily in EU countries and in central Europe (from a very low level), but is much lower in the former Soviet Union (Figure 6). For example, adjusting for purchasing power, 1998 health expenditure per capita was US\$2077 in France, US\$705 in Hungary, US\$111 in Ukraine, and US\$60 in Kyrgyzstan. In the Central Asian Republics, official expenditure on health care has dropped in real terms to one-third of its 1990 level.

Hospitals are very significant in fiscal terms since they take up the largest share of the health budget, up to 70 per cent in some eastern European countries; compared to generally less than 50 per cent in European Union countries. Any systematic change in the context of shrinking health budgets, such as strengthening primary care, inevitably requires a reconfiguration of the hospital system to free resources.

Implementing change

Policy-makers and planners, whether from a bureaucratic or pluralist tradition, rarely systematically consider the challenges and obstacles to implementation. Such concerns are typically left to lower level managers who must implement the policies. Hospital systems are extremely complex, however, and thus change is intrinsically difficult to manage. In the following section we explore some of the key factors involved in the implementation of change, which are discussed in more depth elsewhere.² We draw upon examples from central and eastern Europe, specifically the Health Care Systems in Transition reports published by the European Observatory on Health Care Systems (www.observatory.dk), as well as the papers in this issue of *eurohealth*.

Societal constraints

The implementation of health policy is influenced by many contextual factors, including the macroeconomic situation, the political system, societal values, and the institutional structure of the health system. Some contextual factors have been

described above: greatly constrained funding; the demands made by hospital-dominated systems; and the inherited structure of the Soviet-style health care system. Another consideration is that hospitals in

“...admission rates have now collapsed as many patients can no longer afford to pay either formal or informal hospital charges and there is less reason to attend hospitals that lack pharmaceuticals, medical supplies and functioning equipment”

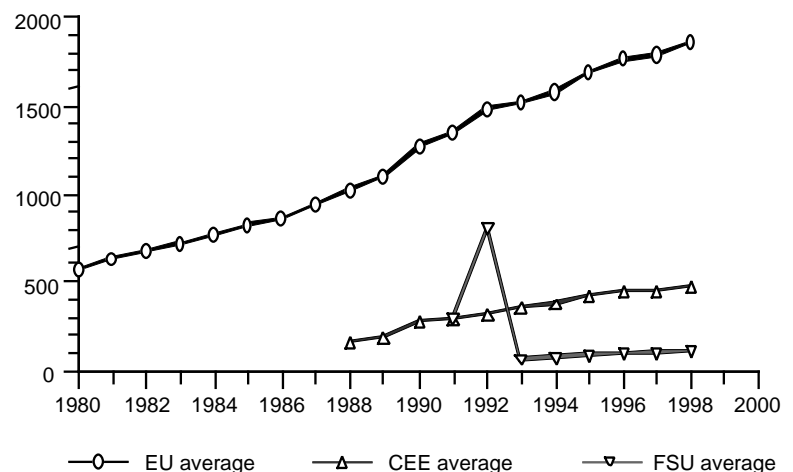
eastern Europe serve different functions to those in much of western Europe; having been designed as the dominant providers not only of health care, but also much social care as few community care services (apart from the family) exist. Finally, some countries (such as Albania, Bosnia, Georgia, Kosovo and Tajikistan) have faced wars and civil unrest. The major contributor to the fall in hospital beds in the countries of the former Soviet Union has, however, been the impact of economic crisis, which forced the closure of many small hospitals in rural areas. For example – down from 684 in 1994 to 208 in 1997 – the number of hospitals in Kazakhstan fell by nearly half between 1990 and 1997,⁷ mostly from the closure of village hospitals.

Lack of policy agreement

Central and eastern European countries have undergone massive societal changes,

Figure 6

TOTAL HEALTH EXPENDITURE IN PPP\$ PER CAPITA



Source: World Health Organization, 2001⁴ Note: 1992 figures are highly questionable.

both for good and ill, with doubts cast upon many old certainties such as the ownership, scale and role of hospitals. One debate revolves around whether health care is a collective good supplied by the state, or a commodity to be bought and sold on the market. Policies on the role and function of a hospital are thus influenced by social and political values, as well as by technical considerations.

Western European countries have typically engaged in incremental changes to their health care systems over the last few decades. In contrast, several eastern European countries embarked upon comprehensive restructuring in the early 1990s, in the context of dramatic economic, political and social changes following independence. Some adopted a 'big bang' approach (such as the Czech Republic); others a more gradual overhaul (such as Hungary

“Entrenched vested interests, especially in the context of deteriorating socioeconomic circumstances, are likely to oppose change”

and Bulgaria). Some produced a national health 'plan', but typically these are at a high level of generality rather than representing a detailed plan of action. Even where there is near policy consensus, successful implementation is unlikely where there is a long chain of decision-making,⁸ with many inter-linked decisions and often involving external agencies.

Shrinking resources

Change requires resources, financial, human and technical, but these are scarce throughout the region (countries are experiencing severe difficulties in maintaining their existing systems⁶). As we have noted, most countries are attempting to overhaul their health care systems driven in large part by shrinking budgets. Change is, however, much easier to implement with new resources. Thus, new programmes have typically been implemented using funds from external donors. However, one of the greatest obstacles is the limited human resources within these health care systems to bring about change. There is a great need for capacity building, which is even more important in the face of scarce financial resources.⁹

Enlisting interest groups

Research on implementation, particularly within a pluralist tradition, emphasises the importance of identifying and involving the stakeholders; for successful change is likely to depend upon consultation and coalition building. Such interest groups include elected politicians, commercial interests, external donors, the media, the public, civil servants, and professional associations. In the new, more dispersed, power structures, grand plans developed in isolation from key stakeholders have floundered.

Entrenched vested interests, especially in the context of deteriorating socioeconomic circumstances, are likely to oppose change.¹⁰ Thus, reform of tuberculosis services in the Tomsk *oblast* in Russia succeeded only by introducing financial incentives for staff funded by external donors. In Hungary, despite several attempts to reduce hospital capacity,¹¹ strong vested interests, principally physicians and local politicians, have successfully opposed change.¹²

System-wide effects

The effects of implementing change must be considered, not only for hospitals but also for other parts of the health sector. The hospital is part of a wider health care system in which all the elements are interdependent.¹ For example, if hospital admissions are reduced, the demand for outpatient care may increase. Policies aimed at reducing hospital capacity have been driven by the necessity to reduce costs, but the impact on equity and access to health care is unclear; especially since alternative provisions, including strengthened primary care, will take time to develop. There are few well-designed evaluations of the impact of change on the people seeking care. Although there is evidence that individual patients often bear the burden of funding shortages, especially where they must pay (both officially and unofficially) for hospital treatment.^{13,14}

Lessons and implications

The extent of health system reform varies considerably across the region. Some countries, such as Hungary, are on the verge of European Union accession and are necessarily more advanced in the reform process, while others, such as Bosnia-Herzegovina, are recovering from the devastation of war and still have a long way to go. Nevertheless, they all must restructure hospital systems that are ill-equipped to meet the challenges of the twenty-first century.

The greatest changes have arisen, however, not from careful planning, but rather because of war or economic collapse. In other words, systems have been forced to react to external circumstances rather than anticipate them. In many cases, these enforced structural changes have not been accompanied by the necessary changes in clinical practice.

Some lessons are apparent from the experience of the past ten years. The first is that hospital reform must be seen as part of health sector reform, but also as part of wider public sector reform. The legacy of fragmentation and vertical programmes within these health care systems makes 'joined-up' change difficult. Further, a system-wide approach has often been inhibited where hospitals have become autonomous, pursuing their own survival at the expense of the wider interests of the health care system.

The second lesson is that new sources of finance, such as insurance funds and new payment methods, were often seen, incorrectly, as panaceas. In many former Soviet countries, formal payments are only a minor element of overall fiscal flows. Further, structural changes to financing have to be accompanied by changes in the culture of health care organisations.

Third, market-based policies are on their own unlikely to be successful. The creation of autonomous hospitals has meant that managers focus on the survival of the institution. Instead of reducing capacity, they have allowed capital stock to deteriorate and have run down the services they provide. In contrast, regional plans that look at the role of a group of hospitals in meeting the health needs of a population, or a management structure that groups together several hospitals (as recently in Kyrgyzstan), seem more likely to bring about change.

Finally, these countries must develop and involve their human resources in health care reform. Some countries have been fortunate in being able to draw on managerial skills to support change. Many of the former Soviet-bloc countries are especially disadvantaged; in starting from a low skills base they have lost many of the brightest staff to the private sector or to employment abroad. Health care professionals and other interest groups also are adapting to a new pluralist policy context. However, strengthening human resources involves bringing on board a range of new stakeholders and working in different ways. And this may be the greatest challenge.

REFERENCES

1. McKee M, Healy J. The significance of hospitals: an introduction. In: McKee M, Healy J (eds). *Hospitals in a Changing Europe*. Buckingham: Open University Press, 2002 (in press).
2. Healy J, McKee M. Implementing hospital reform in eastern Europe. *Health Policy* (in press).
3. Ho T, Ali-Zade N. Eastern European hospitals in transition. *Eurohealth* 2001;7(3), this issue.
4. World Health Organization. *Health For All Database*. Copenhagen: WHO Regional Office for Europe, 2001.
5. McKee M, Healy J, Falkingham J (eds). *Health Care in Central Asia*. Buckingham: Open University Press, 2002 (in press).
6. Walt G. *Health Policy*. Johannesburg: Witwatersrand University Press, 1994.
7. Kulzhanov M, Healy J. *Health Care Systems in Transition: Kazakhstan*. Copenhagen: European Observatory on Health Care Systems, 1999.
8. Pressman JL, Wildavsky A. *Implementation: How Great Expectations in Washington Are Dashed in Oakland*. Berkeley, Los Angeles: University of California Press, 1973.
9. Grindle M, Hildebrand M. Building sustainable capacity in the public sector: what can be done? *Public Administration and Development* 1995;15:441-63.
10. Kammerling M, Banatvala N. Tuberculosis hospitals in Russia. *Eurohealth* 2001;7(3), this issue.
11. Orosz E, Holló I. Rationalising Hungarian hospitals: the story of stalled reforms. *Eurohealth* 2001;7(3), this issue.
12. Gaál P, Rekassy B, Healy J. *Health Care Systems in Transition: Hungary*. Copenhagen: European Observatory on Health Care Systems, 1999.
13. Falkingham J. Poverty, out-of-pocket payments and inequality in access to health care: evidence from Tajikistan. *Social Science and Medicine* 2001 (forthcoming).
14. Lewis M. Informal health payments in eastern Europe and central Asia: issues, trends and policy implications. In: Mossialos E, Dixon A, Figueras J, Kutzin J (eds). *Funding Health Care: Options for Europe*. Open University Press: Buckingham, 2002 (in press).

Eastern European hospitals in transition



Teresa Ho

The story of hospital reform in eastern Europe must be understood in the context of the wider political and economic events in the region and it should also be understood that the dominance of hospitals in the former socialist countries has shaped all aspects of their health care systems.

In the rush to overhaul their systems during the 1990s, many eastern European reform initiatives adopted from western models proved inappropriate. The future of hospitals in eastern Europe lies in the second generation of reforms that are being tailored more to the cultural, social and economic environments of these countries.

This overview of hospital system reforms in eastern Europe and the Former Soviet Union discusses the inherited structure of the hospital sector together with the main factors that contributed to its development. Then, the main attempts to restructure hospital systems are outlined during the decade of transition. Finally, issues are identified that remain to be addressed in 2002 and beyond.



Narguiz Ali-Zade

The inherited system: hospitals in the late 1980s

The story of hospital reforms in eastern Europe must be understood in the context of the macroeconomic and political events: the region's transition to a market economy and democratic political processes. This section describes the situation in the hospital sector just before eastern Europe embarked on its transition from 1989/90 onwards. It is important to emphasise that the story is very similar in each country, reflecting the dominance of the Soviet-style health system in the region. For most countries the pre-transition hospital sector

was marked by the following common characteristics.

The dominance of hospitals

The health systems of the former socialist countries were based on the Soviet *Semashko* model, which was characterised by the dominance of hospitals. Officials and ordinary citizens believed that only hospitals could provide the best medical care. Building new hospitals and training more doctors were considered essential factors for success in health care delivery. The national health care strategy focused more on quantity than quality of services, with political goals taking priority over medical and public health needs. The bulk of resources were directed to inpatient services, which accounted for about 60–75 per cent of total health expenditures. In essence, the hospital focus of the Soviet system did not differ much from that of the western systems of earlier years. However, whereas western countries started to reverse that trend in the 1960s and 1970s, health systems in the socialist bloc continued along this path until the late 1980s.

Specialist hospitals. Hospitals represented the apex of the health care system, with narrow and technically advanced specialities as its crowning glory. Specialised hospitals got the best doctors and the most resources. The needs in speciality areas, such as paediatrics, maternity, infectious diseases and tuberculosis, and especially in super-specialities within each of these fields were overestimated. Further, a great number of specialists in 'narrow' fields worked in polyclinics (outpatient specialist services) along with therapists (adult medicine physicians) and paediatricians.

Surplus physical capacity and surplus staff. Administrative targets and standards of coverage were set in terms of beds and doctors, and maximising their numbers was the

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principal objective. Hospitals had a financial incentive to increase or maintain the number of beds and staff, upon which their budgets were mainly based. Very large multi-thousand-bed hospitals were not uncommon. By the end of the 1980s, bed per capita and doctor per capita ratios far exceeded those observed in western European countries. The nurse-to-doctor ratio, on the other hand, was low, and physicians undertook many tasks that in western Europe were undertaken by nurses.

Decapitalised infrastructure

Expansion in hospital capacity continued even as economic stagnation set in during the 1980s and health budgets became increasingly constrained. Construction of new facilities continued, including many stand-alone single speciality hospitals, while a general hospital and several single-speciality hospitals commonly were erected in close proximity to one another. Many hospital construction projects have been left incomplete to the present day. Building and equipment maintenance and eventually equipment replacement were neglected. By the late 1980s, many hospitals were in serious need of repair and much equipment had far exceeded its useful life.

Poor distribution of technology. Hospitals in the former Soviet Union, and particularly in rural areas, were poorly supplied with technology and equipment, such as X-ray, endoscopic and imaging equipment, and laboratory services. Central facilities received priority such as city research institutes and teaching hospitals. It was not, however, uncommon to see recently purchased expensive equipment sitting idle because hospitals could not procure spare parts. Ministry of health inpatient facilities, therefore, might possess little used state-of-the-art technology in capital cities, while other hospitals and polyclinics lacked even basic equipment. Because many facilities could not perform tests in-house, the central health authorities established centralised diagnostic facilities. In Russia, about 40 diagnostic centres were built and equipped with modern technology; the capitals of former republics had similar centres. Because about 10–20 per cent of Russian hospitals still do not have their own laboratories, utilisation of diagnostic centres is quite high. Shortly after their construction, well-equipped diagnostic centres started facing problems with replacing equipment, repairs, and spare parts. The lack of coordination among multiple owners, and shortage of supplies and equip-

ment, led to the inefficient use of existing facilities and/or duplication of services.

A fragmented hospital system

The organisation of the health care system in eastern Europe and the former Soviet Union was quite different to that in western countries. The system was extremely fragmented with a tendency to refer patients on to the next level of care rather than to treat.

Administrative fragmentation. The provision of health care services was divided between the administrative levels in a country. In Russia, for example, there were four layers of hospitals: national, *oblast* (region), city, and *rayon* (district) hospitals. Within each area, this resulted in a network of a central hospital and several general and/or single speciality hospitals. Hospitals ranged in size from the very small district hospital, with as few as 30 beds, to 2,000 or more bed facilities in the major cities. As well as the proliferation of single-speciality hospitals, the specialities within each hospital had their own separate departments, and many hospitals maintained separate facilities, such as wards and operating floors, for so-called 'infectious' and 'non-infectious' patients. Although they could be located on the same hospital premises, outpatient speciality services (polyclinics) were often managed separately, with little sharing of staff, equipment or other resources.

Big urban areas had a high concentration of multi-profile inpatient facilities with duplicated functions. In addition to hospitals that were accountable to the ministry of health (such as national speciality and teaching hospitals), there were hospitals that reported to a regional or city administration. Other ministries also owned hospitals, such as the ministries of education, railway communications, national defence, internal affairs, and maritime transportation. According to rough estimates, total medical resources at the disposal of all other ministries were almost equivalent to those under the jurisdiction of the ministry of health. Poor coordination among ministries usually led to highly inefficient and ineffective use of scarce resources.

In countries such as Russia, poor road conditions hampered access to inpatient facilities during winter and forced local health authorities to build additional hospitals for remote villages. The threat of infectious outbreaks contributed to the development of various specialised facilities for communicable diseases.

“Many hospital construction projects have been left incomplete to the present day”

“There was little exchange of information between primary care providers, outpatient specialists and inpatient specialists. About every fourth or fifth patient was referred to a hospital”

Primary care was provided in rural areas by feldsher posts (FAPs), rural physician clinics (SVAs), and small rural hospitals (SUBs), and in urban areas by hospital-based or free-standing polyclinics. Secondary care was provided by polyclinics and by small and medium-sized hospitals. Highly specialised national research institutes offered more advanced health services. Such a hierarchy of multiple hospital networks created duplication of services and an oversupply of physical capacity and staff.

Refer rather than treat. Primary care physicians mainly served as dispatchers rather than as gatekeepers who referred only complicated patient cases to specialists. Referral rates to hospitals were high since primary care physicians were not trained to handle a full range of primary and basic secondary care, and speciality care in polyclinics was often of poor quality. Further, district and polyclinic physicians were considered inferior to their specialist colleagues in inpatient departments, and diagnostic equipment was usually of poorer standards. People frequently by-passed primary care services and self-referred to hospitals, often facilitated by informal payments to hospital staff or through personal connections. There was little exchange of information between primary care providers, outpatient specialists and inpatient specialists. About every fourth or fifth patient was referred to a hospital.

No intermediate/social care facilities. There were little or no day care/day surgery facilities, nursing homes, rehabilitation centres, or system of home care to serve those in need of routine, low-intensity care. These patients often remained in hospitals for an extended period of time, contributing to the very high average lengths of stay. The exception was the system of spa facilities that were often used for recreational purposes rather than for rehabilitation of recovering patients. With limited social care services for the elderly and mentally ill individuals (including chronic alcohol dependants), these patients often stayed indefinitely in hospitals after an acute episode, or until alternative care could be arranged.

Inappropriate clinical practices

Clinical practice was regulated by rigid and often outdated practice standards. Standards for care were often excessive (long hospital stays, multiple tests), to protect practitioners from administrative sanctions in case of negative outcomes. Failure

to follow clinical standards regardless of the actual condition of the patient could lead to administrative sanctions or even criminal indictment. Clinical protocols were administratively set, often by a small group of academics, with little consultation with practitioners, or reference to existing evidence.

Quality of care has been the prerogative of the ministries of health. Long out-dated protocols were still in use. No peer review or other means of internal and/or external quality control such as continuous improvement were in place. All data were processed manually and, as a rule, at the ministry level. Hospital managers did not have enough responsibility to undertake quality assurance procedures. In the case of a patient complaint, the health ministry would organise an *ad hoc* committee to follow up the case, which could result in administrative penalties for the doctor. Criminal charges were rare.

Inflexible planning and budgeting

Typical of a centrally planned system, decision-making was dominated by regulatory/statutory processes built around centrally set by-laws. Hospital budgets were organised into rigid categories that allowed no interchange between categories. Hospitals were administrative units rather than managerial units with full accountability. Low wages in the health care sector, coupled with the absence of mechanisms to link remuneration with performance, led to proliferation of informal out-of-pocket payments. In this system, consumers had no voice and no mechanism for redress.

The allocation of inpatient resources was based on long-outdated standards, which defined the number and profile of hospital beds and specialists. Hospital budgets were based on input-based financing that encouraged expansion of capacity. Being rigid and archaic, these norms did not allow for local adjustments, but despite their inappropriateness, local health authorities had to follow these centrally dictated ‘normatives’.

There were no financial incentives in place to improve the quality and efficiency of staff, since remuneration was not calculated based on staff performance but on the number of years worked and the type of speciality practised. The central bureaucracy also controlled the mix of staff. Consequently, countries of the former socialist bloc ended up having proportionally excessive number of doctors and nurses per patient, compared to western

European countries.

Health care providers submitted statistical data (that often existed on paper rather than in actuality) to the ministry of health. The technical capacity of the ministry to use statistics adequately for inpatient services (such as hospital bed occupancy rate, bed turnover rates and average length of stay) in policy formulation was limited. In the former Soviet Union, the central government in Moscow was responsible for planning care delivery at the republic, region and *rayon* levels. Local health authorities did not actively participate in policy formulation. Most health norms were developed based solely on bed occupancy rates, without proper use of other indicators, such as bed turnover rate and average length of stay that could help assess the efficiency of services.

At the facility level, hospital managers did not have the authority to use service utilisation indicators to adjust the type and intensity of services, or to change inputs depending on their effectiveness. Managers had a medical background but lacked management skills and training to run hospitals effectively and efficiently. The capacity to analyse internal efficiencies that would enable hospital administrators to improve hospital performance was also very limited due to the absence of computer information systems.

The decade of transition: hospitals in the 1990s

As did their societies generally, health and hospital systems in eastern Europe underwent fundamental changes during the 1990s. Early efforts at health reform were influenced by the broader transition to a market economy and to a decentralised state sector. These countries also were exposed to ideas on ongoing health reforms from western European and other industrialised countries. A number of common trends began to emerge, largely related to restructuring the management and financing of health services. On the other hand, just as different countries began to follow divergent paths during this decade of economic and political transition, so did their health sectors.¹ A number of countries, in the Balkans and parts of the Former Soviet Union, experienced armed conflicts. Others (such as the Central Asian Republics) saw many-fold declines in their economic status. Still others experienced more gradual economic deterioration or at best stagnation, while a final group (mainly in Central Europe and the Baltic States)

emerged with stronger economic and political regimes. These different circumstances elicited different responses within the health sector. Though each country's transition was distinct, a number of common trends in hospital system reforms were observed.

Introducing payroll-based mandatory health insurance. Whether conceived as a supplement to budget financing (as in Russia) or a replacement (as in Hungary) health insurance was seen as a more reliable source of funding for health services, given the deteriorating fiscal budgets. In many cases, however, this assumption proved only partially true. Increased general unemployment, collection difficulties from numerous newly created small-scale enterprises, and the proliferation of informal markets limited the pool of available resources. The creation of independent health insurance administrations was seen as a key step toward the separation of payers and providers. However, in many cases, resource allocation policies (among regions or among different levels of care) were based on historical precedent, hence favouring established patterns of supply rather than shifting to a new, needs-based allocation mechanism.

New provider payment mechanisms. For hospitals, two patterns of provider reimbursement methods emerged. Some countries introduced different forms of a case-based payment system. Others such as the Czech Republic and Slovakia introduced a variation on the German point system. As expected, these changes reduced average lengths of stay, in some cases partly due to the introduction of day care/day surgery services. However, admissions tended to increase, and the new payment systems generally were ineffectual in reducing overall hospital sector expenditures. Under the point system, shrinking budgets combined with increased admissions greatly diminished the value of a point so that most services were compensated at levels below the actual cost, leading to widespread arrears to hospitals. A number of challenges arose with the introduction of case-based payment (for example, the lack of information on costs made it impossible to establish fair economic prices for services) and it became clear that more careful crafting of payment systems was needed in the future.^{2,3}

Increased informal payments. There is some evidence that informal payments (already widespread in the 1980s) increased during the transition period. Patients

“Managers had a medical background but lacked management skills and training to run hospitals effectively and efficiently”

increasingly made 'under-the-table' payments to staff to receive health services. Hospital staff, like most public servants, were paid fixed salaries that were seldom adjusted for inflation. This reflected attempts by health workers to maintain standards of income in a highly inflationary period, as the unclear separation made between public and private interests. The impact on access for the poor remains an issue of considerable concern.

“Despite their severe budget limitations, many countries managed to allocate some resources to the purchase of new equipment... In some cases it reached a point where per capita ratios for some equipment exceeded those in many western European countries”

Minimal downsizing in hospital capacity. Most countries reduced the number of hospital beds over the decade. However, these reductions have been small, nowhere near the number required to bring per capita ratios closer to western European levels. Most closures have involved unused or 'ghost' beds (that is, beds that existed on paper for budget purposes). Where administrative closures of hospitals have occurred, these mainly have been small, sometimes abandoned hospitals in rural areas. The early expectation that a shift to a case-based reimbursement system would lead to large-scale reductions in beds has never materialised. To have any serious impact on health care costs, mergers or closures of larger hospitals would be required, but few such closures have been accomplished.

No reductions in personnel. Few countries have shown significant downward trends in the number of health care personnel. Given the very high levels of unemployment in transition countries, the issue of excess personnel has been understandably sensitive, socially and politically. The lack of an effective social safety net for the unemployed is an exacerbating factor. To meet targets for hospital bed closures, staff were often simply reassigned to outpatient facilities. As with reported reductions in hospital beds, many registered reductions in personnel were actually the result of the elimination of 'ghost' positions. Some of these positions previously were occupied by medical staff holding more than one position (i.e. one person would occupy and receive salaries for one and one-half or two

positions).

Decentralisation of ownership. With the state moving to privatise public enterprises, a similar move might have been expected for state-owned social services. In the earlier years of the transition, there was much talk of privatisation of health care facilities. Although some health services were quickly privatised (such as dental practices, pharmacies and spas), privatisation of polyclinics was limited to a few facilities in urban areas, and privatisation of state-owned hospitals almost never took place. Much more common was the transfer of ownership of hospitals from the central government to lower levels of government. In some countries, publicly owned hospitals were granted some degree of autonomy, although rarely full autonomy through corporatisation.³ A small number of new privately financed hospitals have emerged in large urban areas to serve the growing middle class. A more common phenomenon, however, was the widespread practice of allowing public sector doctors to work 'private hours' on publicly owned premises. This has led to a blurring of the distinction between public and private interests, and has raised numerous questions about the appropriateness of the practice.

Hospital management initiatives. Granting managerial autonomy to hospitals focussed attention on the lack of adequate management skills among hospital managers and health sector administrators. With assistance from the international donor community, countries have initiated programmes to improve management capacity. The most common initiatives have included the development of training programmes in hospital management, the establishment of management information systems, the introduction of more 'business-like' practices, the introduction of quality assurance systems, and the establishment of 'best practice' hospitals (usually through institutional partnerships with foreign hospitals). Initiatives to develop management information systems in hospitals often came from Health Insurance Institutes/Funds as part of their effort to better monitor costs, services and quality. However, there has been little evaluation of the impact of these programmes on hospital performance.

Upgrading technology. Despite their severe budget limitations, many countries managed to allocate some resources to the purchase of new equipment. In almost all countries, priority was given to high-end imaging equipment. In some cases it

reached a point where per capita ratios for some equipment exceeded those in many western European countries (for example CT scanners in Hungary). The easy availability of suppliers' credits from western countries (some backed by government guarantees from either a seller's or buyer's country) appeared to be a factor in the proliferation of such state-of-art equipment. Payment systems that earmarked portions of health insurance budgets for 'expensive' services tended to contribute to this over-investment. In many cases, these technologies have proven unsustainable in the long run, with hospitals unable to pay for operating supplies or repairs. Often, equipment was sitting idle and rarely used to its full capacity.

Upgrading primary care. Most countries adopted policies to upgrade primary care. One of the goals was to reduce the demand for hospital services by establishing the general practitioner in a gatekeeper role. However, financial incentives for primary care workers (largely paid on salaries or on patient capitation) do not encourage exercise of the gatekeeper function. There is little evidence so far that the expansion of primary care has led to reductions in hospital referrals. Alternative payment regimes that were studied or tried in some countries, included introduction of fundholding and limited fee-for-service mechanisms in primary care, as well as differentiated payments for referred and non-referred hospital patients. A better definition of roles/tasks is required for family/general practitioners. Appropriate training programmes are being established in many countries, generally as new departments of family medicine in medical schools.

Deterioration in hospital services. The physical infrastructure continued to deteriorate in many countries as the shrinking health care budgets allowed little capital for maintenance, refurbishment and repair. In low-income countries, the physical condition of premises became unacceptable and patients simply stopped attending such hospitals. The deterioration in the quality of health care became particularly problematic in countries with drastically worsening hygienic norms, shortages of water and electricity, and lack of heating and air conditioning. In some countries, humanitarian assistance could only partially cover the supplies needed for emergency care, vaccines and antibiotics. Clinical services also had deteriorated since clinical guidelines were long out-dated and continuing education for doctors and nurses had lapsed.

Where to next? 2002 and beyond

In the rush to restructure the old system during the 1990s, much was done without sufficient forethought. Reform initiatives were copied from western models, often out of context and without considering the fact that resource levels in the east were five to ten times lower than in the west, and that management capacity was severely limited relative to the demands of western-style financing and management systems. In the coming years, hospital reform in eastern Europe will have to be better tailored to conditions in these countries. Initiatives to reform the organisation, financing and management of hospital services will need to be further refined or redirected. More structured or systemic approaches will have to replace *ad hoc* and short-term solutions. The objectives remain the same: to redefine the role of the hospital in a more integrated continuum of care; to use inpatient services as the option of last resort; and to release resources tied up in hospitals for improving the quality of care throughout the health care system. The future of hospitals in eastern Europe lies in the following package of second-generation reforms, some of which have been initiated in some countries.

Continuing financing reform. Resource allocation, whether among regions or among different levels of care, will have to be based on assessments of need rather than on historical patterns of care or on supply-based criteria, such as the number and types of hospitals in the region. Case-based reimbursement will need to be supplemented with transparent cost capping mechanisms (such as negotiated global budgets) with hospitals and hospital managers being held accountable for budget deficits. Improved data on costs will allow the development of more appropriate pricing systems. Appropriate incentives will also need to be built into payment systems for primary care, outpatient services, and other health services to ensure consistency with the goals of hospital system reform. In addition, the current practice in many countries of subsidising inpatient but not outpatient drugs will need to be reconsidered, given the perverse incentive to increase admissions and lengthen hospital stays. Overall, transparent and enforceable contracts should form the basis of relations between payers and providers. Finally, investments in improving financial management in hospitals will need to continue.

Reconfiguring hospital networks. Well-defined provider payment mechanisms

“Case-based reimbursement will need to be supplemented with transparent cost capping mechanisms (such as negotiated global budgets) with hospitals and hospital managers being held accountable for budget deficits”

have proven to be necessary but not sufficient conditions for downsizing hospital systems. Hospitals that respond to these incentives work to improve internal efficiencies to maximise internal gains, but seldom concern themselves with systemic inefficiencies such as duplication of services or excess system-wide capacity. It is evident that a more structured and more systemic approach to downsizing will be required. Hospital system restructuring will need to be based on an analysis of needs and utilisation patterns in a given service area (such as a region or city) to determine the most efficient configuration of services. Hospital mergers and closures inevitably will be necessary. The multiple levels of hospital care should be replaced by a simpler distinction between secondary and tertiary care, with a greater concentration of tertiary services to reduce investments in high-cost technology. Such changes are certain to rouse opposition from a wide range of stakeholders (hospital managers and staff, local populations, and politicians), and strong leadership as well as effective participatory processes will be needed to manage the political fallout. In almost all cases, this responsibility will fall on health administrations or third party payers who are responsible for allocation of already tight budgets.

Regulating capital financing. More control over new investment is needed if hospital restructuring programmes are to be implemented effectively. At present, hospitals able to raise the funds (whether from public or private sources) are free to purchase new equipment or expand capacity. This freedom in the future may need to be curtailed through a 'certificate-of-need' or similar process that will determine whether the proposed investment addresses an unmet need or simply creates excess capacity.

Establishing alternative care services. Studies in Russia and other countries have shown that as many as 30 to 40 per cent of hospital patients do not belong in hospitals. Many could be sent home shortly after treatment. They could then be treated on an outpatient basis, transferred to less intensive care facilities like rehabilitation centres, managed by family practitioners, or supported at home by home care services. These alternative care services will need to be established. Because there are few models of such care facilities in eastern European settings, models from western Europe or other countries will need to be studied and carefully adapted to local circumstances.

Increasing integration. With an increasing role for primary care, outpatient services and other alternative forms of care, hospitals will need to better define their relationships with other parts of the health system. Continuity of care for the patient will become the dominant concern. Consultation between primary care provider and hospital specialist should be encouraged. Exchange of information will be facilitated by integrated, or at least compatible, information systems. The separation between inpatient and outpatient specialist services should be diminished.

Human resources planning. While expanding primary care and alternative care services may absorb some of the excess staff from hospitals, reductions in overall numbers of medical personnel will be inevitable. It will be necessary to establish programmes to ease termination from employment (such as severance pay and retraining programmes). Admissions into medical schools need to be drastically reduced with careful attention given to the mix and regional distribution of specialists. Nurse-to-doctor ratios will need to be boosted (more likely by reducing numbers of doctors than by increasing the number of nurses) as will the quality of nursing care. Compensation mechanisms will need to improve to attract and reward good performers, which will only be possible with substantive reductions in numbers of staff. Contractual relations between employers and employees will need to become more transparent, and terms of employment and remuneration more compatible with increased productivity. Finally, a long-term solution to the problem of informal payments will need to be found.

Quality assurance, accreditation and licensing. While quality assurance systems are slowly being introduced in individual hospitals, more consistent system-wide approaches will need to be established through accreditation and licensing procedures. An important component of quality assurance is the updating of clinical practice guidelines and the introduction of evidence-based medicine (combined with cost-effectiveness evaluation) in the definition of these guidelines. Likewise, technology assessment methods will be needed to guide investment decisions and development of new services. As these new approaches to quality improvement evolve, new regulatory mechanisms encouraging stakeholder participation will need to be introduced to avoid returning to the rigid controls of the old system.

REFERENCES

1. Chellaraj C, Heleniak T, Staines V. *Health sector statistics for the former Soviet Union*. Washington: World Bank, 1999.
2. Langenbrunner J, Wiley M. Hospital payment mechanisms: theory and practice in transition countries. In: McKee M, Healy J (eds). *Hospitals in a Changing Europe*. Buckingham: Open University Press, 2002 (in press).
3. Jakab M, Preker A, Harding A. Linking organisational structure to the external environment: experiences from hospital reform in transitional economies. In: McKee M, Healy J (eds). *Hospitals in a Changing Europe*. Buckingham: Open University Press, 2002 (in press).

Mental health reform in eastern Europe



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Most eastern European countries have medicalised and institutionalised mental health services, mainly run in large psychiatric hospitals as separate programmes with few links to the general health care system, while community-based services are still virtually non-existent. Reform of the mental health services calls for a strategic action plan and concerted effort across several sectors.

Virtually all eastern European countries have a heavily institutional model of mental health care, with many hospital beds in large asylums where patients stay for long periods of time. There are also social protection homes, or *internats*, where many former occupants of asylums end their days, having lost all contact with their families. The reform of mental hospitals, therefore, needs to be viewed in the wider societal context. This article discusses mental health reform in eastern Europe and the role of hospital reform within that process.

Many organisations work in eastern Europe on mental health reform. These include:

- The World Health Organization (WHO) Regional Office for Europe, which coordinates mental health activities on a national level, supports reform programmes and offers training programmes;

- The Geneva Initiative on Psychiatry, which promotes more ethical and evidence-based practice, and which supported the recent establishment of the Association of Reformers in Psychiatry in Eastern Europe;
- The Hamlet Trust, which works to stimulate the development of mental health non-governmental organisations (NGOs) and encourages user and carer groups to make their voices heard;
- Cordaid and the Open Society Institute, which fund a wide range of projects on mental health;
- The United Kingdom Department for International Development (DfID), which has run a children's mental health project in Russia that encouraged multi-disciplinary team working, and now plans adult mental health projects in Russia, Georgia and Kyrgyzstan;
- Voluntary Service Overseas (VSO), which seeks to include mental health professionals in their volunteer programmes; and
- The International Consortium for Mental Health Policy and Services, which is piloting a country profile for mental health situation assessment and also is piloting a policy template in Bulgaria and Lithuania.

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All these initiatives exert leverage for change and encourage models of good practice. Much, however, remains to be done.

The burden of mental disorder

Mental disorders account for a large part of the burden of disease across the world. Neuropsychiatric disorders account for 28 per cent of the total years of life lived with a disability. These comprise five of the ten leading causes of disability as measured by years of life lived with a disability; namely, unipolar depression, alcohol abuse, bipolar affective disorder, schizophrenia and obsessive compulsive disorder. Further, suicide is the tenth leading cause of death in the world.¹

The Global Burden of Disease is estimated by combining the loss of healthy life from premature death and disability into quanti-

Table 1
THE BURDEN OF NEUROPSYCHIATRIC DISORDERS IN EACH REGION OF THE WORLD

Region	Percentage (DALYs)
Sub-Saharan Africa	4.0%
India	7.0%
China	4.2%
Latin America and the Caribbean	15.9%
Middle East	8.7%
Other Asia and Islands	10.8%
Former socialist economies of Europe	17.2%
Established market economies	25.1%
Developing countries as a whole	9.0%
The world as a whole	10.5%

Source: Murray CJL, Lopez AD, 1996.¹

tative disability adjusted life years (DALYs). The proportion of the global burden attributable to mental disorders is estimated to be 10.5 per cent, but this figure varies across the different regions of the world (see Table 1). The overall DALY burden for eastern Europe due to neuropsychiatric disorders is estimated as one of the highest, at 17.2 per cent. The overall DALY burden for the world for neuropsychiatric disorders is projected to increase to 15 per cent by the year 2020; a bigger increase than for cardiovascular disease.¹

Despite the importance of DALYs in highlighting the burden of psychiatric disorders, there are a number of important deficiencies with respect to their derivation and enumeration. The disability weights are still arbitrary, the epidemiology in many countries has still not been carried out, and there is some double-counting due to comorbidity within mental illness (not to mention substantial undercounting due to comorbidity between mental and physical illness). Further, there is no inclusion of family burden or the burden to society from, for example, sickness absence, labour turnover, accidents, reduced productivity and the consequences for children's emotional, cognitive and physical development.

Apart from their contribution to specific mental disorders, psychological factors also contribute to specific risk behaviours which add significantly to the overall disease burden. These behaviours include excessive alcohol consumption, unsafe sex and tobacco use. Unsafe sex and alcohol

each contribute approximately 3.5 per cent of the total disease burden, while tobacco use contributes a further 3 per cent.

Mental disorder and social issues

Mental disorders are not only linked to social factors, but result in disturbances in social functioning. The strong links between mental illness and poverty, and between general health and poverty are thus not surprising.² First, poor people are far more likely to suffer from mental health problems. And second, poor mental health can have a severe impact on ability to earn, and therefore contribute to the poverty cycle.

People with mental health problems have an increased risk of physical illness through a number of mechanisms. For example, infant and child mortality can be reduced through improved treatment of post-natal depression. Also, reduced depression has proven links with increased compliance with medical programmes such as antenatal care, vaccination programmes and prevention and treatment of infectious diseases including rehydration during diarrhoea. In addition, by causing somatic symptoms and by predisposing to physical illness, mental disorders place a significant burden on general health systems all over the world.

Our understanding of the importance of social and human capital – as well as economic capital – to the wellbeing of a nation continues to grow. As a result, many governments are attempting to enhance social capital by making concerted efforts to reduce the societal exclusion suffered by deprived groups, partly by reducing deprivation itself and partly by reducing the associated exclusion. These strategies tend to focus on unemployment, homelessness, and educational failure. However, mental illness also plays an important role in social exclusion and deserves attention in its own right.³

Particular challenges in eastern Europe

Mental health professionals in eastern Europe are struggling with difficult challenges, and five in particular bear mention here. First, social supports were weakened under the former Soviet system with its emphasis on the role of the state above the role of the family, and were further weakened by the rapid economic collapse after the Union's break-up. This weakening of community social structures has resulted in a lack of support to people with severe

mental illness and their families, and to extremely limited NGO development in the field of mental health.

Second, Soviet psychiatry was for many decades isolated from the west. Furthermore, the Soviet Union itself was excluded from the World Psychiatric Association because of concern about the political abuse of psychiatry. This resulted in a lack of access to the evidence base available in western journals and conferences, and to limited dialogue.

Third, as elsewhere in the world, mental health services in eastern Europe are poorly resourced.

