Health systems in transition: learning from experience

The period following the break-up of the Soviet Union has brought enormous political and socioeconomic change to the European Region. The health sector has not been spared the effects of transition, and the countries emerging from the process have each engaged to varying degrees in health system reform. It is at last possible to reach some judgement about how this process has unfolded, to identify successes and failures, and to understand better the scale and nature of the remaining challenges. This book draws on the experience and lessons learned in the Region over the past ten years of transition in key health systems areas, such as health care financing, the restructuring of hospitals, public health, gains in health system quality, fostering citizens' rights and mobilizing communities for health. It serves as a valuable resource for policy-makers, academics and donor institutions working in the Region.

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European
Observatory
on Health Systems and Policies

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The European Observatory on Health Systems and Policies is a partnership between the World Health Organization Regional Office for Europe, the Government of Belgium, the Government of Finland, the Government of Greece, the Government of Norway, the Government of Spain, the Government of Sweden, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science and the London School of Hygiene & Tropical Medicine.

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European Observatory on Health Systems and Policies

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European Observatory on Health Systems and Policies:
WHO Regional Office for Europe
Government of Belgium
Government of Finland
Government of Greece
Government of Norway
Government of Spain
Government of Sweden
European Investment Bank
Open Society Institute
World Bank
London School of Economics and Political Science
London School of Hygiene & Tropical Medicine

www.observatory.dk

ISBN 92-890-1097-5

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Foreword

The United States Agency for International Development (USAID) commends the European Observatory on Health Systems and Policies for publishing these important papers on health care in Europe and Eurasia as part of its distinguished publication series.

Meeting the needs of its citizens for adequate health care has been challenging for the countries of central and eastern Europe and Eurasia over the past ten years. The region has struggled to maintain health systems de-capitalized by worsening economic conditions and the transition to a market economy. It has faced new health challenges, including rapidly growing threats of HIV/AIDS and tuberculosis, as well as the chronic diseases of ageing populations. But with new problems came new opportunities, such as improved diagnostic and treatment regimens; a worldwide communications revolution; a vast expansion of public-private partnerships; and the public commitment of world leaders to address health problems, both within their home countries and at a global level.

These papers which share the lessons learned from a decade of experience working to improve health care systems and health in the region are very relevant today as we in USAID increase our assistance in this critical sector. They come from a conference which USAID sponsored on *Ten Years of Health Systems Transition in central and eastern Europe and Eurasia* with the World Health Organization Regional Office for Europe, the World Bank, the Open Society Institute, and other development partners. More than 700 participants from 37 countries attended.

The Agency wishes to acknowledge the authors for the high quality of the papers, the individual contributions of each conference participant who presented, and the American International Health Alliance for its assistance in contracting and reviewing the papers.

The book is available online on the Observatory's website at: www.observatory.dk.

The final papers and the 125 conference presentations can be found on the USAID conference website at www.eurasiahealthtransitionconference.org/.

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Foreword

Central and eastern Europe and the former Soviet Union have faced profound challenges as a result of the political and economic transition. Human health and health systems suffered in the region as policy makers struggled with profound structural changes coupled with reduced budgets, lack of appropriately trained staff, and rising poverty levels. Following this tumultuous period, comes a critical opportunity to assess the progress, challenges and achievements of health sector reform as well as to prepare for the next phases of reform.

In response to the rapidly changing international development landscape, donor and multilateral institutions have become increasingly aware of the value of partnerships. The *Ten Years of Health Systems Transition in central and eastern Europe and Eurasia* conference held in Washington, DC July 28-31, 2002 represented an excellent example of partnership. It brought together various institutions with key policy makers and stakeholders from the region to review the evidence on health reform and to address the coming challenges.

Within the framework of the conference, critical themes emerged which will require increased attention, such as the growing regional threat of HIV/AIDS, Tuberculosis and drug use, the impact of poverty, the critical importance of a free media and the role of the private citizen as a key stakeholder in health reform and the development of an open society.

We applaud the efforts of all involved in bringing this publication to life. As active members of European Observatory on Health Systems and Policies partnership, we stand firm in our commitment to support and promote evidence based policy making in the region.

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Acknowledgements

The editors would like to thank the following individuals for their contribution to this publication.

Olusoji Adeyi
World Bank

Jan Bultman
World Bank

Reinhard Busse
Technische Universitaet Berlin

Forest Duncan
U.S. Agency for International Development

Suzanne E. Grinnan
American International Health Alliance

Paul Holmes
U.S Agency for International Development

Anne Jakobsen
The European Observatory on Health Systems and Policies

Joe Kutzin
World Health Organization

Jeffrey V. Lazarus
World Health Organization

Peter Makara
Council on Health Research for Development

Nickl Muller
European Observatory on Health Systems and Policies

Tom Novotny
Institute for Global health

Jesper Rossing
N9ne Media

Charles Shaw
Rodean School

Tom Rathwell
Dalhousie University

Magdalene Rosenmöller
IESE Business School

Kate Schecter
American International Health Alliance

Nina Schwalbe
Open Society Institute

James P. Smith
American International Health Alliance

Helen Vieth
World Health Organization

This publication was made possible through support provided by the Office of Democracy, Governance and Social Transition, Bureau for Europe and Eurasia, U.S. Agency for International Development (USAID) under the terms of a subgrant with the American International Health Alliance (AIHA). The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID or AIHA.

Chapter 1 Overview

by Josep Figueras, Martin McKee, and Suszy Lessof

The decade since the breakup of the Soviet Union has brought enormous political and socioeconomic change. The health sector has not been spared the effects of transition, and the countries emerging from the process have each engaged to varying degrees in health system reform. It is at last possible to reach some judgement about how this process has unfolded, to identify successes and failures, and to understand better the scale and nature of the remaining challenges. It is now timely to take stock of these experiences and to draw lessons for the future development of health systems in this complex and dynamic region.

In all countries, one of the greatest challenges facing those undertaking health system reform is how to develop an overall "health system perspective." In practice, policy-makers tend to focus their attention on individual initiatives that all too often are perceived as "magic bullets" that will cure all of the health sector's ills. We take instead the position that the need is for a better understanding of the intricacies and complexities of health systems as a whole, and the nature of the interrelationships between their different elements. This publication aims to provide such a perspective, offering an integrated framework that encompasses main health system reforms in the countries of central and eastern Europe (CEE) and the newly independent states (NIS) of the former Soviet Union.

In addition to the marked deterioration of the health of their citizens, health systems in the region had to respond to a variety of economic and political pressures as well as to long-standing health care problems, including a low quality of services characterized by poor responsiveness to citizens and outdated clinical practices. Clearly, the approach to and depth of health reforms varied between countries in light of their particular contextual and health system circumstances. However, it is possible to identify a series of reform themes that are common to many of the countries and that may help to understand the reform phenomenon in the region. The key themes singled out for analysis in this volume are strengthening health care financing, reconfiguring the continuum of care, improving the quality of health services, linking with the community, and advancing public health.

Following this overview chapter, chapter 2 of this volume provides a brief analysis of the main health challenges encountered in these countries. Chapters 3 to 7 address each one of the identified reform themes, in turn outlining the evidence and drawing lessons for future reform. The chapters were commissioned by the United States Agency for International Development (USAID) in preparation for the 2002 Conference "Ten Years of Health Systems in Transition in Centeral and Eastern Europe and Eurasia." The papers have been subsequently updated and further reviewed for this publication.

This overview chapter summarizes key points for each one of the reform themes. For each theme, it highlights a number of priority areas and outlines key successes, failures and future challenges. At the end, the paper looks at the process of reform to identify those factors (whether contextual or linked to capacity) that begin to explain why some reforms are implemented successfully and others are not.

Strengthening health care financing

Much of the initial reform effort in the region has focused on the key theme of health system financing. Financing includes funding (that is, the collection and pooling of financial resources) and the allocation of these resources to providers (that is,, the purchasing of services). In most countries the intention of the reform was to shift away from the centralized and integrated tax-based state model of Semashko to decentralized, contract-based social health insurance reflecting the core features of the western European Bismarck model. The shift has changed the way money is collected and pooled and created a new relationship between purchasers and providers of care. It was intended to earmark or protect health funds, prompt greater efficiency and responsiveness and signal a move away from the perceived shortcomings of the past. It often took place, however, against a backdrop of socioeconomic and institutional upheaval. The CEE and NIS therefore face a new and challenging environment, in terms both of the total funding of health care and also of the effectiveness with which they collect and pool resources and purchase services.