Fourth, the polyclinic system inherited from the former Soviet Union is staffed by specialists rather than generalists, and does not yet provide a primary care system that is able to detect and treat people with common mental disorders.⁴

Finally, the organisational culture of the mental health system has greatly hindered mental health reforms.^{5,6} Mental health services in eastern Europe are heavily institutional, with community care equated with outpatient or dispensary care, so that community-based care is practically non-existent. There are few community services, social work or occupational therapy, little concept of multidisciplinary team work, and no systematic framework for multi-axial assessment of each patient's needs. Professionals have low therapeutic optimism in their diagnostic formulations and in their expectations for patients. There is little experience of intersectoral working, user groups are still rare, and services have a highly vertical structure. The presumption is that all mental illness must be treated by a psychiatrist and that legislation is required before mental health care can be integrated with primary care.

The organisational culture has been heavily influenced by the structural power embedded in the central blueprint of socialism. This has ensured that attitudes of dependence are entrenched in eastern European psychiatry – both in staff and in patients – resulting in behavioural patterns that maintain a large gap between staff and patients, and entrench a custodial rather than therapeutic milieu. This has restricted both the development of user-groups capable of advocating for improvements, as well as the emergence of a professional reform movement. The professional identity acquired by staff under centralised regimes does not allow them to conceive of work roles extending beyond the narrow clinical

realm, of professional obligations flowing from a code of ethics, or the necessity of engaging in policy dialogue with the state on mental health reform.^{7,8} The Geneva Initiative on Psychiatry is working to support reform-minded psychiatrists in changing such attitudes. For example, the Bulgarian Psychiatric Association founded in 1991, aims to introduce ethical reform in mental health services, to voice the need for a national mental health policy, and to encourage the public and the profession to take joint 'ownership' of the mental health of a community.

Developing mental health strategies

Decision-making must be 'needs-led' rather than 'supply-led'. The problem is that there are few epidemiological studies of mental disorder in eastern Europe. While it is important to know about service use, estimates of need should be based on population levels of disease, severity, disability, chronicity and risk. Without information on population needs, governments perforce use service use data as a proxy for health needs, making it too easy to conclude that the present system is adequate. Epidemiological studies are an essential prerequisite for developing locally tailored mental health policy.⁹

The main goals for a mental health policy include the following:

- promoting mental health in the general population, schools and workplaces;
- reducing the incidence and prevalence of mental illness (prevention and treatment);
- reducing the extent and severity of associated disability (rehabilitation);
- reducing stigma and discrimination associated with mental illness;
- reducing mortality associated with mental illness;
- protecting the human rights and dignity of people with mental illness; and
- promoting the psychological aspects of general health care.

Most countries in the world are in the process of reforming their mental health services to a greater or lesser extent. These reforms include shifts from old style custodial and institutional services to care in at least restrictive an environment as is compatible with the health and safety of the individual, their family and the public. Many countries also are reforming their legislation to support appropriate care in the community, and to enable professionals

“Mental health services in eastern Europe are heavily institutional, with community care equated with outpatient or dispensary care, so that community-based care is practically non-existent”

**Figure 1
SHIFTS IN APPROACH TO THE CARE OF PEOPLE WITH SEVERE MENTAL ILLNESS**

FROM	TO
Separate large hospitals and outpatient services	Clinically integrated range of local services
Hospital services, funding and staff	Community services, funding and staff
Rehabilitation in a medical setting	Rehabilitation in a home setting
Treating biological symptoms	Addressing spectrum of physical, psychological, social and cultural consequences of disorder
Addressing diagnosis alone	Addressing multi-axial impairment, disability and handicap including discrimination and stigma
Group programmes	Individually-tailored care plans
Emphasising weaknesses	Emphasising incremental strengths and victories
Sequestered community rehabilitation	Real social integration
Perpetual maintenance	Perpetual expectation of movement to next stage
Support and maintenance	Recovery
Professionally run facilities	Consumer involvement and consumer run programmes
Protecting clients from stress in an effort to prevent relapse	Instilling hope and encouraging positive risk taking and supporting clients to meet life goals
Day treatment and sheltered work	Supported employment
Group work programmes	Work programmes which: ¥ are tailored to individual needs; ¥ build on strengths, resources and relationships of community; and ¥ develop relationships with businesses in the community

to deliver better care with more attention to human rights. Both these approaches require reforms in other areas as well; such as in training for mental health workers and strengthening intersectoral links. Better links are needed with primary and secondary health care, social care, housing, welfare benefits, the criminal justice system, education and industry.

The types of shifts in thinking that are involved in reforming the care of people with mental illness are shown in Figure 1. These involve moving from institutional care to care that is local and needs-led, and which aims for recovery and social integration. Specific strategies are needed to shift to these new models of mental health services. Each country is different but some common issues that need to be considered include national components, support

infrastructure and service components.¹⁰

National components of a strategy

These components include a written national strategy to promote mental health, reduce morbidity and reduce mortality; policy links between the ministry of health and other relevant departments; legislation to support the national mental health policy; establishment of funding streams for the reformed structure; and mechanisms for implementation and high level accountability.

Few countries of the former Soviet Union have produced a detailed mental health strategy as opposed to a broad policy. For example, Georgia has recently produced a written national policy that pays attention to mental health promotion and prevention as well as to treatment, rehabilitation and suicide prevention, addresses the stigma and discrimination surrounding people with mental illness, and the protection of human rights. However, it does not contain clear strategies for moving to community-based care, and its implementation is hampered by the lack of resources, training and community awareness. Similarly, the Council of Ministers in Bulgaria, after years of persistence by the psychiatric association, has endorsed a policy document with priorities and a time frame, but again it specifies no mechanisms for moving from an institutional model to community care.

Support infrastructure for a strategy

This should include a mental health information strategy, a research and development strategy including cost-effectiveness studies,¹¹ and a human resources strategy. Mental health information in eastern Europe is usually restricted to data about hospital admissions and discharges, and about population suicide rates. There is little research and development in mental health, and most professionals still do not have access to, amongst other things, the internet, the Cochrane database on evidence-based interventions, or western journals.

Service components of a strategy

These components include primary care, specialist care, social care, and best practice guidelines and standards. A strategy also requires intersectoral links between health care and social care, NGOs, and the criminal justice system. It calls for client participation, support for carers, community action to tackle stigma, and mental health promotion in schools, workplaces and the community.^{4,12,13}

Some obstacles to implementation

As in other parts of the world, eastern Europe faces many obstacles to mental health reform. Health sector reform documents seldom make more than a passing mention of mental health, and then usually only in the context of alcohol and tobacco policies. Thus, when a ministry of health finally does consider mental health reform, it is viewed in isolation from health system reform generally, with the available resources already consumed and opportunities for concerted action missed. For example, in some countries the World Bank's 'hospital optimisation' programmes do not specifically consider mental hospitals.

Second, there is a lack of funding for community care. Research in the west has shown that health and social outcomes are better where people are cared for in local community settings rather than in large asylums. But adequate care in the community requires not only well-trained teams of health and social care professionals, but also community structures including access to hospital beds, supported housing, occupational rehabilitation, employment and leisure opportunities. Ministries of finance either see deinstitutionalisation as an opportunity to save money rather than to transfer funds to community care, or else block deinstitutionalisation out of concern that it will generate additional costs. Since it is impossible to close asylums until the last patient is in the community, double-running costs are needed to fund community services while the asylum is still open. No investment has been made in community health and social services, which are thus inadequately prepared for the deinstitutionalisation movement. In countries that have introduced health insurance, benefits mostly are tied to biomedical health services. Thus in Lithuania, for example, community-based psychosocial services such as counselling are not eligible for health insurance, but neither are they funded through the social services sector.

In Georgia meanwhile, the economic crisis has reduced government health expenditure from US\$200 to US\$7 per head per year. Only 7.5 per cent of the state budget is spent on the health system, of which only 5.2 per cent is spent on mental health services. The government recently reduced the number of psychiatric beds from 1 per 1,000 population to 1 per 5,000. The resources are insufficient to run 7 mental hospitals, 1,000 beds and 17 outpatient clinics, let alone develop community outreach services. The hospitals have less than

US\$3 per patient per day to cover all treatment and running costs. During the civil war, 800 psychiatric patients died in mental hospitals because of lack of food, medications and care, and there are continuing high death rates in hospitals. Asylums are old and often distant from families. The quality of care is poor, with low staff morale, and there is a lack of funds for even the basic necessities of food and warmth, let alone active treatment and rehabilitation activities. Perverse financial incentives exist so that hospital directors are keen to admit more patients in order to increase their hospital budget, and cannot reduce hospital beds without further reducing the hospital budget. According to the Georgia State Statistic Department, 103,000 people in Georgia are registered with the psychiatric institutions. Only 29,000 of these receive inpatient and outpatient care free of charge, and the remaining 74,000 must pay.

Third, the supply of medicines is variable. For example, Russia appears to have few shortages and medicines are subsidised by the government. In Georgia, however, the financial situation is so bad that the Red Cross supplied medicines to the hospitals as part of a special project that finished in April 2000. Since medicines are not available in the dispensaries (outpatient clinics) unless paid for by an NGO or international organisation, patients do not bother to attend until they relapse. Doctors only receive reimbursement for people with psychosis (schizophrenia and bipolar disorder) and then for only one consultation per patient per month.

Fourth, most east European countries lack clinical protocols for patient management; which includes individual care planning, with high standards of assessment of psychological, physical and social needs, their management, continuity of care in the community, and a routine audit of the outcomes.

Fifth, psychiatric training in eastern Europe is brief and outdated compared to the west. In Russia for example, psychiatrists receive less than one year of postgraduate training, compared to 4-6 years in the west. Doctors and nurses are not trained to work in the community and the training contains little social component.

Sixth, mental health services are not coordinated with the health and social sectors, or with the non-statutory services and NGOs. This leads to poor utilisation of resources available and missed educational opportunities. The bureaucratic structures

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surrounding health and social care can often work against the mental health strategy. For example, health and social care are run by different administrations and have different finance streams, so that patients are shunted between sectors instead of receiving integrated care. The same problem results from the rigid boundaries between primary, secondary and tertiary care and between parts of the service (such as child and adolescent mental health services and adult services).

Seventh, new community-based services run as demonstration projects are not sustainable if the donor pulls out, nor are there resources to roll out these services to the rest of the country. For example, external donors fund the Psychosocial Rehabilitation Centre started by the Georgian Association for Mental Health. The centre looks after 45-50 patients a day, concentrating on individual case management, psychosocial rehabilitation and a client care partnership. The centre focuses on activities such as social skills training models and the strengthening of resources to help the patient live in the community. The Georgian Association for Mental Health is working to find ways to continue its various projects since these have created very positive precedents.

Eighth, there is no system for monitoring mental health needs, service use and outcomes. Even the poorest of countries have methods to monitor physical disease, but little attention is paid to mental health. Countries lack good epidemiological data, cost-effectiveness evidence and other health services research. There is often a lack of machinery to get this information directly to ministers, policy-makers and the outside world.

Finally, without community and user involvement, services may not gain community support or meet user needs. It is particularly difficult to implement a community-based model of psychiatric care where the communities and their social relationships have been damaged over many years. The fall of communism caused a breakdown in the former major social institutions, leaving only the extended family to provide community-based care. Thus civil society is slowly being rebuilt in many of these countries. For example, official policy in Lithuania now stresses the development of community-based mental health services, but NGOs are still weak and there is no culture of collaboration between the state and the voluntary sector.

Related mental health issues

Conflict and mental health

Conflicts in eastern European countries have resulted in refugees and internally displaced people. As well as the men who may have been forced to fight, women and children also are vulnerable. They may be witness to murder or assault, they may be raped and risk being infected with AIDS, and being subsequently rejected by their families and communities. During and after conflicts there is high mortality from preventable or treatable disease, and the presence of psychosocial disorders contributes to low compliance with vaccination, nutrition, oral rehydration, antibiotics and to risky sexual behaviour. Psychosocial issues are often neglected in post conflict reconstruction. For example, in Georgia with a population of around 5 million, there are more than a quarter of a million internally displaced people with largely unmet needs for psychological support, and a further 7,000 refugees from Chechnya for whom the government does not accept responsibility. They have no money, poor access to medical care other than that provided by the Red Cross, are highly stigmatised, and many live in terrible conditions. Many have been severely traumatised by having been taken hostage, threatened with death, seeing others die, and are often in need of concerted rehabilitation.

AIDS

Few AIDS reduction programmes make links to mental health reform, despite the fact that not only does AIDS cause mental disorder, but also psychosocial strategies are required to reduce the risk of contracting HIV. HIV enters the brain shortly after the first infection, leading to malignancy, opportunistic infections, vascular lesions and encephalitis, and finally to loss of general cognitive function. In turn, this leads to apathy, withdrawal and deterioration of personality. As in other life threatening illness, AIDS is also linked to adjustment reactions, persistent depression, affective psychosis and suicidal risk. Mental health promotion programmes in schools could reduce the risk of contracting HIV with unprotected sex or drug use.

Orphanages and children's homes

Children in such homes usually come from difficult circumstances and may exhibit developmental delay and retardation, speech delay and problems in articulation, fits, severe overactivity or aggression, chronic physical illness, physical disability

and handicap. Therefore their carers need training and guidance in the management of such problems.

Prisons

Mental illness and suicide are much more common in the prison population than amongst the general population. Prisons should, therefore, divert people with psychosis to hospital, treat less severe illness in prison, give prison health care staff training and guidelines in the assessment and management of mental disorders, and train prison staff to recognise depression and the management of suicidal risk

Alcohol and drugs

In the countries of eastern Europe, services for substance abuse (known as narcology services) often are separate from mental health services, which leads to a number of problems. The comorbidity between substance abuse and mental illness is more difficult to address. Also, the recent rise in mortality from substance abuse has not been linked to underlying psychosocial issues and mental health promotion has not been incorporated into existing strategies to reduce substance abuse.

Achieving institutional change

Mental health reform must develop a strategic plan to reform the mental health system. The plan should set out goals for promoting mental health, prevention, treatment and rehabilitation of mental illness and associated disability, reduction of mortality, reduction of stigma and discrimination, and the promotion of dignity and human rights. It should include the various components set out earlier: national-level components, a support infrastructure, and service elements. And at the same time, financing must be addressed to eliminate perverse fiscal incentives, while local funding must be sustainable with a funding stream allocated for policy implementation.

It is also important to address, at a high level, the stigma surrounding mental health issues in order to integrate mental health with overall health policy. A substantial cultural shift is required to tackle resistance to change, to encourage the public and the profession to work together to take 'ownership' of improving population mental health, to involve service users and other stakeholders, to engage in multidisciplinary working and dialogue, and to increase access to the international evidence base.

The optimism for change among local organisations and service providers is often

very low. Psychologically, having spent their formative years being directed, people feel abandoned by their superiors. Support, leadership development, team-building exercises and opportunity for discussion is needed to overcome this natural pessimism. As well as engaging with the relevant professionals and officials, it is also helpful to identify and bring in people (regardless of their official positions) who are enthusiastic about mental health reforms.

Finally, detailed situation appraisals and preparation are essential. The preparatory work in any reform programme often takes as much time as the project itself.

REFERENCES

1. Murray CJL, Lopez AD. *The Global Burden of Disease*. Boston: Harvard School of Public Health, WHO and the World, 1996.
2. Kawachi I, Kennedy B. Income inequality and health: pathways and mechanisms. *Health Services Research* 1999;34:215–27.
3. WHO. *Mental Health in Europe: Stop Exclusion: Dare to Care*. Copenhagen: WHO Regional Office for Europe, 2001.
4. Jenkins R, Strathdee G. The integration of mental health care with primary care. *International Journal of Law and Mental Health* 2000;23:277–91.
5. Hinshelwood RD. Alienation: social relations and therapeutic relations. In: *Kleinian Studies Ejournal*, 2001. (www.human-nature.com/ksej/index.html).
6. Tomov T, Van Voren R. Attitudes and needs assessment in psychiatry. *Mental Health Reforms* 2002 (in press).
7. Tomov T. Mental health reforms in eastern Europe. *Acta Psychiatrica Scandinavica* 2001 (in press).
8. Tomov T. The social engagement of psychiatry in eastern Europe: back to a discourse on ethics. *Philosophy, Psychiatry and Psychology* 2001 (in press).
9. Jenkins R. The contribution of epidemiology to government mental health policy *Acta Psychiatrica Scandinavica* 2001;103:2–14.
10. Jenkins R. Public Policy and Environment. In: M. Gelder (ed) *Oxford Textbook of Psychiatry*. Oxford: Oxford University Press, 2000.
11. Shah A, Jenkins R. Mental health economic studies from developing countries reviewed in the context of those from developed countries. *Acta Psychiatrica Scandinavica* 1999;100:1–18.
12. Jenkins R, McCulloch A, Parker C. *Supporting Governments and Policy Makers on Mental Health Policy*. Geneva: WHO, 1998.
13. Jenkins R, McCulloch A, Friedli L, Parker C. Developing a national mental health plan. *Maudsley Monograph* 2001 (in press).

NOT CITED IN THE TEXT

Andrews G, Jenkins R (eds). *Management of Mental Disorders*. Aldershot: Datapress, 2000.

Jenkins R. Towards a system of outcome indicators for mental health care. *British Journal of Psychiatry* 1990;157:500–14.

Jenkins R, Singh B. General population strategies for suicide prevention. In: K Hawton, K van Heeringen (eds). *The International Handbook of Suicide and Attempted Suicide*. Chichester: Wiley, 2000.

Hospitals in Hungary: The story of stalled reforms



Éva Orosz

Efforts by the government to rationalise the extensive Hungarian hospital system during the 1990s encountered opposition from various vested interests: government ministries, the National Health Insurance Fund, local governments, hospital managers, physicians and the medical industry. This story highlights the lesson that any successful reform must consider the interests of all the parties concerned. Further, a concerted strategy is needed since any change to one part of a hospital system can be offset by adjustments to other parts.



Imre Holló

The background

The Hungarian governments of the 1990s attempted several reforms of the hospital system in order to address both inherited problems and problems exacerbated by the struggling economy.^{1,2} First, like other countries in the former Soviet sphere of influence, Hungary inherited an excessively large hospital system. For example, there were 9.8 beds per 1,000 population in 1990 compared to the European Union average of 8.4.³ The emphasis upon quantitative indicators of progress (such as numbers of beds and physicians) also produced an excessive number of specialists. Second, the health sector was a loser in public expenditure cuts, with curative-preventive care being cut by almost 35 per cent between 1990 and 1999 in constant prices. Third, hospitals dominated the health care system with little use made of other forms of health care. Fourth, funds were allocated to hospitals according to inefficient normative and historical input criteria, influenced also by political bargaining by influential county leaders and physicians. Fifth, physicians had a perverse incentive to hospitalise people in order to obtain gratitude money to supplement their low salaries.

Our argument here is that, in the short term, most actors had a vested interest in maintaining a hospital-centred health system. We examine three major reforms aimed at rationalising hospitals: (i) the introduction of diagnosis-related group

(DRG) financing; (ii) a centrally planned bed reduction programme; and (iii) a regional restructuring programme. We then identify the various stakeholders and analyse their incentives in order to explain why none of these hospital reforms have succeeded in Hungary.

First attempt: DRG-based payments

In the mid-1980s, the government looked for a mechanism to curb hospital costs and decided upon output financing. Specifically, it identified the DRG case-mix system as this appeared to be successful in the United States. Physicians were initially quite enthusiastic for two reasons. First, the DRG funding principle (to treat as many patients as possible in the shortest time without complications) suited the endemic practice of gratuities (unofficial payments by patients to physicians). Second, doctors expected their salaries to increase since they expected to negotiate a high DRG weight for their speciality. After developing a Hungarian variant on a DRG model, the payment system was introduced in 28 hospitals in 1987, and in 1993 was extended by the Health Insurance Fund to all Hungarian hospitals.

Case-mix funding had some positive impact over these years. First, it resulted in a drop in average length of stay in acute hospitals from 10.6 days in the late 1980s to 7.8 days by 1998. Second, DRG funding introduced more transparency in terms of hospital and speciality costs. Third, the collapse of the Hungarian health care system arguably was averted, but mainly because the Health Insurance Fund set a cap upon its overall expenditure on hospitals. On the negative side, the number of admissions

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rose from 21.8 to 24.2 per 100 population between 1990 and 1996. Hospitals had a financial incentive to increase admissions (supplier induced demand) since the real value of DRG per case payment fell by 16 per cent between 1993 and 1997. Its second major failure was that DRG funding did not stimulate any downsizing in hospital capacity.

The DRG system encountered several problems, primarily because some essential design features were not included. Outpatient care, funded according to the so-called German 'points' model, was set at low payment levels, which created a financial incentive for hospitals to admit patients. Next, the case-mix formula was initially set for individual hospitals, rather than being based on a regional or national average; resulting in four to fivefold differences between hospitals for identical diagnostic groups. The value of a DRG unit finally was fully equalised across hospitals by March 1998. Further, there was no incentive for hospitals and physicians to improve the quality of care since quality assurance systems were not introduced concurrently. As well, the DRG system lacked skilled management, sophisticated computer information systems and ongoing monitoring. This allowed, for example, the inherent problem of 'DRG creep', whereby patients were increasingly coded in more severe categories in order to attract higher case payments. Finally, precise information on patient unit costs upon which to base DRG weights was lacking.

Centrally planned bed reduction

With the fall in average length of stay, superfluous hospital capacity became more obvious in the form of low occupancy rates. Since the DRG system had triggered no structural change, the government attempted to downsize the hospital system through direct administrative mechanisms. In 1995, a four-member committee was charged with setting a maximum number of beds for each hospital under contract with the Health Insurance Fund. After popular protests, the Minister of Welfare yielded to pressure and reversed many recommendations; not a single hospital was closed in 1995.

The Ministry of Welfare persisted, however, and drafted an Act entitled 'Responsibility of health care provision and territorial capacity standards of provision' which was passed by Parliament in July 1996. This legislation defined maximum inpatient and outpatient capacities by county (maxi-

imum number of hospital beds and speciality share). Consensus committees consisting of the major stakeholders were set up in each county to decide reductions in hospitals and hospital departments and to manage the process. These committees managed to close 11,400 beds in 1996, which represented a 12 per cent reduction on the total stock of beds.²

The impact upon total expenditures was minimal, however, for two reasons. First, bed reduction was distributed evenly across institutions and very few hospitals closed, producing no savings in fixed costs, and no proportionate reduction in personnel. Second, as noted earlier, hospital admissions continued to increase. The forced bed closures provoked widespread opposition: from the population, hospital managers, the medical profession, local government, and even from local politicians in the governing parties.

Third attempt: regional restructuring programme

In early 1997, a regional approach to restructuring was proposed under a pilot project financed by a World Bank loan. The Regional Modernisation Programme was designed to support the government's overall health and regional strategies through a bottom-up approach involving the relevant stakeholders. A pilot region, selected through open competition, was to act as a demonstration project for health and social services regionalisation. The intention was to link public health priorities, service delivery modernisation, and health finance reform. The strategies included funding substitutes for hospitalisation (such as home nursing), developing optimum 'patient routes' (to facilitate continuous health care), and various attempts to improve the quality and efficiency of hospital services. The intention was to introduce regional level strategic planning and better service coordination, with a separate budget to ensure that any savings would be kept in the region.

The project plan was supported by local actors, but opposed by the Health Insurance Fund administration. Applications from five regional consortia were evaluated in July 1998. By that time, however, a new government had come to power and the new Minister of Health summarily declared the tender null and void in September 1998. Whether this new regional structure could have broken the political deadlock (the interests against change) cannot therefore be assessed.

"the case-mix formula was initially set for individual hospitals...resulting in four to fivefold differences between hospitals for identical diagnostic groups"

The vested interests

Efforts to transform the hospital system depend in large part upon whether change is in the interests of the main actors; this includes their financial interests, power and social status. The main actors must also be seen within the wider health care system, within an intricate web of institutions, relationships, attitudes, traditions and procedures, each with their own socioeconomic and historical roots. The following summary can, therefore, only be something of a simplification.

Central government

Different government ministries had different agendas that hindered the development of a long-term reform strategy. The Ministry of Finance wished to reduce public expenditures, while the Ministry of Welfare (which included the health portfolio) wished to avoid major disruptions and to improve the standard of care in the hospital system. The latter was also trapped between the Ministry of Finance and the physicians. In other words, between pressure to reduce public expenditures and pressure to increase wages. Given the several changes in government which took place, the central bureaucracy wished to minimise political tensions and conflicts with influential specialists, and wished to demonstrate some successes to the public.

Health Insurance Fund

As the purchaser of services, the Health Insurance Fund (initially an autonomous public sector body) was in theory interested in improving efficiency. However, the Fund was paralysed by its administrative structure and by its lack of a clear mandate. Further, the Ministry of Welfare and the Fund's board often disagreed. The board comprised various interest groups. For example, the biggest trade union wished to redistribute state assets, while the medical trade union wished to defend medical jobs and workplaces. The board was abolished in 1998 and the Fund was moved under the direct control of government (with disagreements as to its location between the Ministry of Welfare, the Ministry of Finance and the Prime Minister's department). In its early years, therefore, the Health Insurance Fund had no clear authority to purchase selectively or to rationalise the hospital system.

Local governments

After 1990, public administration was substantially decentralised to local government, which in consequence became the

owner of many health care institutions, including hospitals. On the other hand, local government lost most of its health funding function with the switch from tax-based to insurance funding; the role of local government in health care was not clearly defined. Until the 1997 amendment to the public finance act, which made local governments responsible for hospital debts, many had managed their health care assets badly. They allowed hospitals to go bankrupt, relying on the central government to bail them out, thereby rewarding inefficiency. This was also the case with the national hospitals in Budapest owned by the central government.

Hospital managers

The financial circumstances of hospitals changed dramatically in the transition to a market economy, and with the decentralisation of public administration. Hospital managers are elected by the health board of local government, and though consisting mainly of influential physicians, they are dominated by party politics. (Hence, in appointing a hospital manager, party affiliation may be more important than management ability.) Since major staff changes are subject to the law on public employment, hospital managers have limited autonomy; many other decisions require the support of local government as the owner. The interests of managers, moreover, are not necessarily similar to those of the hospital and the hospital staff, neither to local government as the owner, nor to the health sector as a whole. For example, lower rates of hospitalisation would result in higher national per case unit prices, but in the short term individual hospitals increase revenue by increasing patient admissions. There are few incentives, therefore, for hospital managers to increase efficiency or to close hospital beds let alone hospitals. Further, the decision-maker for the most part does not bear the consequences of the decision. Capital costs are another example of this collective irresponsibility: not a single player perceives that superfluous fixed assets significantly raise the actual cost of services. Also, most hospitals are severely under-capitalised since fees paid by the Health Insurance Fund do not cover depreciation and investment in buildings and medical equipment. Investment decisions continue to be influenced by interpersonal networks and lobbying power.

Physicians

Physicians are the key decision-makers at service level, their behaviour being influ-

“Capital costs are another example of this collective irresponsibility: not a single player perceives that superfluous fixed assets significantly raise the actual cost of services”

enced by their economic interests but also by other factors such as personal and professional values and public expectations. The tradition that the doctor should do what is medically possible and available without considering actual medical effectiveness and costs has changed little in Hungary. The leading hospital specialists wish to preserve the present system and many have considerable political influence. The low wages in the health sector were an inheritance from the previous regime, but wages eroded further during the 1990s with repeated austerity packages (aggravated by the failure to reduce the high health sector staffing level). Many specialists, however, supplement (or more than double) their official salaries with gratitude money. Since patients are more likely to pay gratitude money in hospital and for surgery, there is a strong incentive for physicians to admit patients and to undertake interventionist treatment. Performance incentives are not passed down to physicians, who continue to be remunerated on a salaried basis. Consequently, gratitude payments are a serious problem for the rational reform of the health care system. It is in the interests of hospital specialists to maintain or expand hospital admissions and lengths of stay, and to encourage the central bureaucracy to tolerate these under-the-table payments.

Medical industry

The medical industry has become a new and important actor. Pharmaceutical and medical equipment companies now influence hospital management and individual doctors in many ways. Their obvious interest is in a high-technology, hospital-centred health sector.

Conclusions

A radical restructuring of the Hungarian hospital system was not in the immediate interests of any of the major actors. In the long-term, of course, it was in every actor's interest to have an effective and efficient health care system. But in the short term, each had other dominant interests; not only direct pecuniary interests, but also incentives such as maintaining political power, prestige and position.

The introduction of case-mix funding (the DRG model) concentrated on linking revenue and performance (inputs and outputs). However, other incentives embedded in the hospital system were not sufficiently considered. Crucially, the Health Insurance Fund continued to contract with each hos-

pital and paid for all the services they provided (there was no selective purchasing). Further, the central government did not allow failing hospitals to go bankrupt. Under Hungarian circumstances, we would argue that to replace DRG payments by a prospective global budget could produce even worse incentives. It would encourage hospital managers and owners to assume the 'old habit' of informal bargaining. DRG problems could be mitigated by continuing to improve DRG methods and by persevering with other hospital sector reform strategies. The cost-effectiveness of the hospital system (health gain for given health expenditure) could be improved by moving towards a needs-based allocation of financial resources across territorial units, and by then applying a DRG formula across hospitals within the regions.

The strategy to reduce the capacity of the hospital system concentrated on only one element of the structural problem, the excess capacities of hospitals i.e. the number of hospital beds. The Ministry of Welfare did not take into consideration that other financial incentives pushed hospitals in a different direction than the 'logical' goals set out in the legislation. The regional modernisation approach (implying greater autonomy) was thus rejected for political reasons.

The experiences of the last decade show that changing only one element of the hospital system - introducing DRGs or reducing hospital beds for example - can be offset by other elements. The story of Hungarian hospital reform shows there is no one magic tool. Concerted changes are needed across financial, legal and organisational settings. Allocation decisions must be made at the right level (and by actors with the most information), the combination of implementation incentives must be considered, the actors must be made accountable for their decisions, and information (about needs, medical effectiveness and costs) must be made more accessible to all, including the public.

“The tradition that the doctor should do what is medically possible and available without considering actual medical effectiveness and costs has changed little in Hungary”

REFERENCES

- 1 Orosz E, Burns A. *The Health Care System in Hungary*. OECD Economics Department Working Papers No.241. Paris: OECD, 2000.
- 2 Gaál P, Rekassy B, Healy J. *Health Care Systems in Transition: Hungary*. Copenhagen: European Observatory on Health Care Systems, 1999.
- 3 World Health Organisation. *Health for All Database*. Copenhagen: WHO Regional Office for Europe. 2000.

Coping with environmental change: The hospital perspective in Hungary



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Reforming the hospital sector in Hungary during the 1990s has meant constant policy changes. Although the environmental circumstances are far from favourable, adaptations and slow changes are clearly visible in hospitals. This brief paper discusses the factors identified by hospital management teams as crucial for successful change, and presents a case study on a Hungarian hospital that has successfully introduced new management information systems.

Introduction

The hospital sector in Hungary has undergone a series of structural changes over the last decade during a period of dramatic political and economic change.^{1,2} Although the introduction of diagnosis-related group (DRG) funding and the centrally planned bed reductions have not had the expected effect, they have definitely stirred up the legal, financial and organisational environment of hospitals. While at the macro level the impact of the different policies might seem scant and the general situation rather gloomy, at the level of individual hospitals it is obvious that some are doing better than others.

The hospitals that function well in terms of their finances and organisation, as well as improved service quality and health outcomes, can be assumed to have successful hospital management structures. On the other hand, constant fiscal problems, fragmented organisational structure, leadership failures, organisational resistance to change, poor services and low consumer satisfaction suggest poor management. Of course, these performance problems are not specifically Hungarian, they occur world-wide and are common problems in the public sector.³

Our argument is that management tools

and managerial skills were not required earlier, but are necessary now to cope with the constantly changing environment. Our observation, based on our training programmes, is that hospital managers and doctors have now started to think about costs, budgets, expenditures, effectiveness and efficiency. Despite perverse incentives and unintended consequences, in our opinion, such attitudinal change is a beneficial result of health care reform in Hungary. One of the most important lessons from the last decade of health reform, however, is that hospital teams need support to successfully adapt to constant change. Hospital management teams can do this with the help of programmes on how to manage change, conduct management control, and monitor clinical quality.

Change management programmes

The Health Services Management Training Centre at Budapest's Semmelweis University, realising the necessity for management training in health care institutions, set up a programme in 1995 which now involves 11 hospitals in Hungary. The training programme, which usually takes place at the site of the institution, consists of three parts. The first part is introductory sessions on the strategies and environment of institutions, and theoretical and practical training in health economics, management, and the legal basis of the health sector. The second part involves planning a change management project for their institution, developed and presented by the participating staff members of the institution (usually a mix of doctors, nurses, economists and engineers). The third part of the programme is an evaluation of these management reform projects. According to later

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feedback about these courses, most participating hospitals were able to successfully put into practice some elements learned from the courses.

A new management reform programme introduced in 2000 has now been run twice. The goal is to help health care leaders in planning and implementing organisational change. The course, based on the change management theory of Beckhard and Harris,⁴ is conducted using lectures on theories, continuous discussion, and detailed planning of the participants' change projects. The weekly or twice-weekly sessions over four months allow the group to follow and advise on the progress of the projects. The course concludes with presentations by the participants on whether the plan was adopted, the changes already implemented, and any future plans.

Obstacles to change

In examining both the successful and unsuccessful projects, we realised the importance of leadership mistakes and organisational resistance as obstacles to change. We undertook a research programme to identify the most important factors. Using focus groups and brainstorming sessions, a questionnaire was developed to assess the occurrence and importance of leadership mistakes and organisational resistance. We then used this questionnaire to conduct a survey among middle and top-level health care managers.

The results pointed to some key factors associated with failure to change health care organisations. The most frequent and important leadership mistakes formed thematic clusters around five factors. These were: (i) mistakes in planning and initiating a change project; (ii) a leader's lack of competence and/or qualifications and failure as a role model; (iii) insufficient communication and task delegation; (iv) failure to explain implementation procedures; and v) conflicts of interest. The most frequent and important forms of organisational resistance related to: communication problems and lack of information; vested interests and perverse incentives; and failure to mobilise members of the organisation.

These forms of leadership mistakes and organisational resistance can lead to organisational rigidity and the failure of reform programmes. In the light of these results, which suggest a lack of managerial skills in the health sector, the importance of continuous training is obvious. In summary, professionally conceived and maintained

change management is needed to adapt both to environmental challenges and to patient/consumer needs.

Quality management programme

The 1997 Health Care System Act prescribed the introduction of quality management programmes in health care institutions in Hungary. It also set out requirements on patients' rights and personal data protection. This legislation is only sluggishly being put into practice; nevertheless monitoring quality is becoming a basic tool of hospital management. Our centre is thus involved in offering training in quality management programmes. Unfortunately, the increased number of hospital admissions under conditions of supplier-induced demand, and the shortage of nursing staff, make it difficult to implement and maintain ongoing strategies for monitoring and improving the quality of services.

“Unfortunately, the increased number of hospital admissions under conditions of supplier-induced demand, and the shortage of nursing staff, make it difficult to implement and maintain ongoing strategies for monitoring and improving the quality of services”

Management control programme

The 'management control' programme, launched in 2001, has attracted general interest throughout Hungary. The course aims to synthesise knowledge from the business and health sectors. The definition of management control, derived from business management, means an approach to complex management tasks that synthesises planning, information gathering, monitoring and evaluation.⁵ Some demonstration projects in health care institutions have shown the general applicability of the model, although the specific features of health care organisations mean that the model must be adapted.

The central goal is to develop a cost-sensitive accounting system in a health care institution; one which ensures transparency, enforces medium and long-range performance and cost planning, and couples financial incentives with efficient performance. The responsible leaders must agree on this system in advance. The hospital then bases its organisational strategy upon an analysis that links costs and perfor-

“Hospitals will continue to dominate the health care system in Hungary and old ways of working will continue to influence hospital performance”

mance. As the financial stability and transparency of health care institutions is a basic goal in the reform process, the introduction of budgetary and management control systems will be a key issue in the future of Hungarian hospitals.

Case study: a story of partial success

The subject of our case study is a large county hospital in Hungary. County hospitals, owned by county local governments, offer secondary and some tertiary care and also coordinate the health care system of their county. Hungary, with a population of over 10 million, has 19 counties plus Budapest as the capital.² In the late 1990s, county hospitals on average had around 1,200 beds. They offered the basic specialties - internal medicine, surgery, obstetrics and gynaecology, and paediatrics - and some also offered more advanced services such as diagnostic imaging, cardiology, haematology, immunology, endocrinology, oncology and emergency psychiatry. This case study hospital has an in-patient capacity of over 1,200 beds in more than 20 wards, and employs nearly 200 physicians, along with more than 1,000 nurses and almost 500 other non-medical employees. The hospital potentially covers a population of 120,000 and treats more than 35,000 inpatients yearly.

Over the last decade, the hospital has installed modern diagnostic equipment and, parallel with its technical development projects, has launched new management projects such as quality management and management control. This case study demonstrates how one hospital has adapted to the restrictions placed upon health sector expenditure.

As a member of the Hungarian DRG case-mix demonstration project of the late 1980s, the hospital was aware of the necessity for efficient functioning. The hospital management chose a management control system that met strict criteria. The system was introduced in four successive steps. First, a management structure was laid down with the establishment of the management control department and a controller appointed to each hospital organisational unit. Second, the overall hospital strategy was agreed. In the third step, cost calculations were prepared for defined procedures/patient diagnostic categories and cost locations were determined. Finally, the accounting system was prepared and set up on the computer network.

The basic concept of this budgetary control

system is counter-flow planning. The hospital management determines the benchmark figures, and unit costs linked to performance are then planned also in each ward and department. The yearly hospital plan for the year is based upon this information, and the various departments are informed on the monthly analysis of accounting data. Incentives were introduced at a later point whereby departments performing better compared to the target plan were rewarded financially. Positive results from this management control system were immediately apparent and, after five years, the hospital closed the fiscal year with a positive balance.

The quality management project introduced at the same time emphasised patient information and obtaining feedback from consumers. Although the goals for quality management differ from budgetary aims, the hospital management hopes to reach a balance between quality and efficiency.

Conclusion

Hospitals will continue to dominate the health care system in Hungary and old ways of working will continue to influence hospital performance for at least another couple of years. Even a carefully designed programme for change will meet obstacles from various sides. The importance of managerial skills and continuing management training in the health sector is underscored by the constant drive to cope with the changing environment, and to provide both more efficient and better quality services.

REFERENCES

1. Orosz E, Holló I. Hospitals in Hungary: The Story of Stalled Reforms. *Eurohealth* 2001;7(3) (this issue).
2. Gaál P, Rekassy B, Healy J. *Health Care Systems in Transition: Hungary*. Copenhagen: European Observatory on Health Care Systems, 1999.
3. Jakab M, et al. *Flagship Module on Organisational Reform of Public Providers: Autonomization and Corporatization* (Work course material), 2001.
4. Beckhard R, Harris R. *Organizational Transitions* 2nd edition. Reading MA: Addison-Wesley, 1987.
5. Horvath and Partner. *Controlling* (in Hungarian). Budapest: *Kozgazdasagi es Jogi Konyvkiado*, 1997.

Implementing hospital reforms in the Czech Republic



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The Czech Republic has reduced its large number of acute hospital beds and set targets for further reductions. Hospital costs have continued to rise, however, despite changes by the insurance funds in their contracts with hospitals. Cost-containment is being sought through the introduction of funding that incorporates diagnosis-related groups.

The Czech Republic, with a population over 10 million, inherited a network of hospitals and polyclinics covering the entire country.¹ These were formerly managed by the Ministry of Health through a three-tiered system of regional, district and municipal health institutes, but the situation has changed significantly since the reforms of the mid-1990s. Hospitals are now owned by a public-private mix that includes the national government, districts and municipalities, as well as private not-for-profit and for-profit organisations. Independent of ownership, hospitals contract with the health insurance funds to provide services to the insured population. Current reforms include further changes to hospital ownership and proposed changes to the financing system through the use of diagnosis-related groups (DRGs).

Infrastructure: hospital types and ownership

The national government still owns regional and university hospitals, which have over 1,000 beds and also function as teaching hospitals. These large hospitals provide a full range of specialised care and take referrals for tertiary care. While their number is small at 24 (12 per cent of hospitals), they nevertheless account for 31 per cent of beds. Following the break-up of the health institutes that owned state hospitals, own-

ership of the smaller hospitals was transferred to districts and municipalities. These hospitals comprise almost 60 per cent of all hospitals and provide around 60 per cent of all beds. District hospitals offer the main specialities, have their own blood transfusion unit and mobile emergency service, and typically have just under 700 beds. Local hospitals usually have less than 200 beds and run only four departments: internal medicine, surgery, paediatrics and gynaecology-obstetrics.

Some hospitals were privatised in the 1990s with the number of private beds rising from 0.3 per cent in 1992 to 9.4 per cent in 1997, though slowing to 10 per cent in 2000. Of a total of 203 hospitals in 2000, 64, or 32 per cent, were in private hands, so that most privately-owned hospitals are small. While they are partly owned by non-profit charities or foundations, they are considered to be for-profit as a law regulating non-profit organisations in health care is still being discussed. Privatisation as a policy lacks political and professional consensus. Moreover, no funds are available for such changes and hospitals are not a promising field for private investors. Thus, the process of privatising hospitals came to a stop in the late 1990s and is unlikely to resume in the near future. However, this does not imply a stable situation regarding ownership, as the newly created 14 regions now govern most public sector hospitals and will thus play a very important role. It was decided that new regional health care networks should be set up to ensure better access to health services. How university hospitals will be integrated in such a decentralised system is, however, still unclear.

Public sector hospitals are managed by directors, mostly physicians until recently

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but increasingly these are managers, lawyers or economists. The director used to be directly accountable to the municipality or Ministry of Health, but now answers to a board comprised of representatives from the municipality, the Ministry of Health, local enterprises and employees of the hospital. A hospital director is supported by three deputy directors, the clinical chief, the head of nursing and the head of finance, and in practice, the director is very powerful within the hospital.

Infrastructure: number and types of beds

The Czech Republic has a cautious programme for a long-term decrease in the number of hospital beds, and some acute care beds have been switched to long-term care. The 10.9 beds per 1,000 population in 1990 were reduced by 22 per cent to 8.5 per 1,000 in 1999 (Table 1). The average length of stay (all inpatient beds) decreased sharply during these years from 16 to 11.6 days. The number of acute care beds decreased between 1990 and 2000 from 8.1 to 6.1 per 1,000 population, with a decrease in average length of stay from 12.5 to 8.0 days (Table 1).

In accordance with a new law in 1997, Act

No. 48/97, it was determined that public competition would be a key principle for reorganising the health care system. And, in May of the same year, the Ministry of Health launched a programme for restructuring hospitals. The targets were to reduce acute beds to 5 per 1,000 population and to increase long-term beds to 2 per 1,000. The 2000 figures show that progress is being made, with one-third of the reduction already achieved. Leaving aside political issues about closing hospitals, 5 beds per 1,000 could accommodate the current population of hospital patients assuming an 85 per cent instead of 70 per cent occupancy level.

The policy intention was also to limit the number of health care providers. Accordingly in 1997, the General Health Insurance Fund (GHIF), which insures about 75 per cent of the population, refused to enter into contracts with 176 new health care providers and terminated contracts with 130 others. This was only partly successful since the other eight smaller health insurance funds in competition to the GHIF did not follow suit.

The physical quality of hospital services is generally good since almost all local and district hospitals either have been newly built or reconstructed during the last 20 years. There is more variation in quality amongst the central hospitals however. Some old buildings would be extremely expensive to reconstruct, while others are new but burdened with debts related to their original construction. The latter are unable to fund further development and, as a result, have a strong incentive to increase activity in order to repay their debts. Quality standards for hospitals are being implemented slowly. An accreditation procedure is underway for all hospitals and health care facilities, which began in 1995 as a collaborative effort between the Ministry of Health, the health insurance funds, the associations of hospitals and professional chambers.

Contracting and paying hospitals

Health insurance funds contract with hospitals and doctors to provide services. Since the introduction of the health insurance system in 1993, payment was purely fee-for-service, based on a fee schedule listing a certain number of points per service. The number of points was then multiplied by the monetary value per point to calculate the reimbursement. The monetary value itself was determined by various factors such as the allowed maximum value and the

Table 1
INPATIENT FACILITIES: UTILISATION AND PERFORMANCE, 1990—98

	1990	1995	1996	1997	1998	1999	2000
INPATIENT CARE							
Beds per 1,000 population	10.9	9.2	9.0	8.8	8.6	8.5	
Admissions per 100 population	18.1	20.1	20.5	20.2	19.6	19.4	
Average length of stay in days	16.0	13.1	12.5	12.0	11.7	11.6	
Occupancy rate (%)	72.7	78.3	77.2	75.3	72.4	n/a	
ACUTE CARE							
Beds per 1,000 population	8.1	6.9	6.7	6.6	6.5	6.4	6.1
Admissions per 100 population	16.7	18.7	19.0	19.1	19.2	18.9	18.9
Average length of stay in days	12.5	10.3	9.7	9.2	8.8	8.2	8.0
Occupancy rate (%)	70.5	73.4	74.7	72.2	70.8	67.0	69.9

Source: WHO Regional Office for Europe, 2001²; Institute of Health Information and Statistics (UZIS), 2001³

overall level of activity to be reimbursed by an individual fund.

Invoices submitted to the insurer contained a patient identification code and a list of the procedures carried out. Up to 4,500 procedures were reimbursable with points supposedly based on the time taken to carry out a procedure. Hospitals also invoiced points for each patient day spent in the hospital and, in addition, received a lump-sum payment for pharmaceuticals. Direct charges for materials were reimbursed first and the remaining funds were then divided by the total number of points. Each health insurance fund calculated its own point values.

This system had shortcomings. In order to compensate for decreasing fee-for-service rates, providers increased the number of services delivered, resulting in 'point inflation'. For it stimulated considerable growth in hospital and ambulatory services, over-valued some specialities (such as orthopaedics and ophthalmology) relative to others, and there was no allowance for higher labour costs in some areas such as Prague. Also, it did not encourage shorter hospital stays even though from late 1994 *per diem* payments were based on a decreasing scale. Despite these changes, GHIF per capita expenditure for inpatient care increased by 51 per cent between 1993 and 1997, although expenditure on other health services increased even faster.

Payments to hospitals are supposed to cover recurrent costs and also include a depreciation allowance to finance capital expenditures. Capital investment for university and regional hospitals, however, is funded from the state budget, while district hospitals theoretically also receive support from the municipalities. These sources of funding are available only to public sector institutions. If the privatisation of health care facilities is to continue, then private sector hospitals will need to tap private capital

Recalling Act No. 48/97 mentioned earlier, amongst other changes, the new law introduced a new budget system for hospitals. Originally limited to two years, the system was subsequently extended two years later under further legislation, Act No. 106/99. Since mid-1997, inpatient health care for each hospital has been reimbursed according to a budget (or rather budgets as funds contract hospitals individually) based on the activity in the previous calendar year taking inflation into account. The points from the fee schedule are used to determine

the activity of the hospital, or, in other words, to evaluate whether an equivalent activity has been delivered for the budget.

A combined daily charge incorporating diagnosis-related groups for hospital care is being piloted in 19 Czech hospitals, with the so-called 'Grouper-AP-DRG-3M' adapted for the Czech Republic. This new payment system is to be fully implemented in the near future.

"The majority of the bed stock (over 90 per cent) remains in the public sector despite policy efforts to increase privatisation"

Conclusions

Starting from a level well above the central and eastern European average in 1990, the Czech Republic has decreased hospital bed numbers rapidly but still has more for its population than many of its neighbours. The policy is to further reduce acute care hospital beds and to increase long-term care beds. The hospital system has room for greater productivity since the average length of stay remains rather high compared to most western European countries – though lower than in Germany and Switzerland – while the occupancy rate has remained comparatively low. The majority of the bed stock (over 90 per cent) remains in the public sector despite policy efforts to increase privatisation, and most public sector hospitals now are owned by 14 regional administrations. Hospital costs have continued to rise despite changes to the payment system by the main insurance fund since hospitals had fiscal incentives to admit more patients and to over-serve. The hope is that rising costs will be contained by the introduction of DRG payments.

REFERENCES

1. Struck P, et al. *Health Care Systems in Transition: Czech Republic*. Copenhagen: European Observatory on Health Care Systems, 2000.
2. WHO Regional Office for Europe. *Health for all Database*, 2001.
3. Institute of Health Information and Statistics (UZIS), Czech Republic, 2001.

Hospital sector reform in Poland



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Poland has decentralised the ownership of hospitals and reorganised acute care hospitals, including switching some to long term care. New payment methods are being introduced by the statutory regional health insurance funds. Both the public and the politicians want to see more rapid improvements, however, in both the efficiency and quality of health care.

Poland began to address the problems within its health system in the late 1980s but progress has been slow. The country has been in the process of redefining the role of the state, attempting to allocate resources more efficiently through quasi-market mechanisms, offering greater individual freedom through democratic processes, and strengthening institutional capacity through the devolution of management. In the past, both surpluses and shortages in hospital services occurred due to variations in local patterns and also to political patronage. The compulsory catchment areas and the role of primary care doctors as 'gate keepers' were unpopular with patients who rightfully felt that they were wasting their time waiting in line, not to be treated, but to be referred on to other services. Patients paid gratuities to be referred quickly up the line or to use services outside their official areas. Instead of providing comprehensive and integrated services, the system created many barriers to access through corruption and perverse fiscal incentives. Significant structural changes to the hospital system have been

made since the mid-1990s, however, and particularly over the last three years, as this paper will describe.

Hospital utilisation trends

Poland does not have an excessive supply of hospital beds compared to western European countries but no comparable statistics are available for acute care beds. Most hospital beds in Poland are said to be short-term with shortages in long-term and palliative care beds. Investment in the early 1970s produced a build-up of acute care hospitals and excessive specialisation¹ at a time when most western countries had begun to shift care out of hospitals to ambulatory services. Figure 1 shows the static number of hospital beds in Poland at over 5 per 1,000 population, with a slight drop in the late 1990s compared to steady declines in European Union (EU) countries. Turning to acute care hospitals, the average for the central and eastern European countries in 1998 was 5.7 beds per 1,000 population, compared to 4.6 in the EU – with a large number in Germany at 7.0, compared to only 2.4 in the United Kingdom.² If most hospital beds

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The authors wish to acknowledge the assistance of Monica Chelkowska-Tarony in the preparation of this article.

Figure 1
NUMBER OF ALL HOSPITAL BEDS PER 1,000 PERSONS IN SELECTED EUROPEAN COUNTRIES

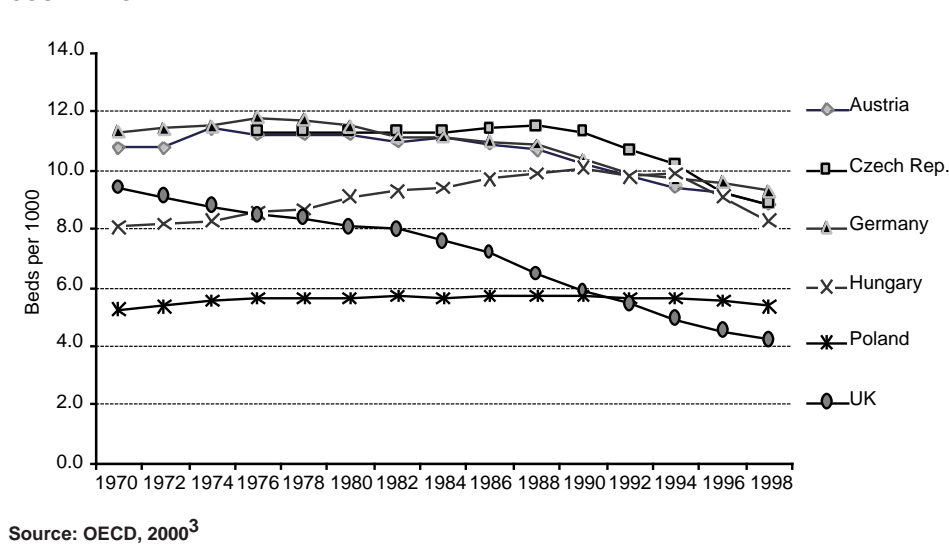


Table 1
INPATIENT UTILISATION AND PERFORMANCE, 1980—99

Inpatient	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Hospital beds/ 1,000 population	6.67	6.59	6.60	6.53	6.39	6.38	6.34	6.29	6.11	6.10	5.91	5.19
Admissions/ 100 population	10.12	10.64	10.57	10.61	10.75	11.19	11.43	13.09	13.6	13.5	13.8	13.8
Average length of stay in days	14.0	13.1	12.5	12.3	11.8	11.4	11.0	10.8	10.6	10.4	10.1	9.3
Occupancy rate (%)	84.3	78.5	73.1	72.5	71.1	71.9	71.8	71.6	71.8	70.9	72.1	72.2

Sources: World Health Organization, 2001²; National Centre for Health Information Systems, 2000⁶

in Poland are for acute treatment, then the supply in Poland certainly is higher than in many EU countries.

The number of hospital beds peaked in Poland in 1990 at about 6.6 per 1,000 population (slightly different figures are supplied by Poland to World Health Organization and the Organisation for Economic Co-operation and Development), and thereafter decreased slowly (Table 1). There were 4.9 hospital beds per 1,000 population in 2000.⁴ Various utilisation indicators suggest that Poland has excess hospital capacity. Over the last two decades, admissions per 100 population have been lower than in most western European countries, occupancy levels have been lower, but the average length of stay has been longer.⁵

A current aim of health system reform is to reduce acute hospital beds. The target is to decrease these from 5.4 per 1,000 population to 4.1 and to increase the occupancy level to 85 per cent. The related aim is to increase the number of long-term hospital beds from 0.5 to 2.0 per 1,000, and palliative and hospice care to 0.05 per 1,000. Another goal is to improve psychiatric wards in general hospitals and to increase the number of beds in psychiatric hospitals. Thus the overall supply of hospital beds for the population will not be substantially decreased but rather reconfigured.

The number of acute hospital beds decreased from 230,385 in 1998 to 217,352 in 2000 (a loss of 13,033 beds) but at the same time 5,200 new long-term beds were created. This equates with an overall decline in all hospital beds by 3.4 per cent between 1998 and 2000.

Hospital ownership

Hospitals began to be devolved from central to lower levels of government from the early 1990s and some hospitals were

restored to their original owners, either private organisations or the church. The new self-governments (regional, district and community) now run most primary and secondary health care services. Self-governments are responsible for investment in health care institutions and must also bear the weight of debts. Health facilities were required to convert from budgetary units of the state to so-called 'autonomous health care units' while remaining a public entity but operating more like a company. By May 1998 only 100 out of 1,200 units were autonomous, but this process accelerated in the second half of 1998 to include almost all health units. Much of this conversion may be described as artificial, however, with only the label and legal form changed; for hospital managers have not changed the way they do their job.

A hospital director is accountable to the hospital executive board. The executive board has representatives of the self-government entity, the staff and the trade unions. The internal management structure of the hospital varies but typically the management board consists of the heads of hospital departments.

Under a decree from the Ministry of Health dated 22 December 1998, the country's hospitals were divided into three reference levels, depending on the type and scope of services, with defined catchment areas. The first reference level is the local (*gmina*) and district (*powiat*) hospitals that provide basic care; the second level includes the regional (*voivodship*) hospitals that provide more specialised care; and the third level is the national university hospitals and institutes. In addition, there are many sanatoria and spas. The purpose in categorising hospitals is to ensure that each is appropriately equipped to provide good quality and appropriate health services. Since patient

Table 2
HOSPITALS AND BEDS 31.12.1999

Type of hospital ownership	No. of facilities	No. of beds	% beds
Ministry of Health	59	24,988	12.6%
Self-government entities	635	72,647	87.1%
- voivodship	223	75,520	38%
- powiat	395	93,041	47%
- gmina	17	93,041	2.1%
Non-public hospitals	18	692	0.3%
Total	712	198,327	100%

Sources: National Centre for Health Information Systems, 2000⁶; National Centre for Health Information Systems⁷

costs vary across these facilities, it is important to determine appropriate proportions of hospital beds. A new licensing and accreditation system is therefore also being set up.

Modernisation and maintenance of hospitals is mainly the responsibility of the *voivodships* while major capital investments are financed from central funds. Investment in the infrastructure has dropped over the last decade to below 10 per cent of total health care expenditure, so that many hospitals require repairs and lack modern equipment. Some sub-standard hospitals should be closed but are not for political reasons. The self-governments thus incurred a major financial responsibility with the hospitals. The Sickness Funds allocate few funds to invest in hospitals and professional staff want higher pay. Since 1999, the national government has granted special funds (some 1 billion zlotys or US\$250 million) to restructure hospitals, close those in bad shape, and transform 'acute beds' into long-term beds.

In 1999 Poland had 712 hospitals (Table 2) compared to 679 in 1997. This 1999 total rises to 756 with the inclusion of military hospitals, prison hospitals, those managed by the Ministry of Internal Affairs and Administration, and health facilities managed by industry or other business institutions.

The 59 hospitals under the Ministry of Health include 41 university teaching hospitals and 15 medical research institutes, and their number of beds has decreased slightly since 1997. Most hospitals (635) are now owned by the *voivodship* and *powiat* self-governments, accounting for 87 per cent of the bed supply.

The private hospital sector is growing slowly. There were 9 private hospitals in

1994, 12 in 1996, and 18 in 1999 (Table 2). There were 38 registered in 2000 but this number includes small nursing 'hospitals', many of which are the institutions formerly run by employers and industry.⁴

The number of beds in the 105 psychiatric hospitals (run by the Ministry of Health or the *voivodships*) has decreased, but the number of beds in psychiatric wards at general hospitals has increased.^{6,7}

Health insurance

Accurate statistics on health care expenditure in Poland have been difficult to extract from the public accounts. According to research by the School of Public Health in Kraków and the National Centre for Health System Management, about 15 per cent of the state budget, or 4 per cent of GDP, was dedicated to health care.⁸ This does not include 'greyzone' financing such as out-of-pocket payments by the public, including gratuities. As in many central and eastern European countries, many public sector doctors 'moonlight' in the private sector. Out-of-pocket payments were estimated at around 38 per cent of total health expenditure in the early 1990s.⁹ Revised figures for Poland estimate that health expenditure accounted for 6.4 per cent of GDP in 1998 compared to 8.6 per cent in the European Union.² In an effort to secure sustainable funding for the health system, universal health insurance has been introduced.

The 1997 Law of Universal Health Insurance, after various amendments, took effect in January 1999. Sixteen regional health insurance funds in the 16 *voivodships* were established, plus one national fund for so-called 'uniformed workers' and their families. Health insurance is mandatory and people contribute 7.5 per cent of income, which is deducted by employers (about 22 billion zloty), or contributed by the state in the case of the unemployed, pensioners and farmers (about 5 billion zloty). The premiums for Sickness Funds were recently raised to 7.75 per cent of a citizen's income and are to rise to 9 per cent by 2003.

The Sickness Funds are autonomous organisations that contract with hospitals, and an insured patient's choice of hospitals is limited to those under contract. A patient has the right to select 'any hospital' but within a 'proper' level of care. Patients still however prefer to go directly to university hospitals, sometimes with the help of 'envelope' payments to referring physicians.

Paying hospitals

The Sickness Funds purchase specific medical services from hospitals within defined limits. The total price list in 1999 was about 100 items, covering 60–70 prices for outpatient clinic visits and 40–50 prices for ward discharges. By 2000, the Funds listed 300–400 outpatient items since each service had diversified – for example, first time visit, visit with tests, follow-up visit, etc. – while the 40 inpatient prices had risen to over 100 items. Apart from increasing administrative complexity, the payment mechanism encouraged hospitals to admit more patients and to aim for the upper service limit. Despite the goal of decreasing hospital admissions, these increased by nearly 30 per cent between 1999 and 2000 – according to Sickness Fund statistics.

Some Sickness Funds have started to use other payment methods including fee-for-service or fee-per-diagnosed case (similar to diagnosis-related groups or DRGs). A pilot project to adapt the LKF – the Austrian DRG equivalent – began in 1999. Given limited resources, there are prolonged negotiations and friction between service providers and sickness funds. For example, Ministry of Health hospitals continue to undertake very expensive medical and surgical procedures.

Reform outcomes

Consumer views after the first year of the new system have not been positive. A representative survey of social groups found that 38 per cent of respondents were less satisfied after this phase of reform than before (Table 3).

The main success by the end of 1999 was the substantial decrease in debt incurred by public sector health care institutions, hospitals in particular. In 1998 their accumulated debts of about US\$1.7 billion were taken over by the state treasury and their 1999 debt was lower at some US\$50 million. In 2000, however, the debt rose to 2 billion zlotys or US\$500 million.

Despite some negative results from the reforms, unlike the plans that were never implemented earlier in the 1990s, big structural changes have taken place within the hospital sector. Within the wider health care system, other changes include the massive privatisation of ambulatory care, gradual reduction of employment in the health sector, and the appearance of new forms of health services such as long-term care and nursing homes. These changes call for both quantitative and qualitative evaluations.

Table 3
PERCENTAGE HOUSEHOLD SATISFACTION WITH HEALTH SERVICES, 1998 VERSUS 1999

Social Group	Less satisfied	% households More satisfied	No difference
Employees	31.9	2.7	65.3
Farmers	37.7	2.3	59.8
Farm workers	34.5	3.2	62.3
Pensioners	51.3	3.2	45.5
Self-employed	28.7	1.8	69.4
Other sources	34.9	3.6	61.4
Total	38.2	2.6	59.2

Source: Czapinski J, Panek T, 2000.¹⁰

Health policy is now on the political agenda, and with the coming Parliamentary election; there are calls for ‘curing health care’. There are many ideas for reform. Each political party offers its own solution but most want to reduce the number of funds, re-exert more central control over the autonomous hospitals, set national tariffs, and determine standards of care. A careful observer may notice the lack of ideas for rapid improvement of the situation, but the public is impatient and politicians feel obliged to offer change. One may expect interesting changes in the coming months, hopefully based on some evidence.

REFERENCES

- Preker A, Feacher R. *Market Mechanisms and the Health Sector in Central and Eastern Europe*. World Bank Technical Paper No. 293. Washington DC: World Bank, 1995.
- World Health Organization. *Health For All Database*. Copenhagen: WHO Regional Office for Europe, 2001
- OECD. *OECD Health Data 2000: Comparative Analysis of 29 Countries*. OECD, 2000.
- National Centre for Health Information Systems. *Annual Statistical Bulletin*. Warsaw: National Centre for Health Information Systems, 2001.
- Karski JB, Koronkiewicz A, Healy J. *Health Care Systems in Transition: Poland*. Copenhagen: European Observatory on Health Care Systems, 1999.
- National Centre for Health Information Systems. *Annual Statistical Bulletin*. Warsaw: National Centre for Health Information Systems, 2000.
- National Centre for Health Information Systems. *Statistic Information Book 2000*. Warsaw: National Centre for Health Information Systems, 2001.
- National Centre for Health Information Systems. *Annual Statistical Bulletin*. Warsaw: National Centre for Health Information Systems, 1998.
- Chawla M, Berman P, Kawiorska D. Financing health services in Poland: new evidence on private expenditures. *Health Economics* 1998;7:337–46.
- Czapinski J, Panek T. *Social Diagnosis*. Warsaw: Department of the Prime Minister, 2000.

Reforming hospitals in Croatia: Asking the patients

All over the world, governments are reassessing their role in health care service delivery. The 2000 health care reform strategy for Croatia aims to decentralise health care services, rationalise the hospital system, develop better links between hospital and community-based health services, and offer patients more say in their own health care.



Stipe Orešković

The reforms being undertaken in the Croatian hospital sector specifically are motivated by several factors, which this paper discusses in turn. These are:

- the inefficiency of existing delivery systems;
- rising costs leading to new approaches to public sector management; and
- consumer dissatisfaction with the quality of care.

Structural changes as a response to public sector inefficiency

Croatia has begun a broad programme of health sector restructuring with the aim of moving closer to achieving the best health outcomes for the available resources. These strategies are laid out in its 2000 health care plan.¹ Croatia already spends 10.8 per cent of GDP on health care and it is not realistic to expect any increase in these funds. However, the shrinking employment base and ageing population are contributing to the problem of sustaining health financing and the health insurance scheme (Figure 1).

On what basis have strategic decisions been made about the priorities for reform? Non-communicable diseases (such as stroke, ischaemic heart disease, acute myocardial infarction and heart failure) present a major challenge, and together represent 39.6 per cent of the causes of death. Reducing the early avoidable death toll requires looking not only at patterns of ill-health, but levels of risk factors in the population, environmental and socioeconomic determinants of health, as well as changing public attitudes towards health and disease. There is also a need to explore the scale and nature of health inequalities, a topic that has so far received very little attention in Croatia. This will require more investment in human resources, such as training in multidisciplinary research that draws on epidemiology, medical statistics, health economics and behavioural sciences.

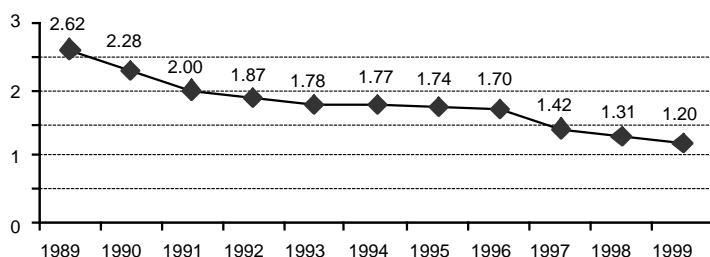
The health system must be made more efficient by reconsidering its priorities in order to improve the availability and quality of health services.² The health care sector has an inefficient and costly structure for delivering services. The Croatian Health Care Reform Plan of 2000 aims to achieve a more effective, efficient, and financially sustainable health system through the following mechanisms:

- (a) Strengthening institutional capacity within the health sector;
- (b) Introducing pilot service delivery improvements;
- (c) Strengthening public health activities;
- (d) Developing policy options that will strengthen financial sustainability; and
- (e) Improving, expanding and integrating the health information system.

The plan recognises that one key to more effective resource use is better integration between primary care and hospital services. Health services will be provided through a mixed system of public and private health institutions. Public health institutions will mainly cover the higher and more expensive forms of health care i.e. hospitals and polyclinics, while private practitioners will deliver primary health care and some specialist health care. Planning for the supply and distribution of health services (both public and private) will be based on popu-

Figure 1
DEPENDENCY RATIO 1989—99, CROATIA

Employed / retired - Dependency ratio



Source: Croatian Health Insurance Institute Database, 2000⁷

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lation health needs. New schemes are being discussed for categorising facilities and services, for accrediting providers, and for undertaking quality assurance.

Health care services are to be better integrated through vertical links between local self-government and health administration units. Physical access will be improved by planning a network of hospitals and other health institutions in accordance with the needs of local populations across the country. Financial access will be improved mainly by establishing basic health insurance coverage. Organisational changes and the identification of clinical priorities are expected to reduce waiting lists for elective health services; for example, the wait for a hip replacement is more than two years in some hospital orthopaedic departments.¹

One key challenge is that consumers and providers expect more and better health services than the available resources can sustain. The district of Koprivnica has been selected to pilot a wide range of sustainable activities. This will involve adjusting the mix, number and scale of health services, to better match the health needs of its population. This means using the most clinically appropriate and cost-effective methods that are economically sustainable. For instance, hospitals are expected to adopt a more cost-effective approach to hospital care and to strengthen their links with the primary and secondary sectors.

The hospital sector is a key focus for reform. The primary goals of the health care system, and thus of the hospitals themselves, include improving health and being responsive to the legitimate expectations of the public. In this vein for example, neither the public nor the policy-makers are happy with recent factory-like hospital designs. The design of a hospital must reflect its many different roles, such as teaching and research, as well as direct patient care. One issue for Croatia is to decide upon the optimal size and distribution of its hospital system. The hospital system in Croatia was built for a different environment – namely, the former Yugoslavia – a different organisational system (self-managed socialism), and a larger population. For example, 400,000 fewer people now live in Croatia compared to before the war, and patients also came from other parts of the former federation. In addition, changing patterns of disease, rising public expectations, and new technology mean that policy-makers face a variety of pressures in restructuring the hospital system.

Table 1
PERFORMANCE INDICATORS FOR CLINICAL, GENERAL AND SPECIAL HOSPITALS, 1998 AND 1999

	Clinical hospitals*		General hospitals		Special hospitals	
	1998	1999	1998	1999	1998	1999
Bed utilisation (%)	89.6	87.4	86.9	86.5	93.3	81.9
Average length of treatment (days)	10.4	10.0	8.9	8.8	34.1	34.2
No. of patients per bed per year	31.5	31.9	35.8	35.9	8.9	8.7
Turnover interval (days)	1.2	1.4	1.3	1.3	6.9	7.6

* Clinical hospital centres, clinical hospitals, university departments

Source: Ministry of Health Republic of Croatia¹

Trends in hospital utilisation patterns can be used to evaluate performance across the hospital sector (Table 1). For example, the average length of stay in hospital is gradually falling. Croatia can also consider the structure and performance of its hospital sector in relation to that in other countries in Europe.³

As mentioned, Koprivnica city (and county) in the northern part of Croatia, with 123,000 inhabitants, was selected to pilot some health care system reforms. The project covers the district referral hospital located in the city as well as primary care facilities and personnel throughout the county. The situation before the project started was that the district hospital had 452 beds (392 under contract to the Croatian Health Insurance Institute), about 17,500 admissions per annum, an occupancy rate of 100 per cent of contracted beds, and an average length of stay of 8.1 days. General practitioners had an average patient list of 1,700 and 4–6 doctor-patient contacts per year. Payment to doctors is based upon patient capitation funding. Referral rates are high by international standards. A home for the elderly (178 beds) and home nursing services exist in the district as well. The expectation is that a better organised and integrated district health care system will increase the use of primary health care services and reduce the reliance on hospital services. The reform activities are grouped into three major areas: (a) service delivery including primary care, alternative levels of care and hospital reorganisation; (b) purchasing; and (c) information technology.

The links between the hospital and the community are being strengthened by providing more home-based support services, by improving the discharge process, and by

“Croatia is considering how to develop its own variant of case-mix funding, but the process will take at least a decade to reach a complete and fully operating system”

involving general practitioners in the post-hospital management of their patients. These strategies involved the following activities:

- Recommendations were made on improving the hospital discharge planning process;
- Patients were identified who could be discharged home earlier under the management of qualified practitioners;
- The most appropriate model to meet service objectives was identified;
- The required resources were identified and costed (such as staff, training, vehicles and equipment);
- The number of nursing home type patients occupying acute hospital beds was identified; and
- Referrals and admissions to nursing home beds were analysed.

The potential for managing more patients as day-only cases also was analysed. This involved examining the hospital case-mix profile and average length of stay by type of patient, type of service provided, and the impact on hospital and primary care services. In conjunction with hospital management, it was agreed to pilot a dedicated day hospital. With clinicians and leading Croatian experts, clinical protocols for the thirteen most common procedures for day hospital admissions were prepared at the national level for consideration and discussion.⁵

The project has so far reached its half-way mark. At the end of the project, the length of stay in the Koprivnica hospital is expected to decrease to less than five days. As a consequence, the number of beds will be reduced to 216 acute beds, plus 135 ‘step-down beds’, to make a total of 351 beds. The objective is also to reduce the total number of admissions appropriate for that population to around 12,500 per annum.

New approaches to management as a response to rising costs

Many countries, both developed and those in transition, have introduced case-mix funding as an element in their hospital payment systems. In general, this is a clear trend, but there are of course national variations. Some countries have proceeded further in their use of case-mix funding, while others have developed their own variants upon the original American system, such as Germany, Great Britain (England) and France. Different case-mix models have been developed in order to relate payments

more closely to clinical aspects and to yield a more precise description of costs. The introduction of case-mix funding often requires substantial changes to the funding structure of a country’s health care system. Croatia is considering how to develop its own variant of case-mix funding, but the process will take at least a decade to reach a complete and fully operating system.

Health services are being decentralised through new regional organisations. These will gather performance information with respect to clinical standards and care, and will be responsible for implementing quality assurance schemes. From the pilot studies it is clear, for example, that certain specialities (especially medical specialities) treat more senior citizens than do others (especially surgical specialities). The Ministry of Health has therefore signed an agreement with the Andrija Štampar School of Public Health to run training schemes on managing change in health care organisations. The future managers will learn how to define problems and opportunities in managing health care organisations. They should recognise that a health system is composed of many different but integrated components: ambulatory care, hospital, long-term care, mental services and home care.

The course will provide participants with tools to understand the dynamics within a health care organisation and the complexities involved in setting up quality assurance schemes. There are many demands upon managers who now must develop new knowledge and skills in areas such as capacity analysis, productivity analysis, the development of quality standards, and the role of corporate strategies. Current proposals to create a more decentralised hospital sector will require hospital managers who have this new knowledge and skills.

Consumer satisfaction

The reforms also aim to improve the quality of health services and thus increase patient and citizen satisfaction. Clinical guidelines were recently prepared for the ten most common diagnoses. A key principle is the right of the patient to be fully informed about both their disease and the planned mode of treatment. Further, a patient should be encouraged to actively participate in making treatment choices. Special attention will be paid to the elimination of double and/or unnecessary procedures in diagnosis and treatment.

As in many other countries in transition, Croatia is emerging from a non-democratic and highly-centralised system where the

state was the central actor. Patient participation was not previously regarded as an issue. Observing the democratic changes in other areas, patients now want a greater say in their own health care, such as selecting their physician and/or hospital, participating in medical decision-making, and in policy-making regarding local health services. Traditionally, patient involvement in medical decision-making during doctor consultations has been minimal, even non-existent at the level of organisational policy-making. Greater community involvement in the health sector has been advocated over the past decade. Patient choice is being claimed as a democratic right, thus offering individuals a mechanism to exercise more influence through the choice of provider and/or insurer. Local community health boards/councils (as in Finland and the United Kingdom) and the growth of health non-governmental organisations (NGOs) offer individuals the opportunity to participate actively in health policy-making and management. These opportunities are developing rapidly in the countries of central and eastern Europe, mainly through the decentralisation of health services.

Surveys of patient opinions are being developed to gain a consumer level view of service quality. Each individual can point out what is or is not going well, help in setting targets for improving care and in measuring the impact of reforms. This opportunity for patient feedback also helps restore the trust in medicine shaken by decades of deteriorating health services, the commercialisation of medical care, and media attention to medical error.

Croatia has undertaken a state-wide survey of patient opinion on their hospital experiences.⁵ All patients hospitalised over a set 90 day period received a questionnaire upon leaving the hospital, which is to be filled in at home and returned anonymously by prepaid mail to the Ministry of Health. Amongst other things, the questions ask about admission; communication with staff; help from staff; staff sensitivity; patient degree of satisfaction with the hospital; what they liked or disliked; what improvements they would suggest; and who they think can best assure the protection of their rights. The questionnaire was drawn up after consulting both patients and medical staff. Patients were approached through NGOs, which invited their member groups to suggest questions. Medical staff were approached through the hospitals (via the medical director or hospital medical advisory board), and through med-

ical associations and chambers.

During the first month, 37,998 patients discharged from hospitals completed questionnaires. This represents a 23 per cent response rate, indicating their high interest in the exercise. The analysis so far already reveals those departments (clinics) with disproportionate shares of patient complaints, the types of complaints made by patients, and the type of staff complained about. The information thus obtained should show the strengths of each hospital and the areas that require improvement.

Reforms for the 21st century

In the twenty-first century, reforms and their outcomes will be measured not only from the perspective of policy-makers but also the consumers. This is largely what differentiates a population-based approach to health care from a traditional one. Modern hospitals need a coherent strategy for monitoring performance to ensure equity of access and responsiveness in service delivery. However, despite the rising interest in hospital reform, evidence on the impact of reforms on hospital performance is still weak. The potential for encouraging citizens and patients to influence hospital behaviour is also not fully explored. The answer as to whether the reforms are a success, a failure, or neither, will be evaluated and measured against five criteria: equity, quality, choice, responsiveness and accountability (making decision-making transparent to the public).⁶

In the last few years, the public has lost sight of changes being made in health policy, including sensitive decisions like the exclusion of persons from certain benefits, increased co-payments, supplementary health insurance mechanisms, and a reduction in beds in secondary and clinical hospitals. The Croatian government thus took the risk of opening up a public debate on priorities for the next decade. In the current phase of health care reforms, consumer views are becoming increasingly important, not only in evaluating the success or otherwise of these initiatives, but in influencing future reform plans. It became apparent that not one single objective, whether to decentralise health care services, rationalise the hospital system, or develop better links between hospital and community-based health services, could be reached without public participation. Thus, the conclusion is that policy-makers should use patient views not only to evaluate existing health services but also as an instrument for planning and designing future hospitals.

REFERENCES

1. Ministry of Health Republic of Croatia. *Health Care Reform: Strategy and Plan for the Reform of the Health Care System and Health Insurance of the Republic of Croatia*. Zagreb, June 2000.
2. Orešković S. New priorities for health sector reform in Central and Eastern Europe. *Croatian Medical Journal* 1998;39(3):225–33.
3. Vulic S, Healy J. *Health Care Systems in Transition: Croatia*. Copenhagen: European Observatory on Health Care System, 1999.
4. www.miz.hr/klinicke_smjernice/klinickesmjernice.html
5. Marusic A. Croatia starts to involve patients in medical decision-making. *Lancet* 2000;357(9272)
6. Le Grand J, Mays N, Mulligan JA. *Learning from the NHS Internal Market. A Review of the Evidence*. London: Kings Fund, 1998.
7. Croatian Health Insurance Institute Database, 2000.

The elements of health care system reform in Moldova



James Cercone



Joana Godinho

The failing economy in Moldova and the near collapse of state funds for the health care system provoked a major restructuring from 1998 onwards of Moldova's very extensive health care system. The number of hospital beds for the population has been more than halved and more funds transferred to primary health care. This radical restructuring was negotiated between the various vested interests and was implemented by the regional health authorities.

Introduction: a clear need for reform

Moldova faced up to three critical challenges in its 1998 strategy for health system reform. First, health status had been declining for nearly all Moldovans, leading to declining life expectancy and outbreaks in infectious diseases. Second, public spending on health had been reduced by 35 per cent per year over the past two years, with total health spending only just above US\$20 per capita per annum, and with arrears accumulating for salaries, utilities and supplies. The operating costs of the hospital system were crowding out spending on the essential drugs and services that have a significant impact on a country's health status. Third, the legacy of the Soviet health care system left Moldova with nearly five times the number of hospitals, beds and staff that were sustainable for an economy of its size, and nearly twice the number as compared to the Organisation for Economic Cooperation and Development (OECD) countries. In 1994, Moldova had 305 hospitals, over 50,000 beds and over 1,000 polyclinics to cover just over 3.8 million people. In terms of internationally comparable indicators, Moldova had 14.4 beds and nearly 4 doctors for every 1,000 people, versus 4.5 beds and 1.6 doctors per 1,000 in the United Kingdom (which runs its national health care system with fewer hospital beds and doctors than most European Union countries). The message for policy-makers was clear: restructure service delivery systems, promote outpatient care by developing a primary care network, and reduce the number of staff wherever possible.¹

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Economic necessity led the Ministry of Health and the *judet* health authorities (regional health authorities) to reluctantly initiate hospital rationalisation and sector

restructuring. The first steps included reducing the number of beds and freezing expenditures on non-essential services: full closure of hospitals was thought to be unpalatable for the population. These reforms produced little savings as more than 40 per cent of total expenditures were associated with the recurrent costs of running Moldova's extensive network of hospitals. Moreover, the Ministry of Finance indicated that further budget cuts were imminent since it saw no evidence of a clear reform strategy. By 1998, many health care facilities remained open but not operational as all beds were closed and many staff were absent. In the absence of adequate state funding for the health system, the public had to make out-of-pocket payments to obtain health care.

Elements of the reforms

Three important elements led to a turn around in the reform process and provide valuable lessons regarding health reform in transition countries. First, change has to be in the interests of all key decision-makers and the political costs have to be spread throughout all levels of government. The worsening fiscal crisis which affected local authorities more severely – since 65 per cent of financing was through local budgets – led managers at all levels of the system to search for solutions that would reduce hospital expenditures and free up resources for investment in primary care. Starting in 2000, the ministries of finance and health approved regulations that required a shift from historical budgets to a budget allocation based on per capita allocation, adjusted for age and sex. These regulations also stipulate that 35 per cent of the budget should be allocated to cover primary care. Because local managers were aware of their budgets

and financing needs, it was evident that bed closures were a necessary but not sufficient condition to achieve the changes required in the system.

The second element was an agreement between the Ministry of Health and the *judet* health authorities on a medium term restructuring plan. Under the proposed plan, each *judet* (twelve in total) would retain one general hospital, while the remaining facilities in each would be closed, leading to closures of as many as ten hospitals in a given *judet*. Staff would be reduced through attrition, with few staff made redundant in order to limit the political fallout from restructuring. Finally, the additional resources would be used to transform polyclinics into family medicine centres, to train general practitioners in family medicine, and to introduce more current clinical protocols for key diseases.