On the funding side, three important areas demand consideration. First, *the implementation of effective health insurance systems*, which has been central to financing reform in a large number of countries, has proved problematic. General government revenues often continue to play a significant funding role, despite the switch to social health insurance contributions. There is now a substantial body of evidence that helps to explain this and other experiences of implementing insurance. Where social insurance has been seen to fail, failure can be attributed to the weak macroeconomic context, the reliance of poorer countries on out-of-pocket payments and general taxation, low levels of employment and formal activity within labour markets, poor compliance and high levels of corruption and lack of transfers from tax or social security funds to health insurance. Tackling these issues will not be simple. Wider economic recovery and institutional capacity-building may go some way towards increasing the revenue collected through payroll taxes, but further efforts to ensure compliance will also be necessary, including dealing with corruption.

Second, *defining a more realistic benefits package* will be a key strategy in ensuring financial sustainability. The commitment to fund both universal coverage and a truly comprehensive benefits package is unrealistic and unsustainable in many countries in the region. Despite political and technical difficulties and concerns about equity, countries may need to consider explicitly defining more limited entitlements to ensure that public revenues are targeted at the most cost-effective interventions and the poorest segments of society and protect public health.

Third, *addressing informal payments* must be a major priority in many countries. Data on their extent in a range of eastern European countries suggest they are widespread in both ambulatory and hospital care, and that in a small number of NIS countries they form the largest source of funding. Informal payments are a response of the health care system, particularly providers, to the lack of financial resources and a system that is unable to provide adequate access to basic services. Cultural and historical factors also help determine the response of patients, although the implications for access, equity and indeed efficiency are highly problematic. Formalizing payments and establishing systems of prepayment (or insurance) is extremely difficult none the less, and requires considerable government and technical capacity and the explicit recognition of external constraints.

On the purchasing side, two areas of reform have been particularly important. First are efforts to enhance the *cost-effective purchasing of services* through the separation of purchaser and provider functions, ascribing purchasing functions to insurance funds and employing contracts as the main tool for resource allocation. The introduction of these new models in the CEE and NIS has been challenging for a number of reasons, including the inadequacy of funding and the unpredictability of funding flows, low provider autonomy, the absence of routine information systems, a lack of timely information and sparse technical capacity and information management skills. Second, the introduction of *performance-related payment systems for providers* is a widespread strategy for enhancing efficiency. Capitation has been introduced for primary care services in many countries, and it is common for new hospital payment systems to be developed that link payment to a defined unit of hospital output. The results to date have been mixed. This is due to a number of issues, including the fragmentation of public sector pooling and purchasing, poor design of payment systems that do not dovetail or complement each other, institutional impediments and vested interests, the financial deficits of public providers and limited capability to monitor inputs or outcomes.

To move towards fulfilling the aims underpinning the reforms of health financing, both funding and resource allocation need further attention. Mechanisms for pooling resources need to be strengthened with other sources of public expenditure included with social health insurance contributions to ensure the most cost-effective use of funding. The technical and administrative capacity of purchasers also needs to be strengthened to exert maximum pressure for provider efficiency. This requires the development of information and monitoring systems that can deliver timely and accurate data on provision and the training of personnel to use this information effectively. Similarly, government regulation and stewardship will be vital in ensuring that purchasers act in the best interests of the population.

Regardless of how well the collection and pooling of funding is organized and the extent to which resource allocation is enhanced, these can only be means to an end. The ultimate endpoint is an improved impact on health outcomes, which depends in turn on the quality and cost–effectiveness of the services provided. Arguably, the initial focus of much of the reform effort in the CEE and NIS on creating a structure of financial incentives has been at the expense of the reform of health care delivery itself. Clearly, the incentives created have not proved sufficient to prompt the “spontaneous” improvements in the delivery systems. Indeed, it now emerges that for these financial reforms to succeed in their overarching objectives they need to be accompanied by an independent, in-depth but articulated reform of the provision of care.

Reconfiguring the continuum of care

The nature of health care provision has changed almost beyond recognition over the past 50 years, in terms of the diseases being treated and the opportunities to diagnose and treat them. Many once common diseases, especially childhood infections, have been significantly reduced or eliminated. Ageing populations now experience multiple chronic diseases. Innovative treatments have turned many diseases that were once fatal into lifelong conditions that people die with rather than from. Collectively, these changes can be characterized as a shift from simplicity to complexity. They have transpired in the east of Europe as well as the west, and demand new responses from health systems regionwide.

The classic Soviet model provided basic care, including immunizations and first aid, to dispersed populations. It may have been suited to previous, more straightforward conditions but is no longer adequate. There now needs to be a more complex interaction of health professionals with a range of skills, each intervening when necessary. The management of diabetes is a case in point. While most care will be self-managed in conjunction with a primary care team, there should always be allowance for recourse to a range of different specialists. Each element must be in place and, just as importantly, there must be clear guidance to ensure that patients can find their way through this complexity.

The policy-makers of the CEE and NIS are only beginning to address this, not least because of their focus on financing and the absolute shortage of finances experienced. If they are to bring about the changes in health care delivery that will meet the complex needs of patients, they face four main dilemmas. They must improve the performance of hospitals, restructure health care facilities, shift the boundaries between primary secondary and tertiary care, and strengthen and modernize primary care. These issues cannot be considered in isolation but as part of a single, integrated delivery structure or “continuum of care” and within the broader health system context.

First, the *effective improvement of hospital performance* includes upgrading the organization of hospital services and increasing the efficiency and appropriateness of services. Decentralization of management, combined with shifts in payment mechanisms, have been pursued as the key strategies in delivering better performance. There has not, however, been sufficient investment to ensure that the information systems needed to measure performance are in place, or that staff have the appropriate skills to review their actions or to act on evidence. Nor are there funds to ensure that facilities are appropriately designed and equipped. Health professionals and managers will require adequate tools to deliver appropriate services. This implies the need for replacement of obsolete facilities and equipment, new training programmes, and clear standard-setting with access to monitoring and feedback and the wherewithal to take steps to enhance performance. These needs are of course linked with the efforts to improve quality (see below) but must also be seen as fundamental to improving the continuum of care.

Second, *hospital restructuring strategies* are needed to address the oversupply of beds and the inefficiencies of secondary and tertiary services. Hospital capacity in many countries of the region is excessive with basic indicators, such as the ratio of hospital beds to population, suggesting that levels of provision in some countries are about 50% higher than in the west. There have been cuts in bed numbers, but these have been patchy across the region. Moreover, the concept that restructuring revolves around bed closures is far too simplistic. It fails to recognize the very different role of hospitals in this region or to acknowledge that in many cases they are still the main providers of social care. While this is rarely the most cost-effective means of service provision, patients have few other options. Closures will certainly be desirable at some stage but they can only follow the provision of alternative, and more appropriate, facilities and the creation of social support systems.

Third, *shifting the boundaries between primary care and hospitals* will be key to any successful reform process. It raises the issue of how and when patients are admitted to hospital and how and when they are discharged. There is clear evidence that many patients who could be more appropriately managed in a nonhospital setting are admitted to hospital. It is also the case that patients who could be discharged are kept in even after they have ceased to receive treatment. Both these problems have a common solution: the provision of alternative and more appropriate and cost-effective care settings with a simple and uncomplicated interface between them.

Finally, and central to the above, there must be effective strategies *for strengthening and modernizing primary care*. In communist-influenced systems, primary care was the poor relation of the hospital sector. Staff were poorly paid and of low status, and the inadequacy of their training, facilities and equipment meant that their role was limited to little more than referring patients for specialist care or regulating sickness absence. Almost all countries have accepted the need for reform, and they have achieved varying degrees of progress. Reforms have tended to centre on the development of a concept of family medicine, with all that implies about continuity of care, capitation payments and physician responsibility. These need to be pushed forward with organizational reforms, to give primary care professionals or institutions more control over levels of care and allow them to steer patients to the most appropriate care setting, whether it be in a hospital, nursing home or a patient's own home. There also needs to be an expansion of the range of services and functions that primary care delivers, including new or enhanced services currently seen as "secondary," provided that the primary care context can be shown to be appropriate in terms of effectiveness and efficiency. This requires that a full range of primary care professionals are furnished with the necessary skills and that effective communication between levels can be established to allow primary care to successfully lead the process of the "virtual integration" of the different modalities of care.