Third, consensus was reached among donors and the World Bank regarding the direction and the pace of reform. The policy reform discussions focused on investing in primary care, improving the quality of care and ensuring access to a basic package of services, rather than on introducing new sources of financing and requiring more hospital closures. Although it remained clear to all stakeholders that downsizing would remain a critical aspect of the reforms, the focus on issues more 'sellable' to the population (primary care, quality and free access) improved the face of the reforms. This allowed for an open dialogue between the Ministry of Finance and the Ministry of Health on what was required to steer the reforms forward; at least in terms of technical issues related to restructuring and additional resources for the health sector. A measure of the success is reflected in the recent, unanimous approval of a World Bank Health Sector Reform Project by the newly elected Communist Parliament.

In combination, these three factors worked together to promote a rapid change in the health care system. Working within the context of a conceptual framework for restructuring, but with total autonomy regarding the pace and methods for achieving the required changes, the *judet* health authorities started to close facilities, to 'facilitate' the departure of staff, and to reinvest in the primary care network. The freedom with which they were able to act was a critical element to the results that have been achieved to date.

At the same time, the cooperation among

external stakeholders and consensus on the changes required put health policy higher on the political agenda. This contributed to the protection of the public expenditure for health and to increased willingness by the Ministry of Finance to support changes in the system regarding provider payment mechanisms, autonomous hospitals and civil service reform.

Between 1998 and June 2001, the number of hospitals was reduced from 305 to 65, the number of beds from 14.4 to 6.5 per 1,000 people, and the number of physicians per 1,000 from over 3.8 to just over 3.0. More importantly, primary health care was the direct beneficiary of these cuts. Between 1998 and 2001, the total percentage of public expenditure allocated to primary care increased from less than 10 per cent to 23 per cent. Training was provided to more than 2,000 family physicians and improvements were initiated to strengthen primary care in the *judets*. The savings from downsizing the hospital infrastructure facilitated many of the changes, yielding roughly US\$9 million per year in savings.

Moldova also has made steady progress between 1994 and 1999 in reversing the decline in life expectancy and in restoring health status to levels unseen since before the economic collapse.¹ Life expectancy increased from 62 years to 67.4 years. Infant mortality declined from over 22 deaths per 1,000 live births to 18 deaths. Standardised mortality decreased from 1,613 deaths per 100,000 to 1,133. The incidence of tuberculosis declined from 67 cases per 100,000 to 61 in 1999.

The way forward

After just over two years of steady progress, Moldova offers some lessons for policy-makers. Health reforms must be carried out in phases. The agenda for health policy reforms in almost all countries, ranging from downsizing tertiary facilities to strengthening regulation of pharmaceuticals and the private sector, exceeds the institutional capacity and the political will to implement the required reforms. Recognition of this fact and the careful design of policy changes in line with institutional capacity and political will improve the likelihood of success. An ancient Chinese proverb notes that "a long journey starts with a single step". Moldova has made the initial steps and is well on its way to make important gains in efficiency and quality that will lead to improved health status for all.

"The message for policy-makers was clear: restructure service delivery systems, promote outpatient care by developing a primary care network, and reduce the number of staff wherever possible"

REFERENCES

1. Centre for Public Health Prevention and Management and Department of Statistics. *Annual Statistics*. Moldova: Centre for Public Health Prevention and Management, 1999.

Hospital sector reform in Bulgaria: First steps



Evgenia Delcheva



Dina Balabanova

Hospital sector reform in Bulgaria has been slow compared to other central and eastern European countries but is now undergoing radical changes. Public sector hospitals are being transformed into autonomous organisations with some funds coming through contracts with the National Health Insurance Fund. New payment methods are also being introduced. The expectation is that the hospital sector will shrink in size in the new quasi-market environment rather than through state regulation.

Prior to 1990, the hospital sector in Bulgaria was entirely state-owned and financed through general taxation, and was based on the *Semashko* system that promoted curative care and relied on extensive facilities for hospital care.¹ The first private hospitals only became possible with a 1991 amendment to the Law for Public Health. By the end of 1999, about 20 private hospitals were officially registered, mainly specialising in surgery, with a small number of inpatient beds. These hospitals were financed entirely from private sources as health insurance was undeveloped. Public hospitals offering formally free treatment remained the main option for the majority of the population. Between 1990 and 1997, the total number of hospitals and beds continued to grow (Table 1), as a result of structural reorganisations and the opening of new hospital units.

Most public hospitals suffer from chronic shortages of financial resources, exacerbated by the economic crisis and contraction of government spending for health care. Material conditions are poor and equipment inadequate. The actual requirements of the hospital sector are several times higher than the current spending, with DM1.5–2 billion required but only DM450–500 million spent.* The average monthly salary of a hospital physician is DM200–300 (equal to US\$100–150) and for a nurse it is DM120–150 (US\$60–75). In 1998–99, many hospital facilities had just DM 0.5–1 per patient to cover food for one bed-day, and drugs were provided only for emergency care in the first two to five days after admission. Patients must purchase

other drugs from outside the hospital (as well as sanitary supplies), and must also provide their own food and bed linen. Further, under-the-counter payments by patients to staff for obstetrics deliveries, operations and hospital care are a well-established supplement to official budgetary financing.

Between 1997 and 2000, the number of hospitals remained stable at around 276–288 including dispensaries, while the numbers of beds per 1,000 population declined to 6.6; with pressure for further reduction because of low bed occupancy (245 days per year). The number of hospital admissions per 100 population fell steadily from 19.6 in 1990 to 15.8 in 1999.

Reform in hospital ownership and organisation

Since the mid-1990s, structural changes have included a division between inpatient and outpatient facilities. The inpatient departments of hospitals were integrated with polyclinics, the latter becoming independent facilities. The purpose was to split the purchase and provision of hospital services and to create competition between hospital care providers for patients referred by primary health care physicians and outpatient specialists.

According to the 1999 Law on Health Care Facilities, public hospitals owned by the state (national, university, and inter-regional hospitals) and by the municipalities (serving one or more municipalities) are to be transformed into for-profit companies (limited companies owned by the munic-

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* Since 1997, the Bulgarian Currency Board has tied the Bulgarian Lev to the German DM, where Lev 1 = 1 DM

palities or shareholding companies with the state as majority holder). These will offer a specified range of medical and other treatment-related services. This initiative aims to improve hospital management, create economically independent and efficient hospitals, promote entrepreneurial skills, tap investment in infrastructure and staff, and generate extra revenue. It is envisaged that the National Health Insurance Fund (NHIF) will sign contracts with these facilities for the delivery of hospital care for the insured population.

Hospitals were categorised into three groups: hospitals for active or acute care treatment (multi-profile and specialised at national, regional or municipal level); hospitals for extended treatment; and rehabilitation hospitals (former sanatoria). Dispensaries specialised in oncological, dermatological, pulmonary and psychiatric diseases, as well as the newly created hospices, were also classified as inpatient facilities (but outside these hospital groups).

New regulatory mechanisms for hospitals

The public hospital sector and its relationship with the private sector are regulated through a mixture of economic and administrative instruments. These include the National Health Map, the minimum package of services, accreditation mechanisms, the annual National Framework Contract between the NHIF and the professional organisations, the requirements for payment of labour, as well as other instruments.

The National Health Map: Published by the Ministry of Health, this contains the minimum number of physicians and medical facilities per area to be contracted by the NHIF in order to cover the insured population. The minimum number of hospital facilities is 287, including 146 (out of 157) multi-profile national, regional and municipal hospitals for active treatment; 45 (out of 57) specialised hospitals; 60 dispensaries; and 36 rehabilitation hospitals. The type of ownership of these facilities is not specified, allowing private hospitals to bid for contracts with the NHIF (Figure 1). Clearly, many facilities (at least one-third) could not be strictly classified as hospitals. Indeed, there are plans to transform or liquidate some facilities according to the Commercial Law, for example, in the case of bankruptcy.

The minimum package: The Ministry of Health also determines the minimum pack-

Table 1
PUBLIC INPATIENT FACILITIES IN BULGARIA IN THE 1990S

	1990	1997	2000
Number of acute hospitals	197	228	223
Dispensaries	59	60	53
Sanatoria*	184	136	30
Hospices	Ñ	Ñ	23
Hospital beds (incl. dispensaries)/ 1,000 population	10.4	10.5	6.6
Sanatoria beds/ 1,000 population	2.5	1.9	0.9

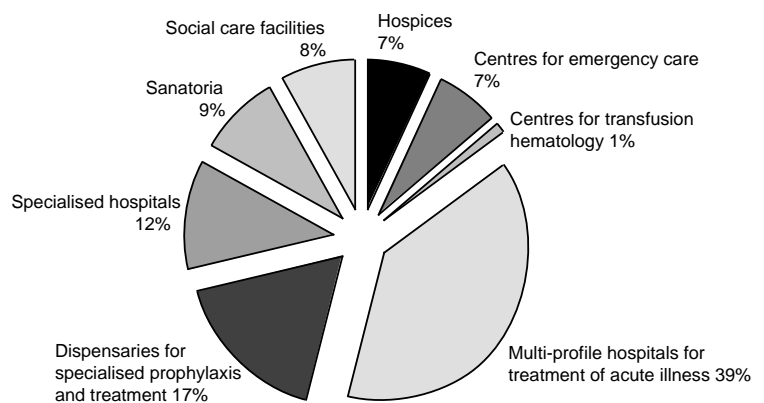
Sources: National Statistical Institute, 2000²; National Statistical Institute, 2001.³
*Sanatoria were transformed into rehabilitation hospitals in 2000

age of hospital activities that the NHIF is required to finance. This package includes hospital benefits for 30 disease groups and 159 types of units according to the following two criteria:

- coverage of significant diseases and types of users: cardiovascular and circulatory diseases, chronic obstructive lung disease, neoplasms (especially cervical cancer, breast cancer, bowel cancer and prostate cancer), diabetes, maternal and child care; and
- conditions frequently involving visits to hospitals, for example, abortion for medical reasons, pneumonia and cholethiasis.

Hospital accreditation: The Law on Health Care Facilities also envisages an obligatory accreditation procedure for all hospitals and some outpatient hospital facilities as an important mechanism for raising quality. The Ministry of Health published a decree

Figure 1
TYPE OF INPATIENT FACILITIES IN THE NATIONAL HEALTH MAP



Source: Ministry of Health, National Health Care Map.

and procedure for accreditation, established the Higher Accreditation Council, and trained 400 accreditation experts. The criteria for accreditation are structure, staff skills, equipment, effectiveness (costs and benefits), and quality. At present, about 20 hospitals are accredited; the plan being to inspect all hospitals by the end of 2001. The accreditation process will force mergers or closures of some hospitals with low scores. The accreditation procedure will guide the NHIF to selecting hospitals, but in future only accredited hospitals will be contracted.

The 2001 National Framework Contract: This contract for hospital care was agreed between the NHIF and the professional organisations. It specifies the procedure for contracting hospitals, requirements for hospital care, payment conditions, financial and medical control of quality, and sanctions. The second stage of contracting is individual contracts between Regional Health Insurance Funds and separate hospitals.

In the second half of 2001, the NHIF/regional health insurance funds will contract only with hospitals for active treatment (acute care hospitals). These will be paid for only a small part of the treatment on a 'cost per case' basis according to 30 clinical pathways. These are clinical guidelines prescribing the routine for treatment for each diagnosis approved by the professional organisations, and in accordance with the minimum package specified by the Ministry of Health. The NHIF and regional funds will contract hospital providers for the treatment of certain numbers of types of cases, provided that they can offer the standard of treatment (such as equipment and staff) required by the clinical pathways.

This is expected to guarantee more effective spending, respond to the most critical needs, and result in better health outcomes in general.

Hospitals that are limited companies (above 50 per cent state or municipal shareholding) have to comply with national regulations on salary rates. The main principle is to link the salaries with financial performance. Up to 40 per cent of the revenue from outside the state subsidy (that is, the NHIF, patient payments and private services) can be spent on providing financial incentives to staff and thus increasing their salaries.

Financing hospital care

The Ministry of Health and the municipalities have so far financed hospitals mainly on the basis of historical budgets, which has given rise to some negative consequences, including:

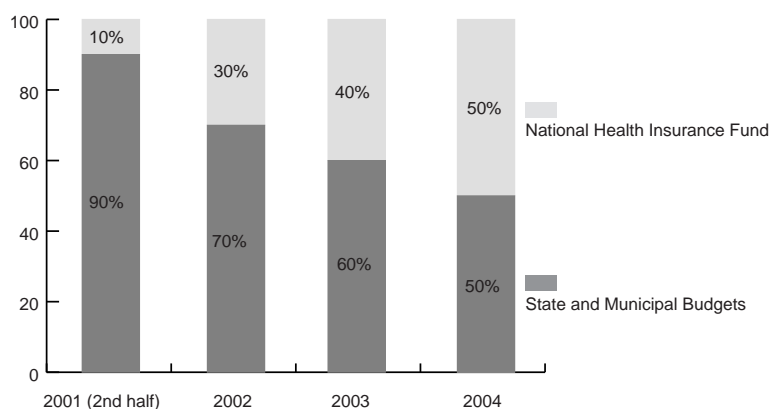
- increased inequality in the distribution of resources between hospitals and patient groups, with some hospitals historically better financed than others; and
- insufficient incentives for hospitals to contain costs since savings realised in one financial year will lead to less funding the following year.

The Ministry of Health has now developed a concept for the co-financing of hospitals, which combines established (state and municipal budgets) and new funding sources (the NHIF). From July 2001, hospital financing will be shared between the Ministry of Health, municipalities, the NHIF, and other institutions owning hospitals (e.g. the Ministry of Defence). Such joint hospital financing aims to share financial responsibility for delivery of high-cost hospital care and to guarantee a comprehensive package of hospital services to the population.

The major share of hospital financing will continue to come from state and municipal budgets (Figure 2). Health facilities financed centrally by the Ministry of Health will employ a combined financing approach. Thus 80 per cent of their budget will be allocated on the basis of historical spending and around 20 per cent as a flexible budget, depending mainly on the number of patients treated and other performance and outcomes indicators. The municipalities could apply a similar method for financing hospitals and dispensaries.

The NHIF will initially fund about 10 per cent of the hospital budget (DM 26 mil-

Figure 2
PLANNED SPENDING ON HOSPITAL CARE BY SOURCE, 2001—03



Source: Ministry of Health, 2001.⁴

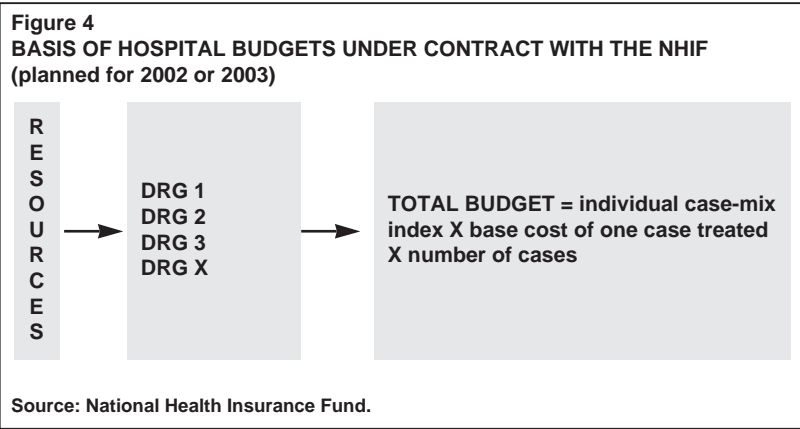
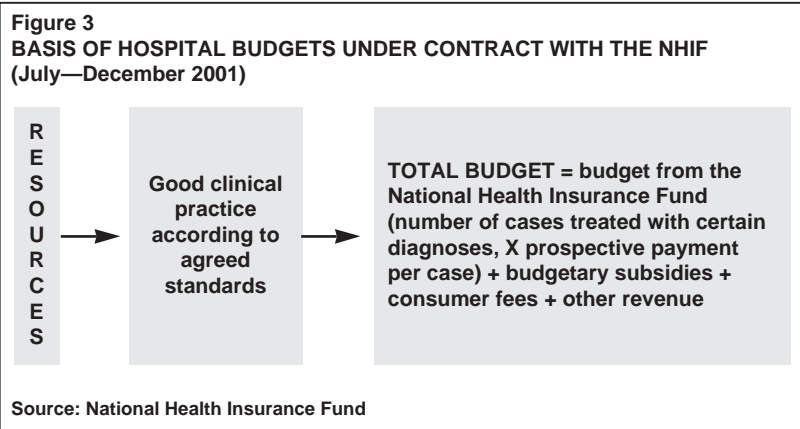
lion), with this share gradually increasing in following years. This revenue will be drawn from compulsory insurance contributions (6 per cent of taxable income) introduced since 1 July 1999. These new payment methods for hospitals aim to improve quality of services, create incentives for more effective and equitable allocation and spending of resources, encourage competitive behaviour, and promote performance-related financing.

The NHIF intends to gradually move hospital financing from historical to performance-related financing. Revenue also will be raised through official co-payments by the insured. Inpatient co-payments will be 2 per cent of the minimum price for each bed-day, not exceeding 20 bed-days per person yearly, with children, pregnant women, the disabled and poor people exempted. The NHIF will fund a hospital prospectively based on the number and type of cases treated, where hospitals meet the clinical guidelines for good medical practice and national public health priorities. The Fund intends to begin with changes that can be easily introduced and that are in accordance with reform priorities. The remainder of a hospital's budget will come from state budgetary subsidies, consumer fees and other revenue (Figure 3).

The hospitals also can set fees for private treatment and retain the revenue from private patients, which could increase their overall revenue. The introduction of regulated fees for services is expected to not only increase financing, but also lead to a reduction in the informal market transactions.

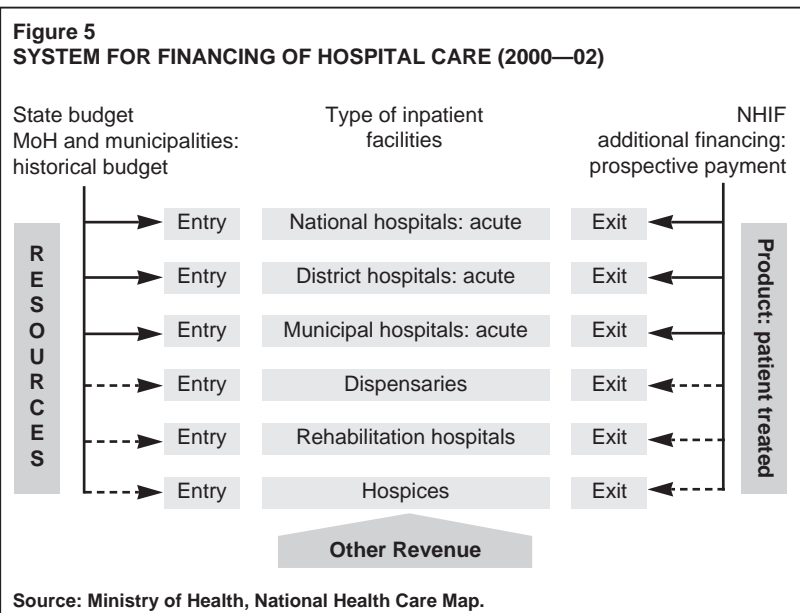
With a gradual increase in the NHIF share in financing hospital care, the types of cases covered will be expanded. The strategy is towards gradual coverage of all cases, and a move from financing of cases of certain diagnoses towards case-mix financing of cases in diagnosis-related groups (DRGs) (Figure 4).

Such evolutionary changes in hospital sector financing were perceived to guarantee a smooth transition without unnecessary shocks for the population. Importantly, the size of the health insurance premium is likely to remain at 6 per cent in 2002, in line with the state policy for reduction of the tax burden upon the population. The financial commitment by the state and municipalities is likely to be sustained, because they will be hospital shareholders and will continue to finance part of the recurrent expenditure (Figure 5).



Investment and credit for hospitals

According to the 1998 Law for Health Insurance, capital investment in health facilities owned by the state or municipalities is their responsibility, to be financed from their budgets in addition to operational costs. Because of the shortage of resources, some capital expenditure will be covered by a World Bank loan on 'Support for Health Sector Reform' from two sources. A revolving fund will provide loans which, on repayment, can be used to



fund other structures. An investment programme funds hospital information systems and medical equipment. The conditions to be met by recipient hospitals for receiving credit (in the range of US\$130,000 to US\$150,000) are as follows:

- A working structure;
- Contract with the Ministry of Health/municipality/and NHIF;
- Accreditation assessment;
- Business plan;
- Balance/financial result;
- Activity;
- Repayment plan; and
- Current obligations (A hospital's debt should not exceed 10 per cent of the sum of the capital sought, and the hospital must present a repayment plan for the unpaid debt that should be signed by the creditor).

Conclusions and future challenges

Health sector reform in Bulgaria has been greatly delayed compared to other central and eastern European countries due to successive economic shocks (especially the 1994 and 1996/7 crises), the lack of political will, and high turnover of governments. Hospital sector reform started even later, and began very cautiously. Major legislation was enacted as recently as 1999 and practical implementation began in July 2000. Ambulatory (outpatient) care was covered by national insurance from mid-1999, but the low premium (6 per cent of income) and the low incomes of employees and employers did not allow for the immediate inclusion of the hospital sector. A delay of almost a decade in hospital sector reform has led to a number of problems, including:

- An increasing shift of hospital costs to patients via formal and under-the-counter payments;
- Lack of incentives to improve quality of service;
- Continued depreciation of facilities due to lack of investment; and
- Conflict between ambulatory and hospital physicians with the former able to earn much higher incomes due to performance-related payment.

The key reform elements since 2000–01 are: *Transformation of hospitals into for-profit corporations*. The intention is to promote more efficient use of resources and man-

agerial initiative. However, experience from the first year showed that the debt incurred by hospitals and insufficient public funding led to large budgetary deficits.

Introduction of regulatory mechanisms: These include the National Health Map, a minimum package of hospital services, and accreditation procedures. It is too early to assess their impact. More emphasis is required on quality control and uniform standards by the NHIF and the physician's associations.

National Framework Contract: This contract between the NHIF and hospital facilities, plus individual contracts between regional funds and separate hospitals, aims to balance demand and supply to cover the insured population.

Clinical pathways: Funding hospitals according to national priority diagnoses and target groups (such as children and mothers) is an innovative approach to financing and prioritising the scarce resources.

Diversified hospital funding: Funding is shared between state and municipal budgets, the NHIF, voluntary insurance, plus co-payments and official direct out-of-pocket payment by patients, and some donor agencies. This arrangement seeks to create joint responsibility for the financing and management of the hospital sector. The expansion of compulsory health insurance to cover hospital care through a contractual relationship might improve quality and reduce user out-of-pocket payments for hospital care in Bulgaria. Increased hospital financing and staff salaries might lead to reduction of under-the-counter payments. However, insurance resources are less than expected since many of population pay the minimum rate or are exempted (approximately 50 per cent of the population) and the insurance premium is set at a low rate.

Gradual reduction in hospitals and beds: The number of beds has been reduced through lack of funding rather than through administrative regulation. The new National Health Strategy envisages a reduction to 6 acute hospital beds per 1,000 by the year 2001.⁵ This will ensure more realistic financing of hospital care. In the 1990s, the hospital infrastructure underwent some restructuring and reorganisation, although with little change in total numbers of hospitals.¹ As elsewhere, closure of hospitals is politically difficult and the tendency is towards small-scale hospitals with reduced numbers of beds in a situation of lower demand and under-funding.

REFERENCES

1. Hinkov H, Koulaksuzov S, Semerdjiev I, Healy J. *Health Care Systems in Transition: Bulgaria*. Copenhagen: European Observatory on Health Care Systems, 1999.
2. National Statistical Institute. *Health Care Statistics, 2000*. Sofia: NCHI (National Statistical Institute, National Health Information Centre), 2000.
3. National Statistical Institute. *Annual Statistical Reference Book 2001*. Sofia: Statistical Publishing House, 2001 (in Bulgarian).
4. Ministry of Health. *Action Plan on the National Health Strategy for the Period 2001–2006*. Sofia: Ministry of Health, April 2001.
5. Ministry of Health. *National Health Strategy: Better Health for a Better Future for Bulgaria*. Sofia: Ministry of Health, April 2001.

NOT CITED IN TEXT

- Delcheva E, Andreeva A. Possible approaches for hospital financing by the NHIF. *Medical Practice* 2001;3.

Restructuring hospitals Albania

Hospitals in Albania have remained in extremely poor condition throughout the 1990s. Reforms were delayed by the struggling economy, a series of political crises, and the influx of refugees.

Investment since the Kosovo crisis has gone on renovating hospitals and buying equipment. Health sector reform, however, calls for strengthening participatory policy-making and management skills.



Besim Nuri

Introduction

Albania had fewer hospitals by the 1990s than other eastern European countries, reflecting the country's independence from the Soviet sphere of influence as well as its poverty. Of its 3.2 million population, one-third are aged under 15 years and two-thirds live in rural areas. Albania spends less than 3 per cent of GDP on health compared to averages of 8 per cent in western Europe and 5 per cent in central and eastern Europe. Given its limited health budget, of which hospitals take nearly one half, the Albanian policy was to reduce hospital beds and strengthen primary health care.¹

By the early 1990s, the 160 Albanian hospitals were in an extremely poor state for a host of reasons, including: the collapse of the economy during the 1980s, deteriorating water, electricity and sanitation infrastructures, poor construction quality, the lack of maintenance funds, and outdated and broken medical equipment. The government embarked upon a national strategy to restructure its hospital system, but its implementation was overtaken by a series of dramatic events.

Political background

The communist regime allowed elections in 1991 after demonstrations by the population, which were won by the Labour Party of Albania. The Democratic Party then won the March 1992 election. In the violence accompanying the political changes, almost one quarter of urban health centres were destroyed along with two-thirds of health posts in small villages.

The years 1992–96 were years of hope for health sector reform. The Ministry of Health developed a new health policy in 1993 that set out several goals for the hospital sector: reduce beds and close small rural hospitals; design a three-tier hospital system with district, regional and national hospitals; and repair and renovate buildings and equipment. Other major goals were to strengthen primary health care and to train family doctors. External donors assisted the Albanian government in restructuring the health sector with an estimated US\$120 million during 1992–96.¹

The collapse of the fraudulent pyramid savings schemes in March 1997, in which perhaps two-thirds of the population had invested money, provoked the 'uncivil war'. Public institutions and the rule of law could not function during the resulting anarchy. The population rioted and fighting continued for months between armed gangs. Hospitals and clinics were looted and/or destroyed. Although most hospitals managed to keep emergency services open, there were no funds for running costs, drugs and other consumables, and salaries were paid months late. Doctors and nurses continued to work despite assaults upon them, not to mention the deaths of some colleagues.

According to the Ministry of Health, hospitals reported over 2,000 people dead and over 11,000 wounded between March and August 1997. The breakdown in public order caused people to migrate to safer areas, such as Tirana, which increased the demand for health services in the capital. About one-third of health staff moved from dangerous rural areas to safer districts. This changed the geographic distribution of staff and services and left many areas without medical services. The 'uncivil war' plunged the economy into crisis with a 15 per cent drop in GDP in 1997. The health sector budget was reduced and the already poor quality hospital services deteriorated even further.

Between 1994 and 1999, public health expenditure declined from 7.3 per cent to

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5.9 per cent of the state budget and from 2.4 per cent to 2.1 per cent as a share of GDP. People want to avoid being hospitalised, and admission rates have thus fallen, with bed occupancy dropping to 56 per cent in 1998. Those who can afford it seek hospital care in neighbouring countries such as Greece and Italy.

The Socialist Party was re-elected in 1997, but in clashes between government and opposition supporters, involving guns and tanks, the Prime Minister's offices were ransacked. A new Prime Minister more acceptable to all factions was appointed in late 1998. The elections of June 2001 were carried out peacefully and the Socialist Party won the majority of votes. During the last three years Albania has experienced relative political stability that has allowed donor investments and projects to be implemented in the hospital sector.

“Hospitals produced intravenous fluids in rudimentary laboratories, and much equipment was reused – including needles and syringes despite ineffective sterilisation equipment”

Poor condition of hospitals

Albania had no funds to repair dilapidated hospitals and equipment. The collapse of the economy during the 1980s and the deterioration of the infrastructure - much of it of poor quality construction - meant an uncertain water supply, intermittent electricity, and non-functioning heating systems. Sanitary conditions were poor, with hospital waste collected with other urban waste, and sewage discharged into urban sewage systems; sometimes directly into rivers without treatment, itself creating a public health hazard. Most hospital equipment needed repair or no longer functioned, and drugs and medical materials were in short supply. Hospitals produced intravenous fluids in rudimentary laboratories, and much equipment was reused – including needles and syringes despite ineffective sterilisation equipment. Hospital-acquired infections were common given these unsanitary conditions and the lack of aseptic and antiseptic practices. For example, in the viral hepatitis epidemic during the 1980s, half of new cases were Hepatitis B transmitted through blood/blood products and medical procedures.

Notwithstanding these problems, hospitals

were heavily used in the absence of alternatives. Hospital doctors were better trained and hospitals had more equipment and drugs. Physicians referred many patients to hospital, including for things such as a ‘complete health check’. Many infectious cases were admitted; for example, legislation required all hepatitis cases to be hospitalised for at least three weeks.

Albania had a fragmented network of 160 hospitals, with eight specialist hospitals in Tirana and many single speciality district hospitals. The typical district pattern was one general hospital (internal medicine and surgery for adults), one maternity hospital, one paediatric hospital and one infectious disease hospital. In the next level down were 85 small rural ‘hospitals’ of 10-30 beds, staffed by a few doctors and nurses, which offered obstetrics, paediatrics and internal medicine, although few had laboratory or X-ray diagnostic services.

Hospital restructuring

The new health policy in 1993 set out several goals for the hospital sector. These were to retain existing hospitals as public sector facilities financed by government; to reduce beds and close small hospitals; set up three tiers of district, regional and national hospitals; repair buildings and equipment; rationalise staffing and improve qualifications; and legalise private hospitals. These reforms were carried out with help from external donors, which the World Bank estimated at about US\$120 million during 1992-1996 - equivalent to over one-quarter of the Albanian health budget. One adverse effect of external aid, however, was that the Albanian government could not sustain all programmes.

Hospital reform has been partially implemented. The 160 hospitals in 1990 were reduced to 51 by 1994, with only minor reductions since. Most of the 85 rural hospitals were transformed into primary health centres. According to the Ministry of Health's own statistics, hospital beds were reduced by 28 per cent between 1990 and 1998, or from 4 to 3 beds per 1,000 population. Six single speciality hospitals in Tirana were merged into the Tirana University Hospital. Although a three-tier system was accepted in principle, there is no agreement on which district hospitals to upgrade. The plan was to develop between 6-12 regional hospitals of a dozen specialities and about 500 beds. But many of the 36 districts want their hospital upgraded and the political factions cannot agree. The district hospital map in Albania is presently very complicat-

ed and mainly reflects historical patterns: there are 20 hospitals of 100-400 beds and 22 smaller hospitals with less than 100 beds.² District hospitals continue to operate with four basic services: internal medicine, paediatrics, general surgery, and obstetrics/gynaecology. A few have upgraded to the level of regional hospitals (advanced secondary care), and national hospitals remain highly specialised. Patients needing tertiary treatment go to the 1,500 bed University Hospital or to other specialist Tirana hospitals. The Ministry of Health runs hospitals and the hospital doctors' lobby has resisted attempts to transfer ownership to local governments; which would in any event be problematic since they lack revenue and managerial capacity.

The 28 per cent reduction in beds was not followed by staff cuts. On the contrary, the number of hospital doctors increased by 4 per cent. The intention is to change hospital funding under the public sector compulsory health insurance scheme being phased in from 1995. A few private clinics and hospitals (for-profit and non-profit) are under construction, such as a 200 bed Catholic Church hospital in Tirana. The political and social instability in the country and its struggling economy make further hospital privatisation unlikely.

The Kosovo crisis

Hospital reform was again put on hold during the war in the Yugoslav province of Kosovo. The flood of ethnic Albanian refugees from Kosovo between March and June 1999 had an enormous impact on Albania and its health services. The population of the country increased by almost 20 per cent in just 40 days. By late April 1999, over 700,000 had fled Kosovo into neighbouring countries including Albania, but began to return from late June 1999 onwards.

The health system faced enormous challenges. First, many refugees arrived exhausted, undernourished and ill. For example, during April 1999, about 4,000 refugees were admitted to hospital, about half being children aged 5 years or younger. Second, public hospitals were used as shelters with refugees occupying about 30 per cent of hospital beds at the height of the crisis. Many chronically ill people could not be discharged to difficult refugee camp conditions. Third, field hospitals were set up by the North Atlantic Treaty Organization (NATO) and relief organisations. The five NATO hospitals were used not only by the military and

refugees, but also by the Albanian population, which in turn changed the balance of hospital services within Albania.

Post-crisis challenges

The Ministry of Health, with support from international agencies and non-governmental organisations (NGOs), conducted a survey on the condition of hospitals in Albania during the period July-September 1999.³ The report referred to a 'sick hospital system in a sick economy' with many severe problems. The infrastructure was obsolete and hospitals poorly managed. Out of the 41 hospitals surveyed, 25 per cent had less than 5 hours of running water. Only 45 per cent of hospitals were supplied with electricity for 24 hours a day, while 5 per cent of them had electricity less than 12 hours a day. Of the buildings, 34 per cent were described in poor condition and only 25 per cent in good condition. And the heating system in 84 per cent of hospitals did not function satisfactorily.

Donors mobilised a great deal of funds for the health sector during the Kosovo crisis. However, by the end of August 1999, the overwhelming majority of refugees had returned to their province, now under the protection of NATO troops. Most of the funds available for health in Albania had to be spent quickly. The World Bank office in Tirana in June 2000 estimated that the total funds for health projects underway and/or in preparation was about US\$160 million, a record for the last ten years of donor activity, and a direct effect of the refugee crisis.⁴

"The flood of ethnic Albanian refugees from Kosovo between March and June 1999 had an enormous impact on Albania and its health services. The population of the country increased by almost 20 per cent in just 40 days"

Much of the hospital rehabilitation/renovation work began in the aftermath of the crisis. Out of US\$130 million of donor funds for health care services, US\$102 million was targeted towards secondary and tertiary inpatient and outpatient care. US\$68 million was committed for hospitals in the capital Tirana and 18 per cent of this to tertiary care services.

These large investments raise some very important issues. For example, how will the Ministry of Health afford the running costs generated by the new facilities and equipment? In addition, hospital management

teams and technicians do not have the skills to keep operational the renovated or new facilities and services. Despite the very good new buildings and equipment, hospitals face formidable challenges since they have to function in an environment with a very poor infrastructure. Water supplied to urban hospitals is contaminated; the electricity supply is intermittent; roads to the emergency wards of hospitals are in very bad shape. This shows that investing in hospitals alone will not improve the quality of care unless the hospital is considered as a part of a broader environment.

Implementing change: barriers and strategies

Some of the barriers in the reform process, as well as some proposed strategies to overcome them, are summarised below.

Barrier 1: Weak leadership

Leadership in the health sector is weak. There is little policy vision on hospital sector reform and considerable volatility due to a rapid turnover of political and ministry leaders and hospital directors. In addition, there is little technical capacity to plan and implement reform programmes. Finally, hospital managers do not have sufficient authority or management skills in order to introduce and maintain improvements in services and facilities.⁵

Strategies: First, the Ministry of Health should hire technical assistance to help formulate strategies and ensure a more interactive process in planning and implementing change. Second, since the ministry prefers the prudent approach of learning by doing, this makes pilot projects an acceptable strategy. Third, a new incentive scheme is needed in order to make management positions more attractive to talented and trained people; while the local capacity for training managers must be strengthened as a precondition for successful hospital reform.

Barrier 2: Lack of participatory policy-making

There is no tradition of staff participation in the decision-making process, but nor does the old model of command and control work anymore. There is strong resistance from the doctors' lobby against many measures that the Ministry of Health would like to introduce. For example, World Bank investment in the Tirana University Hospital was delayed for almost two years because of the resistance of infectious disease doctors who opposed the already agreed restructuring strategy.

Strategies: A major cultural shift is required in Albanian society in general and in the health sector in particular. The government needs to elaborate mechanisms to involve important stakeholders from the beginning in the decision-making process.

Barrier 3: Lack of public communication

The Ministry of Health lacks people with expertise in communication strategies to explain the need reform to stakeholders and the general public. There is no public confidence in the health sector and people do not believe that managers have the capacity and good will to make the necessary improvements.

Strategies: The Ministry of Health needs to build mechanisms for public information campaigns. For example, it commissioned a public opinion survey on perceptions of health sector reform, financed by a World Bank credit.⁶ It is hoped that the results of the survey will be used for a public information campaign and by advocacy groups.

Barrier 4: Low political salience

Health sector issues only recently climbed higher on the agenda of the Albanian government and politicians. This is mainly due to the pressure of donor community which is assisting the government to prepare a poverty reduction and economic growth strategy. Despite the rhetoric of increasing the level of resources allocated to health, the government strategy foresees only 3.2 per cent of GDP going to the health sector by the end of 2003.⁷

Strategy: Solving the serious problems of the health sector in general, and hospitals in particular, should be higher on the political agenda of Albanian politicians.

Conclusions

Hospital services in Albania are facing difficult challenges. The health sector is poorly funded and, despite large donor investments going to hospitals, the infrastructure and quality of services are still poor. The reform started in the early 1990s has not progressed, mainly due to the unstable political and social situation of the country and the conflict in the Kosovo province. In addition, the weak leadership in the health sector has not allowed much progress in the hospital restructuring. The government, with the assistance of the donor community, must undertake serious measures in order to restructure the hospital system and improve the quality of secondary and tertiary care services.

REFERENCES

1. Nuri B, Healy J. *Health Care Systems in Transition: Albania*. Copenhagen: European Observatory on Health Care Systems, 1999.
2. Ministry of Health of Albania. *Health System Strategy 2000–2010 for Albania*. Draft proposal with the support of WHO. May 2000.
3. Albanian Ministry of Health, WHO and Merlin. *Review of the Working Conditions of 41 Hospitals in Albania. July–September 1999*. Sponsored by the UK Department for International Development, November 1999.
4. Nuri B, Bullo O. *Inventory of Ongoing and Planned Investments and Projects of Major Bi/multilateral Donor Agencies* (in the Albania health sector). Tirana: The World Bank Office, May 2000.
5. Ministry of Health and Metis Associates. *Final Report on Hospital Sector Management*. Commissioned by the World Bank Health Services Rehabilitation Project, April 2001.
6. Ministry of Health and IBF International Consultants Belgium. *The Albanian Public's Perception of the Health Care System*. Study commissioned by the World Bank Health Services Rehabilitation Project, September 2000.
7. Republic of Albania. Ministry of Finance. *Medium Term Expenditure Framework, 2001–2003*. Revised Version, December 2000.

Restructuring Hospitals: Bosnia and Herzegovina

Bosnia and Herzegovina emerged from three years of war with a health service struggling to cope with many post-war problems. As efforts to rebuild intensify, it is clear that the hospital system is extremely complex and re-shaping these services is not an easy task.



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Introduction

Bosnia and Herzegovina is one of the sovereign republics that once constituted the former Yugoslavia. The health care system is embedded in a complex political and administrative system. The 1995 Dayton Peace Accord, following a three-year war, established two entities: the Federation of Bosnia and Herzegovina (BiH) and the Republika Srpska (RS). It also established the Office of the High Representative (OHR) to oversee the implementation of the civilian aspects of the Accord. Of the country's estimated 4 million population, some two-thirds live in the Federation and one third live in the Republika Srpska. These population figures are approximate as there has been no official census since before the war. In addition, the district of Brčko in north-east Bosnia is a self-governing administrative unit with a population of about 70,000. The state government of Bosnia and Herzegovina has exclusive responsibility for areas such as foreign policy, customs, and immigration and asylum policy. Entity governments are responsible for policy areas in their territories, including health and social services.

Health care administration in the Federation is further divided into ten decentralised autonomous cantons, based on a system derived from the Swiss model. Health care finance, organisation and management follow the cantonal structures. Ten cantonal ministries of health oversee the organisation and financing of health care services at the cantonal level. The central health ministry in Sarajevo provides some coordination but in practice many decisions related to health care provision and finance are

made at the cantonal level. Cantonal ministers furthermore can veto a health policy proposal made by the Federation.