Reforming delivery is complex, and the problems are compounded by the multiple demands placed on health ministries, which are expected to manage change. Their capacities are already stretched by the day-to-day operation of the health care system, and few therefore have been able to step back and see how health might best be promoted. Nevertheless, even given additional capacity there are no simple rubrics for achieving a seamless continuum of care that balances affordability, equity and efficiency in a complex environment. None the less, it is the role of policy-makers to take a whole-system perspective and develop a clear health strategy with established rules within which the various health care providers can work. This will depend on prerequisites such as effective regulatory systems and mechanisms to promote participation. It will also require that the quality of services at all levels of the health care system can be monitored effectively.

Improving the quality of health services

Reform programmes have consistently underestimated the complexities involved in introducing new skills and genuinely changing practice, but reforms of provider organizations can only improve outcomes if they change the quality of clinical practice. Many commentators have argued, therefore, that for reform to be effective it must be "bottom up" and start with improvements in clinical practice and with the training and standards of health professionals. These will depend on measures that include a range of accreditation, evidence-based medicine and quality assurance mechanisms, and on appropriate human resource policies. These systems and human resource development aspects are addressed in turn.

The strengthening of quality improvement systems depends on the existing clinical context and the legacy of the past. At the outset it must be conceded that the promotion of high-quality care in the CEE and NIS is made difficult by the lack of resources, the failing infrastructure and inappropriate management structures inherited from the communist models. Nevertheless, even allowing for these constraints, it is apparent that the quality of care provided is often much worse than it need be. This is particularly striking when seen in contrast to western European and North American preoccupations with quality over the past three decades.

Many of the ideas underlying the increased emphasis on quality in the west had their origins in manufacturing and service industries and reflected concerns with efficiency and with consumer responses that did not feature in command economies. They saw management systems develop to streamline production (for example, in car manufacturing), to ensure customer satisfaction (the hotel industry) and reduce errors (the aviation industry). Organizational theories on concepts of quality management have also become increasingly influential in health care. In line with work in the wider economy, the emphasis in health has shifted from structures, standards and norms to outcomes and processes linked to outcomes by scientific evidence. This "outcomes movement" underpinned the approach of the American Institute of Medicine in generating a definition of quality in health care: "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge". This allows the concept of quality to be operationalized and raises many important issues, including the meaning of professional knowledge and the definition of outcomes, and there is now an extensive literature on these issues.

It is clear that clinical guidelines should no longer be based on the opinions or instincts of senior physicians, but must stem from systematic reviews that critically appraise the evidence of relevant research and combine the results using explicit techniques such as meta-analysis. It is also clear that the production of clinical guidelines in itself is not sufficient to change clinical practice. A central challenge, therefore, is how to put evidence-based guidelines into routine clinical practice and how to change in reality the two key components that constitute care – its technical content and the organization of its delivery.

It might be supposed that this would be more difficult in the west, with its traditions of physician independence and the historical role of anecdote and opinion in determining clinical practice. It might also be supposed that the communist-inspired traditions of standards and norms would provided a strong basis for applying guidelines to enhance the quality of care. In reality the west has experienced a revolution in its approach to evidence, albeit a gradual one, while the CEE and NIS have been characterized by a failure to develop a culture of evidence-based medicine and the continuing and widespread use of ineffective treatments.

This is not to say that there has been no progress in the region. Since transition, individuals in many countries have formed professional associations to promote quality in health care. It has also proved possible to introduce systems to enhance quality of care, with beneficial effects on effectiveness, efficiency and humanity of care in some areas. Yet there have been many problems. The command-and-control nature of Soviet-inspired systems, which might have eased implementation, has actually prevented change, in large part because of an initial reluctance by those in positions of leadership to delegate decision-making to more junior staff. It is only gradually, and in limited areas, that leaders have became more open to this way of working; and have been able to identify new and often more satisfying roles for themselves in improving services. One of the greatest challenges has been and continues to be the empowerment of those involved, so that the message that change is possible is conveyed and so that practitioners can develop a real sense of ownership of quality initiatives.

This touches on the second dimension inherent in achieving quality care, which is *improving the quality of health professionals*. This requires that the staff have the appropriate and necessary diagnostic, technical and caring skills and that the right mix of professionals is in place. The centrally planned approach before transition saw the oversupply of doctors, rigid demarcation between professional groups, the underdevelopment of the nursing role and an inappropriate skill mix. Therefore, priority areas are: reform of human resource planning to address the new balance of staff required and to ensure production of more family practice specialists, public health professionals (doctors, nurses and others) and managers; training programmes, including continuing education for developing and maintaining the right skills; and strengthening professional standards and accreditation.

It will also be crucial to enable and motivate staff so that they are in a position to deliver quality care and contribute to the ongoing improvement of services. This implies addressing levels of pay, employment security and the conditions under which all staff work. Certainly, staff who are expected to rely on under-the-table payments, who fear losing their jobs or who have to work without access to the equipment needed to treat patients adequately cannot be expected to deliver quality care or to respond appropriately to patients' needs in the long term.

Improving the quality of health services will depend therefore on the expansion of evidence-based medicine and the application of modern quality improvement methods, including the appropriate treatment of staff. These are critical issues that must be explored over the next 10 years of health reform if there are to be real improvements in the quality of care. Certainly, as long as there is widespread use of ineffective treatments, increasing the level of funding for health care will increase waste rather than bringing about substantial improvements in health. If the goal is to improve the health of the population, interventions funded from scarce resources must be based on scientific evidence of their effectiveness and carried out by suitably qualified staff applying best practice and monitoring and responding to outcomes.

Linking with the community

In many respects, total quality of health care and health care services implies appropriate treatment of individuals and the involvement of their communities. Certainly, empowering the citizen and strengthening community participation have been referred to extensively in reform programmes that seek to respond to consumers' needs, decentralize power and become increasingly democratic. However, the legacy in the CEE and even more so in the NIS have not made this easy. The countries of the region have a recent history of highly formalized, state-centred systems, with only a limited presence of civil society and formulaic approaches to participation in social and public life. The nineteenth-century traditions of central Europe were subsumed by communist state monopolies, and civil society gave way to quasi-social organizations in sport, culture and education, which were dominated by the state. Individual participation in the running of the health system was virtually nonexistent, with no choice of providers and low consumer responsiveness. Many countries in transition have sought to address this issue, although it often involves only lip service, as in the broad participatory strategies described in their reform programmes. It has often been difficult, however, to overcome resource constraints, cultural blocks and professional resistance in linking either with the individual or with the community.

Empowering the citizen has been seen as an important focus of reform, not least as a means of prompting system changes and increased responsiveness. Four major sets of strategies are included here: allowing consumers a choice of provider and/or insurer; encouraging patient participation in clinical decision-making (as co-producers of care); promoting citizen participation in the running of the services at various levels (for example, in agreeing to the basic package of care); and introducing patients' rights legislation. These strategies are included in many reform programmes, yet so far progress has been mostly at the level of good will or rhetoric, and only limited change has actually taken place. The most positive evidence of action has been in the areas of patient choice and patients' rights legislation.

An increase in choice of provider by patients is a relatively common goal of reforms, and the introduction of health insurance and of contracting with providers has in some cases allowed consumers to select general practitioners, specialists and hospitals. However, in reality, choice is inevitably constrained by difficulties of access, exacerbated by the short supply of certain services and the widespread use of informal payments. In some cases it exists on paper only. None the less, the issue is at least recognized. Similarly, in a small number of countries consumers are also allowed to choose between competing insurers. This, however, has proved to be difficult to regulate and has had an unintended negative impact on efficiency and solidarity.

The introduction of patients' rights legislation and patients' charters is the other main area of progress, and charters have become a common feature in a number of countries, particularly in the CEE. These set out a series of rights for patients, outline standards covering issues such as access to care or waiting times, and establish complaints procedures. The main challenge is that in most cases there are no effective mechanisms in place to ensure implementation. Without any legal or financial sanctions to promote compliance with standards, they often dwindle to formal statements of principle with few real consequences.

Strengthening community participation might reinforce the rights of the citizen, but this dimension goes beyond the individual perspective to consider the role of the community, reflecting the wider democratization of the CEE and NIS. It is complicated by the fact that, while there is good evidence about the positive contribution of social networks to health status, much less is known about how best to empower communities as social actors in health systems.

Community participation strategies are generally new to communities in the region, at least in operating on a formal level and outside government control. They are especially new in the health sector. Health reforms have begun to include stakeholder analysis, and this has expanded to address intersectoral partnerships for health reform and health development. However, there is little evidence yet of the creation of sustainable civil society initiatives for health in communities. This is despite the significant role of nongovernmental organizations (NGOs) as intermediaries in this respect. The rapid proliferation of NGOs in the region, especially in countries such as Hungary and Poland, may be encouraging in its broadest terms. However, only a small percentage of them work with health issues, and those that do tend to represent groups of individuals responding to a deterioration of services. They tend not to represent a movement explicitly promoting health or advocating for healthy public policy. Furthermore, many NGOs lack proper technical expertise, management and training in advocacy techniques, and most if not all are poorly funded.

Although the civil society sector for health continues to be weak in many countries, a series of successful programmes launched by the WHO Regional Office for Europe has provided an opportunity to foster an exchange of experiences within and between local communities on health and capacity-building issues. Programmes such as the Healthy Cities project, the Safe Communities Initiative and the Health Promoting Schools project have stimulated the growth of local community action for health, and suggest that citizen empowerment and community participation will play an increasing role in the health systems of the CEE and NIS.

Advancing public health

The ultimate reform strategy would be to ensure that populations were healthy and that there was no need for health services. Certainly, while health services play a significant role in reducing mortality and improving quality of life, much of the health gap between west and east can be addressed only through wide population and intersectoral strategies. In this context, reform debate in the region must shift from “health care reform” to “health reform.” Ultimately, and ideally, policy-makers should be able to act across the entire spectrum of policies (including personal, population-based and intersectoral interventions) on the basis of the contribution that each can make to enhancing population health.

The first step in improving population health is to draw on the extensive research available to better understand why health is so much worse in this part of Europe. As noted in chapter 2, this is attributable to a range of factors acting at different levels, with many of the well-established risk factors linked to chronic disease, premature mortality and morbidity being especially high in the region. Smoking has traditionally been common among men in the region, with visible and current consequences. The sustained onslaught of western tobacco companies, often in collusion with senior politicians, promises continuing problems and the increasing inclusion of women in the mortality and morbidity data. Diet is also a major factor. It is typically high in fat content, and the relative lack of year-round fruit and vegetables is now also being recognized as an important cause of chronic disease. Alcohol is an especially important problem in this region, as was apparent from the spectacular reduction in deaths that accompanied the 1985 anti-alcohol campaign in the Soviet Union. The impact of alcohol is especially large, as it not only contributes to cardiovascular and liver diseases but also plays a major part in the very high death rates from injuries and violence. Finally, infectious diseases are returning with a vengeance, but in much more complex guises, as with HIV infection and drug-resistant tuberculosis.

The public health system established in the Soviet Union in the 1920s and 1930s did have many important achievements, in part because of the high political priority given to it. The seriousness with which the threat of disease was regarded is illustrated by Lenin's dictum in respect of typhus that "If communism does not destroy the louse then the louse will destroy communism." However, this extensive but basic system is no longer adequate for the complex challenges that we face. Despite the potential contribution that public health services could make, they have received remarkably little attention in the process of reform so far. Any changes that have occurred were often a by-product of wider organizational change. The two priority areas for reform must be restructuring public health services and strengthening health promotion.

Restructuring public health services is a necessary response to the outmoded structures in place and the increasing recognition that public health has a strategic role in health systems. Before 1990, public health services in the CEE and NIS were organized in line with the Semashko model. Responsibility for public health and prevention was vested in the highly centralized Sanitary–Epidemiological (Sanepid) services and focused on a traditional and limited core of public health activities. Perhaps the most tangible achievement of the Sanepid system was its contribution to vaccination programmes and communicable disease control, which achieved remarkable successes across the region. However, it was relatively ineffective in combatting problems such as environmental pollution, occupational diseases and noncommunicable diseases. Nor was it effective in producing any of the information that might have allowed public health specialists to assess needs or respond effectively to emerging patterns of ill health. Finally, the system was singularly ill-equipped to engage with the public to promote health or encourage behavioural change.

Public health services did undergo a series of changes during the 1990s, with decentralization of powers to local authorities, fragmentation and blurring of responsibility. These were not purposive reforms and, coupled with the decline in funding of the Sanepid system, they led to a decline in the quality of those functions that were previously successful (specifically communicable disease control). There has been subsequent underinvestment in the development of relevant skills and in the information systems on which modern public health depends. There have been some notable successes, and cohorts of specialists equipped for a more strategic role have been trained, but the reform of public health services still has a long way to go.

Strengthening health promotion is the second public health dimension that requires priority attention. It was largely ignored in the CEE and NIS before 1990 but has benefitted subsequently, being recognized as a core public health function in many countries in transition. In general, preventive strategies such as those aimed at drug users and HIV prevention have received most attention and have been best linked with emerging civil society. There is, however, a relative lack of intersectoral action. Blocks to working across sectoral boundaries include a general attitude that population health is largely a product of medical (curative) services and not a cross-sectoral issue and territorialism of ministries and difficulties in collaborating between agencies. In addition, there are explicit problems in adopting and enforcing public health legislation that creates conflict with key interest groups (for example, tobacco lobby efforts have often prevented advertising bans or tax increases). None the less, there are networks and activities that encourage intersectoral action (Healthy Cities, Health Promoting Schools, health impact assessment) and demonstrate that success is possible, particularly at the local level.

The challenges facing public health remain considerable, but experience to date has helped identify key principles that should underpin change. The first is to preserve the good. The inherited system had successes, especially in immunization and child health, and while these need modernizing they should not be abandoned. The second is to attack the bad. While transition has brought benefits, it also has a downside. Just as open borders can increase access to "healthy" products (year-round fresh fruit and vegetables), they also have increased exposure to risks (cigarettes). The third is to reform the institutions, and the fourth is to increase the level of skills available. Almost all countries urgently require a restructuring of public health services to allow them to respond to the complex challenges ahead, and almost all have a major shortage of individuals trained in modern public health able to lead the transformation. There are some well-established and successful schools of public health (in Croatia, Hungary and Lithuania) but there is still a great unmet training need for those already working in the field and for the next generation of public health professionals. Fifth, governments must protect the public health budget and recognize that public health services are a public good. If the state does not invest in them then no one will, with adverse consequences for everyone. Finally, there is a need to think much more widely than before and to adopt new forms of and approaches to interdisciplinary and intersectoral working.

Implementing successful reforms

Health reform has been harder to implement than expected, and too often it has had unintended consequences. Many of the difficulties experienced have had more to do with the complexity of changing customs and practices than the actual content of the reform programmes, and to a significant extent the success or failure of reform has depended on the ability of policy-makers to implement and manage change.

The reform debate focuses increasingly on those contextual and process factors that enable or obstruct change. The experience of the CEE and NIS to date in implementing health reform signal those that are most relevant in this region. None the less, the key issues group around generic concerns and include context, stakeholders, effective stewardship, steering implementation processes, and building institutional, human and management capacity.

Understanding the context is fundamental. A key lesson for reform implementation is the importance of mapping and appreciating the impact of the social, political, cultural and economic context within which reforms take place.

The historical experience of countries, their national culture and popular customs all help shape expectations of the health care system and responses to proposed reforms. The ideological dimensions of national politics and of government policy will clearly shape reform content and will also have an impact on approaches to implementation. Similarly, long periods of political change and instability will inevitably affect the political context and tend to undermine the sustainability of reform efforts, although they may also represent windows of opportunity. Clearly, major political and social transformation creates the possibility of introducing change and may give new governments the legitimacy to execute policies that is otherwise denied. The seizing of these historic opportunities is amply illustrated across the region where new democratic governments have often implemented sweeping reforms. However, in many instances this political "honeymoon" was short-lived.

Another important factor contributing to (and being shaped by) context is the role of external influences in reform development and implementation. Many reform notions have been developed in western countries and transferred across national boundaries to the region. On occasion, countries have been lured into adopting structural health sector arrangements that are incompatible with their health sector traditions, cultures and values, and that they have neither the societal interest nor the organizational capacity to sustain. International organizations sometimes contribute to this phenomenon through their activities. To make an effective and positive use of these external influences and evidence, countries need to develop a stewardship capacity (see below) and to adapt useful reform models to the cultural context, establishing clearly their own health sector objectives and managing donor inputs.

These contextual dimensions are complex to deal with, not least because of the difficulties of delineating and defining them. Other, more tangible, elements of context are easier to measure but no less powerful – economic context is a case in point. The continuing macroeconomic pressures in the region constitute a major obstacle to implementing reform. The deep recession that followed the demise of centrally planned economies led to a significant decline in the financial resources available for health services, which inevitably had consequences for health care provision. In some NIS countries these financial cuts were of up to 50% of the health care budget. They created substantial flows of informal payments and can be shown to have slowed or stalled the implementation of health care reforms.