The Republika Srpska is divided into seven regions. In contrast to the Federation, planning, regulation and management of the Republic's health care system is rather centralised and lies within the health ministry located in Banja Luka. There are no health authorities at regional level; except in Brčko district which organises and finances its own health care system. Thus, the country has at least three separate health care systems.

Health care finance across the country comes from payroll-tax social insurance. The basic elements of the health system in the two entities also are similar. Four types of hospitals are in operation: clinical centres, general acute hospitals, specialised hospitals and small district hospitals. The clinical centres (three in the Federation and two in the Republic) provide secondary and tertiary care, clinical research, and university training and education. There are ongoing negotiations between entities about the population of Brčko having access to these tertiary care facilities. There are 14 general acute hospitals across the BiH cantons and nine general acute hospitals in the RS.

The Federation has four specialised hospitals for chronic diseases and twelve small district hospitals with attached polyclinics.¹ The Republika Srpska has three specialised hospitals, of which one is private.

Bosnia and Herzegovina had 3.7 beds per 1,000 residents in 1999. About 70 per cent are located in general hospitals, 20 per cent in specialised hospitals, and 10 per cent account for chronic and rehabilitative care. The occupancy rate in acute care was about 63 per cent. In 1998, the average length of stay in acute care amounted to 9.8 days per 100 residents.² Both capacity and hospital utilisation have fallen since the early 1990s.

The payment system for hospital services by the social insurance funds is based on a retrospective invoice system with line item

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“The war caused serious damage and disruption to the health care system. About 30–40 per cent of all hospitals were destroyed or heavily damaged during the war”

charges, with actual payments adjusted by the fund administrators.

The aftermath of war

The war caused serious damage and disruption to the health care system. About 30–40 per cent of all hospitals were destroyed or heavily damaged during the war. For example, BiH had 80 emergency care stations before the war and 46 after. One general and one regional hospital were completely destroyed. Wartime hospital services had to respond to massive population movements with almost 1.5 million people displaced during the war, and around 30 per cent of practising health professionals lost either due to migration or as war casualties. In the medical faculties of Sarajevo and Tuzla, the number of medical students diminished by half and the teaching staff fell by 15 per cent.

War injuries resulted in a high rate of traumas (such as amputations, spinal cord lesions, traumatic brain injuries, and other injuries), affecting about 2 per cent of the population. Psychological traumas resulting from the war will also continue to be a health problem.

Hospital directors had to secure resources and organise services as best they could. Health care was reduced to a minimal standard, and major health programmes such as immunisation were disrupted. New emergency care facilities were set up to treat some 80,000 people who were injured during the war. Sanitary units in the front lines worked under very difficult conditions and lacked equipment and appropriate medicines. Health services were organised centrally in areas controlled by the Serb and Croat armies, but the Bosnian government had to rely upon isolated communities to organise their own health care.

Before the war, the health system was financed mainly by employee and employer compulsory contributions, and to a smaller extent by pensions and other personal incomes, as well as state and municipal funds. During the war, contributions per person dropped substantially to about US\$5 while about US\$100 per capita was received in international aid. Health personnel were paid very low salaries or did not receive salaries at all.

Macroeconomic and health care expenditure data during the war are not available, and data after the war are estimates. Bosnia and Herzegovina was a poor republic under the old Yugoslav Federation, but its 1990 per capita income of US\$2,400 plum-

meted to US\$500 by 1995. Two years after the war, the country was spending about 12.7 per cent of its US\$7.5 billion gross national product on health care, of which 60 per cent was derived from public sources.³ Of the latter, external funds accounted for about 50 per cent of total public expenditure.⁴ A substantial share of expenses was (and still is) covered by out-of-pocket private expenditure via co-payments and under-the-table payments.

Humanitarian aid helped to maintain essential health services, especially in the Republika Srpska. External aid often bypassed the country's existing networks, however, with little coordination between international organisations. For example, humanitarian financial aid covered 50–70 per cent of total drug expenditures in hospitals, but humanitarian agencies often based their drug supply on estimates and available stocks rather than on actual needs. At one point more than sixty organisations were providing drugs to four health centres and three hospitals in Sarajevo. Many drugs were not appropriate, and as a result, several hundred tons of partly out-dated drugs are still awaiting proper waste disposal. In addition, the magnitude of aid flowing into the country since the end of the war, and the weak accountability structures, have allowed a climate in which corruption can more easily occur.

Restructuring hospital services

Although the war did enormous damage to the health care system, reforms have been needed since long before the war. In particular, few planning mechanisms for hospital facilities and hospital technology were in place.

Acquisitions of hospital equipment were highly inefficient with a complete lack of planning cycles. In addition, equipment maintenance was very poor and the war caused additional devastation. As a result, much hospital equipment is out-dated, damaged and/or out of use. Each hospital currently purchases its own equipment, sometimes worth millions of dollars, with a few funds set aside for operating costs, accompanied by allegations of kickbacks from suppliers.

No planning criteria were in place for establishing hospital facilities. Hospitals are thus unevenly distributed between urban and rural areas, while in the Federation variations are related to the large differences in revenue collection across cantons. The distribution of hospital beds varies

from 6 beds per 1,000 population in the canton of Sarajevo to less than 1 hospital bed per 1,000 population in some other cantons. Although the population pattern changed dramatically during the war and its aftermath, hospitals remain where they were built. In addition, the rapid decentralisation following the Dayton Agreement left no time to build management capacities in the canton health insurance schemes and health services in the Federation.

Hospital management lacks financial incentives because budgets still are largely funded on line items, based on input criteria such as the number of beds and staff. Also, both specialised care and hospital care are overemphasised and coordination between health care providers and sub-sectors has traditionally been poor. The lack of continuity between primary, secondary and tertiary care is a significant shortcoming.

Plans for change

The hospital system has changed little since the war ended in 1995. An exception is hospital reconstruction for the rehabilitation of war victims. The BiH has reconstructed three clinical centres and five cantonal hospitals, each of which supports a number of community-based rehabilitation centres. This work is part of the essential hospital services project run by the Federation health ministry in cooperation with the World Bank and WHO, which aims to rationalise the size and financing of the hospital system.

Much effort has gone into developing strategic plans for health system reform in both entities, assisted by the World Health Organization (WHO) and the World Bank, and the European Union PHARE project. The strategic plans in the two entities follow similar lines and both involve establishing a legal framework for the health care system. The plans include reconstruction and reforms of secondary and tertiary care. The development of these strategic plans played an important role in the policy dialogue. Another common feature is that hospital networks will be planned at the entity level. Projects are being undertaken to define the so-called basic benefits package to be provided under compulsory social insurance.

In December 2000, the health insurance fund in the RS published a discussion paper on a basic benefits package. The package provides benefits only for the insured, however, so that the government would be under pressure to ensure funding for vul-

nerable groups. The Republika Srpska has concentrated on repairing facilities and upgrading hospital equipment; on defining long-term sustainable levels of secondary and tertiary care services; and on training health professionals and managers. The Federation plans to reduce referrals to hospitals, and to shift to prospective payment of hospital services based on contracts between hospitals and the sickness funds. Privatisation of hospitals is not foreseen on a major scale. The plan is to maintain the number of hospital beds, to reduce hospital admissions and to improve the quality of the services. The intention was to close some hospitals and upgrade others. The original plan was to maintain the three university hospitals, one national hospital, and seven canton general hospitals, and to close the remainder including small district hospitals. However, local politicians have been reluctant to close any of them.

Considering the elapse of several years since the end of the war, relatively little change has been implemented in the country overall. Some barriers are common across the country and others to an individual entity. For example, the Federation has little executive power or capacity to implement change. Thus the BiH's 'Strategic Health System Plan' of 1998 has not yet been taken to the Federation Parliament for adoption. Another factor is that decision-making is not always clearly demarcated between the local and central levels, while cantonal ministers can veto legal proposals made by the Federation. On the other hand, although the cantonal health ministers are relatively powerful in theory, in practice they have few staff and little technical capacity to initiate policy, plan or implement programs. In the Republika Srpska, decision-making is less fragmented, but there is limited capacity to implement change at central level. In addition, the entity has suffered from a particularly slow post-war recovery of national income, which has hampered reform endeavours and investments.

In conclusion, the country's hospitals have experienced turbulent times. The organisation of hospital services also will have to be released from their pre-war shortcomings, such the absence of planning cycles, rigid and perverse hospital payment systems, and deficient coordination across the health care system. Other challenges include the need for more equitable access to hospitals and the need to pool health funds and health risks throughout the country.

"both specialised care and hospital care are overemphasised and coordination between health care providers and sub-sectors has traditionally been poor"

REFERENCES

1. Bosnia and Herzegovina. Federation of Bosnia and Herzegovina. *Federal Ministry of Health. Strategic Health System Plan*. Sarajevo, July 1998 (written with the support of the World Health Organization).
2. WHO Regional Office for Europe. *Health for All Database*, 2000. www.who.dk/country/country.htm.
3. Department of International Development, Know How Fund. *Health Resources Accounts in Bosnia and Herzegovina*. United Kingdom, 1998.
4. United Nations Development Report. *Bosnia and Herzegovina: Human Development Report*. Sarajevo: UNDP, 1999.

Hospital policy in post-conflict settings: Site of care and struggle



Anthony Zwi



Val Percival



Jim Campbell

Countries emerging from major periods of conflict face significant challenges. These societies must rebuild lives, re-establish livelihoods, and rehabilitate social services including health care. This short article examines the contested nature of health care in post-conflict settings, and identifies the particular issues facing hospital policy in these circumstances. We provide some illustrative examples drawn from Kosovo.

Introduction

In post-conflict settings, the health sector becomes highly politicised. Society's need for effective health care may be greater than normal as a result of the consequences of war: population movements; destruction of health facilities and social infrastructure; cessation of health programmes such as immunisation; and an increase in war-related injuries and social distress. Actors in the health sector also expand rapidly to include many more international players, such as donors, multilateral agencies, and non-governmental organisations (NGOs). As a large proportion of donor assistance is devoted to health related activities, participation in and control of the health sector confers financial benefits and patronage prospects that are scarce elsewhere in society. The international community often uses post-conflict settings as an opportunity to reform and restructure the way that health care is delivered. However, establishing these reforms may be difficult and contentious as the state lacks the capacity to effectively undertake its regulatory and oversight role in the health sector.

Below, we describe these issues in more detail with a specific focus on the need for policy guidelines, balancing the priorities, the role of national stakeholders, and the management of the reform process.

The need for policy guidelines

The importance of the early establishment of a very clear policy framework and vision for the health system cannot be underestimated. Given the number of donors and NGOs operating in post-conflict settings, clear policy guidelines target resources towards a common agenda, avoid duplication, and prevent the creation of unsustainable activities.

In Kosovo, the World Health Organization (WHO) played an important role early on in providing guidance and direction. The convened policy group and the policy framework developed in the immediate post-conflict period by WHO was agreed upon by key players, and provided direction for the efforts of donors, government and civil society organisations. These reforms envisioned a transition from the highly specialised *Semashko* model of health care delivery to a primary care based system. The Department of Health of the United Nations Interim Administration Mission in Kosovo (UNMIK) adopted these reforms and has been progressively developing plans to implement them.

While donors may recognise the importance of working with local policy-makers and of contributing to the longer-term sustainability of the health care system, they also have other competing objectives. Post-conflict reconstruction in the immediate aftermath sends a message to donor constituencies at home saying: "we're helping rebuild a war-torn society"; a message that helps attract attention and political support. In Kosovo, the WHO policy guidelines helped ensure that the significant support of the international community was based on a common vision of the transition to a primary care system.

The WHO policy framework also helped mitigate the duplication of NGO activities

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that has plagued other post-conflict and developing contexts. For example, in the absence of a plan for what kind of reproductive health care should be offered to the population, a country could end up with a number of dissimilar programmes, each run by distinct agencies. These programmes may train nurses to different levels, provide services of varying adequacy, use different clinical guidelines, drug regimes and indicators to monitor progress, pay their staff in different ways, and mobilise supplies through different routes.

Policy frameworks also ensure the sustainability of investments in the health sector. While it may be feasible to simply rebuild those services and health care settings that existed prior to the conflict and were damaged during the war, this represents a relatively short-term solution. More importantly, it may undermine the health system's longer-term sustainability, as the state is unable to fund the recurrent costs necessary for maintaining such services. Rebuilding pre-existing services can also contribute to the reinforcement of prior inequities in service delivery i.e. between rural and urban areas or between areas dominated by one or other ethnic or religious group. In post-conflict environments, donors and NGOs need to be particularly sensitive to avoid exacerbating enmity among ethnic or religious groups.

Balancing priorities

Providing a policy framework for health reform in post-conflict settings is crucial. As part of the implementation of these reforms, determining such important issues as the priorities and resource base for the emerging health system is a sensitive but vital matter.

The current focus of many reforms is the transition to a primary care based system. This emphasis may neglect an important institution in the health sector – the hospital. Clear policy guidelines for secondary and tertiary care are crucial for determining the role of hospitals, their location, level of financing, services provided, level of technological development, and the rationing of service provision that is acceptable within the broader health care system. If primary care reforms – such as the establishment of a referral system – are not effective, the impact will most likely be felt at the secondary care level. Hospitals may see their capacity stretched at a time when their funding levels are being reduced in a system focused on building primary care capacity. Decisions about hospital services must fit

into the broader objectives for the health care system: What values and underlying objectives will it have? Whose interests will it serve? What basic services will be guaranteed to all, and for which services will people have to make contributory payments?

Post-conflict periods offer some opportunities to consider how to plan service delivery to best use limited resources for maximum health gain. Yet, international donors often seek to place their funds in highly visible infrastructure development projects. If donor funds are to be used for infrastructure development, this development must fit in with other health care planning activities. Decisions need to be taken, for example, as to which hospitals need to be rehabilitated or further developed, and which ones should probably be rationalised because they duplicate services, are beyond the means of the emerging country resources, or simply because recurrent cost support cannot be mobilised. Without careful planning, international aid may inadvertently reinforce pre-existing inequities. Money may be targeted at politically sensitive regions and institutions, such as the tertiary hospital, and historically underfunded areas may continue to be neglected.

Although Kosovo's policy reforms outline in broad terms the future role of secondary and tertiary care, like the other reform measures in eastern Europe, their emphasis is on primary care. Primary care services will be offered through family practitioners and direct access to specialist consultants will be restricted. This is in keeping with making basic care more available to all and utilising more efficiently the scarce specialist resources available. This has implications for hospitals and key health personnel within them. And it should be added that attempts to shift some resources from hospitals to primary health care in post-conflict Kosovo have proven problematic given disagreements among the many policy actors.

The health sector budget in Kosovo is currently evenly split between primary and secondary care services. Although budgetary allocation is an important lever of change – and this distribution supports the future of primary care – it currently leaves hospitals under-funded by even the crudest of calculations of activity, catchment population and maintaining site infrastructure. The referral system is not yet fully functioning. The Kosovar public still perceives primary care as a stopping point on the road to specialist care, not as a place to receive treatment. Therefore, some hospitals are still overburdened, but are compar-

“Post-conflict periods offer some opportunities to consider how to plan service delivery to best use limited resources for maximum health gain. Yet, international donors often seek to place their funds in highly visible infrastructure development projects”

actively under-financed and unable to secure resources to address historic under investment or lead to rationalisation initiatives.

The role of national stakeholders

The numerous stakeholders all wish to influence decision-making, which further complicates the implementation process. In defining the reform programme, the process of negotiating change and determining values and priorities is as important – if not even more so – than their content. Different groups have different interests, and if these are not taken into account, then some key stakeholders may manage to derail the entire process.

Resistance to the reform programme may stem from people's deeply held beliefs that the situation faced by their country is unique. Kosovo has indeed had a unique experience. In the early 1990s, many Albanian health professionals were forced out of the public system, and medical education for Albanians in Pristina University was stopped. In response to this repression, Albanians established parallel services and separately trained their own personnel. When the war ended, those originally in the system wanted to resume their prior positions and some wanted to see the same sort of health care system operating a state-sponsored and state centred, hospital-oriented and specialist-driven service. However, as elsewhere in eastern Europe, donors, UN representatives and NGOs determined that Kosovo needed a more primary care oriented service, and set about to achieve this.

In Kosovo, the WHO and UNMIK tried to work with different interest groups and key figures in defining the broad shape of the future health care system. Many argue, however, that the process of consultation could have been more widespread and could have encompassed more groups. Nonetheless, there is typically a trade-off between consulting widely, and making decisions and moving ahead: too much consultation with no action may be as dysfunctional as decision-making without consultation.

A key issue of contention with the reforms in Kosovo has been the extent to which access to specialist and hospital care will require prior agreement and referral from a primary care provider. While young doctors being trained in primary care will support the notion that primary care physicians act as gatekeepers to secondary and hospital care, some specialists feel disempowered by this shift in power. They are

concerned that their power and influence may be eroded and that young family practitioners – being trained with donor support – will undermine their role within the health care system.

Management of the reform process

The reform process needs to be carefully managed. However, in post-conflict settings, the capacity of the state in the health sector to undertake its regulatory and oversight roles is often weak. Local politicians and bureaucrats may use the reform process to jockey for the most influential positions – those associated with major political decision-making and with determining how resources are to be spent. In the absence of state regulatory and oversight mechanisms, hospitals, as the greatest consumers of resources in the health care system, become highly susceptible to declining standards and misappropriation.

In Kosovo, the international community under United Nations Security Council Resolution 1244 has the authority to establish self-governing institutions. The UNMIK Regulation 2001/9, "A Constitutional Framework for Provisional Self-Government in Kosovo", established the legal basis for the creation of institutions of self-government and paved the way for the election of a Kosovar Assembly. This election will be held on 17 November 2001. The health sector is one of the responsibilities of the Provisional Institutions of Self-Government.

With the establishment of self-governing institutions in Kosovo, the UNMIK Health Department faces three simultaneous challenges: to continue its oversight of the administration of the health care system; to build an autonomous Kosovar Department of Health capable of fulfilling its oversight and regulatory functions; and to persevere with the reform programme for the health care system. The Department, with its skeleton staff, has lacked the capacity to undertake all these complex roles. The development of secondary care policy and health institutions, such as hospitals, has suffered as a result.

Information systems (health, management, finance) are critical to ensure the smooth functioning of hospitals. Agencies working on these information systems have provided numerous recommendations on how to ensure that these systems are functional and responsive. Agencies working to develop hospital master plans, the financing of the health care system, and the pharmaceutical sector have provided similar propos-

“The Kosovar public still perceives primary care as a stopping point on the road to specialist care, not as a place to receive treatment”

als. Although the Department of Health responds to these recommendations by developing regulations (or 'Administrative Instructions'), it lacks any real enforcement power.

Conclusion: lessons learned

The Kosovo experience teaches us four key lessons about the reform of health care, and the role of hospitals, in post-conflict settings. It is clear that post-conflict settings need a policy framework to ensure that the significant investments of many players in the health sector are coordinated and sustainable. Second, the focus of reforms on primary care is an important goal for the future, but ignoring the consequence of this policy on secondary care services and implementing it too quickly is problematic. In Kosovo, the primary care focus of reforms has placed undue pressure on under-funded hospitals and has caused dissonance among some health professionals.

Third, getting national stakeholders on board is critical to the success of the new policies. Therefore, placing emphasis on innovative communication strategies is important if new policies are to interact with public perceptions and have some influence on how people use health services. And fourth, the reform process must pay sufficient attention to the capacity of the government/statutory authority to undertake the reform measures. States shape health systems. Even if the state does not directly provide health care services, it is intimately involved in its delivery as a policy-maker, regulator, and overseer, and hence requires support from all participants.

The health sector and its hospitals are a site of struggle and contention, as well as of care. We ignore the sensitive role of hospitals and secondary care in post-conflict settings at our peril.

FURTHER READING

Shuey D, Arenliu-Qosaj F, Schouten E, Zwi A. *Health Policy Formulation in Post-War Kosovo: WHO Role 1999–2000* (submitted for publication).

Hospital reform in Romania



Reinhard Busse



Carmen Dolea

Romania has enacted considerable health legislation but delays in agreeing upon the regulations have hindered its implementation. Large numbers of excess hospital beds were closed in the early 1990s and the hospital system is being reorganised. Hospitals are now funded through global budgets according to their performance contracts with the health insurance funds.

Historical context

Romania, with a population of almost 23 million, has a long tradition of organised health care. Between the First and Second World Wars Romania had a social insurance system based on the Bismarckian sickness fund model. But, from the 1949 Law on Health Organisation of the State, there was a gradual transition to a *Semashko* Soviet-model health system. The latter was based on the principles of universal coverage and free access at the point of delivery, and its main features were government financing, central planning, rigid management, a state monopoly over health services, and health professionals as salaried civil servants.

In response to increasing pressure for health system reform after the political changes in 1989, both the Ministry of Health and the government issued many decrees and orders. This was done in the context of maintaining the right to health care which is enshrined in Article 33 of the Romanian Constitution. The bulk of the health system regulations were passed in the late 1990s: Law 74/1995 concerning the organisation of the College of Physicians; Law 145/1997 on Social Health Insurance; Law 100/1998 on Public Health; and Law 146/1999 on Hospital Organisation. Together these new regulations have changed the structure of the health care system. They established a legal framework

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Table 1
INPATIENT BEDS AND UTILISATION, 1990—98

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Inpatient beds	207,001	206,869	179,161	179,082	174,900	173,311	170,954	166,411	164,526
Inpatient beds/ 1,000 population	8.9	8.9	7.9	7.9	7.7	7.6	7.6	7.4	7.3
Admissions/ 100 population	20.1	19.0	20.2	20.4	21.1	20.6	21.5	20.9	20.3
Average length of stay in days	11.4	11.7	11.7	11.6	10.3	10.9	10.4	10.1	10.0
Occupancy rate (%)	67.7	66.4	78.4	78.5	79.2	77.5	78.0	78.7	78.2

Source: Ministry of Health and Health Statistics and Documentation Centre, 1999¹

“The new Social-Democrat government elected in December 2000 regards the privatisation of medical care facilities, including hospitals, as a means to increase health care efficiency”

for a shift from a centralised, state-owned and controlled tax-based system, to a more decentralised and pluralist social health insurance system, with contractual relationships between health insurance funds (as purchasers) and health care providers.

Hospital infrastructure and activity

Romania has 7.3 beds per 1,000 people¹ (including acute care and long-term care beds), with regional variations ranging from 10.5 beds in the west of the country and Bucharest to 6.9 in the south.

Between 1991 and 1992, under a Ministry of Health plan agreed with the district Health Directorates, Romania closed almost 28,000 hospital beds, mainly in departments with low occupancy. Excess beds resulted from over-centralised decision-making in the 1980s, as well as changes in health care demand in the early 1990s as a consequence of the social and economic transition. The most striking changes were the drop in the birth rate after the legalisation of abortions and the provision of contraceptives, and decreased admissions of children to hospitals. Fewer children were admitted partly because new legislation gave mothers a financial allowance to care for their children up to the age of two years. Also, living conditions at home improved due to the abolition of restrictions on heating and electricity supplies that were very common in the late 1980s. The occupancy rate of paediatric beds dropped to below 50 per cent in 1991, followed by the closure of more than 9,000 beds i.e. over 25 per cent of capacity. Beds in obstetrics and gynaecology were reduced by about 4,000, or 16 per cent of the 1991 capacity, and beds for new-borns in maternity wards dropped by about 3,500.

An Interhealth Institute survey conducted in 1998 at the request of the Ministry of Health produced a series of findings concerning secondary and tertiary care,² and the results concerning inpatient care, covering almost one-quarter of all hospital beds, are summarised in Table 2.

The data suggest the following key points:

- The number of all inpatient beds for Romania has followed the trends in European Union (EU) and central and eastern European countries since 1992; the (estimated) number of acute care beds is however higher than in EU countries.
- The number of admissions, at around 21 per 100 population, is higher than most European countries, but comparable to Germany, Hungary and the United Kingdom.
- The high proportion of ‘emergency’ hospital admissions supports the hypothesis that more attention should be given to delivering high quality ambulatory care.
- The average length-of-stay in acute care hospitals (about 9.5 days) is reasonable compared to the central and eastern European average, but is above most western European countries.

The Law on Hospital Organisation

The current phase of hospital reform in Romania began in 1999 when Parliament passed the Law of Hospital Organisation, Functioning and Financing. The Law classifies types of hospitals, sets out the organisation and management of hospitals, sets out payment mechanisms, specifies the rules for accreditation, and outlines procedures for contracting and purchasing hos-

pital services. According to the 1997 Health Insurance Law, the insured are entitled to receive health services, pharmaceuticals and medical devices. The insured receive specialised care in accredited hospitals if ambulatory or home-based medical treatment prove ineffective. Inpatient care includes full or partial hospitalisation with medical investigations and treatment, nursing, drugs and health care supplies, accommodation and food. Persons accompanying sick children under three years of age are also entitled to accommodation in the hospital if, according to the terms agreed upon by the National Health Insurance Fund (NHIF) and the College of Physicians, the doctor requires their presence.

Infrastructure and management

Hospitals are classified into general or specialised hospitals, acute or chronic hospitals, and hospitals for continuing care. There are four main levels of hospitals in Romania:

- Rural hospitals have a minimum of 120 beds and provide internal medicine and paediatric services.
- Town and municipal hospitals have at least 250 and 400 beds respectively, with departments of internal medicine, surgery, gynaecology-obstetrics and paediatrics.
- District hospitals in larger towns also have departments for orthopaedics, intensive care, ophthalmology and otorhinolaryngology.
- Tertiary care is provided in specialised units such as the Institute for Maternal and Child Care, the Institute of Oncology, the Neurosurgery Hospital, the Institute of Balneophysiotherapy and Recovery, the Institute of Pneumophysiology, and a number of cardiovascular and other surgery departments in teaching hospitals.

Except for a few small hospitals, all hospitals are publicly-owned and administered by the state. A hospital is managed by a general director (usually a physician) who is appointed by the district Public Health Directorate (there are 42 directorates across the country). There are two deputy directors, a physician and an economist. The hospital director appoints the hospital council, which usually includes representatives of hospital departments such as health care, nursing, pharmacy, administration and accounts. A hospital is allowed significant autonomy in making decisions and allocating its allotted budget.

The issue of hospital ownership is under debate in Romania. Although the majority of the hospitals have been transferred from the Ministry of Health to local government ownership, the new Law on Public Property (No. 213/1998) remains unclear on many points. The new Social-Democrat government elected in December 2000 regards the privatisation of medical care facilities, including hospitals, as a means to increase health care efficiency. It intends to privatise 25 per cent of the facilities owned by the Ministry of Health and Family. The intention is that private for-profit hospitals will reduce the burden of financing from the state and bring incentives for efficiency. Hospitals ownership may change from being the public property of the state to the private property of the state; other forms of property ownership also are envisaged, such as concession or joint venture, and even individual ownership.

Hospital accreditation

Hospital accreditation is intended to guarantee that hospitals function within specific standards and to certify the quality of services provided. The National Commission for Hospital Accreditation was set up in late 2000, with a board formed by two representatives each from the Ministry of Health, the National College of Physicians and the National Health Insurance Fund, and one representative from the Hospitals Association. Previously, hospitals applied for a sanitary authorisation from the Ministry of Health and Family although some hospitals still have not met these requirements.

Table 2
DATA ON HOSPITAL-BASED CARE, 1998

	Acute care hospitals	University hospitals	Chronic hospitals	Non-Ministry of Health hospitals	Total
Admissions/bed	28.9	31.8	5.9	21.4	29.0
Admissions/100 population	10.3	10.1	0.2	0.6	21.2*
Avg. length of stay (days)	9.7	9.0	47.0	12.3	9.7*
Avg. occupancy rate (%)	76.4	77.2	75.3	71.7	76.4*
% Emergency admissions	92.5	51.7	3.7	16.4	70.3

Source: Interhealth Institute, 1998

*Note: differences to figures in table 1 due to sampling

Hospital financing

Hospital funding is regulated by the Health Insurance Law, the Law on Hospital Organisation and the Framework-Contract. The latter document, negotiated each year between the College of Physicians and the National Health Insurance Fund, must be endorsed by the Ministry of Health and approved by the Government. It outlines the terms and conditions of health care delivery in the health insurance contract and indicates the share of funds for different types of care (such as primary care, hospital care, specialist ambulatory care and dental care). According to the 2001 Framework-Contract, hospitals will receive 50-53 per cent of National Health Insurance Fund expenditure, whereas primary care and secondary outpatient care will receive 15 per cent and 8 percent respectively.

Starting from the last trimester of 1999, hospitals received global budgets for their inpatient activities. These have been negotiated with the 42 district health insurance funds. Thus, financing is now related to hospital activity rather than inputs such as the number of beds or staff. According to the 2001 Framework-Contract, global budgets are based on number of admissions, average patient costs per day, and norms of length of stay by hospital type and department. The Law on Hospital Organisation calls for the development of a prospective payment system for hospitals, the involvement of communities in hospital management, and changes in the payment of medical staff. Under-the-table payments remain a common source of additional income for salaried physicians.

Hospital maintenance costs are now the responsibility of the district health insurance funds, while major capital investments remain a responsibility of the Ministry of Health financed from the state budget. Teaching hospitals and the national institutes are financed jointly by the Ministry of Health and the Ministry of Education, but local governments generally lack sufficient funds to invest in local hospitals.

Implementing change

Although the current phase of hospital reform began in 1999 under the Law on Hospital Organisation, Functioning and Financing, there are still problems in implementing change. There has been a long time lag between passing the law and issuing regulations for its implementation. The main reason for this delay is that the health system reform in Romania has lacked clear

objectives and a clear strategy. Implementation is also hindered by frequent changes in the Ministry of Health (over 12 ministers in 10 years), the lack of resources, the difficulties related to old mentalities and resistance to change, and a lack of political will. The regulations under the Hospital Law are still being discussed with no action so far taken regarding ownership, hospital accreditation or the legal framework for privatisation.

The new government is committed to moving health reform forward. It has issued a White Paper setting out the goals for health system reform and further steps to be taken.² The emphasis is on increasing the quality of health care services as well as promoting efficiency through new financing mechanisms.

A pilot study on hospital financing using diagnosis-related groups (DRGs) is underway in 23 hospitals, and its conclusions will form the basis for new methods for hospital financing starting in 2001. The Ministry of Health and Family has submitted a privatisation proposal to government, calling for 25 per cent of health care facilities to be privatised by the end of 2004. The objectives are to improve the efficiency of hospitals and their performance. One of the five components of the second World Bank loan refers to the improvement of essential hospital services and the modernisation of district hospitals (US\$18.33 million from the World Bank and US\$7.33 million from the Romanian government).

Some hospitals are to be transformed into centres for sociomedical care for people with very low incomes who need both health care and social assistance, and into centres for elderly care. The financing of these new centres will be shared between the Ministry of Labour and Social Solidarity, the Ministry of Health and Family and the National Health Insurance Fund.

The health status of the Romanian population remains among the poorest in Europe. A recently released survey pointed out that almost half of Romanians were not satisfied with their health status.³ Although 97 per cent of those interviewed considered health a national priority, their main worries were price fluctuations and the future of their children.

In the context of ongoing political and economic changes, improving the health care of the Romanian population and managing health system reform will require a strong political will and a serious commitment by all the actors involved.

REFERENCES

1. Ministry of Health and Health Statistics and Documentation Centre. *Statistical Yearbook 1998*. Bucharest: Ministry of Health, 1999.
2. Ministry of Health and Family. *Cartea Alba a preluării guvernării în domeniul sanitar (The White Paper on changing of the government – the health system)*. December 2000. Ministry of Health and Family: Bucharest, 2000.
3. Vacarasteanu N. "The opinion of Beneficiaries" editorial note, in *Viata Medicala Romaneasca*. 2001. p. 559.

The material for this paper is based on the the European Observatory on Health Care Systems' "Health Care Systems in Transition" [HiT] profile for Romania (2000), and is available at www.observatory.dk.

Estonian hospital sector in transition



Toomas Palu



Reet Kadakmaa

Estonia, like most ex-socialist transition economies, has been reforming its health system to adjust to changing socioeconomic, epidemiological and demographic circumstances. The overarching goal is to reorient public health systems towards non-communicable disease prevention and health promotion, and to improve efficiency of health financing and health care delivery systems.

Hospitals are the costliest part of a health system and thus the area where efficiency gains would give significant returns. Until recently there was no clearly defined hospital sector reform in Estonia but, as expected, hospitals have responded to financial incentives and exploited gaps in the regulatory environment.

Health reforms: the impact on hospitals

Post-independence, the key health reform landmarks affecting hospitals were as follows: The 1991 Health Insurance Act changed the financial incentives; the 1994 Health Care Organisation Act decentralised ownership of public hospitals to local governments; and the primary health care reform implemented by Estonian Ministry of Social Affairs (MSA) which established family doctors as the gatekeepers to specialist services. In 2001, Estonia is

entering the second stage of health care reforms. The 2000 Health Insurance Fund Act reorganised former sickness funds into a single Estonian Health Insurance Fund (EHIF) and strengthens the role of health insurance *vis-à-vis* hospitals. The 2001 Health Care Services Organisation Act replaces the 1994 law and clarifies the legal status of hospitals. The Estonian Health Insurance Fund plans changes in financial incentives for hospitals. The government has developed a hospital masterplan that provides direction for significant hospital sector restructuring by 2015. In the autumn of 2001, the government will begin the parliamentary review and approval process on a draft new Health Insurance Act. Among other things, the act will redefine health insurance benefits and co-payments, if any, for health services.

There are two issues that are yet to be tackled: capital financing in health care sector, and the organisation of long term care. The remainder of this paper discusses the changes in the hospital sector from the perspective of financial incentives, hospital legal status, optimisation of hospital capacity, capital finance and long term care.

Financial incentives

Estonia has a largely urbanised population of 1.4 million on 45,000 km². There were 68 hospitals with a total of 9,828 beds in Estonia as of 31 December 2000. Hospitals are very diverse in terms of age, size, condition and functions. Most hospitals are at least 20 years old. Hospitals built between 1960 and 1990 are in poor condition. There has been no replacement of hospital stock during the first 10 years of transition. Several hospital efficiency indicators have improved over 10 years of transition but they still remain below EU benchmarks (see Table 1).

Public health insurance has been and remains the main source of finance for hos-

Table 1
COMPARISON OF HOSPITAL UTILISATION INDICATORS
Baltic and selected European countries

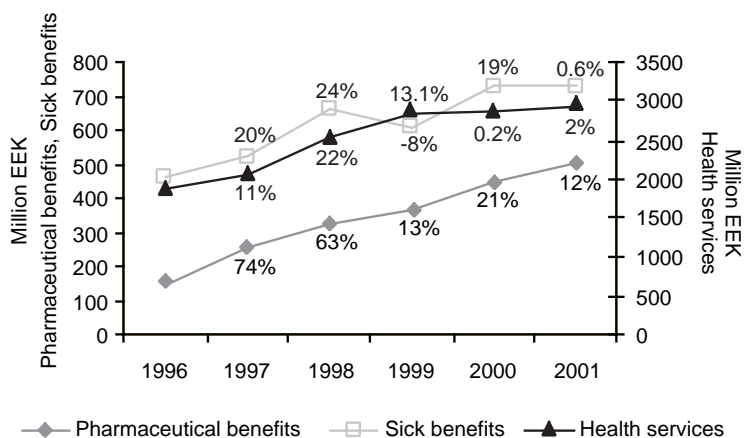
	Beds/ 1,000 population	Admissions/ 100 population	ALOS	Bed days/ 100 population
Estonia, 1990	11.6	18.4	17.4	257
Estonia, 1999	7.2	19.6	10.9	194
Latvia, 1990	14.0	22.4	17.3	381
Latvia, 1999	8.9	11.8	-	
Lithuania, 1990	12.4	18.6	17.9	273
Lithuania, 1999	9.4	24.5	11.3	Ñ
Hungary, 1999	8.4	25.4	9.2	Ñ
Finland, 1999	7.6	27.3	10.5	130
Denmark, 1998	4.5	19.4	7.3	Ñ
Netherlands, 1998	5.1	9.6	13.8	139

Source: WHO Health for All Database¹; Medical Statistic Agencies in Baltic Countries.²

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Figure 1
EHIF EXPENDITURES ON HEALTH SERVICES, PHARMACEUTICAL AND SICK BENEFITS 1996—2001
Total expenditures and rate of increase.



Source: EHIF data.

“Estonia is betting that a significantly better defined legal environment and management capacity will compensate for the risks of failure experienced by a number of countries which decentralised the health financing function in the early years of transition”

pitals. According to the National Health Accounts, in 1999 hospital inpatient care consumed 36 per cent of total Estonian health care expenditures. The EHIF met 93 per cent of this expenditure – 60 per cent of EHIF expenditures on health services – while other public sources and private payments met 6 per cent and 1 per cent respectively. Total Estonian health care expenditures amounted to 4.8 billion Estonian kroons (EEK), equivalent to US\$208 per capita in 1999. The EHIF contributed 68 per cent to the total health care expenditure. The overall financial environment was favourable for hospitals until the 1997 financial crisis. Expenditure by the sickness funds on health services had increased both in nominal and real terms. Since 1998, the rate of increase has slowed. Most of the revenue increase of the sickness funds was consumed by increasing expenditures on sickness and pharmaceutical benefits (see Figure 1). These two expenditure items are open-ended for EHIF, thus limiting the funds available for financing acute care hospitals.

The 1991 Health Insurance Law marked a change in hospital financing. Instead of the historical line-item budget, a German style relative point scale hospital payment system was introduced. The 17 regional sickness funds administered the contracts with hospitals. After a couple of years experience with annual adjustments of point values, the point system evolved into a pure fee-for-service system. In 2000 the health insurance price list included 1,892 fees. In 1999 and 2000, a small number of case-based payment modules were developed to be used in parallel with the fee-for-service

system (e.g. normal delivery, cataract surgery, etc). Annual hospital budget caps and sliding scales for hospital day reimbursement were used by sickness funds for cost-containment and as hospital efficiency incentives. Hospitals responded to changing incentives as expected by increasing the number of services produced, shortening average length of stay (ALOS), and increasing hospital throughput. The introduction of a general practitioner based primary health care system as a gatekeeper to specialist services has also counterbalanced the financial incentives. The year 1999 marked the first time that the number of specialist visits, hospital admissions and certain diagnostic procedures (radiology) did not increase from the year before.

With a new Health Insurance Fund Act becoming effective from January 1, 2001, the 17 regional sickness funds were consolidated into the single Estonian Health Insurance Fund. The EHIF has 7 branches purchasing care for their respective population pools, which range from 70,000 to 490,000 people. EHIF is an autonomous public agency incorporated under a special law. The new law significantly strengthens the negotiating position of the health insurance fund by completing the purchaser-provider split. The 15-member EHIF governing board has full decision powers on the organisation, budget and contracting rules of the EHIF, and includes representatives of government, the employers’ association and civil society. No hospital sector interests are represented in the governance of the health insurance fund.

Incorporating the EHIF as an autonomous agency bucks the trend in eastern Europe to re-centralise health sector financing under direct government control. Estonia is betting that a significantly better defined legal environment and management capacity will compensate for the risks of failure experienced by a number of countries which decentralised the health financing function in the early years of transition. The newly incorporated EHIF has taken a decision to introduce diagnosis-related groups (DRGs) for acute hospital care financing fully coming into effect from 2003. In the summer of 2001, the EHIF is testing the NORD-DRG grouper (a DRG system used in Sweden, Finland and Norway for statistical and hospital reimbursement purposes) and the NOMESCO (Nordic Medico-Statistical Committee) classification of surgical procedures on the Estonia acute hospital care case-mix for possible application. This change is expect-

ed to further motivate hospitals to improve efficiency by removing incentives to produce more hospital bed days per patient.

Legal status of hospitals

The 1994 Health Care Organisation Law decentralised ownership of most hospitals to local governments. A local government entity status gave hospital directors only limited decision rights and no residual claimant status (the legal ability to make decisions on hospital assets and to keep revenue from sales). For example, the hospital director could not represent the hospital in court. At the same time, hospitals had quite a significant market exposure since they acquired most of their inputs from a more and more liberalised market place. In addition to other market inputs, human resources employed by hospitals were released from the civil servant pay scales in early 1990s. As most of a hospital's funds were received through contracts with sickness funds, local governments did not have much interest in the operations of the institutions they owned and did not provide adequate oversight and support where needed. New legal and entrepreneurial forms for hospital governance had to be found under existing legal options.