It is not surprising that economic retrenchment and decreasing health budgets should have affected the scale of reform and the extent of implementation. Many reforms (such as contracting hospitals) require substantial additional investments in management training and information systems in their start-up phase. Even when reforms are intended specifically to contain costs or generate savings (such as hospital restructuring), initial investments are required before the effects can be felt. This does not, however, lead inexorably to the conclusion that reform cannot succeed in the face of major financial constraints. Rather, the main contextual obstacle to implementation of change may be unrealistic expectations about the likely benefits of reform, both from decision-makers and the population at large. For instance, in many NIS, market reforms were expected to increase quality while maintaining universality in the face of dwindling financial resources. The demands made of the reforms were unsustainable, and early experiences were inevitably deemed failures, which in turn hampered further implementation. Policy-makers may begin to address these dilemmas by acknowledging the full financial implications of reforms proposed and tuning expectations accordingly. This means that implementers may need to be less ambitious, maintain some current structures, and focus on affordable areas of reform and on marginal but high-priority shifts between areas.

Given that the contextual issues are addressed, reform development and implementation will still require that policy-makers are effective in *dealing with stakeholders*. Health system reform inevitably involves a large number of stakeholders, from patients and professionals to politicians. The ability to identify and then deal with them is key to implementation, and three strategies play a particularly central role.

First, ensuring the political willingness to support the reform will be key to success. A lack of political will has posed a major obstacle to reform in several countries of the region and explains some of the slowness in introducing change. This is not surprising, particularly since the complex nature of health care reform demands major changes in the status quo and creates benefits felt only in the longer term, which inevitably clashes with the short-term nature of many political agendas. The difficulties of achieving change in this environment are exacerbated in some CEE and NIS countries by weak coalition governments and political instability. Frequent political changes, not only of governments and ministers but also of high-level officials within the relevant ministries, have often led to multiple overlapping or competing reform proposals and overall inaction. In contrast, reforms backed by a strong political will within a politically stable setting have sometimes achieved success in otherwise unfavourable circumstances. There are no simple ways of securing political commitment to reform, but strategies that have been shown to work include using comparative analysis to highlight how reform models work, pilot projects to demonstrate the impact of particular reform strategies, decentralizing implementation to local levels, and consensus-building from the outset to maximize political support for reform.

Second, setting strategic alliances with key health sector actors is central to implementation efforts. There are numerous examples in the region of pivotal stakeholders, such as the medical profession having blocked or enabled reform. In many CEE countries, for example, physicians played a central role in the introduction of social health insurance in the expectation that this would increase their income. While there is a good understanding of the importance of stakeholders and of forming strategic alliances with them, it is less clear how best to steer diverse interests into policy coalitions to support reform. Every reform effort needs, none the less, to be preceded by a political mapping of key stakeholder interests and to include the development of alliances; and, if possible, the cultivation of policy champions if implementation and sustainability are to be secured.

Finally, public support of reform is becoming increasingly important in much of the region. In the former communist systems the public made little real contribution to the running of the health services, but there has been a growth of civil society and the recent development of health NGOs and consumer groups. Furthermore, many new reform strategies give the public a major role in areas such as choosing providers. This has largely been an untapped force in the region, but must increasingly be an important reference point for policy-makers who want to ensure reform success.

Steering the process or the design and the management of the implementation process itself is also crucial. Inadequate planning and management of implementation have helped to account for numerous reform failures. Key strategies here include: making reform objectives explicit; establishing an appropriate management structure; allocating responsibility clearly; assessing available financial, technical and managerial resources; using a range of mechanisms and tools, including legislation and financial incentives; timing and pacing reform appropriately; and putting in place appropriate information and monitoring systems. Overall, the effectiveness of these organizational management techniques is uncontroversial, but two strategies deserve special consideration given the characteristics they take on in this region.

First, the development of enabling legislation has been a major challenge to reform implementation in the CEE and NIS. Many countries in the region have failed to enact appropriate legislation owing to the political uncertainty resulting from short-term coalition governments. However, to have legislation in place does not necessarily generate subsequent implementation. Legislation in parts of the NIS, typically in the form of inadequately thought-through presidential decrees, acts as a formulaic expression of official values to which no one subscribes in practice.

A second strategy in steering the process of reform, selecting the most appropriate timing and pacing of reform, has been the subject of some controversy. Choosing the most appropriate timing, perhaps when there are specific and supportive social or political circumstances, is an important factor in achieving successful implementation. As noted, recent periods of major social transformation have proved to offer windows of opportunity for radical change. Rapid "big bang" reforms such as in the Czech Republic were effective in bringing about change in a short time. However, experience shows that for this to be sustainable and effective in the long term, two prerequisites are crucial: a degree of technical "certainty" as regards the reform model to be introduced, and a broad social consensus behind the chosen model. The lack of either one of these in some countries that underwent a "big bang" reform has resulted in major reversals.

A more incremental approach, whereby change is tested locally with pilot projects before being extended nationally, may be more effective. This approach yields more evidence about the effectiveness of different models and in the long run may lead to more socially sustainable policies. There are many successful examples of pilot projects linked to successful national reforms, such as the introduction of general-practitioner-based systems in some CEE countries. This is not to say that all countries undergoing incremental reform have done so by design or by following on from the results of pilot experiences. Often incrementalism has taken place by default and is explained by contextual factors, including political instability and macroeconomic constraints. Moreover, incrementalist approaches do have drawbacks. A slow pace of reform will allow key groups of stakeholders to organize resistance before change is introduced. Incremental approaches may also flounder when faced with the difficulties of generalizing the results of pilot experiences, with factors such as the self-selection of human resources in pilot sites or the lack of financial resources available to extend established best practice confounding implementation efforts.

Ultimately, the "best" approach to implementation in any country will depend on its particular contextual circumstances. However, there seems to be a consensus about the need to combine an incremental and flexible approach to reform with a series of small "bangs" that can put in place particular reform strategies, particularly in those cases where there is both organizational certainty and social consensus.

Building institutional, human and management capacity is also crucial to the success of reform implementation. Many reform strategies such as the introduction of provider markets require sophisticated information systems as well as substantial technical and managerial skills, which have been lacking in much of the CEE and NIS. The absence of these preconditions helps to explain the minimal progress achieved with some reform strategies in a number of countries in the region, and remedying these shortfalls will enable implementation.

A related factor in determining reform success is the extent to which there is institutional capacity, particularly in the public sector, to steer the reform process. The introduction of some complex organizational and market reforms, together with the decentralization of state functions, has highlighted the need to increase the capacity of the state for governance, monitoring and regulating new organizational relationships. A central factor in the failure of reforms in some countries has been the lack of capacity of health ministries to adopt these new functions. Two key contributory factors to this failure are the rapid turnover of public sector employees migrating to better paid jobs in the private sector, and the chaotic decentralization of authority to health insurance agencies and/or regions that has left ministries with accountability for implementation but little authority or capacity to drive reforms forward. These issues are further developed as part of the consideration of how to build an effective stewardship role for the state.

The world health report 2000, on health systems performance, identifies *ensuring effective stewardship* as fundamental to health systems. Stewardship is defined as having three main components: (*a*) health policy formulation – defining the vision and direction for the health system; (*b*) regulation – setting fair rules of the game with a level playing field; and (*c*) intelligence – assessing performance and sharing information. This concept combines many of the elements discussed above and underlines the importance of the state in ensuring effective reform implementation.

Effective government stewardship is key in ensuring the appropriate performance of all health system functions, and it becomes particularly important when introducing reform strategies. For instance, the introduction of market incentives, together with the loosening of direct managerial control and accountability mechanisms, may result in a series of perverse incentives that will require monitoring and regulation.

The analysis of experience in the region shows that the introduction of reforms succeeds only when they are accompanied by strong regulatory, managerial and information capacity, which is often lacking in countries. In other words, if the stewardship role of the government is weak, regardless of the merits or otherwise of particular reform models, they may lead to catastrophic results for the society.

If governments are to succeed, they must provide a clear policy vision that makes health policy goals and trade-offs explicit, demarcates the role and functions of the private sector, sets out a level playing field for the public and private sectors, and includes the definition of a basic package of benefits. Second, governments need to put in place appropriate information systems that allow monitoring of results of reforms and support the introduction of quality assurance mechanisms, such as accreditation of facilities and auditing. Finally, governments will need to construct a strong and efficient regulatory framework.