Table 2 shows the distribution of the Estonian hospital bed stock among different legal forms of incorporation. These legal options considerably increase management decision rights but still often leave ambiguous and uncertain financial accountability lines and investment financing decisions. For example, the Foundation Act in itself is not suitable to regulate a complex enterprise such as a modern hospital providing essential services for a population. The law does not require the management of a foundation to provide regular financial statements to the board. Instead, the law gives the board a right to ask the management to provide any information on a 'need' basis. Much depends on the wisdom of the founders in drawing up the by-laws and on the sense of responsibility of the board members in exercising their legal rights.

The 2001 Health Care Services Organisation Act calls for all hospitals in Estonia to be incorporated under private law as foundations (trusts) or joint-stock companies by 2003. Under this arrangement, the key challenge still to be solved is the financial oversight of hospital operations to avoid bankruptcy cases and other market exits often in situations where hospitals are natural monopolies. In addition, a joint-stock

company option would allow for (at least partly) privatisation though equity acquisitions that would require the government to develop step-in rights for situations where possible market exit would put in jeopardy service provision to a particular population, or in case of contract disputes with the EHIF as the main public fund.

Optimising hospital capacity

Entering the transition period, Estonia had significant overcapacity of hospital bed stock. In 1994 a round of administrative closures of a number of small hospitals failing the licensing criteria was conducted. Administrative closures are more difficult today because of vested local interests (employment) and a more politicised environment. The impact of financial incentives and market competition has been limited, as a fee-for-service system still motivates hospitals (for example, to keep patients in bed) and as hospitals are natural monopolies in many locations across the country. Given mounting financial pressures to channel scarce capital resources and allow efficiency and quality gains from economies of scale, the government is taking a more proactive approach to the optimisation of hospital capacity.

The masterplan on hospital services would effectively downsize acute hospital capacity from 68 hospitals in 2001 to 13 by year 2015, or, from the current 7.2 acute care beds to about 2.2 beds in 2015.³ The future hospital configuration would include 2 university level teaching hospitals, 4 central hospitals and 7 community hospitals. The main criteria used for planning hospital capacity were sufficient population pools to support necessary service volume for quality and efficiency, and at most 60 minutes travel by car to reach a hospital as a geographical access criterion. Realisation of this plan would not mean the closure of all excess hospital sites. Some of the plan will

Table 2
LEGAL ORGANISATIONAL FORMS OF ESTONIAN HOSPITALS, 31.12. 2001

Hospital type	Hospitals	Beds
Central government entity	10	2,390
Local government entity	29	3,702
Joint stock company	8	616
Limited liability company	9	395
Foundation	5	2,109
Not-for-profit association	6	561
Other	1	55
Total	68	9,828

Source: EHIF analysis of various sources

be realised through mergers. For example, the 17 hospitals in the city of Tallinn (catchment population for secondary care services 490,000; for tertiary care about 800,000 people) are being merged into 4 hospital networks (1 regional, 2 central and 1 children hospital networks) by 2002. This should effectively place responsibility for the efficiency problem upon the management of the new entities. From the health insurance fund perspective, this would mean 4 contracts in Tallinn in 2002 instead of 17 in 2001.

The 2001 Health Care Services Organisation Act legalises the hospital masterplan by mandating the EHIF to conclude at least 3-year service funding contracts with the hospitals that are included in the masterplan. The law also outlines a decision mechanism for future amendments in the plan involving the Ministry of Social Affairs and the EHIF.

Financing capital

How to finance capital in the health sector remains one of the issues still to be solved by the Estonian policy-makers. The 1994 Health Care Organisation Law mandated the owners of the hospitals (central or local governments) to finance capital investments. This mandate was never appropriately funded and the capital stock of hospitals has been significantly run down during the 10 years of transition. According to the National Health Accounts, the 1999 capital expenditure from all sources amounted only to 2.2 per cent of total health care expenditure. This, compared to empirical evidence of the Organisation for Economic Cooperation and Development countries of around 10 per cent. Under budget pressures to fund foremost the sectors that are priorities for European Union accession and North Atlantic Treaty Organisation membership, it is unrealistic to expect public finance to meet fully the health sector investment needs. Therefore, the government is currently looking into ways to develop a regulatory environment for the health sector that would allow private funds to complement public sources of health sector capital finance. As mentioned earlier, incorporating hospitals under private law would allow private partners to join as equity partners in a joint-stock company form of hospitals. In addition, the government is considering introducing a capital charge for public hospital assets to equalise the cost of capital from different sources for the hospital managers and owners. This would also necessarily mean a

review of health services pricing policy by EHIF to include provision for capital cost.

Long term (nursing) care

Long term care is another major issue that remains unsolved in the face of hospital sector restructuring (See Howe and Koppel in this issue). A hospital bed needs assessment in 1999 concluded that in 1998 about 12 per cent of all hospital beds were occupied by chronic patients needing long term care.⁴ If alternative forms of care could be provided, the acute hospital capacity could be downsized by 30 per cent. The EHIF plans to introduce a DRG-based hospital payment system will put more pressure on hospitals to discharge patients after the acute care episode is completed. To complement the hospital masterplan for acute care services, the Ministry of Social Affairs is currently developing a strategy for long term care. The key issues here are how to design alternative forms of care that best suit patients' needs, and how to manage the interface between social and health care services given the provision and financing implications. Some local hospitals that are giving up their acute care functions under the hospital masterplan will be restructured to become extended care centres that would offer both institutional and community care. The need for different long term care options is expected to grow as the population is rapidly ageing.

Conclusion

The future of the hospital sector in Estonia depends on the impact of the second stage health care reforms initiated in 2001. This raises the following questions. Can the public interest in the availability of health services be protected through proper financial oversight of hospitals and regulation of natural monopolies once the decentralisation of hospital ownership and legal status under private law are completed? Will the financial incentives embedded in hospital payment systems motivate hospitals to realise efficiency gains by reorganising their bed stock and physical assets? Are adequate alternatives available for pre- and post-hospital care? Is capital finance available to replace and maintain essential capital stock of hospitals? Can Estonia achieve optimal hospital capacity through implementing the masterplan and by regulating high-cost technology dissemination? And an important factor not discussed in this paper, will hospitals have board members, managers and health professionals with the proper qualifications, experience and motivation to make right decisions?

REFERENCES

1. World Health Organization Regional Office for Europe *Health for All Database*. WHO, 2000.
2. Medical Statistic Agencies in Baltic Countries, NOMESCO, Statistic Netherlands.
3. The Estonian Hospital Masterplan can be found on the Estonia Ministry of Social Affairs homepage www.sm.ee/develop.html
4. *Estonia Hospital Bed Needs Assessment*. A consultant study commissioned by the Estonian Ministry of Social Affairs and performed by Danish Health Consult A/S. 1999.

Long term care in central and eastern Europe: The case of Estonia



Anna Howe



Agris Koppel

Introduction

As with the other countries of central and eastern Europe, the Estonian health care system has been characterised by an excessive provision of hospital beds. Progress with reform of the Estonian acute care sector has been reported by the recent Health Care in Transition Report.¹ The extent of change is indicated by the decline in the number of acute beds from 18,000 in 1991 to 10,500 in 1998, and a fall in average length of stay from 14 to 9 days. Some of the small hospitals which have lost their annual contracts with the Health Insurance Fund (HIF) have turned to providing long term care. But as there has been no planning for long term care and concepts of long term nursing care are not well developed, they can only be considered to be nursing homes by default. This paper surveys the context in which planning for long term care is now proceeding in Estonia, and identifies the main issues to be addressed in moving towards a more diversified system of long term care services.

The policy context

As reform of the acute sector proceeds in Estonia, provision of alternative forms of long term care for the elderly becomes critical if further reductions in bed numbers and length of stay are to be realised. In 1999 almost 25 per cent of beds were occupied by patients classified as '*pikaravi*'.² This uniquely Estonian term means that the patient is receiving follow-up, convalescent care – as distinct from active medical treatment – and the duration of this care is longer than for acute episodes. The term is used to describe long term care in Estonia, but it does not refer to the same kinds of

care as covered by 'long term care' as used in countries of the Organisation for Economic Cooperation and Development (OECD). Two-thirds of these patients are aged over 60, and with only 11 per cent in designated *pikaravi* units, most are in general hospital wards. *Pikaravi* care is distinguished by a reduction in the rate of funding from the Health Insurance Fund to EEK203 per day after 10 days, imposition of a 50 per cent co-payment after 30 days, and full payment after 60 days. The only other widespread provision of long term care is some 3,200 places in social care homes which are funded and operated by municipalities, and there are some incipient community services. Nursing homes providing nursing care outside hospitals, and for an indefinite period, are absent.

The need to address this situation was recognised in the Estonia Hospital Master Plan (HMP), prepared by the Scandinavian Care Consultants Group in 1999 as part of the Estonia Health Project funded by a World Bank loan.³ In stressing the need to strengthen medical care of the elderly, the HMP made three main points: that there will be increased demand for better secondary medical care for the elderly as well as for long term care, involving the complete reorganisation of *pikaravi* care; that the new hospital structure for secondary care requires that patients who needed further medical treatment after a short hospital visit would be taken care of somewhere else; and that very poor facilities in existing long term hospitals must be replaced with new physical facilities. The HMP identified the resource base for long term care in the form of conversion of the resources currently tied to some 5,100 acute beds that would be in excess of requirements, as the number of acute hospital beds was to be further reduced over a 15-year period from 2000.

The processes by which these resources might be converted into long term care ser-

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“The conversion process envisages a restructuring of residential care that will also free some resources for transfer to community services”

vices have been the subject of a consultancy on nursing care and long term care (NCLTC) to the Estonian Health Project undertaken by one of the authors (Howe). The Estonian Health Project is funded by the World Bank, and the consultancy is contributing to the preparation of a submission for World Bank loan funding for wider reform of the health care system. This, is in line with the Bank’s interest in more effective use of resources allocated to health care. Rather than simply re-labelling the excess hospital beds as long term care or nursing home beds – as appears to be happening in some other countries in the region – a more active approach to the ‘conversion process’ was adopted to present options for developing a wider range of both residential care and community care services.

Three other background developments warrant note. First, the specifications for the NCLTC project were drawn up by a Nursing Care Working Group which was established by the Ministry of Social Affairs early in 2001. This Working Group was charged with developing principles for the organisation and financing of nursing care and long term care services; the early stage of the development of concepts of long term care is indicated by the use of the term ‘nursing hospital’ to describe what are known elsewhere as nursing homes, reflecting the anticipated transformation of former hospital facilities to fill the present gap in this level of care. Second, a statement of policy for the elderly released by the Ministry of Social Affairs in late 2000 made reference to health care and social welfare. Among the specific objectives were the creation of an appropriate environment for the elderly who definitely need assistance, notably those with dementia and the disabled, ensuring necessary medical rehabilitation opportunities and the inclusion of nursing in the range of services for the elderly.⁴

Third, significant progress has been made in implementing policies for reform of other health and social services. In primary health care, hospital based polyclinics are giving way to family doctors working in group practices. Of most relevance to long term care is the development of open care in the mental health system, which has achieved a 30 per cent increase in the number of people receiving support through a reduction in the number of institutional places. Those involved in these areas have identified several preconditions for reform, and the extent to which these are now iden-

tified in the long term care field is taken up below.

Target population for long term care

The narrowest definition of the target population for long term care might be taken as the 15,500 people aged 60 and over who had hospital stays of more than 20 days in 1999 as it is this group for whom alternative care will have to be provided most immediately while acute care reforms proceed.

A broader and more useful definition for planning purposes is the aged population.⁵ In 2000, the 208,574 people aged 65 and over accounted for 14.5 per cent of the population; the aged population is as yet relatively young, with only 18 per cent aged 80 and over. The aged population will increase and grow older in the next 15 years as the cohorts now aged 65–80 are much larger than preceding cohorts and as life expectancy improves. The cohort now aged 75–79 equals the total population aged 80 and over, and the 70–74 years age group is 50 per cent larger again. Subsequent ageing is then moderated by the impact of World War II and its aftermath, including post-war immigration, with the cohorts aged 50 to 64 being almost the same size. Any proportionate increase in the aged population will be more the product of low birth rates and out-migration of younger age groups, including the repatriation of Russian Estonians post re-independence in 1991. While the proportion aged in the 15 counties varies only from 13 to 17 per cent, fully one-third of the elderly are located in the capital Tallinn. The small number of older people in many rural localities, along with limited local transport, raise some critical issues for the delivery of services at local level.

A more detailed account of the need for long term care has been presented in a well designed national survey of the health status and well-being of older Estonians conducted under the auspices of the Estonia Association of Gerontology and Geriatrics in 2000.⁶ Between 10–20 per cent of those aged 65–85 reported a need for help in daily life and personal care, and among those aged 85 and over, fully 40 per cent needed assistance with personal care, 60 per cent with shopping and housekeeping, and most specifically, one in four needed nursing help at home. In the absence of visiting nursing services and very limited provision of other services, the great majority have to rely on family members. And those without close family have few options but to

**Table 1
PROVISION, STAFFING AND PAYMENT FOR LONG TERM NURSING CARE IN HOSPITALS AND SOCIAL CARE HOMES IN ESTONIA**

Criteria	Long term nursing care in hospital - <i>pikaravi</i>	Social care in social care home
PROVISION:		
Funded by	Health Insurance Fund	Municipalities
Provided by	Municipalities	Municipalities
Level of provision per 1,000 aged 65 and over	In designated <i>pikaravi</i> units: 4 beds/1,000 Proposed from conversion of excess hospital beds: 10 per 1,000	Approx. 20 places/1,000, except in two major urban centre counties of Harjumaa (capital city of Tallinn) and Tartu, approx. 10 places/1,000
STAFFING:		
Trained Nurses	Legally required	Not legally required
Nursing tasks	Medical nursing procedures	No medical nursing procedures
Training in long term care	Not required	Not required
Role of doctors	Supervision of medical nursing	Family doctor only
Assessment	Doctor only, but no specialist geriatricians	Municipal social worker
PAYMENT FOR:		
Nursing care	HIF, EEK203 per day	Not defined
Social care	Not defined	Municipality, EEK133 per day.
Co-payment	50% after 30 days, full payment after 60 days	85% of pension of EEK1,500 per month, commencing on admission
Level of payment	Flat rate. Average of EEK203 per day, range EEK198-213.	Flat rate. Average approx. EEK160 per day, based on pension contribution of EEK1,275 per month and funding of EEK3,500.
Medication	All paid for by hospital	Co-payment for prescription medication and full payment for other.

enter social care homes. Another factor precipitating moves to social care homes is the poor standard of housing for some older people.

Assessing adequacy of present provision

The conversion process envisages a restructuring of residential care that will also free some resources for transfer to community services. Directions for these developments were informed by canvassing the adequacy of present provision and gaps in services in discussions with key informants in hospitals, social care homes and municipalities.

At present there are no effective mechanisms for assessing care needs and transferring individuals to appropriate services. The role of designated *pikaravi* units is restricted to basic inpatient care, and admission to social care homes is controlled by the municipalities. Those in both *pikaravi* and social care homes have widely

varying levels of dependency and diverse care needs, but little differentiation in care programmes; assessment is the key to sorting out this assortment of patients and directing them to appropriate services.

Equity in provision between counties was also examined with a view to setting benchmarks that could serve three main purposes in the conversion process: promoting an equitable distribution of services between counties, including redistribution of resources released from excess acute beds; establishing a balance between different levels of care; and setting some broad dimensions for financing.

The level of provision of social care places was generally regarded as adequate except in the two major urban centres of Tallinn and Tartu. A benchmark 20 places per 1,000 aged 65 and over was proposed to bring all counties to an equal level. The level of nursing care beds proposed by the Hospital Master Plan would have resulted

“Estonia stands as a pioneer among the central and eastern European countries, where the development of long term care appears to have progressed no further than re-labelling excess hospital beds as nursing home beds”

in a ratio of just on 17 beds per 1,000 aged 65 and over, effectively doubling the total level of residential care and providing the same number of nursing home and social care beds. The alternative proposed was a balance of 1 nursing care bed to every 2 social care beds, with a benchmark of 10 nursing home beds per 1,000.

While the derivation of these benchmarks is somewhat arbitrary, the nursing home benchmark is very close to the level of provision estimated in the Tartu University Feasibility Study.⁷ Based on a survey of dependency of long stay hospital patients and residents of social care homes in south east Estonia and comparisons with Swedish experience, the estimated need for nursing care beds resulted in a ratio of 11.4 places per 1,000 aged 65 and over.

Provision of residential care at these benchmarks, with new levels of funding per place set to achieve improved relativities compared to current funding, would allow some 25 per cent of the available conversion resources to be allocated to expansion of community care services. A number of local initiatives in visiting nursing and day care have been taken in recent years, drawing on a variety of sources for short term funding. These activities provide the foundation on which a nationally organised programme of community care can be built.

Funding issues

The conversion process presents an opportunity to address three main problems in present funding arrangements. The main features of provision, staffing and funding of long term care in hospitals and social care homes are summarised in Table 1.

First, the funding for social care homes, commonly EEK3500 a month, is high compared to the Age Pension of EEK1,500 a month on which the majority of older Estonians live; 85 per cent of the pension is paid as a co-payment. Co-payments for *pikaravi* are not only inconsistent with those in social care homes, but are unaffordable for those whose only income is a pension; these payments then become the responsibility of family members, giving rise to considerable inequity between these families and those whose elderly relatives have conditions that receive free treatment in acute hospitals. While there is a difference of some 30 per cent between social care funding and the *pikaravi* rate, both are funded at a flat rate and so there is no relationship to dependency.

These problems and the inconsistencies in co-payments seen in Table 1 could be resolved by adopting standard co-payments in both nursing homes and social care homes, and developing a dependency-based payment system. Readiness to move to such a system is indicated by the development of dependency scales and related care plans by nurses in a number of long term hospital units, and experience with the international ‘Resident Assessment Instrument’ in the Tartu University feasibility study.

The second risk to funding is that Estonia will perpetuate the medical-social divide that has been the bane of long term care funding in many other countries; unless the division of funding for long term care between the Health Insurance Fund and local government is resolved. Long term nursing care that is delivered in hospitals, even though the patient is not receiving active treatment, is regarded as ‘medical’ care, and so comes under the Health Insurance Fund. At the same time, much of this care is similar in nature to the care provided in social care homes but which are not licensed to provide nursing care. The challenge is now to develop funding arrangements for long term care that bring together HIF funding for nursing care, municipal funding for social care, and a pension based co-payment for daily living costs, and to use these arrangements to cover the full range of long term residential care and community care for the elderly.

To avoid argument over the boundary between medical and social care, and who should fund what, the preferred option is to establish a new Nursing and Social Care Fund (NSC Fund). The candidate for administering this fund is the HIF as it is responsible for the hospital resources flagged for conversion and which account for about 80 per cent of the resources going to long term care now and in the future (excluding co-payments). A single payer with experience in contracting for services at standard prices also has many administrative advantages over the some 200 municipalities, which range from rural municipalities of a few hundred residents, to the City of Tallinn with a population of 300,000. Municipalities are substantially funded by central government rather than raising their own revenue, and redirecting the funds that currently go to them for social care to the new NSC Fund would clearly assign the purchaser role to the Fund and leave the municipalities to develop their provider role.

The third funding issue is how prices can be set for long term care services, especially community services. Recent initiatives in community service provision have drawn on funding sources as diverse as municipalities, a foundation that distributes a share of gambling tax to community organisations, and the HIF which has taken a tentative step towards fund nursing care outside hospitals in setting a price for palliative care nursing provided by the Estonian Cancer Society. Open care services in the mental health system also provide a comparative price guide, and have demonstrated the cost effectiveness of community care: the 20 per cent of the mental health budget going to open care covers 50 per cent of all clients.

Catalysts for change

Four of the preconditions for change identified by those who had been involved in reform of primary health care and mental health are now established in the long term care field. Concepts of long term care are being defined, practical initiatives are being taken, and professional associations are active, especially in education. The consultancy to the Estonian Health Project will meet the condition of having a plan in place.

Some other preconditions are emerging. The commissioning of the World Bank consultancy can be taken as an initial commitment by the bureaucracy. And although the HIF has yet to express support for any particular directions for long term care development, it acknowledges its importance for implementation of reforms in acute care. The HIF potentially has considerable power, and it remains to be seen how this will be exercised.

Other conditions for change are unclear, but some positive signs can be seen. The political commitment set out in the policy for the elderly remains relatively passive, and it is difficult to gauge the level of support for developing long term care among other interest groups and in the community as a whole. Concerns that are being expressed about the inequitable impact on families of charges for long term care in hospitals could provide a trigger for action. HelpAge International has been working with representative groups of older people in Estonia to strengthen their participation in policy development, and debate about the development of long term care could be the very cause to engage them.

Finally, it is pertinent to note that rather than being a precondition for reform, leg-

islative change was regarded as an outcome, formalising changes only when new systems had stabilised. The dangers of attempting legislative change at too early a stage in a dynamic social policy environment are all too apparent.

Comparative perspectives: looking to the European Union and other central and eastern European countries

The Estonia case provides comparisons with both the EU countries in which long term care services are long established, although not without problems, and with other countries in the region where the issue has yet to be addressed. Rather than providing a set of benchmarks that could be applied in Estonia, it is the variation in international experience that is striking. The comparative report by Pacolet and others⁸ on the fifteen EU countries (and Norway) documents this diversity in overall levels of provision and in the balance between provision of places in nursing homes, social care homes and service flats, and community care.

While the benchmarks proposed for Estonia appear low compared to those of neighbouring Scandinavian countries, two caveats need to be borne in mind. First, allowance should be made for the relatively young aged population and the early stage of development of long term care services in Estonia. Second, and far more importantly, rather than aiming to achieve a level of residential care that would bring it closer to levels of the EU countries – most of which are striving to contain and reduce such provision – planning of long term care in Estonia might be better seen as offering a real opportunity to test the capacity to minimise residential care and focus on the development of community care, as well as encompassing the changing boundary between acute and long term care in the endeavour. Estonia stands as a pioneer among the central and eastern European countries, where the development of long term care appears to have progressed no further than re-labelling excess hospital beds as nursing home beds.

The outcomes of the strategies that are adopted for the purposeful conversion of the equivalent resources in Estonia should be watched with interest by those concerned to find in new directions in long term care across the whole of Europe.

REFERENCES

- Publications of the Estonian Ministry of Social Affairs are accessible via the internet at: www.sm.ee
1. European Observatory on Health Care. *Health Care Systems in Transition: Estonia*. London, 2000.
 2. Ministry of Social Affairs, Department of Statistics and Analysis. *Estonian Health Statistics, 1992–1999*. Ministry of Social Affairs, 2000.
 3. Estonian Ministry of Social Affairs. *Estonian Hospital Master Plan, 2015*. Prepared by Scandinavian Care Consultants AB for the Estonian Ministry of Social Affairs, 2000.
 4. Estonian Ministry of Social Affairs. *Social, Labour and Health Policy Development Plans: The Policy for the Elderly in Estonia*. 2000.
 5. Demographic data published by the Ministry of Social Affairs, see website.
 6. Saks K., Tiit E-M, Kaarik E. *Study of Health and Coping of Older Population in Estonia in 2000*. Estonian Geriatrics and Gerontology Association, Open Estonia Foundation and Institute of Mathematical Statistics of the University of Tartu, 2000.
 7. Scandinavian Care Consultants AB. *Tartu University Hospital Feasibility Study. Final Draft Report*. Prepared for Tartu University Hospital, 2000.
 8. Pacolet J, Bouten R, Lanoye H, Versieck K. *Social Protection for Dependency in Old Age: A Study of the elderly in the 15 EU Countries and Norway*. Aldershot: Ashgate Publishing, 2000.

Hospital sector reform in Lithuania



Zeneta Logminiene

“...the health of the population depended on an equilibrium between health prevention and promotion, disease prevention, and timely diagnosis, treatment and rehabilitation”

Reforms to the hospital-dominated health care system had to contend with a severe economic recession in the first half of the 1990s. Most hospitals have become non-profit, autonomous public sector organisations that are funded under contracts with insurance funds. The very large number of hospital beds has been decreased by over 20 per cent but the main change has been the transformation of many small hospitals into nursing homes

Introduction

The Republic of Lithuania, situated on the east Baltic coast, has a population of approximately 3.7 million. The health care system was based on the Bismark social insurance model between 1918 and 1940, but after the Second World War when the country was absorbed into the Soviet Union, health care was reorganised according to the *Semashko* system. After March 1990, when Lithuania declared its independence, the country embarked upon a series of reforms of the national economy and the health care system.

The newly independent country inherited a soviet model health care system that was very medicalised and based on hospital care. For example, 60 per cent of health care personnel worked in hospitals, 28 per cent in outpatient care and 12 per cent in other health services.¹ On the one hand, medical facilities were quite evenly distributed throughout the country, public transport was relatively well developed, and financial barriers to health services (even including under-the-table payments) were low. On the other hand, the system was over-centralised, inefficient, had too many hospital beds, little respect for patients' rights, suffered from shortages of drugs, paid little attention to primary and social care, and staff wages and morale were low. Thus, in 1990 the health system faced two major problems: a lack of resources, and hospital-oriented health care.

National health policies

A National Health Plan for Lithuania was ratified in 1991.² It aimed to improve the quality of services, secure adequate financ-

ing and develop primary health care; and it emphasised prevention as well as medical treatment. According to this conception, the health of the population depended on an equilibrium between health prevention and promotion, disease prevention, and timely diagnosis, treatment and rehabilitation.² The vision for health care reform was to strengthen primary health care and to reduce the dominance of hospital care. The strategy was, first, for primary health care to eventually manage 80 per cent of the population's health problems, and second, to install the general practitioner as a 'gate keeper' to the country's health care system.¹ The expensive hospital sector would be restricted to patients with serious health problems who needed sophisticated diagnostic and highly-specialised treatment. The later Lithuanian Health Programme document set out several strategies in relation to the hospital sector. For example, responsibility for hospitals was to be devolved to the regions and the average length of hospital stay was to be reduced.³

Reform implementation in Lithuania

The unfavourable conditions for health care reform in 1991 included a severe recession and hyperinflation, and also a significant deterioration in the health status of the population. Economic recovery and positive GDP growth first appeared in 1995, while some improvements in health status indicators, such as a slight drop in infant mortality, appeared in 1996.

Total health expenditure as a percentage of GDP rose from 3.3 in 1990 to 5.3 in 1998⁴ but this was in the context of low economic growth. Public expenditure on health in real terms in 1998 was only 90 per cent of the 1990 level – the low point having been in 1993.⁵

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Since the restoration of independence in 1990 there have been four phases in health care system reform. The first phase was characterised by devolution. Between 1990 and 1992, the role of municipalities was increased in administering small and medium-size hospitals while medical universities became more autonomous. The disadvantages were that devolution led to coordination problems between health care providers, and also reduced central financial and clinical control over their activities. The second phase, between 1993–94, was marked by public debate on the issues of private versus public ownership of health care institutions, and over patient choice versus ‘gate-keeping’ by general practitioners.

In the third phase, from 1994 to 1995, a number of political decisions were taken. A statutory health insurance scheme was established, and control over most health services was shifted from the Ministry of Health to the ten counties. Primary health was strengthened by reducing physician specialisation in outpatient care. The difficulties in managing change now began to be understood by the authorities, resulting in more attention to training managers and monitoring providers.¹

The most recent phase has focused on the development of legal and institutional capacity. The legislation between 1995–97 established the current legal framework for the health care system. In 1996–97 the compulsory health insurance scheme began to be gradually introduced. The State Sickness Fund (and its ten territorial branches) became the national health insurance agency with its budget separated from the state budget. The difficulties in implementing the new financial management system also had to be surmounted. Other concerns are that although the democratisation process is underway with increasing cooperation between administrators, providers and consumers, the latter remain in the weakest bargaining position. Also, the health sector lacks managerial skills and knowledge on how to use scarce resources in a rational way.

Since 1996 the health care system in Lithuania has been moving from an integrated model toward a contract model. This move was prompted by two major factors: the appearance of a third party payer in the form of a statutory health insurance system, plus legislation redefining the status of health care institutions. According to their juridical status, most

Lithuanian health care institutions are now public (non-profit) enterprises managed by boards, while the remainder are state budgetary units. There are very few private for-profit hospitals. Depending upon the level of care (secondary or tertiary care), public sector hospitals are administered by the Ministry of Health, counties or municipalities.

Hospital activity trends

The main goals of Lithuanian hospital sector reform are to restructure the sector, decentralise governance, and increase efficiency and productivity. This involves reducing hospital beds, the average length of stay, admissions and total expenditure. Some but not all of these factors now show a downward trend as follows.

Expenditure on secondary and inpatient care as a share of total expenditure decreased in 1998 compared to 1995, while primary health care received 18.5 per cent of funds (Table 1). Actual expenditure has risen, however, due to rising costs of equipment and medicines. According to the Lithuanian Health Information Centre, inpatient care accounted for 61 per cent of all personal health care expenditure in 1998 and increased by 5.4 per cent in 1999. Primary health care services accounted for 28 per cent of total personal health expenditure in 1998 and increased by 8.2 per cent in 1999.

The total number of hospitals decreased only marginally from 198 in 1991, to 184 hospitals in 1998.⁶ Most hospitals were in fact re-categorised rather than merged or closed. A few small country hospitals were closed but most were re-labelled as nursing

“The disadvantages were that devolution led to coordination problems between health care providers, and also reduced central financial and clinical control over their activities.”

Table 1
EXPENDITURE BY CATEGORY (PERCENTAGE) OF TOTAL EXPENDITURE ON HEALTH CARE IN 1995 AND 1998

	1995	1998
Primary health care	20%	18.5%
Secondary outpatient care		7.0%
Inpatient care	65%	41.6%
Spa services		4.5%
Reimbursement of outpatient medicines	10%	15.3%
Public health	4%	3.3%
Other expenditure	—	8.7%
Administrative costs	1%	1.1%
Total	100%	100%

Source: Cerniauskas G, Murauskiene L, Tragakes E, 2000¹

Table 2
NUMBER OF HEALTH CARE INSTITUTIONS IN LITHUANIA

	1991	1995	1998	1999	2000
General hospitals:	158	144	76	84	84
City hospitals	23	20	7	30	30
University hospitals and research institutes	16	12	8	8	8
Maternity facilities	5	4	4	—	—
Regional hospitals	42	42	42	42	45
District and rural hospitals	72	66	5	4	1
Specialised hospitals	24	23	38	37	39
Dispensaries	16	16	—	—	—
Nursing hospitals	—	5	68	66	69
Rehabilitation hospitals	—	7	5	5	4
Total	198	195	187	192	196

Sources: Cerniauskas G, Murauskiene L, Tragakes E, 2000;¹ and www.sam.it/lsic/html/spr1.htm

hospitals. For example, district and rural hospitals were reduced from 72 to 4, while nursing hospitals increased from none to 66 (Table 2). A reform goal was to increase the number of nursing beds; thus, there were 130 in 1991, compared to 3,430 in 1998. As well, the number of specialised hospitals increased because dispensaries were moved into this category. In 1998, specialised hospitals included 11 psychiatric, 2 narcological hospitals, 13 tuberculosis hospitals, 4 oncological hospitals and 5 skin and venereological disease hospitals (accounting

for approximately 88 per cent of beds), as well as 3 infectious disease hospitals.

The number of city hospitals actually increased between 1991 and 1999. Closures of inefficient, big hospitals thus proved too difficult and unpopular a political decision, especially since most health ministers in Lithuania are physicians. Nearly all the general regional and district hospitals became smaller (22 and 17 per cent reduction in beds respectively) but university hospitals grew larger on average 1.5 times. In 1998 the largest hospital was Kaunas Medical University hospital (2,125 beds), the smallest were private hospitals and nursing institutions.

The number of all hospital beds decreased by 22 per cent between 1991 and 1999 (by about 1,000 beds) mostly by closing beds in hospital wards (Table 3); it should be noted that separate statistics are not available for acute care hospital beds. During Soviet times, hospitals were paid according to the number of hospital beds but from 1990 this payment method was changed. Thus the number of hospital beds decreased from 122 beds per 10,000 population in 1991 to 95 beds in 1998. This rate still remains substantially above the level for the European Union. Bed closures were achieved by closing several hospitals; the transformation of many small rural hospitals into nursing facilities (so that more than 7 per cent of the total number of hospital beds are now used for nursing²); and reducing the number of beds in hospital wards from 7 to 4 beds.

Table 3
INPATIENT BEDS AND UTILISATION INDICATORS

	1980	1985	1990	1995	1996	1997	1998	1998/90 (%change)
All hospital beds per 1,000 population	12.06	12.77	12.44	10.83	10.56	9.83	9.61	-33%
Nursing home beds per 1,000 population	-	-	2.14	2.28	2.26	2.38	-	+11%
Number of hospitalisations per 100 population	20.2	21.6	18.6	20.7	20.8	21.8	24.2	+30%
Number of patient days per 100 population	394	402	333	304	291	281	283	-22%
Admissions per 100 population	20.20	21.79	18.62	20.70	20.80	21.81	24.17	+30%
Average length of stay (days)	19.5	18.6	17.9	14.7	14.0	12.9	11.7	-35%
Bed occupation rate (%)	92.5	91.5	76.5	76.3	75.8	76.8	80.4	+5%

Source: Health Economics Centre, 2001⁷

About 67 per cent of hospital beds are concentrated in general hospitals and 23 per cent in specialised hospitals. The biggest decrease has been in therapeutic and paediatric beds (respectively 588 and 247 beds each year), but there remain surplus obstetric-gynaecological beds, with about 40 per cent unoccupied.¹

The average length of stay in hospital decreased from 17.6 days in 1991 to 11.7 days in 1998. The time spent in hospital may decline further due to the following factors:

- New medical technologies reduce diagnosis time;
- Better medical equipment and medicines;
- Changed attitudes of health care professionals towards treatment time;
- Managers have fiscal incentives to reduce the length of hospital stays; and
- Patients wish to be discharged as soon as possible.⁷

Another indicator of the hospital use is admission to hospital per 100 population, which increased from 18.8 in 1991 to 24.2 in 1998. Although it had been expected that better primary care would reduce the hospitalisation rate, the opposite occurred with an increase in admissions from 744,000 in 1995 to 867,000 in 1998; that is, about a 17 per cent increase. First, the reimbursement system created strong incentives for hospitals to increase revenues by increasing admissions. Second, general practitioners often acted as ‘dispatchers’ rather than as ‘gatekeepers’ who also undertook the management of most health care. Third, most people continued to believe that the best health care was available in hospitals and had little confidence in under-trained general practitioners. Fourth, at least 40 per cent of the patients in hospital need only social care, such as older patients needing residential care instead of medical treatment.⁸

In summary

To achieve the goals of health care reform it will be necessary to harmonise the various financial, administrative and juridical incentives, and to inform the population about the reasons for reform. Another problem is that health care services in Lithuania continue to offer duplicated ser-

“Although it had been expected that better primary care would reduce the hospitalisation rate, the opposite occurred with an increase in admissions”

vices.⁵ The current policy aim is to merge geographically closely located specialised and general health care institutions, in order to use scarce resources more rationally and to secure access to comprehensive and modern health technologies.

Notwithstanding the various implementation problems, however, the reform of the hospital sector in Lithuania has achieved many positive results. Hospital care is more accessible, the average length of stay is shorter, and the quality of inpatient treatment has not deteriorated and in fact may have improved. And this bodes well for future reform.

REFERENCES

1. Cerniauskas G, Murauskiene L, Tragakes E. *Health Care Systems in Transition: Lithuania*. Copenhagen: European Observatory on Health Care Systems, 2000.
2. Lithuanian Ministry of Health. *Lithuanian National Health Conception*. Vilnius: Ministry of Health, 1999.
3. Lithuanian Ministry of Health. *Lithuanian Health Programme*. Vilnius: Ministry of Health, 1999.
4. World Health Organization. *Health For All Database*. Copenhagen: WHO Regional Office for Europe, 2001.
5. WHO Regional Office for Europe. *Lithuanian Health Care System During Transitional Period*. PHARE project of health care reform. Copenhagen: WHO Regional Office for Europe, 1996.
6. Jankauskiene D. *Evaluation of the Health Care Reform in Lithuania in the Period 1990–1998*. Vilnius: Kaunas Medical University, 2000.
7. Health Economics Centre. *The First Decade of Reforms: Lithuanian Health Care Sector in the Context of Social and Economic Changes*. Vilnius: Health Economics Centre, 2001.
8. Lithuanian Ministry of Health. *Harmonization of the Lithuanian Health Care System for Integration in European Union*. Annual Report of the National Health Council. Vilnius: Ministry of Health, 2000.

This work was undertaken during an Open Society Institute fellowship held at the London School of Hygiene and Tropical Medicine.

Georgia: Implementing a hospital restructuring programme



Laura Rose



George Gotsadze

Since indirect methods for rationalising the very large hospital system in Georgia have had little effect, the government has drawn up a hospital masterplan that involves selling off some hospitals to free badly needed health resources.

Background

Georgia, with a population of 5.1 million, gained independence from the Soviet Union in 1991 with a new constitution, and held its first post-independence parliamentary elections in 1995. The economic progress that started in 1995 has since faltered with continuing civil strife and the economic crisis in 1998 hit the health sector hard, when public financing for health fell to less than US\$7 per person, or only 6 per cent of public spending.

Public financing for health comes from a 4 per cent payroll tax and transfers from the central budget. The health sector remains dependent on private spending that is paid by the user at the time of service. With an estimated 87 per cent of all health spending coming out of pocket,¹ Georgia has the highest rate of private spending in the region.² These extraordinary levels are a major cause of families slipping into poverty.³ Public enthusiasm for change in the health system has been replaced by disillusionment. For health system reforms in Georgia to succeed, several issues must be addressed. First, tax collection must be improved to ensure adequate public funding; second, pre-payment and risk pooling of out-of-pocket expenditures must occur through the introduction of community-based health insurance schemes; and third, efficiency must be improved by reducing excess capacity, both human and capital. This case-study focuses on the last category of reforms and discusses the experience of Georgia in its attempts to improve the efficiency of health care by restructuring the hospital sector.

The hospital sector in Georgia

Georgia has an extensive health care provider network, a legacy of the old Soviet system. In 1999 the country had 4.6 hospital beds per 1,000 population.⁴ While the number of beds has fallen significantly from a high of 10 per 1,000 population in 1988, it is still almost twice as high as the average Organisation for Economic Co-operation and Development (OECD) level (2.5 beds/1,000). Furthermore, almost 60 per cent of the existing beds in Georgia's 287 hospitals remain unoccupied. Georgia's occupancy rate of 42.1 per cent (1999) is the lowest in the region compared to neighbouring countries Armenia 64.8 per cent (1997); Azerbaijan 56.2 per cent (1997); and Turkey 67.3 per cent (1997).⁵ Excess supply of human resources is also a problem, particularly of doctors, where in Georgia one physician serves only 237 people on average, compared to 400 in OECD countries.

Spreading scarce financial resources over 287 hospitals means inadequate spending on capital investments, maintenance, supplies, and salaries. Conservative estimates indicate it would take more than US\$200 million to bring the existing Georgian hospitals up to a minimal standard of care. Large investments are required to replace outdated and broken equipment and repair the dilapidated infrastructure. Reducing hospital beds without closing wards and hospitals (thus saving on utility and maintenance expenses) or reducing staff, will result in little cost savings.

Hospitals are reluctant to lay off staff, despite the government removing all 130,000 health sector employees from the government payroll in 1995. Hospitals have little incentive to reduce staff because salaries are very low. Recent studies on health worker motivation indicate cultural and motivational factors support the trend to keep staff employed even when there is no work or budget.⁶ These staffing prac-

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tices result in absurdly high ratios. For example, a recent study of 41 hospitals found that, on average, 1.5 physicians served each occupied hospital bed.⁷ The limited opportunities that physicians have to perform clinical procedures leads to a deterioration of their skills, suggesting that excess supply in Georgia must also directly affect the quality of health care.

In lieu of a salary, there is clear evidence that physicians and other health care workers now rely on informal payments made by patients. For example, the average official annual salary of a typical hospital physician in 1998 was 573 GEL⁷ – where US\$1 equals approximately 2.04 GEL (Georgian Lari) – while the minimum individual subsistence level was 1,080 GE.⁸ Shifting the financial burden for health care onto consumers has reduced access to health care services. Between 1990 and 1999, the rate of hospital admissions per 100 population fell from 13.8 to 4, and the average number of outpatient visits per person per year dropped from 7 to 1.2.

Health reforms 1995–98

Supported by a loan from the World Bank and financing from other international and bilateral agencies, the government launched an ambitious health sector reform strategy in 1995. During the reform process excess capacity was identified as a major problem, and three main solutions were proposed:

- Introduce a new payment system that only pays for services that are provided;
- Limit the right to practice to accredited and licensed medical institutions and health care professionals; and
- Privatise a large portion of the sector.

Provider payment reforms

The new system of social health insurance pooled revenues from the payroll tax and central budget into the newly created State Health Agency; which itself was incorporated into the State Medical Insurance Company in 1997. Co-payments and user-fees were also introduced to raise additional revenue. The legal status of hospitals was changed from budget institutions to autonomous enterprises and removed from the national budget. Simultaneously in 1995, staff entered into contractual relationships with hospitals and were no longer civil servants paid through the government budget. It should be noted that these ‘contracts’ have not been changed since first signed in 1995 and, while legally no longer civil servants, the distinction is somewhat

blurred in the minds of employees.

Money thus began to ‘follow the patient’, and hospitals were paid using a new case-based reimbursement system. A key element of the reform was the introduction of competition between providers for public funding. The aim was to use the market to provide incentives to improve efficiency and quality at the same as time divesting government from responsibilities it was no longer able to fulfil.

The country’s poor fiscal performance has reduced its ability to leverage major change through financial incentives – Georgia only manages to collect 9 per cent of GDP for its national budget. Even potentially small improvements have been difficult to achieve because of unclear governance arrangements and poor regulation. For example, hospital administrators were given the freedom to manage their own revenues and budget and prioritise expenditures. However, anecdotal evidence now suggests that perhaps as little as 4 per cent of revenues went to salaries spread thinly across a large number of staff. Administrators have been reluctant to downsize and are strongly opposed to any changes in the present system. Revenues are spent on utility costs, medical supplies, payroll and a portion to the state budget, but no one knows what happens to the rest except the administrators.⁹

Market forces without effective public financing and regulation have failed to render expected results, and have contributed to inequality in access to health services. As the market failures have become more obvious, the government has found itself in a stronger position to move towards selective contracting using public financing through the State Medical Insurance Company (SMIC) – the decision to introduce selective contracting was politically nearly as difficult as the one to close hospitals. Using maternity hospitals as a pilot, the SMIC has signed contracts with only 3 of the 11 maternity hospitals in Tbilisi; only one of which is private. At the same time, the reimbursement for deliveries has increased from 120 GEL to 256 GEL. For the first time there has been a response with an increase in patient load in the three contracted facilities, and a decrease in the others. Preliminary studies suggest that this is due in part to a decrease in informal payments in those facilities. This in itself would be a major achievement. It is, however, too early to judge the impact of selective contracting on efficiency or supply.

“...staffing practices result in absurdly high ratios...a recent study of 41 hospitals found that, on average, 1.5 physicians served each occupied hospital bed”

“By 1998, more than half of the hospitals in the country had occupancy levels of 10 per cent or less”

Licensing and accreditation

Another approach the Ministry of Health has taken to influence the supply side of the market is the licensing of medical facilities and medical professionals. The law on health care stipulates that all physicians and facilities must be licensed by 1 July 2001. The licensing of health care providers has been completed, with significant numbers of both graduating students and practising physicians failing the exam. However, there is as yet no discernible impact on the supply of health personnel and facilities.

The government's attempts to control the supply of health sector personnel through licensing graduating students and practising physicians is made much more difficult by the growing number of medical schools in the country. Since 1991 over fifty private medical schools have opened, with an enrolment of 14,000 and an expected annual graduating class of 3,000. In 1996, a Commission of Accreditation for medical education was formed with the intention of closing a majority of the schools that did not meet minimal standards. However, in 1998, responsibility for accreditation was delegated to the Ministry of Education, essentially putting an end to all progress as the Ministry of Education had little incentive to fight strong political opposition from the medical schools. The Ministry of Health resigned itself to reducing supply by limiting the number admissions to residency programmes over which it had control.

Despite major efforts, there have been several problems with introducing the licensing of health care organisations in Georgia. Nearly all facilities are in a very poor condition and few facilities would pass even basic standards. The facilities argue that they are unable to improve conditions since their payments from government are in arrears.

Privatisation

Privatisation was the third strategy the government relied upon to reduce excess capacity. The 1996 Law on Privatisation of Public Enterprises established rules for the privatisation of state enterprises including health care facilities. Facilities are divided into three categories: category 'A' facilities must continue to operate as medical facilities; category 'B' facilities have a ten-year period before their use becomes unrestricted; and category 'C' facilities have no use or property restrictions. The intent was that the number of facilities would be significantly reduced when privatised under category C (and no longer functioning as

hospitals), with further decreases over the course of 10 years through privatisation in category B. The first batch of 400 facilities (mostly pharmacies and dental offices) were privatised during 1996–97. As with most countries, privatisation of pharmacies and dentists was relatively easy. Privatisation of physician clinics, polyclinics and hospitals has moved much more slowly, and has had a negligible impact on supply.

The hospital restructuring programme 1999–2001

Decreasing admission rates and lengths of stay led to a rapid drop in occupancy levels of Georgian hospitals. By 1998, more than half of the hospitals in the country had occupancy levels of 10 per cent or less. With less than US\$7 available annually for health care, the government acknowledged that it was time to turn to more proactive measures to address excess capacity and began to prepare a hospital restructuring programme.

Hospital masterplan

While earlier attempts to prepare a hospital masterplan were based on population norms, preparation of a new plan began in 1998 with a computerised inventory of the 287 hospitals in the country. Using these data, each hospital passed through a four-stage screening process. *Stage 1* criteria were based on location, bed capacity, age of the building, and seismic safety. *Stage 2* screened for low utilisation, whether standards were met (e.g. laboratory and radiology), and whether the physical upgrade would be too expensive. *Stage 3* evaluated the level of investment needed to bring each facility to an appropriate standard. *Stage 4* selected facilities to remain in the public domain based on location, scope and level of services, and necessary capital investment. Based on this methodology, the plan was prepared and cost estimates were made on reprofiling, merging, and closing hospitals, taking into account patient access, political feasibility, and efficiency. As regards the latter point, in Tbilisi the plan was developed so that everyone was within 30 minutes travel time to a hospital and 20 minutes to emergency services. Head doctors at many facilities were interviewed, attempting to assess their opinions towards various restructuring options such as merging with other hospitals, sharing support services, privatising and remaining in their own facility, or remaining as they were. Even today the plan remains somewhat flexible – allowing

one facility to be substituted for another in order to try to take into account these political realities.

In April 1999 the government and other stakeholders met and approved a national plan for hospital sector restructuring that called for the following actions:

- Decrease excess capacity through privatising medical facilities as real estate and merging needed services to achieve efficiency gains through economies of scale;
- Use privatisation proceeds to invest in public facilities and improve the quality of deteriorated infrastructure; and
- While optimising the infrastructure decrease the human resources deployed in the sector.

In June 1999 the main principles of the Hospital Restructuring Programme were approved by the President of Georgia. This was as part of a Structural Adjustment Credit (III) from the World Bank and included endorsement of several key principles: publicly owned hospitals were to be managerially independent and self-financing; the number of higher level staff was to be reduced; and quality assurance programmes were to be introduced.¹⁰

Tbilisi, with more than fifty hospitals and half the country's beds (8,770), was selected as the first priority. The needs assessment projected approximately 3,600 beds as sufficient, using conservative assumptions on demand, occupancy rates, average lengths of stay and population growth. The Tbilisi hospital masterplan recommended that twelve facilities remain in the public sector (category A); seven facilities be leased to the private sector (category B); and 27 facilities be sold as real estate and not as a medical facility (category C). In addition, five facilities were to remain with the Ministry of Health and be converted into housing for nurses or geriatric nursing homes.

Hospital restructuring fund

A Hospital Restructuring Fund was set up in 2000 by Presidential decree to accumulate proceeds from the privatisation of health care facilities to be used to upgrade public facilities and to cover the costs of transition, such as employee compensation and public relations. The Fund is a public entity with a treasury account. By law, all proceeds from the sale of health facilities are now directed to the HRF to be used for the exclusive purpose of financing programmes in the hospital restructuring programme. It is governed by a supervisory

board with representatives from the ministries of Health, Labour, and Social Affairs; Finance; Economy; Justice; and State Property Management. More than US\$50 million revenue is projected from the sale of the hospitals in Tbilisi. These facilities, which are relatively small and historic, have a relatively high real estate value because they are located in the best parts of town and the buildings are well suited for renovation into hotels, offices and housing.

In the first stage of the Tbilisi plan (2–5 years) ten hospitals will be available for sale following consolidation of their services into other health care facilities. The sale of these buildings should bring US\$18 million, while phase I requirements for investments to consolidate and renovate the twelve institutions remaining in the public sector are approximately US\$12 million. The remaining funds would be used to upgrade hospitals, purchase medical equipment, provide redundant workers with severance packages and/or retraining, and run a public relations programme. Financing from the World Bank is being used as 'seed money' for the hospital restructuring fund. These funds will pay for the initial civil works and purchase of equipment and furniture in four hospitals before relocating the first facilities and emptying the buildings for sale. Substantial investments in medical equipment and renovation of other hospitals will depend on the revenue flows from the privatised facilities.

Human resources strategy

In the first phase of the Tbilisi plan, approximately one-third of hospital staff (about 1,000 people) may lose their jobs. Several compensation options were considered in Georgia: including redeployment; retraining; job search and career counselling; enhanced retirement options; a pension fund; and severance payments. A decision was made by the government to proceed only with a severance package because not only was it the preferred choice of all health care providers, but it would be the easiest to administer – and staff would still be able to use the monies to purchase other services included under other options (i.e. retraining).

To be effective, any human resources strategy must: (i) assist the retention of essential staff; (ii) encourage employees without requisite skills to leave; (iii) provide incentives for retraining or redeployment to those with the necessary skills or who are capable of acquiring new skills; and (iv) inform staff of their options. The government

“Poorly-defined governance structures during the early stages of reform process allowed hospital administrators to abuse their powers and divert facility revenues away from salaries to other purposes”

encountered several challenges when preparing its human resources strategy. Chief amongst these was how it would be able to afford to pay for severance. Other issues included how to adjust packages for the high level of informal payments and salary arrears. The speed at which reform could take place was also limited by lack of an overall civil service reform strategy for the country, as officials were concerned about setting precedents that could not later be followed in other sectors.

Ultimately, a decision was made to proceed with a one-time payment consisting of three components: wage arrears (if any); payments envisaged by the labour law; and a single payment based on the number of years worked, multiplied by the average monthly salary.¹¹ Using data from one of the first hospitals to begin layoffs, the estimated average package will be 1,132 GEL for doctors and 573 GEL for nurses. While the general principles of the package have been agreed upon, the source of funding currently needs to be approved by the President for each hospital. The first round of hospitals are being financed from the budget.

Hospital governance, organisation and management

Poorly-defined governance structures during the early stages of reform process allowed hospital administrators to abuse their powers and divert facility revenues away from salaries to other purposes. There is a need for the relationship between government and hospitals to change. It is critical to define the governance structures, develop new organisation and hospital management capacity that will ensure the success of the twelve hospitals remaining under public ownership in Tbilisi. New plans for operations, financing, clinical services, and quality assurance are under preparation. Management teams for the first four hospitals have been identified and are being trained with support from the Swedish government.

Communications strategy

The logic and values behind the hospital restructuring effort must be made understandable and relevant to each stakeholder. The main message to convey is *quality*. Hospital restructuring will lead to savings, more cost-effective services, and ultimately better quality of care. Unfortunately, while the government recognises the importance of implementing a public relations programme on hospital restructuring, they have had great difficulty in doing so.

Obstacles to effectively communicating these messages are widespread. Information filtered to the public has not been presented clearly and resulted in confusion and misreporting. Administrators themselves do not understand what is happening and are unable to control the flow of information. Some of the opportunities to communicate messages to the public have been used by the opposition to create negative press. There are also fundamental problems with popular means of communication, and false and competing assessments produced by those who are opposed to restructuring.

For these reasons, it is vital to improve the capacity of the Ministry in communicating to all audiences and to make strong efforts to establish a dialogue with providers. A 'Communications Strategy for Hospital Restructuring' was recently approved by the government and if implemented quickly, should help to repair the damage caused by lack of effective communications up until this point.

Concluding remarks

Georgia's early attempts to rationalise the hospital sector by changing incentives through provider payment mechanisms and controlling the right to practice have had only limited impact on decreasing the number of beds and physicians. Acute hospital beds per 10,00 population dropped from 7.3 in 1994 to 4.57 in 1999, and the number of physicians per 1,000 population from 4.2 in 1994 to 4.0 in 1997.⁵ These supply levels are still well in excess of what is needed or affordable for the country.

The government's reform efforts have been constrained by the fact that they are unable to exert much financial leverage with public financing comprising only 15 per cent of total health spending. Furthermore, some policies put in place to support restructuring have backfired because of the government's inability to act as a regulatory agent. Finally, as in all countries of the region, the political pressures have made it enormously difficult to close or sell health care facilities. Despite these constraints, however, it does appear that these market approaches are beginning to have an impact and should not be abandoned. The introduction of selective contracting and renewed vigour in the licensing of health care professionals are good examples.

Implementation of the hospital restructuring programme is proceeding slowly, but going forward nonetheless. By July 2001, the Hospital Restructuring Fund had been established and started to receive proceeds

"...it does appear that market approaches are beginning to have an impact and should not be abandoned"

from the sale of health care facilities. The first two hospital mergers supported by the World Bank project have legally taken place and their properties are up for sale. The Ministry of Health and Ministry of Finance have reached agreement on the design of the severance package for health sector employees. While it is too early to predict the future of the programme, important lessons are already being learned on facility privatisation, labour adjustment, and privatisation.

REFERENCES

1. Mays J, Schaefer M. *Health Financing Study of Georgia: Impacts of Alternative Prototypical Options*. Actuarial Research Corporation, 1999 (unpublished).
2. Preker, Jakab, Schmidt, 2001.
3. World Bank, 2001.
4. Georgian Centre for Medical Statistics and Information, Statistical Yearbook. *Healthcare in Georgia, 1999*. Tbilisi, 2000.
5. World Health Organization Regional Office for Europe. *Health For All Database*, 2000. www.euphin.dk/hfa/index.htm
6. Bennett S, Gzirishvili D, Kanfer R. *An In Depth Analyses of the Determinants and Consequences of Worker Motivation in Two Hospitals in Tbilisi, Georgia*. MAR 5, WP 9 Bethesda, MD: Partnership for Health Reform Project project, Abt Associates Inc, 2000.
7. Zoidze A, Gzirishvili, D, Gotsadze G. *Hospital Financing Study for Georgia*. SAR 4. Bethesda, MD: Partnership for Health Reform Project, Abt. Associates Inc., 1999.
8. World Bank. *Georgia: Poverty and Income Distribution*. World Bank, 1999.
9. Gotsadze G, Gzirishvili D. *Institutional Issues and Out-of-Pocket Payments in Georgia, Report of the Qualitative Research*. Tbilisi: Curatio International Foundation, 2001 (forthcoming).
10. World Bank. *Structural Reform Support Project*. Project Appraisal Document. World Bank, 1999.
11. *Labor Adjustments Policies in the Health Sector in Georgia: Lessons Learned HNP* Discussion Paper. 2001 (forthcoming).

Paying hospitals in Russia

New methods for paying hospitals were introduced in Russia during the 1990s, mainly by health insurers, in order to improve cost-effectiveness. The Russian hospital payment system is thus in transition from a traditional input-based formula to performance-related payments. This transition has revitalised a 'frozen' hospital system, but has failed to achieve better results in terms of internal and structural efficiency. Other pressures, including other fiscal incentives, remain too strong.



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Background

Traditionally, hospitals in Russia were paid line-item budgets, based on generous norms such as number of beds per 1,000 population. The result was many hospitals, but with few incentives to use resources more cost-effectively. By the late 1980s the country had twice as many hospital beds for its population than the average for the countries of the Organisation for Economic Cooperation (OECD). Under the 1993 Health Insurance Law, a mandatory health insurance scheme was set up (based on 3.6 per cent payroll tax), and 89 regional (*oblast*) insurance funds were established. They collect contributions and allocate them to insurers based on a weighted capitation formula. The insurers then enter into contractual arrangements with health care providers and pay them for services.

Although the national fund issues guidelines and has regulatory powers, each region has chosen its own methods for paying hospitals. Notably, the regional insurers apply retrospective rather than prospective payments, so that hospitals are not bound to produce services according to agreed budgets. Concurrently, hospital governance is changing, and while remaining under public ownership, hospitals have more autonomy, being free to sell their services or to reduce beds and redeploy some resources.

Several payment methods have emerged in some regions; for example, eleven of the regions each use five different payment methods concurrently. The method of payment, however, is not negotiated between insurers and providers. The hospitals are moving from input to output-based meth-

Table 1
HOSPITALS BY PAYMENT METHODS (PERCENTAGE OF HOSPITALS CONTRACTED WITH INSURANCE FUNDS), 1995-1997

	Line-item budget %	Clinical speciality %	Diagnosis related groups %	Bed-days %
1995	12.7	7.5	50.4	29.4
1996	8.5	9.7	53.1	28.7
1997	5.5	10.0	58.4	26.1

Source: Federal Mandatory Health Insurance Fund.

ods of insurance payments (Table 1). Most hospitals under contract with health insurance funds by the late 1990s used some variation on a case payment system (58 per cent), and while per day payments had decreased to 26 per cent, line-item budgets were used by less than 6 per cent of hospitals. The funds operate payment systems of varying degrees of complexity. For example, the Kemerovo region used payment categories based upon International Classification of Disease (ICD) codes and five levels of hospital care, which resulted in over 50,000 possible inpatient rates. Due to huge administrative problems and severe upcoding of claims, Kemerovo has now moved to a simpler system of under 100 categories.¹

Impact of new provider payment methods

The new reimbursement system was expected to motivate Russian hospitals to use their resources in a more cost-effective way and to counter the strong structural bias within the health system in favour of inpatient care. On the positive side, the insurers and hospitals developed new clinical

Table 2
RUSSIAN HOSPITAL UTILISATION INDICATORS, 1990—99

	1990	1994	1996	1998	1999
Beds/10,000 population, acute hospitals	10.6	9.9	9.5	9.0	9.0
Beds/10,000 population, all hospitals	13.1	11.9	11.6	11.1	10.8
Hospital admissions/ 1,000 population	22.8	21.0	20.6	20.7	20.0
Bed occupancy, acute hospitals, percent	86	88	88	83	84
Average length of stay, acute hospitals	13.8	13.6	13.6	14.0	13.7

Source: World Health Organization, 2001³; Ministry of Health of the Russian Federation, 1998⁵

cal and financial information systems. Purchasing of health care is based increasingly on data about hospital utilisation, patient diagnostic groups and costs, and managers have become more aware of cost-effectiveness issues. Second, insurers are exerting external financial and clinical pressures upon physicians to improve their performance. Quality control of cases is conducted and there is a growing interest in quality assurance systems based on continuous quality improvement models.

On the negative side, changes in hospital reimbursement did not bring about the expected improvement in hospital resource utilisation. Between 1994 (the starting point of a large-scale transition to mandatory health insurance) and 1999, the number of beds dropped only slightly from 11.9 beds per 1,000 population to 10.8 beds (Table 2). Hospital admissions dropped slightly to 20 admissions per 100 population annually. The estimate of inappropriate inpatient cases in Russia range from 20 to 35 per cent of patients; that is, up to one-third of hospital patients at any one time do not need to be treated or cared for in a hospital environment.

Bed occupancy has remained much the same since the 1994 introduction of health insurance, with nearly 20 per cent of hospital beds not used. A study in the Moscow *oblast* showed that hospitals paid a line-item budget had a higher bed turnover ratio than those reimbursed under a diagnosis-related group (DRG) scheme.² The measure of good hospital performance is still widely interpreted by health care providers as achieving the statutory bed utilisation targets, with a high occupancy rate seen as synonymous with effective resource utilisation.

The average length of stay in hospital also remains high compared to western European countries (Table 2). For example, patients stay nearly 14 days in Russian acute care hospitals compared to 5 days in the United Kingdom.³ The average length of stay in Russian hospitals does not differ between regions according to input versus output-based hospital payments, because when reimbursement rates were set, most regions took as a reference point the traditionally high stays for each diagnostic group thus formalising inefficiency.⁴

Turning to another measure of hospital use, the number of bed-days of inpatient care per person for the Russian population (rather than average length of stay per patient) is 3.6. In contrast, the average for

the United Kingdom population is 2 bed-days; the average in the United States is 1.2, and in successful managed care settings is 0.3 bed-days. The population bed-days indicator in Russia has remained unchanged, while most western nations have seen its reduction.

Future reforms

The Russian hospital payment system is in transition from a traditional input-based formula to performance-related payments. This transition has revitalised a 'frozen' hospital system, but has failed to achieve better results in terms of internal and structural efficiency because of other pressures. First, the new insurance payment methods have only a limited impact upon hospitals, since two-thirds of hospital funds still come directly from local governments as line item budgets. The bulk of the health funding is still allocated to hospitals without regard for their performance. A hospital therefore operates two budgeting systems: one based on outputs (contracts with insurers) and the other on inputs (direct allocation by local governments).

Second, insurers do not act as prudent purchasers. They reimburse services costs retrospectively. Payment is on a cost-per-case basis without appropriate analysis and planning of utilisation patterns. There are no cost-containment mechanisms such as global budgeting or systematic utilisation reviews. Also, the contracting procedure is non-competitive. Retrospective reimbursement of the actually provided services does not preclude the use of the costly hospital services, but in fact encourages it.

Third, contradictory incentives are embedded in the mix of payment methods. For example, line-item budgets contain no incentives for hospital managers to spend less. Bed-day payments motivates hospitals to keep patients as long as possible, while DRG reimbursement encourages hospitals to admit more patients but for shorter stays. Capital and fixed costs are not included in payment rates. The separation of recurrent and fixed costs also results in contradictory incentives. For example, local government pays utility costs such as heating and electricity, and since this cost is not directly borne by hospitals, they have no incentive to reduce excess capacity. Further, the new payment methods do not change the behaviour of doctors in relation to their clinical practice; indeed, the more patients admitted, the greater the opportunities for unofficial payments by patients to hospital staff. The excessive number of

physicians is also a powerful incentive to maintain a large hospital system.

Fourth, the organisational culture is difficult to transform as decades of bureaucratic control over health systems have resulted in substantial distortions of behaviour in relation to allocative efficiency. Staff feel little responsibility to use resources cost-effectively.

Final remarks

In summary, in the context of ongoing crises in the Russian economy and system of governance, the structural problems in the Russian health care system include shrinking health care funds, excess capacity and extreme fragmentation, and these remain to be addressed.

Some new approaches to hospital payment are being tried, however, in particular, cost-containment and managed care. Cost-containment mechanisms are being considered by some regional health insurance funds, such as the introduction of prospective hospital budgets and incentives for primary care providers to offer more treatment. In Samara *oblast* for example, a 'polyclinic as fund holder' scheme has contributed to physicians treating more patients in the community and referring fewer patients for admission to hospital. Managed care pilot projects, such as pre-planned cost and volume contracts, have been underway since 1994 in USAID sponsored programmes in six *oblasts* and several cities. The major contractors are Abt Associates, Kaiser Permanente International and Boston University. The Federal Mandatory Health Insurance Fund is also considering new guidelines including recommending a shift from retrospective to prospective methods of payment.

"...up to one-third of hospital patients at any one time do not need to be treated or cared for in a hospital environment"

REFERENCES

1. Langenbrunner J, Wiley M. Hospital payment mechanisms: theory and practice in transition countries. In: McKee M, Healy J (eds). *Hospitals in a Changing Europe* Buckingham: Open University Press, 2001.
2. Starodubov V, Dubinina E, Zenkov V. The impact of the method of payment on indicators of providers performance (in Russian). *Economica Zdravoohranenia* 1998;7:33-5.
3. World Health Organization. *Health For All Database*. Copenhagen: WHO Regional Office for Europe, 2001.
4. Lebedyeva N. *The Use of Various Provider Reimbursement Techniques within the Mandatory Health Insurance System in the Russian Federation. Issues of Price-setting and Provider Reimbursement in a Mandatory Health Insurance System*. (in Russian ed.) Moscow: Izhevsk, 1995.
5. Ministry of Health of the Russian Federation. *Health in Russia and Russian Health Institutions in 1997: Statistical Materials* (in Russian). Moscow: Ministry of Health, 1998.

Tuberculosis hospitals in Russia



Max Kammerling

The treatment of tuberculosis in Russia traditionally involved long stays in hospital. The health care system has been reluctant to adopt the World Health Organization's DOTS strategy – a directly observed cocktail of drugs administered over a few months in a community setting. Such a switch in treatment methods and resources, at least in the Tomsk oblast, required financial incentives from external donors. Given the rapidly rising rates of tuberculosis in Russia, and especially multi-drug resistant tuberculosis, the country must find ways to introduce cost-effective forms of treatment.



Nicholas Banatvala

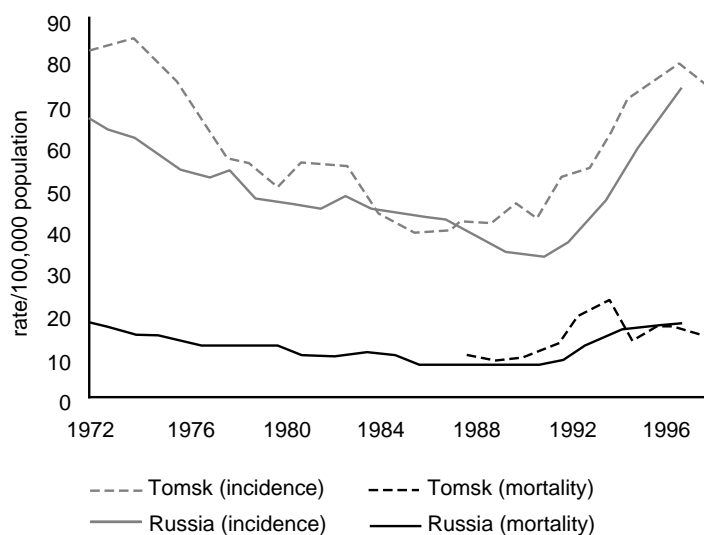
Under the Soviet Union, the strong social network and provision of comprehensive health care resulted in falling rates of tuberculosis (TB) in Russia. However, during the final years of the Union and following its collapse, increasing poverty and severe financial pressures within the health sector were associated with an increase in tuberculosis (see Figure 1).^{1,2} Over several years, the inconsistent supply of anti-tuberculosis drugs has led to an increase in multi-drug resistance.³ The main features of the Soviet TB system include mass population screening, x-ray based diagnosis, and variable

treatment regimes that require lengthy hospitalisation and treatment based on pulmonary cavity closure.⁴

In 1994, MERLIN initiated a TB control programme in Tomsk *oblast* (region), based on the Directly Observed Treatment, Short Course (DOTS) strategy.⁵ The intention was that the DOTS approach would enable ambulatory treatment and reduce the need for hospitalisation. This paper reviews the role of the hospital in the management of tuberculosis in Russia, and examines the levers used to implement change in the TB control system. We draw extensively on MERLIN's experience in Tomsk *oblast* where rates of tuberculosis in the community are approximately 65 per 100,000 population (approximately 600 new cases per year, 10 per cent of which are multi-drug resistant), and in the prison population, where the rate is much higher at 5,000 per 100,000 (400 per year, 40 per cent resistant).

Tomsk *oblast* is in Western Siberia, 3,500 kilometres east of Moscow. The *oblast* is 316,900 km² – slightly smaller than Germany – and has a population of just over 1 million of which 66 per cent are urban, and 50 per cent live in the administrative capital, Tomsk City. Winters are severe and long, while summers are hot and short; the mean January temperature being -19°C and the mean July temperature +18°C. Although public transport within Tomsk City and the larger towns is good, travel between towns can be difficult because of the long distances and the difficult road conditions in winter. The more isolated settlements may be virtually inaccessible for a substantial part of the year. Air transport, although available, is much less frequent than during Soviet times.

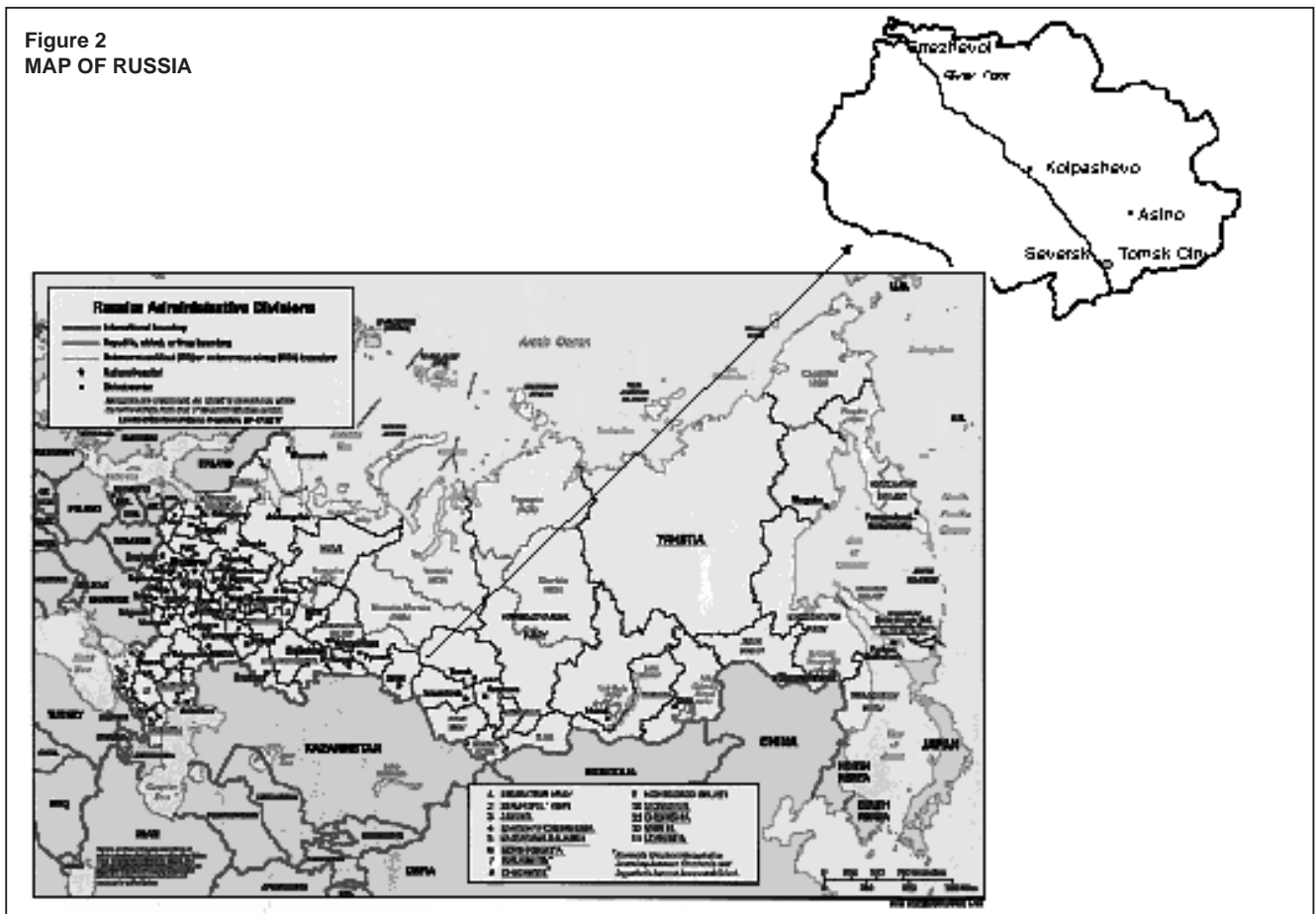
Figure 1
INCIDENCE AND DEATH RATES FOR TUBERCULOSIS PER 1,000,000 POPULATION, RUSSIA AND TOMSK OBLAST, 1972–88



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Figure 2
MAP OF RUSSIA



Approaches to TB control

The organisational structure of the TB health care and surveillance systems is similar across the Russian Federation. The principal elements are extensive population-based screening, followed by referrals to the dispensary, polyclinic and hospital.

Patients are referred to the TB dispensary as a result of mass screening, or when clinical symptoms are identified at health centres and hospitals within the general medical services. The dispensary is responsible for confirming all cases of tuberculosis in the region, and acts as an administrative centre. The polyclinic is the focus for all outpatient services. Finally, there are a number of specialised TB hospitals. Surgery has traditionally been an important aspect of TB management, and is discussed later. Parallel systems of inpatient and outpatient care for TB exist in the prisons, the military, railways, the nuclear industry and in some large companies such as the Far East Shipping Line.

The Soviet system left a legacy of excessive hospital care with 70 per cent of all TB resources allocated to TB hospitals. Health administrators are preoccupied with maintaining huge buildings and paying staff. The ambulatory services are much less

developed and currently there are insufficient funds for drugs.

Oblast funding of health care is based largely on previous expenditure with a number of peculiarities specific to Russia. Budget planning and analysis relates to standards set twenty years ago. Each organisation submits its annual budget proposals in the almost certain knowledge that they will only receive a minority of what is proposed. Much of the balance is negotiated through a form of barter known as 'debt rescheduling', and there is little attempt to relate resource allocation to opportunities for health gain or clinical effectiveness. Within the hospital, once the budget is received, there is little debate or analysis of cost benefits.

Details of Tomsk *oblast* TB hospitals are shown in Table 1. In 1996, there were seven hospitals with a total of 1,071 beds. There were two operating theatres within the main hospital and 107 operations were performed in 1996. The main TB hospital contained seven sections: Therapeutic I ward (125 beds); Diagnostic (20); Surgery (110); Extrapulmonary (80); Intensive care (6); Therapeutic II (50); and Therapeutic III (100). Ninety per cent of patients in Therapeutic III were former prisoners.

Table 1
ACTIVITY LEVELS WITHIN TB HOSPITAL FACILITIES IN TOMSK OBLAST, 1996

Hospital	Beds	Annual discharges	ALOS (days)	Bed occupancy
Main TB hospital	491	1669	93.5	87%
TB paediatric hospital	150	394	97.6	70%
TB psychiatric	80	84	197.4	57%
TB Railway	60	138	112.9	71%
TB Prison	200	943	123.9	160%
Kolpashevo City	30	200	72.5	132%
Seversk City	60	227	101.0	105%
Total	1071	3655	103.9	97%

Source: Clowes CI, 1997¹⁰

The hospital culture

The Soviet system emphasised the health of the individual as it contributed to or detracted from the health of society in general. It placed less importance on the health of the individual as a personal benefit.⁶ Thus, isolating people in hospitals for extended periods of time was considered a major public health benefit, and the substantial costs to the people concerned, many of whom then found it impossible to go back to their jobs, was of much less importance.

The attitude of patients to this situation was mixed, but in many cases the extended stay in hospital was welcomed. Tuberculosis tends to affect the more marginalised members of society to a greater extent than the better-off. Therefore, the incidence in alcoholics, the homeless, the unemployed, ex-prisoners (who may be all of these things) is higher than in other

Table 2
NUMBERS OF POSTS AND (PERSONS) BY HOSPITAL AND DISCIPLINE, TOMSK OBLAST TB HOSPITALS, 1996

Hospital	Doctors posts (persons)	Nurses posts (persons)	Others posts (persons)	Total posts (persons)
Main TB hospital	55 (41)	178 (116)	361 (213)	594 (370)
TB paediatric hospital	14 (9)	39 (29)	183 (114)	236 (152)
TB psychiatric	4 (3)	19 (13)	16 (7)	39 (23)
TB Railway	4 (2)	15 (9)	46 (28)	65 (39)
TB Prison	28 (27)	48 (46)	36 (36)	112 (109)
Kolpashevo City	9 (7)	19 (18)	45 (39)	73 (64)
Seversk City	13 (13)	27 (26)	33 (31)	73 (70)
Total	127 (102)	345 (257)	720 (468)	1192 (827)

Source: Clowes CI, 1997¹⁰

groups.⁷ For these people, a long stay in hospital offers some very positive advantages: a roof over their heads, no financial concerns, regular meals, and a warm place to stay throughout the very harsh Siberian winters. Many welcomed the adjunct therapies, such as physiotherapy, as a sign of active treatment and, possibly, as an interesting interlude in the day.

For others, though, the diagnosis of TB and its ramifications were less welcome. The extended treatment and the associated public health laws had devastating effects on a person's life and career. As such, TB was a stigmatised illness and, as the diagnosis carried with it such terrible connotations, it was not unusual for symptoms to be covered up.⁷

Management of tuberculosis

A specialist branch of the medical services was dedicated to the management of tuberculosis. In 1996, the Tomsk TB services had over 1,000 staff posts, and over 800 actual staff persons since some people are appointed to more than one post (Table 2). One-third of the medical staff were past retirement age, whilst within ten years one half of the existing medical staff will have reached retirement.

The system of tuberculosis care in the Russian Federation in the 1990s was based on a number of established principles dating from Soviet times. Because of the continuing decline in the 1970s and 1980s in the incidence of tuberculosis, these treatment methods were considered successful.^{4,7} These principles are discussed as follows.

Treatment Methods

There was extensive population based screening, with mass miniature radiography and recurrent tuberculin testing in children the cornerstones. In Tomsk, 572,000 screening procedures were undertaken in 1996, but lack of funding has meant that such procedures are now much less widespread.

Diagnostic criteria enabled patients to be divided into complex dispensary groups, which were based on a range of clinical and radiographic changes rather than on microbiologic grounds. Unlike the WHO definition of cure, which is based on smear conversion and completion of treatment, the Russian definition relied on clinical and anatomical healing (cavity closure) preceded by disappearance of clinical symptoms and abacillation – considerably more conservative. Such a definition of cure inevitably required prolonged follow-up.

There was extensive hospitalisation for anyone diagnosed with tuberculosis. Traditionally, patients were hospitalised for 6–12 months during which time they received intensive and second phase treatments. In 1996, patients stayed for 94 days on average in the main TB hospital and for longer in other hospitals (Table 2).

There were individualised treatment regimens for patients with extensive use of adjunct therapies. Intravenous, intramuscular, intrapleural and intracavity routes of drug administration were widely used, and immune system boosters were also important. Plasmaphoresis, auto-irradiation of UV irradiated blood, and ultrasound were examples of so-called 'phthio-therapeutic' methods. Extensive use of surgery, including the removal of cavitated lung tissue, regardless of evidence of continued bacterial activity, was also popular.

The MERLIN programme

The first objective of the MERLIN programme, which commenced in 1994, was to introduce the DOTS concept in Tomsk and to raise awareness throughout Russia. The DOTS strategy is based upon the following techniques: (a) treatment given according to standard protocols under direct observation; (b) regular drug supply; (c) active case finding based on sputum microscopy; (d) information systems to follow treatment outcomes on a cohort basis; and (e) a political commitment to channel resources into ambulatory care and decrease the need for hospital inpatient care.⁵ The second MERLIN objective was to reduce the expensive hospital infrastructure to make the TB service cost-effective and sustainable.

MERLIN's experience has shown considerable reluctance on the part of many doctors and politicians in Russia to accept the DOTS strategy. There are several reasons for this reluctance. First, the traditional Russian system had evolved over many years and had been demonstrably successful. It was hard for Russian doctors to accept that a system originally designed for use in developing countries with a much more basic health care infrastructure could be as successful. Second, DOTS is directly in opposition to the Russian tradition of individualised hospital therapy. For DOTS does not require extended periods of hospitalisation, can be given on an ambulatory basis for the vast majority of patients, and does not require the use of adjunct therapies. Third, DOTS uses definitions of cure that are different from those used in Russia, which are in fact enshrined

in law. In particular, a DOTS definition of cure based on bacillary excretion does away with the need for surgery in the vast majority of cases.

Russian society places great importance on plentiful hospital beds as a sign of a successful health care system. Hospital doctors have more power and status than community doctors and are thus also paid more. The absence of a social care network means that hospitals perform a major social care function, particularly in the provision of food and housing for marginalised groups, who are more likely to contract TB. Unemployment is a major stigma, and in Russian society the hospital fulfils an important role as an employer, even if that work is not especially productive for society or lucrative for the employee. The concept of redundancy, without alternative employment in order to save money for the hospital or health care system, is alien. Further, removal from office usually brings the offer of an alternative position.