These demands highlight the importance of putting in place programmes to strengthen institutional governance aimed at public bodies and, in particular, ministries of health charged with steering health reforms. It will also be particularly important to plan for a new skill mix, and to introduce appropriate training programmes for existing and new human resources.

Conclusions

The paper outlines a conceptual framework that integrates the key strategies that must be addressed and linked if policy-makers are to create the kinds of health care system to which the citizens of the region are entitled. It examines how financing, coordinated service delivery and quality measures matter independently, and it highlights the need to interweave them effectively with citizen and community participation mechanisms and a far-reaching concern for public health. It also reviews the complex issues that hinder or help the implementation of reforms and suggests how an understanding of context, stakeholders and capacity will be critical to delivering change. It draws attention to a number of priority areas for further reform and suggests that policy-makers will need to forge alliances, mobilize political will and the public and draw on a range of legal, technical and managerial strategies if they are to steer reform implementation effectively.

Ultimately, the success or failure of reform will depend on the impact of reforms on the societal objectives of health improvement, equity and efficiency, and on the extent to which health systems respond to consumers. There are no simple solutions to the challenges faced. Rather, complexity must be an inherent factor in any realistic approach to balancing affordability and effectiveness in what is an immensely complex environment surrounded by powerful interest groups. Policy-makers need therefore to address stewardship and to take a whole-system perspective, adopting a clear health strategy and sponsoring effective regulatory systems so as to provide the framework that health care purchasers, providers and public health professionals need. This paper gives some indication of the degree of complexity and the elements policy-makers will need to combine. Subsequent papers examine each individual component in more detail. The extent to which these different elements will combine in any given country to have an impact on health outcomes remains open to debate and is an area where national policy-makers must bring their expertise to bear.

Chapter 2 Winners and losers:

the consequences of transition for health

by **Martin McKee**

The same, but different

The complex changes in health during the 1990s in the countries that emerged from the communist bloc defy a simple description. It has almost become a cliché to say that transition has created winners and losers; these can be seen at the level of countries, groups within societies and individuals.

Across the region, transition had an immediate, and largely adverse, impact on health. In the euphoria that accompanied new-found freedoms, existing social norms were swept away, and public rejection of state control did not discriminate between those activities that had sought to repress legitimate freedoms and those that aimed to promote the public good. For example, almost everywhere deaths from road traffic injuries rose as individuals exerted their “freedom to be foolish” (Leichter, 1991), rejecting the legitimacy of speed limits and traffic police (Winston et al., 1999). In retrospect this might have been predictable; similar changes accompanied the transition to democracy in Spain over a decade earlier but, like so many of the effects of transition, it was not (Chenet et al., 1997b).

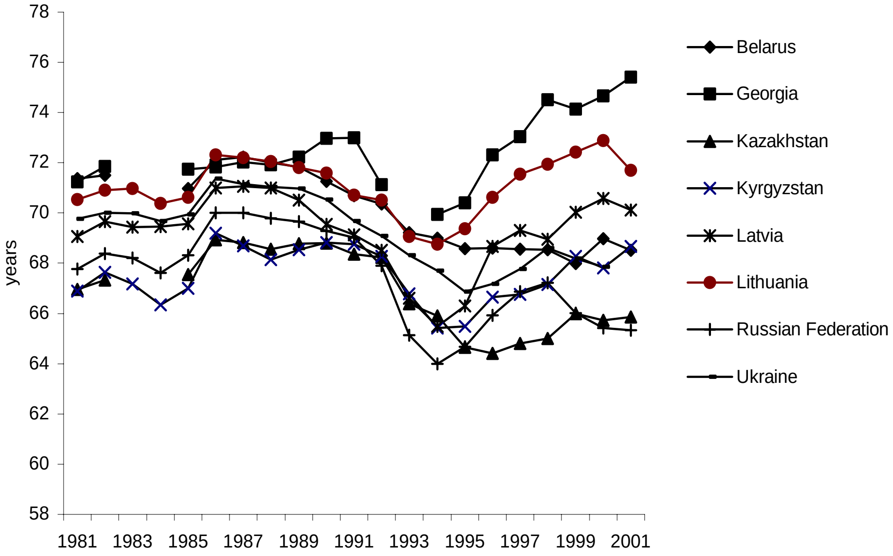
Subsequently, experiences have differed, reflecting a combination of common factors, albeit differentially affecting different countries and, within them, different groups in the population, and factors that are more specific to certain countries at particular times. As a consequence, any geographical categorization is a simplification but, to impose some order on this otherwise complex picture, it may be helpful to consider separately three groups of countries: those that were part of the USSR; the former Soviet satellites in central and eastern Europe; and the countries of southeast Europe (the former Yugoslavia and Albania).

This chapter seeks to provide some background to the others in this volume, reviewing the impact of transition on health, examining where things have improved and where they have become worse, and trying to understand the reasons for what has happened. However, it also serves as a reminder of the important relationship between health and health systems. First, if countries pursue policies that fail to enhance the health of their populations then they and their citizens must pay the human and economic price of failure, picking up the pieces of lives prematurely ruined by preventable conditions. Second, health systems exist to respond to the burden of disease in a population and not the interests of providers. Any discussion of health care delivery that ignores the nature of this disease burden is meaningless.

The transition in the former Soviet Union

The impact of transition on health was especially great in many of the countries that emerged from the breakup of the USSR. These countries had experienced unprecedented fluctuations in mortality during the 1980s (Fig. 2.1) although a culture of secrecy at the time meant that these went largely unnoticed in the outside world.

Fig. 2.1 Life expectancy (both sexes) in selected countries of the former Soviet Union



Source: WHO Health for all database.

In the early 1980s the USSR stopped reporting mortality data to the WHO, having realized that its much vaunted achievements in the arms and space races were not replicated in the social sector. Yet the USSR was not unique; its partner in these races, the United States, was also diverting resources from areas such as health, education and housing and with similar, although much less serious consequences (Schwartz, 1998; Wallace & Wallace, 1990).

As is now well known, by 1985, when Mikhail Gorbachev assumed the leadership of the Communist Party of the Soviet Union, the country was facing potentially terminal problems (Gorbachev, 1996). The command economy was just managing to hold things together but it was clear that things could not continue. The crisis was exemplified by the events surrounding the explosion at Chernobyl; the failure of the initial attempts at denial and the subsequent disclosure of what had happened exposed a staggering degree of incompetence and system failure (Mould, 2000).

One major reason for what was increasingly being recognized as a widespread societal failure was the pervasive use of alcohol as a means of escape from the daily reality. Frequent and hazardous alcohol consumption had been a feature of Russian society for centuries, for several reasons (McKee, 1999). One was simply climate. In much of the territory that was first the Russian Empire and subsequently the USSR, the only source of sugar from which to produce alcohol was grain; as a consequence the commonest drink was vodka. The resulting drinking culture is different, and more dangerous, than that seen in wine-producing regions. But the effects of climate are not only mediated through the type of alcohol available; a culture of heavy drinking is found at similar latitudes around the world, explaining the stringent policies on alcohol in Sweden and Finland (Chenet et al., 1997a).

Unlike the Nordic countries, where governments sought to tackle heavy drinking, the Czarist, and subsequently Soviet, regimes adopted policies that actively promoted it. Up to a third of the imperial revenues came from the alcohol monopoly. A short-lived campaign to reduce consumption in the 1920s was soon abandoned. Furthermore, the failures of Soviet social policy, in particular in the area of housing that left most Soviet families in overcrowded buildings dependent on communal kitchens and bathrooms, contributed to social breakdown from which alcoholic oblivion provided one of the few means of escape (Taubman, 2003).

As a consequence, in many parts of the USSR, there was an extremely high level of alcohol-related premature mortality. The extent to which alcohol contributed to mortality in the USSR was revealed in 1985, when Gorbachev instituted a wide-ranging, and initially highly effective, anti-alcohol campaign (White, 1996). Life expectancy improved rapidly, with reductions in deaths from many causes where the link with alcohol is self-evident, such as injuries and violence and acute alcohol poisoning, but also cardiovascular disease, where the link was less obvious until later research identified the important role played by binge drinking, especially in cases of sudden cardiac death (McKee, Shkolnikov & Leon, 2001).

Even before the collapse of communist rule, the anti-alcohol campaign was faltering. The Soviet authorities no longer had the ability to impose earlier restrictions, and the campaign had unleashed an unprecedented amount of illegal alcohol production, the scale of which was illustrated by the disappearance of sugar from shops. As a result, by the late 1980s, the improvements in life expectancy that had been achieved by the anti-alcohol campaign had been reversed.

In this situation, further social breakdown would inevitably have consequences for levels of alcohol consumption and ultimately for health. In the by now independent republics, life expectancy fell rapidly (Shkolnikov, McKee & Leon, 2001). The change was driven largely by the same causes of deaths that had been responsible for the improvement after the anti-alcohol campaign (Leon et al., 1997). Furthermore, it was the same groups that were affected. Young and middle-aged men were most vulnerable, in particular those with the fewest social, economic and educational resources (McKee & Shkolnikov, 2001). And although the overall pattern could be seen everywhere, its scale varied, with those regions where the pace of transition had been most rapid experiencing the greatest changes (Walberg et al., 1998).

Yet, the precipitous increase in overall mortality in the early 1990s eventually came to a halt. Coinciding with a degree of economic stability in the Russian Federation and the Baltic states, in 1994 the tide turned and life expectancy began to improve. The turning point came the following year in Ukraine, as in Belarus, although there it was only transient. By 1998, however, many parts of the FSU faced a further economic crisis following the devaluation of the Russian rouble. Many of the health gains over the previous years were once again lost as life expectancy began to fall. This time, however, the Baltic states, by now increasingly integrated with western European economies and on track for European Union membership, were spared and there life expectancy continued steadily upward.

By 2000, life expectancy at birth for Russian men was almost two years less than it had been in 1980; for Russian women it was almost three-quarters of a year less. Life expectancy was also lower than it had been two decades earlier in most other former Soviet republics while in the Baltic states it was now several years higher.

So far this analysis has focused on the substantial changes in mortality in the newly independent states (NIS) of the former Soviet Union during the 1990s, changes in which hazardous consumption of alcohol has played a major part, although it is also important to look at hazardous drinking in the NIS as part of a wider social malaise, driven by adverse economic circumstances and impacting most on those already vulnerable (McKee, 2002).

Yet, the fluctuations in mortality are only one part of the story. It is equally important to consider the underlying level of mortality, not least because many of the causes are also being affected by transition (Cockerham, 2000), even if the effects are not so immediate. Here the analysis becomes more complicated. First, it is important to understand how, unlike alcohol, many determinants of health act over many years (León, 2001). As in western Europe, rates of stomach cancer are falling across the NIS because of the progressive reduction in rates of infection with a bacteria, Helicobacter pylori, in childhood (Forman & Goodman, 2000). Falling death rates from lung cancer across the NIS in the 1990s resulted from the lower uptake of smoking among men who were teenagers in the period 1945–1953, a time when consumer goods of all sorts, including cigarettes, were in short supply as Stalin prioritized industrial investment (Shkolnikov et al., 1999). This trend is already beginning to reverse as those who were teenagers when Khrushchev came to power, and consumer production recovered, reach the age at which lung cancer strikes.

There are specific factors involved for many causes of premature death. For example, deaths from tuberculosis have returned to a level not seen since 1980, although it is now killing people at younger ages. Obviously, the essential factor is infection with the tubercle bacillus, although as with alcohol, this is only one part of a more complex sequence of causation which, in this case, includes the social conditions that encourage spread of tuberculosis, as well as the major role in transmission played by the inherited Soviet model prison system, with especially poor conditions in the pretrial detention centres in which increasing numbers of young men languish for long periods. This is exacerbated by the effects of drug resistance, a consequence of inadequately managed and poorly coordinated treatment regimes and lack of investment in laboratories (Coker, 2001; Farmer et al., 1999).

The case of tuberculosis illustrates how infectious diseases exploit societal changes. Another well-recognized example is the growth in rates of sexually transmitted infections. There are, however, other less well-known examples. In some cases these are new phenomena, such as the growth in rates of tick-borne encephalitis in the Baltic states (Randolph, 2001). The reasons are still imperfectly understood but may reflect a combination of climate change and changing patterns of settlement and leisure activity. Others involve the reappearance of diseases that had been controlled, such as the outbreak of diphtheria in the Russian Federation in the early 1990s and the re-emergence of malaria in countries such as Azerbaijan (Kasumov & Guseinov, 2001).

Another phenomenon that has been affected by transition, and which is also associated with quite specific causes, is the growth in homicide rates. Already high during the Soviet period, murder rates doubled or tripled in many countries during the 1990s. A detailed study in one Russian region showed how those committing murder became much more diverse during the 1990s, with convicted murderers increasingly likely to be female and better educated. It also confirmed the major role played by alcohol in many of these murders, often with both perpetrators and victims being intoxicated (Chervyakov et al., 2002). Similar factors are contributing to the equally serious rise in suicide rates in many countries.

Some risk factors have wide-ranging effects. The traditional Soviet diet, reflecting the seasonal availability of food in what is, in many places, a harsh and unforgiving climate, is especially low in many of the micronutrients derived from fresh fruit and vegetables that are increasingly recognized as important for health (Bobak et al., 1998). Soviet nutrition policy emphasized the supply of protein, which inevitably also led to high levels of consumption of animal fat. The consequences can be seen in the high levels of cardiovascular disease and some cancers. Nutrition is, however, an area where transition is already leading to improved health, at least for some. The growth of international trade, coupled with effective systems of retail distribution, has led to a substantial improvement in the diversity of food available, and in particular access to year-round fruit and vegetables. Yet access is still uneven, both in terms of geography and degree of social inclusion.

The opening of borders has, inevitably, had good and bad effects. One area of particular concern has been the increase in access to narcotics. The countries of the NIS have the misfortune to be on the route from Pakistan and Afghanistan to western Europe (Lubin, Kaits & Barsegian, 2002). The introduction of substantial quantities of heroin into communities facing wide-ranging, and for many seemingly insoluble, problems has had effects that were entirely predictable. The spread of injecting drug use is, of course, the main reason for the dramatic rise in HIV infection, which is now growing at a faster rate than in any other part of the world and beginning to diffuse into the noninjecting population through sexual spread (Dobson, 2001). Interventions to reduce the risk of infection, such as needle exchange schemes and methadone substitution, are expanding, with the initial programmes championed by the Open Society Institute, but greater uptake of these schemes remains limited by lack of financial support from governments and, in some cases, persistence in regarding drugs as a criminal justice rather than a health problem.

Another factor with wide-ranging consequences for health is smoking, traditionally high among Soviet men. As noted above, deaths from lung cancer, an important marker of historical patterns of smoking, have been falling but are now increasing again. Of course, the harmful effects of smoking go far beyond lung cancer, playing a major role in cardiovascular disease and many other cancers. The effects are not limited to those who smoke; the health effects of passive smoking are increasingly recognized. During the Soviet period smoking among women was relatively uncommon. The situation is, however, changing rapidly with the entry of international tobacco companies. As in Southeast Asia a decade earlier, the opening of previously closed tobacco markets has been accompanied by a dramatic increase in cigarette marketing. The most obvious manifestation is the proliferation of advertisements but these are only one element of more wide-ranging strategies. These include, in several countries, acquisition of domestic monopolies (such as British-American Tobacco's position in Uzbekistan) that give them advantageous trading conditions and which allow them to block anti-tobacco legislation. They also include aggressive targeting of young people by, for example, free distribution of cigarettes at sponsored events designed to attract teenagers and through campaigns on youth smoking, sometimes in association with governments that are unaware of their true intention to convey the message that smoking is an adult pursuit, so making it attractive to these aspiring adults. As a consequence, smoking rates among young women are rising rapidly, especially in cities where marketing activities are concentrated, with serious long-term consequences for their health. A few countries have, however, resisted the efforts of the international tobacco companies, either because of a general unwillingness to open markets, as in Belarus and Turkmenistan, or because of health concerns, as in Lithuania, or for mixed reasons, as in the Republic of Moldova. Regrettably, in some cases, as in the Republic of Moldova, countries are coming under sustained pressure from international financial institutions to privatize their industry even though the inevitable effect would be an increase in consumption (with any financial gains for the country largely illusory).