The process of change

MERLIN used several levers for change, including education (in particular developing the evidence-base through a clinical trial comparing Russian and WHO treatment regimens).⁸ It also used training, drug donations, supply of materials and equipment, local, national and international agreements and decrees. Results from the clinical trial showed that ambulatory-based DOTS treatment was cheaper than the Russian approach. Nevertheless, the practice of admitting all patients to hospital continued. A cost-effectiveness analysis using data from the trial also showed that ambulatory-based DOTS treatment was cheaper than the Russian approach. The main savings were hospital related. If inpatient stays were reduced to the international standard of two weeks, DOTS would cost around a quarter of the traditional costs; that is, US\$465 as opposed to US\$1,217 per cured case (1995 prices). Thus, rationalisation of hospitals was an essential part in developing a cost-effective and ultimately self-sustaining TB service in Tomsk.

Thereafter, a series of national and *oblast* edicts explicitly recognised and ratified DOTS in Tomsk.⁹ While there was enthusiasm by health system policy-makers and within the community sector, the hospital system remained resistant to change. Hospital staff strongly opposed the implementation of the WHO DOTS guidelines, insisting that surgery, adjunct therapy,

“Unemployment is a major stigma, and in Russian society the hospital fulfils an important role as an employer, even if that work is not especially productive for society or lucrative for the employee”

REFERENCES

1. Cockerham WC. The social determinants of the decline of life expectancy in Russia and Eastern Europe: a lifestyle explanation. *Journal of Health and Social Behaviour* 1997;38:117–30.
 2. Drobniewski F, et al. Tuberculosis in Siberia: an epidemiological and microbiological assessment. *Tubercle and Lung Disease* 1996;77:199–206.
 3. Farmer P. Managerial successes, clinical failures. *International Journal of Tuberculosis and Lung Disease* 1999;3:365–7.
 4. Drobniewski F, et al. Tuberculosis in Siberia: 2. Diagnosis, chemoprophylaxis and treatment. *Tubercle and Lung Disease* 1996;77:297–301.
 5. World Health Organization. *Treatment of Tuberculosis: Guidelines for National Programmes* Vol.97.220. Geneva: World Health Organization, 1997.
 6. Barr DA, Field MG. The current state of health care in the former Soviet Union: implications for health care policy and reform. *American Journal of Public Health* 1996;86:307–12.
 7. Lyagoshina TV. Russia. In: *Clinical Tuberculosis*, PDO Davis (ed). Oxford University Press: London, 1999.
 8. Wares DF, et al. Preliminary trial results of short course chemotherapy in WHO category 1 patients in Tomsk Oblast, Siberia, Russia. *International Journal of Tubercle and Lung Disease* 1997.
 9. Banatvala N. Russia opens doors to western TB treatments. *Lancet* 1997;350:348.
 10. Clowes CI. *Tomsk Region TB Services; a Review of Services and Management Structures for Treatment of Tuberculosis in the Tomsk Region of Siberia*. London: Merlin, 1997.
- extended inpatient stay and individualised therapy were more effective.
- Between 1994 and 1996, little change took place in the hospital structure, although lengths of stay did decrease slightly. However, in 1997 the New York Public Health Research Institute signed a formal agreement with the Governor of Tomsk *oblast* committing the TB services to substantially reduce hospital beds, accompanied by an investment by the New York Institute of US\$1.1 million in TB services over the next two years. A sum of US\$500,000 was earmarked for direct payments to staff, if key components of the agreement were met, including bed closures. These direct payments were substantial in terms of local salaries with some workers quadrupling their salary. As a direct result, bed numbers in the main hospital fell from 594 in 1994 to 355 in 1998, and were halved to 30 in Seversk. Plans were in hand to close the beds at the Railway Hospital, but little change occurred in the psychiatric and paediatric institutions. Staff positions were reduced by 14 per cent in the main hospital, from 594 in 1996 to 511 in 1998. However, because of the practice of staff members holding more than one position, this was accompanied by a smaller reduction in actual people employed.
- By 1997, there had been a substantial move towards community based TB care. This was achieved by empowering community health staff rather than by any direct support from hospital staff. Community doctors had been trained in the DOTS approach, and were able and willing to start their patients on treatment without the need for hospital assessment or admission. The infrastructure was in place to support them in this approach. This included formal support from the *oblast* administration, professional guidance from the head of the TB Services, and regular monitoring and supervision by senior staff (supported by MERLIN). There was, however, tension between hospital and community health services over this change. For example, hospital staff accused the community services of deliberately undermining them by not referring patients. By 1999, around 50 per cent of Tomsk City patients were treated in the community. For outlying districts, the percentage was necessarily lower since greater distances are involved, along with further difficulties in travelling.
- The intention of the changes was to release a substantial pool of resources locked up in hospitals. This would allow the Tomsk TB services to become self-sufficient after external funding withdrew, particularly in relation to the ability to purchase drugs for TB treatment. This has not really occurred. Because of the historical pattern of funding, the reduction in hospital beds did not result in any direct change in resource levels to the hospital. Because the costs of estate and essential services are hidden within the Russian system, closing hospital beds achieved no direct savings. Although nearly one-fifth of staff positions were lost, the real reduction in people employed was much less. The reduction in posts resulted in a decrease in some staff take-home pay (for example, being employed in one not two positions). The extra funds from the New York Public Health Research Institute made this acceptable in the short term. However, the collapse of the rouble in 1998 made it even more difficult to untangle the economics of the TB sector, made staff still more resistant to losing their job, and made it more difficult to transfer savings from one part of the TB service to others.
- Although there is less surgery and less use of adjunct therapies in Tomsk, traditional Russian definitions of cure still affect people's ability to work; as it remains illegal for people with TB who have lung cavities to be employed in certain positions. Surgery continues to be practised to meet legal requirements (to excise lung cavities), rather than for the clinical indications common elsewhere.

Conclusions

In Russia the hospital is crucial, both medically and legally, to tuberculosis control. It offers professional status and provides social care. Rationalising hospital use and developing the community health sector have been very difficult but slow progress continues. Resistance is strong, both in political terms given the role of the hospital in Russian society, and in human terms since redundancy carries significant social stigma. Loss of income is a disaster in a society that has no structures to support the unemployed or to help them with retraining or redeployment. Change has required political, managerial and financial inputs, with much of these coming from external donors. Realising the cost-effectiveness benefits that the changes should bring is very difficult because of the country's economic collapse, the financing structure of Russian health system, and the social and cultural environment.

Planning a hospital system for Bishkek City

Jane Haycock

Kyrgyzstan, in common with other former Soviet countries, had an extensive hospital system with, for example, over 26 hospitals for a population of 800,000 in the capital city, Bishkek, alone. The Ministry of Health adopted a plan to rationalise hospitals in the city, but by 1999 only three hospitals had been adapted to different uses. The barriers to hospital mergers and downsizing included the lack of fiscal and administrative incentives as well as opposition from hospital physicians.

“The gap between what could be afforded and what existed could either be filled by new money, or by making services fit the available resources”

Background

Kyrgyzstan gained political independence from the Soviet Union in 1991 but lost its macro-economic security. Public sector health expenditure plummeted by one-third so that by 1994 it amounted to less than 3 per cent of GDP, roughly where it has remained. It was soon obvious that the health infrastructure could no longer be afforded from the public purse. The financing gap was partially filled by unregulated out-of-pocket payments from patients, but salary debts to staff and unpaid utility company bills rose, and no maintenance was undertaken. By 1995, the financial problems and their negative impact on the health of the population were widely reported in the press. A survey of household payments showed that in 20 per cent of cases the cost of illness for one member exceeded total household monthly income.¹

The debate initially focused upon which method of financial reform could save the health system, such as user charges, health insurance or privatisation. After reviewing the health care system, however, it became apparent that Kyrgyzstan (similar to other former Soviet Union countries) had many more hospital beds and doctors than countries of similar economic status, while its epidemiological profile did not suggest above average need. The Ministry of Health began to consider whether hospital capacity might be surplus to requirements. This concept was included in its 1996–2000

MANAS national plan for health care reform, which was ratified by the government in 1996 and became the policy and legislative justification for the subsequent reform programme.

The Kyrgyzstan Ministry of Health had sought advice from the World Health Organization Regional Office for Europe in drawing up the MANAS national health strategy.² In looking for guidance on hospital rationalisation, the experience of the United Kingdom in reforming its National Health Service looked most relevant as a country with a tax-financed, publicly-owned health sector. The Ministry therefore accepted technical assistance funded by the UK Department for International Development in developing a hospital rationalisation programme for the capital city, Bishkek.

Most actors in the health system, however, still saw the problem as lack of money rather than surplus and inefficient hospital services. The gap between what could be afforded and what existed could either be filled by new money, or by making services fit the available resources. Since new sources of finance in the shrinking economy were scarce, the necessity for a rationalisation plan to prioritise services was very reluctantly accepted.

The policy debate was further complicated in that responsibility for the country's health system was divided between two ministries: the Ministry of Health formulated national health policy, while the Ministry of Finance directly allocated funds to health institutions. One proposal was that the Ministry of Finance cut a

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“What started with a brief to rationalise national specialist hospitals, ended in a decision to close two city children’s hospitals and one district maternity hospital”

number of hospitals off the budget and transfer the money to other needed health services. The difficulty with this approach, apart from its political unpopularity, lay in the financing mechanism. The public budget did not allocate defined health funds, but rather funded inputs such as staff and payroll taxes across the public sector. If money was saved, there was no precedent to reallocate it within the health sector. This required new legislation and a new budgetary process not based on input norms. In the absence of much international evidence, it was argued that if market-style reforms could be introduced, provider payment mechanisms would gradually reallocate health funds more cost-effectively. Since the Ministry of Finance was not interested in changing its method of input funding, the agent of reform had to be a new organisation capable of raising and allocating health revenue: a health insurance fund.

The power struggle on how to set up a health insurance fund continued throughout 1996 and 1997, while health services continued to crumble and equity of access deteriorated. In the absence of a consensus on the most promising strategy, both were taken forward. The health finance reformers finally settled on a health insurance fund; the health service reformers worked on a hospital rationalisation plan.

A hospital plan for Bishkek City

Bishkek, with a population of 800,000, had 26 hospitals at the time. The most optimistic estimate was that the available public revenue covered only 53 per cent of overall hospital costs. Twelve hospitals were designed to provide tertiary care for the national population (4.5 million), but increasing population poverty and deeper budget cuts meant that few referrals were made from other hospitals, so that specialist services increasingly treated secondary not tertiary care conditions. Further, these hospitals mainly treated Bishkek residents rather than the national population. Moreover, vertical administrative and budgetary divisions between national, city and district hospitals led to considerable service duplication.

Over seven months in 1996, a working group of local and international members drew up a ten-year rationalisation plan. This was based upon site visits, an audit of the physical and functional state of the hospitals, utilisation review techniques, data analysis, and workshops with key local stakeholders. A computer model was built

to test the economic consequences of various reconfigurations and closures.³ Changes could release sufficient funds to allow hospitals in Bishkek to break even over ten years, or else could be transferred to support primary and secondary health care.

Comprehensive data analysis and consultative techniques in decision-making were new to Kyrgyzstan. With hindsight, it is probable that the process was too fast to allow key stakeholders to buy in, while computer modelling was too ‘black box’ for widespread understanding. The planning pace suited the Ministry of Health, however, which needed to demonstrate a hospital rationalisation plan by December 1996 to fulfil the conditionality requirements of the first World Bank health sector loan.

During the first half of 1997, the plan was considered by the chief clinical specialists in the Ministry of Health and by some senior physicians. Without local champions and World Bank support, it would have been subsumed in the health insurance arguments, which more attractively appeared to offer new money rather than difficult prioritisation choices. Hospital rationalisation was clearly going to be difficult if the MANAS plan was followed, which suggested closing or merging some national hospitals. These were the most powerful vested interests and their senior specialists continued to oppose the hospital rationalisation planning process.

In June 1997, the decision-making committee of the Ministry of Health (comprising clinical specialists) considered the rationalisation programme for the next year. They recommended changing the use of three hospitals and also substantial bed reductions. Whilst it was a significant achievement for the Ministry to endorse any closures, the opportunity to take decisive action was gone.

A hospital rationalisation programme

What started with a brief to rationalise national specialist hospitals, ended in a decision to close two city children’s hospitals and one district maternity hospital. One children’s hospital reverted to the use of the Medical Academy (shifting it off the health budget), the other became a residential ‘home’ for children of parents with tuberculosis, while the maternity hospital became a quasi-private fertility centre. Several lessons can be drawn from this experience:

- Senior doctors acted to preserve jobs and service structures in circumstances that clearly were not in the public interest;
- No single organisation was responsible for strategic planning and the different players used this fragmentation to maintain the status quo;
- The health sector did not have the resources or skills to handle an ambitious programme of rationalisation;
- The skills and mechanisms required for long term financial planning rather than annual accounting were absent;
- There was no precedent for the sale of a health sector asset and, as any revenue would revert to the Treasury, there was no incentive for the health sector to sell assets;
- There was no financial mechanism to redeploy financial resources between health services within a region since the Ministry of Finance allocated line-item budgets;
- The public wanted reduced service fees rather than plans to reduce service infrastructures; and
- Small reductions in hospital beds yielded few savings.

The Ministry of Health persevered with its health system reform plans and commissioned the consultants to extend the Bishkek planning model to other areas of the country. Since international donors funded the work this was not a major commitment by the Ministry. However, the overall reform process was beginning to gain internal acceptance, helped along by some international acclaim. The new health insurance fund also supported rationalisation by contracting only with hospitals that endorsed the plan.

The second phase of rationalisation considered the functions of hospitals and standards of care, not just strategies for downsizing the hospital system. New management skills had to be developed before any strategic plans could be operationalised. Most importantly, high level political backing was needed to maintain the support of the different ministries and to coordinate the reform process. Activities were concentrated in the following areas:

- Defining the role of hospitals in improving population health;
- Identifying clinical training requirements;

- Developing management and planning skills;
- Facilitating communication between different stakeholders; and
- Setting up structures in the Ministry of Health able to undertake policy planning.

This approach was successful in that the President's office issued an edict in 1998 recommending the use of the hospital rationalisation model. In 1999 the Ministry of Health adopted the rationalisation programme as its main objective. On the negative side, no more hospitals have been closed or merged, and only 20 per cent of acute hospital beds were closed between 1990 and 1997.⁴

Conclusions

This hospital rationalisation strategy adopted supply side mechanisms, but the initial objective of the donor agency, namely to take large amounts of capacity out of the system, was not sufficiently shared by the Ministry of Health and was not achieved. In retrospect, this strategy may not have been appropriate since the skills needed to manage such change were not in place. The work undoubtedly did catalyse the process of reform, which continues to proceed at the pace that political will allows. The MANAS plan remains the cornerstone of the reforms, although it is more important symbolically than in practice. Health sector reform in Kyrgyzstan so far lacks the investment capital that was necessary elsewhere to support new initiatives.⁵ The next stage of hospital rationalisation depends upon changing the budgeting system of the Ministry of Finance or establishing another more flexible payer.

REFERENCES

1. Abel-Smith B, Falkingham J. *Financing Health Services in Kyrgyzstan: The Extent of Private Payments*. LSE Health Working Paper. London: London School of Economics: London, 1995.
2. Savas BS, Gedik G, Craig M. The reform process. In: McKee M, Healy J, Falkingham J (eds). *Health Care in Central Asia*. Buckingham: Open University Press, 2001.
3. Street A, Haycock J. The economic consequences of reorganizing hospital services in Bishkek, Kyrgyzstan. *Health Economist* 1999;8(1):53-64.
4. Sargaldakova A, et al. *Health Care Systems in Transition: Kyrgyzstan*. Copenhagen: European Observatory on Health Care Systems, 2000.
5. Le Grand J, Mays N, Dixon J. The reforms: success, failure or neither? In: Le Grand J, Mays N, Dixon J (eds). *Learning From the NHS Internal Market: A Review of the Evidence*. London: King's Fund, 1998.



Joe Kutzin

Addressing informal payments in Kyrgyz hospitals: A preliminary assessment



Ainura S. Ibraimova

Background: The context of transition

The Kyrgyz health system underwent severe financial stress during the economic transition following independence in 1991. Real levels of GDP and public sector (mainly tax) revenues were reduced by half by mid-decade before gradually recovering. By 1999, however, these indicators were still far below even their independence levels.^{1,2,3} This situation reduced substantially the ability of the government to fund its commitments in the health system.



Tilek S. Meimanaliev

The inherited health system was characterised by excess capacity, particularly at the hospital level. For example, despite having a far lower income level, Kyrgyzstan had about 15 per cent more hospital beds and nearly twice as many hospitals per capita as the average for the European Union (EU) countries in 1998.⁴ Several factors contributed to this. First, the method for allocating resources to providers, driven by input norms (e.g. number of beds), rewarded expansion of physical capacity. The consequences of this financial incentive were compounded by the organisational structure of the health system. Each level of government had its own delivery system that integrated the pooling, purchasing, and service provision functions within the same organisational entity, such as the *oblast* (province or state) or *rayon* (district) health departments. Responsibilities for population coverage were duplicated between different government levels, particularly in the capital cities of each *oblast*, and in Bishkek, the national



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capital. This vertical integration of the health systems of different levels of government, combined with overlapping geographic population coverage, resulted in duplication of service delivery responsibilities. Finally, these organisational and financial incentives reinforced the way that health professionals were trained in the Soviet system. Clinical protocols and norms encouraged, and even required, an emphasis on specialised hospital care, and the principal role of primary care providers was to 'dispatch' patients to speciality providers and facilities.⁵

Informal payments by patients for hospital care

Although user fees were legalised shortly after independence, most observers believe that illegal, informal payments made by patients have long been of far greater magnitude. Lewis defines informal payments as:

"payments to individual and institutional providers in kind or in cash that are outside official payment channels or are purchases meant to be covered by the health care system. This encompasses 'envelope' payments to physicians and 'contributions' to hospitals as well as the value of medical supplies purchased by patients and drugs obtained from private pharmacies but intended to be part of government-financed health care services."⁶

The limited available evidence suggests that both informal payments to staff and the

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private purchase of goods and services meant to be provided by the system occur in Kyrgyz hospitals, though the latter are more pervasive. Results from a 1994 household survey suggest that 86 per cent of inpatients paid something toward the cost of their care. For an average inpatient stay, about 60 per cent of payments was for drugs, 18 per cent was for payments to staff, 14 per cent was for surgical supplies, just over 3 per cent was for official fees, and the rest was spent on various other items.⁷ A 1997 survey in two *oblasts* found that most inpatients had provided medical and non-medical inputs,⁸ and a 2001 national household survey suggests that the frequency of this was even greater (see Table 1). The latter survey also showed that nearly all inpatients paid something towards their hospitalisation.^{9,10}

There is also reason to believe that the demand for payments by health workers has grown. According to official government statistics, wages in the health sector have always been below average for the country and have declined in relative terms from 92 per cent of the average wage in 1994 to 52 per cent by 1999.³ Together with the survey evidence reported above, it is clear that informal payments were occurring in Kyrgyz hospitals. Increasingly, access to inpatient care, including drugs, medical and non-medical supplies, and the time of providers, depended on the ability of the patient and their family to pay for these.

Informal payments were the tangible symptom of a system characterised by excess physical and human resource capacity in a context of shrinking public resource availability, low wages, and rising prices. Given this, the only realistic way to address informal payments was as part of a package of measures aimed at the causes of inefficiency while injecting a small amount of additional funds into the system.

Hospital payment in the first phase of reforms: 1997–2000

In 1997, the government introduced the Mandatory Health Insurance Fund (MHIF) as an independent agency. Initially, the population groups covered by the MHIF were employees for whom employers (including the public sector from 1998 onwards) made a 2 per cent payroll contribution as part of their overall payroll tax obligations, as well as pensioners and the registered unemployed, whose coverage was funded out of the pension and unemployment insurance funds,

Table 1
PROVISION OF INPUTS BY FAMILY MEMBERS FOR INPATIENTS

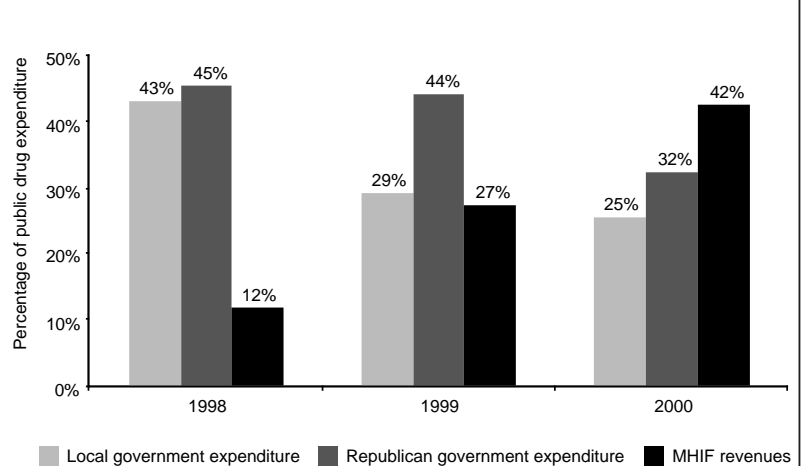
	1997, two oblasts	2000-01, nation-wide
Medicines	65%	81%
Food	84%	95%
Linen	55%	74%

Sources: Blomquist, 1997⁹; Falkingham 2001¹⁰

respectively. A substantial increment to population coverage occurred in 2000 with the addition of all children under 16 (and full-time students under 18), as well as persons receiving social benefits from the government. These groups were funded by a direct transfer from the national budget to the MHIF. About 30 per cent of the population was covered by the MHIF in 1999, but the inclusion of children brought this to nearly 70 per cent in 2000.⁵

The level of funding provided by the MHIF was very small when compared to that from the budget: 6.6 per cent of pooled health sector funding for general hospitals in 1998 and 12.2 per cent in 1999.⁵ Despite this low level of funding, MHIF payments may well have mitigated a rise in informal payments. The management of the MHIF took a strategic decision to limit the use of its funds by hospitals to two items: staff bonuses (30 per cent) and drugs (70 per cent). The additional resources provided for these could have reduced the demand for private payments from health workers and should certainly have reduced the need for insured persons to buy their drugs.

Figure 1
SOURCES OF PUBLIC FUNDING FOR PHARMACEUTICALS



Source: MHIF data.

Indeed, the impact of the MHIF on drug funding was substantial even when measured at the overall level of the health system (Figure 1). By 2000, the MHIF was funding over 40 per cent of recorded drug costs in the health system, and so the impact in those hospitals with which it contracted was considerably greater.

The MHIF introduced the concept of 'active purchasing' and a purchaser-provider split into the Kyrgyz health system. Contracted hospitals were paid according to a case-based system modelled on the American diagnosis-related group

“The payment systems of the Mandatory Health Insurance Fund injected both additional resources and a new way of doing business into the health sector”

(DRG) system. Importantly, the MHIF did not create a separate, parallel health system; instead, its case payments were incremental revenues to hospitals that continued to receive a budget allocation according to the old methods. The MHIF and Ministry of Health (MOH) worked together closely; an arrangement that was formalised in late 1998 when the MHIF was brought under the explicit policy direction of the MOH, while maintaining its separate source of funds. One example of their coordination was that any hospital contracted with the MHIF had to use a new Clinical Information Form and report data on all patients using the new forms. The data from these forms was used for the statistical purposes of the MOH as well as for the payment and utilisation review functions of the MHIF.⁵

The payment systems of the MHIF injected both additional resources and a new way of doing business into the health sector. Although there is no direct evidence of the impact on informal payments in hospitals, the MHIF's purchasing strategy addressed two of the causes of these payments: low salaries and limited availability of drugs. However, the underlying structural inefficiencies of the system were not addressed in this first phase of health reforms.

2001: Introduction of the 'Single Payer' reform

In 2001, the MOH introduced a compre-

hensive package of measures under the rubric of the 'Single Payer' reform. These were introduced in two *oblasts* in 2001 with a plan to extend the reform nation-wide by 2003. Relevant features of the Single Payer are:

- pooling of all local budget funds for health in the *oblast* offices of the MHIF;
- payment of providers from these resources according to the systems of the MHIF, de-linking the amount of budget revenues received by a facility from the number of beds that it has; and
- establishment of an explicit, formal and differentiated co-payment for inpatient care meant to eliminate all informal payments at that level.

The critical aspect of the Single Payer (and the reason for this title) is the creation of a single pool of funds for health care at the *oblast* level, which effectively eliminates the fragmentation and duplication of the former system. This was made possible by a government decision in early 2000 to eliminate *oblast* health departments as part of an overall streamlining of the health sector. The MOH then proposed that all local government budget health care funds be administered by the *oblast* MHIF offices rather than being retained and distributed by the *oblast* administrations. This proposal was accepted by the government. Shortly thereafter, government decrees were approved for the MHIFs in two *oblasts* (Chui and Issyk-Kul) to apply the payment methods of the MHIF to budget funds for primary and inpatient care. The details of the administrative arrangements were developed during the rest of 2000, and the policy was implemented in January 2001.

Hospital co-payment under the Single Payer

Within the context of the Single Payer, the objectives of the co-payment policy are:

- to formalise payments for inpatient care and make the contribution and collection process transparent;
- to find an additional source of funding for the health system; and
- to promote access to needed care for defined population groups via exemption mechanisms.

Although the Single Payer was introduced in January, it took somewhat longer to work out the details of the co-payment policy, and it was not implemented until March 2001. The inpatient co-payment is

linked to the inpatient payment system of the MHIF and includes three main levels, paid as a flat fee per admission:

- 1,140 *soms* for uninsured persons;
- 570 *soms* for insured persons; and
- 190 *soms* for partially exempt persons (and 0 for those few groups that are fully exempt) – where US\$1 equals approximately 49 *soms* (May 200).

The co-payment levels are inversely related to hospital payment rates from the purchaser. Local budget funds pooled in the *oblast* MHIF offices are used to pay a common ‘base rate’ (prior to the case category adjustment) for all patients. An additional amount of budget funds is set aside to pay a higher base rate for partially and fully exempt persons. For insured persons, the standard uninsured base rate is paid from budget funds, and an additional base rate is paid from the MHIF national pool of funds.

As noted earlier, there is not a separate ‘insurance system’ for MHIF beneficiaries. Instead, MHIF coverage entitles the beneficiary to a lower co-payment, in much the same way as coverage by a *mutuelle* in France or a ‘Medi-gap’ policy in the US. With the payment by the MHIF (national) still supplementary to that paid from budget sources, there is no fragmentation of the population (and the system) into separate pools. Most importantly, the *oblast* MHIF office is organisationally distinct from service providers (i.e. it is not a part of the *oblast* or *rayon* government), and this combined with the new payment methods means that a true purchaser-provider split exists, thereby removing one important structural barrier to system rationalisation.

Effects of the policy on informal payments: some early findings

Because the policy was only implemented in March 2001, any assessment of its effects should be considered preliminary. However, some analyses that have already been completed give a sense of how the policy has been implemented to-date and its effects in terms of the utilisation of services and acceptability to the population. First, however, we present information from a recently available household survey that provides evidence on the frequency and extent of private payments in hospitals for the year just prior to the implementation of the co-payment policy. It is particularly useful to assess the policy in the context of these findings.

Table 2
Payments for inputs and services during hospitalisation

	Percentage of patients paying	Amount paid (soms)	Mean Median
Food	93%	372	300
Medicines	83%	572	300
Other supplies	67%	142	90
Hospital charges	48%	156	30
Laboratory tests	55%	64	20

Source: Falkingham 2001⁹

Summary of household survey findings

The national survey of 3,000 households comprising about 12,900 individuals was undertaken in February–March 2001 and provides information on hospitalisations for the 12 months prior to the conduct of the survey. Preliminary analyses of the survey^{9,10} suggest that nearly all inpatients paid something during their stay (Table 2). The expenditures on food, medicines, and other supplies can be considered ‘informal’ because these inputs are meant to be provided by the hospital. Most people (87 per cent) paying ‘hospital’ and laboratory charges did not get a receipt, so it is not clear whether such payments – for which various official charges do exist – should be considered formal or informal. In general, payments to staff were reported to have occurred relatively infrequently, although virtually all persons who had an operation reported paying something to the surgeon.

In total, the average levels of payment for a hospitalisation are summarised in Table 3. These figures suggest that if the co-payment has been implemented as planned, both insured and uninsured persons would pay less than the mean amounts paid prior to the policy.¹ The insured would also pay less than the median, but the uninsured would not. In relative terms, the patients in

Table 3
Average amount paid per hospitalisation

	Mean amount paid (soms)	Median amount paid (soms)
Nation-wide	1,270	720
Chui oblast	1,416	900
Issyk-Kul oblast	1,385	630

Source: Falkingham 2001.⁹

Chui hospitals would be better off under the co-payment than those in Issyk-Kul.

Is the co-payment policy working?

Do the people accept it?

A preliminary ‘rapid appraisal’ study using techniques of Participatory Rural Appraisal was implemented in May 2001 to provide rapid feedback to the MOH on the co-payment policy.¹¹ This study utilised 9 focus group interviews with 63 participants in Chui and Issyk-Kul, 52 of whom had received hospital treatment under the co-payment policy. The most important findings are described below.

“The co-payment levels may pose a significant financial barrier to access, particularly for uninsured persons who do not qualify for exemption”

First, the policy appears to be working: most patients made the official co-payment without paying other charges. 45 of 52 patients interviewed made no extra payments for drugs, laboratory, and x-ray, and only 1 patient reported making an ‘informal’ payment to a doctor. Most patients did have family members bring food from home, but the need to do so appears to be hospital-specific (depending on the quality of food in a particular hospital).

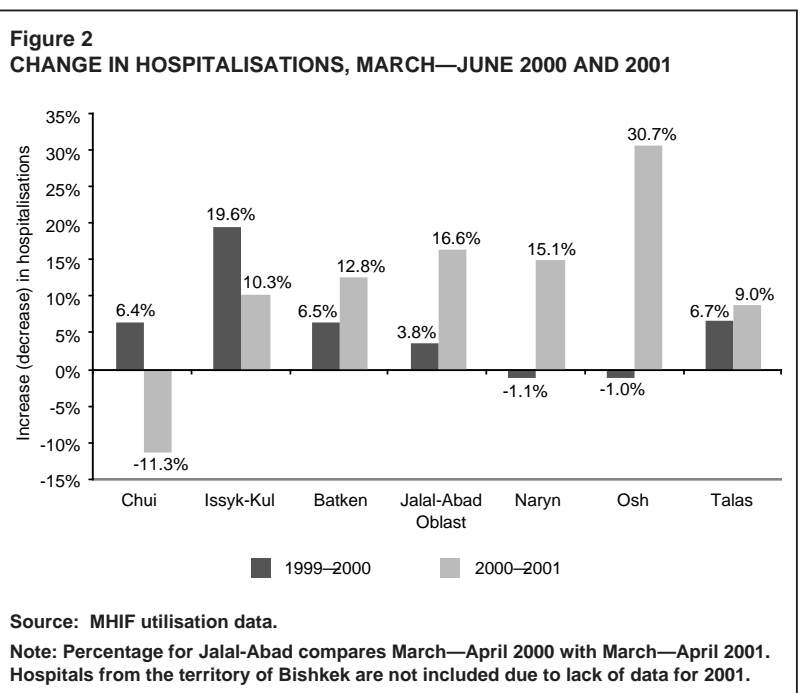
Second, acceptance of the policy is mixed, with most non-maternity patients support-

ing the policy, but with near universal opposition to the co-payment for deliveries. The main reasons given for the positive view of the policy with regard to non-maternity care were that: (a) many patients (especially the insured) are paying less than what had been paid previously for the same treatment, especially for surgery; (b) patients are seeing drugs and supplies available in the hospital rather having to purchase these themselves in pharmacies; and (c) patients see the sharing of the burden between the state and the individual as fair. While the view was generally positive, concerns about the policy were also raised. .

There was a very strong negative view of the co-payment policy for deliveries, mainly because the co-payment level was viewed as much too high. Most respondents said that the co-payment was several times higher than what women had been paying informally. Concerns were raised that the policy would lead some women to deliver at home to avoid these costs. So far, however, utilisation data do not support this concern. Despite an overall decline in utilisation in 2001 relative to 2000 for the months of March to July, the number of maternity cases has actually increased. The high co-payment level for deliveries is a consequence of the nature of insurance coverage under the MHIF. As noted earlier, the main population groups covered by the MHIF are children, employed persons for whom employers have made a contribution, and pensioners. Because of this, women of reproductive age are least likely to be covered. In February 2001, for example, there were 36,924 cases in hospitals contracted by the MHIF nation-wide; 66 per cent of these were for insured persons. Of the 2,487 maternity cases in that month, however, only 19 per cent were for insured persons (according MHIF data). Hence, most delivering mothers are uninsured and face the highest level of co-payment.

Utilisation impact

The Single Payer established conflicting incentives for the level of inpatient utilisation. The shift to an entirely case-based payment system created an incentive for hospitals to increase the volume of admissions. The co-payment erected a formal barrier to utilisation on the demand side, although it was impossible to know if this implied an increase or a decrease in the real price facing prospective hospital users. The MOH and MHIF were very concerned that the net effect of these changes would be an increase in the volume of admissions



that would create financial problems for the Single Payer.

Evidence to-date suggests that the feared increase in admissions has not occurred. In Chui and Issyk-Kul combined, the total number of admissions was 4.4 per cent less in 2001 than in 2000 for the March-June period. Indeed, there has been a decline in utilisation which may be attributable to the co-payment. Figure 2 shows the annual percentage change between 1999–2000 and 2000–01 in the number of hospitalisations, by *oblast*, for the months March to June. The figure reveals several interesting findings:

- Utilisation fell in Chui but rose in Issyk-Kul during the first four months of the co-payment policy as compared to the same months of the previous year;
- In 2001 as compared to 2000, utilisation increased in all *oblasts* except Chui, and in most of the non-co-payment *oblasts*, the increase in utilisation was also greater than that experienced in Issyk-Kul; and
- The rate of change in the growth rate of hospitalisations increased in all of the non-co-payment *oblasts* but decreased in both Chui and Issyk-Kul. This means that in both Chui and Issyk-Kul, the percent change in hospitalisations was less for 2000–01 than for 1999–2000, whereas it was greater for 2000–01 everywhere else.

While the lack of increase in utilisation may be reassuring in terms of financial sustainability, the decline in utilisation suggests that some people who need care are not getting it because of financial barriers resulting from the co-payment. While it is possible that the co-payment policy deterred ‘unnecessary’ hospitalisation, international experience suggests that this is unlikely, especially for inpatient care for which utilisation is largely provider-driven.¹²

In this present context it is difficult to determine whether the implementation of the co-payment policy has effectively raised or lowered the price of hospitalisation for patients. This is likely to vary by individual patient characteristics, such as their insurance and exemption status, the nature of their hospitalisation (e.g. surgical versus non-surgical), and their income. The averages presented in Table 3 are not adequate to determine how the co-payment affects the behaviour of individual prospective patients. Even if the co-payment price

is the same as the ‘informal price’, it should pose less of a barrier because of the greater uncertainty likely to be associated with informal payments. Despite these points and the data from Table 3 suggesting that the co-payment probably lowered the price in most cases (especially for insured persons), the downward trend in utilisation (Figure 2) is cause for concern.

Revenues from co-payment

MHIF data show that for the first 3 months of the co-payment policy, a total of 8.6 million *soms* was collected. For the same period in 2000, a total of 3.1 million was collected in official user-fees. This suggests that the policy is having some success in bringing more revenues explicitly into the hospitals, but also suggests that the past data on official fee collections understates the true level of payments made. The advantage of formalising the payments is that they are then open to redistribution throughout the hospital, whereas the previous informal contributions were not subject to the management control of the hospital.

“Politically, the biggest concern associated with the co-payment policy is maternity care: how can the co-payment for deliveries be lowered?”

Conclusions and next steps for policy and research

The limited available evidence to-date suggests a mixed picture with regard to the co-payment policy. The qualitative research found a generally favourable impression by the population (excluding maternity care), and a comparison of the co-payment levels with the survey data on private payments in hospitals suggests that prices are now lower than previously. The main negative findings are the unpopularity of the co-payment for maternity care and the decline in hospital utilisation.

Politically, the biggest concern associated with the policy is maternity care: how can the co-payment for deliveries be lowered? The MOH is seeking a solution to this but needs to find a way to take a greater share of the financial burden away from patients. One possible solution would be to cover all

pregnant women by the MHIF, thus entitling them to a lower co-payment. This could be financed by a direct transfer from the national budget, in much the same way as children's health insurance. While it is unlikely that coverage of pregnant women would create a moral hazard problem, it is possible that there would be an increase in maternity admissions if women shift from home to hospital delivery. While more costly to the system, such a shift would be desirable in terms of quality of care.

Overall, the success of the Single Payer depends on the extent to which it induces a reduction in the fixed costs of the health system through a downsizing of the physical infrastructure as well as of staff, without a concomitant reduction in health system funding. It is only in this way that resources can be freed for reallocation to variable cost items and increased salaries. In turn, such reallocation can enable the co-payment policy to succeed in the longer term by reducing pressures for supplementary private payments.

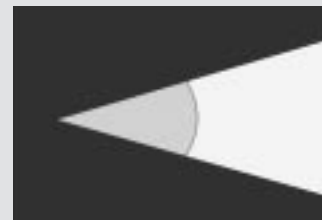
The findings presented here give a picture of the effects of hospital co-payment within the broader context of the Single Payer reform during the first few months of implementation. Ongoing research will attempt to determine more precisely the effectiveness of the policy, whether it entails an increase or decrease in the price facing patients (which will provide indirect evidence of its impact on access to care), and the extent to which the effects of the policy vary across regions. Additional qualitative research will also be undertaken to get an idea of how to improve the policy to promote better access for particularly 'at-risk' persons, such as the poor, persons outside the cash economy, and persons living in remote areas. This research should lead to concrete policy recommendations that the government can consider as the Single Payer and co-payment policies are 'rolled out' to the rest of the country.

REFERENCES

- Izvorski I, Gürgen E. Growth, employment and real incomes. In: Gürgen E, Snoek H, Craig J, McHugh J, Izvorski I, van Rooden R (eds). *Economic Reforms in Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan*. Occasional Paper 183. Washington, DC: International Monetary Fund, 1999.
- Abdymomunov A. *The Kyrgyz Republic: Economic Developments January–September 2000*. Memorandum of 8 November. Bishkek, Kyrgyzstan: The World Bank, 2000.
- NSC (National Statistical Committee of the Kyrgyz Republic), 2001. <http://nsc.bishkek.su/Eng/Home/Start.html>
- World Health Organization. *Health for All Database, European Region. January Update*. Copenhagen: World Health Organization, Regional Office for Europe, 2001.
- Kutzin J, Ibraimova A, Kadyrova N, Isabekova G, Samyshkin Y, Kataganova Z. *Innovations in Resource Allocation, Pooling and Purchasing in the Kyrgyz Health Care System*. HNP Working Paper. Washington, DC: World Bank, Health and Population Advisory Service, 2001 (forthcoming).
- Lewis M. Informal health payments in transition countries: issues, trends and policy implications. In: Mossialos E, Dixon A, Figueras J, Kutzin J (eds). *Funding Health Care: Options for Europe*. Buckingham, England: Open University Press, 2002 (forthcoming).
- Abel-Smith B, Falkingham J. *Private Payments for Health Care in Kyrgyzstan*. Report to Overseas Development Administration, Health & Population Division, Central Asia. London, 1995.
- Blomquist J. *Results and Recommendations from the Social Services Household Survey of Jalal-Abad and Osh Oblasts, Kyrgyz Republic*. TA No. 2688-KGZ, Social Services Delivery and Finance Project, Kyrgyz Republic. Prepared for the Asian Development Bank. Abt Associates, Inc., 1997
- Falkingham J. *Kyrgyz Household Health Finance Survey 2001: Preliminary Report*. Report on DFID-funded survey. London: London School of Economics and Political Science, 2001.
- NSC (National Statistical Committee of the Kyrgyz Republic). *Sociological Household Survey on Health Care Matters*. Preliminary report on DFID-funded survey. Bishkek: National Statistical Committee, Department of Sample Surveys, 2001.
- Schüth T. *People's Perspectives on the Co-payment Policy*. Rapid Appraisal Study conducted in the pilot areas of Chui and Issyk-Kul oblasts. Bishkek: Swiss Red Cross and WHO/Kyrgyzstan, 2001.
- Kutzin J. The appropriate role for patient cost sharing. In: Saltman RB, Figueras J, Sakellarides C (eds). *Critical Challenges for Health Systems in Europe*. Buckingham, England: Open University Press, 1998.

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