Another factor is the impact of health care. Deaths from causes amenable to health care have been falling faster than overall mortality in western Europe since the mid-1960s. In contrast, in the USSR, deaths from these causes remained steady, contributing to the widening mortality gap with the west. The reasons are multiple. One is that the USSR did not benefit from many of the advances in pharmaceuticals experienced in the west. A second was that, while the gains in health attributable to health care in the 1940s and 1950s had been brought about by relatively simple interventions, such as immunization and safer obstetric practices, once these gains had been achieved further progress required more complex interventions, including new organizational responses, which the USSR was unable to deliver. This was exacerbated by the growing importance of chronic diseases, such as diabetes. Such conditions are best managed by a partnership that includes the patient (increasingly supported by resources such as self-testing kits), the primary care team, and appropriate specialists. This model of care was difficult to provide in the Soviet system where demarcations were rigid and in a highly medicalized environment where patient empowerment was discouraged. By the 1980s a further factor was the lack of modern computers because of western export restrictions introduced to prevent access to technology with a potential military application. Finally, Soviet medical science was still recovering from the damage done during the Stalinist period, with many of those who gained prominence during that time remaining in positions of influence long afterwards. This created an environment that was hostile to the sort of changes occurring in the west that fall within the heading of evidence-based medicine, a situation that was exacerbated by the isolation of most Soviet physicians from developments in the west. It is easy to forget just how difficult it was for Soviet scientists to obtain material from abroad, or to underestimate the fear of doing so among those who recalled the flimsy excuses for mass deportations and worse in the 1930s and 1940s.

The consequences of changes in health care for mortality during the 1990s vary considerably. Improvements in mortality amenable to health care in the Russian Federation and some of its neighbours after 1994 were, as with overall mortality, reversed after 1998. The reasons are still poorly understood but it seems likely that this reflects the broader economic deterioration.

In contrast, improvements have continued in the Baltic states (Andreev et al., 2003). Some people have been especially vulnerable, such as those with chronic diseases requiring life-sustaining treatment. Thus, deaths from diabetes among those under 50 years of age increased eightfold in Ukraine in the early 1990s. Interviews with a group of surviving relatives revealed a substantial breakdown in the health care system. Although it was possible to get insulin, supplies were often erratic and treatment of complications, in particular kidney disease, was extremely limited (Telishevska, Chenet & McKee, 2001).

So far, this analysis has looked at factors that are common to many, if not all, of the former Soviet republics. There are, however, some particular issues in some of the central Asian republics, always the least developed parts of the USSR. These countries suffer from relatively high rates of infant and maternal mortality, with official statistics substantially underestimating the true scale of the problem (McKee & Chenet, 2002). Some, such as Uzbekistan, also have high levels of anaemia among women, especially in rural areas. This is likely to be multifactorial, although one of the most important factors seems to be the pattern of distribution of food within families, with women and children eating the least nutritious diets, and ones that are especially low in iron.

A review of the health effects of transition would, of course, be incomplete without mention of the wars that have broken out in the region. Thousands of people have been killed or disabled by the direct effects of hostilities in Tajikistan, Chechnya, Georgia, Armenia, Azerbaijan and the Republic of Moldova. Many more have suffered from the indirect effects of conflict, in particular the elderly and those with chronic diseases.

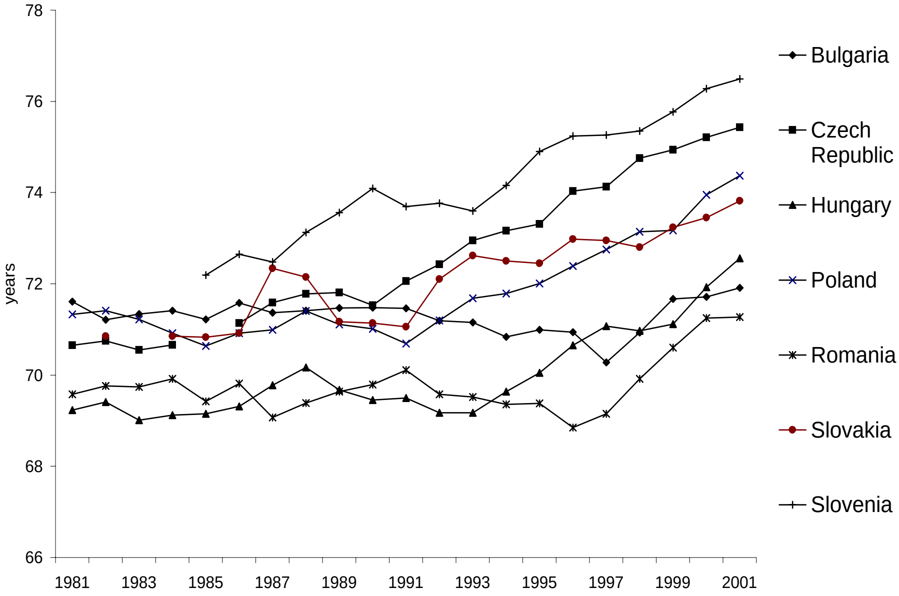
In summary, the health effects of transition in the countries of the NIS have been mixed, but largely negative. Overall life expectancy in many countries is lower than it was two decades ago and would be even lower had there not been sustained improvements in infant mortality as death rates among young men are now substantially higher than in the past. The exceptions are the three Baltic states that have, since 1998, broken away from the trend and are on a steady upward trajectory. In the few countries where the analyses have been undertaken it is also clear that some have done better than others. Thus, even in Estonia, where life expectancy has improved overall, it has fallen for the least well educated, counterbalanced by an improvement among those with university education (Leinsalu, Vågerö & Kunst, in press).

The following section looks at the transition in central and eastern Europe (CEE), where the picture has, albeit with some similarities, been quite different.

The transition in central and eastern Europe

These countries have fared rather better during the transition, although as in the NIS, many experienced an immediate increase in deaths from injuries and violence, in particular from road traffic injuries. Subsequently, however, all have experienced sustained improvements in life expectancy (Fig. 2.2).

Fig. 2.2 Life expectancy (both sexes) in selected countries of central and eastern Europe



Source: WHO Health for all database.

Importantly, their starting conditions were different from those in the USSR. They were stronger economically, with relatively well-developed infrastructure, although still far behind that in the west. Several had been much more open societies, both politically and in their ability to gain access to modern scientific developments. In some countries, such as Hungary, many health professionals had been able to train in the west. The much greater use of English also facilitated engagement with the international scientific community.

Mortality during the 1980s did, however, exhibit some similarities with that in the USSR. In particular, in many countries there was an increasing death rate among young and middle-aged men (Chenet et al., 1996), in particular those with little social support, such as the unmarried (Hajdu, McKee & Bojan, 1995).

Many of the same factors played a part, although as exposure was less, so were the adverse effects.

The situation with alcohol is illustrative. Many of the countries have traditions of beer or wine drinking, reflecting patterns of agriculture. As a consequence, the pattern of drinking is different so that the effects associated with binge drinking, such as sudden cardiac death, are less common. In addition, societal norms and levels of social support, most likely associated with the higher level of economic development, seem to have prevented the scale of violence and injuries seen in the NIS

Alcohol is, however, still an important cause of premature death, with extremely high rates of liver cirrhosis in a band of countries stretching from Slovenia through Hungary and Romania to the Republic of Moldova. Deaths from cirrhosis in these countries have now fallen from their earlier peak (Varvasovszky, Bain & McKee, 1997) but, in Romania and Slovenia, the recent decline is now reversing.

Prior to the transition poor nutrition was also a problem in this region, in particular because of seasonal unavailability of certain foods. This is, however, one area where the opening of borders has been an overwhelming success, as fruit and vegetable consumption rose and there was a shift from animal to vegetable fats. These changes are thought to contribute substantially to the fall in deaths from cardiovascular disease, which occurred almost at once in the former German Democratic Republic (Nolte et al., 2000), Poland (Zatonski, McMichael, & Powles, 1998) and Czechoslovakia (Bobak et al., 1997), although was delayed until 1993 in Hungary and 1995 in Romania.

The impact of changes in health care was also broadly positive, but again with variations. Prior to the transition, deaths from causes that could be prevented by timely and effective health care made a substantial contribution to the mortality gap with western Europe (Velkova, Wolleswonkel-Van den Bosch & Mackenbach, 1997). One study showed how mortality from causes amenable to medical care had improved slightly in Hungary, Romania and Lithuania in the 1980s, although much less than in West Germany (although a major factor was the steady improvement in infant mortality, with the situation for some groups, such as older Romanian women, deteriorating). In the 1990s, at a time when many of the gains from medical care had already been achieved in the west, substantial improvements were seen in Hungary and Lithuania, although not in Romania.

The situation in the former German Democratic Republic requires special mention, as its health care system was essentially replaced by the West German one, leading to marked reductions in deaths from causes amenable to medical care. Especially large gains were seen in perinatal mortality, with improvements in survival of low-birthweight babies (Nolte, Shkolnikov & McKee, 2000), a phenomenon also observed in the Czech Republic (Koupilová, McKee & Holcik, 1998).

The other major determinant of health is, of course, tobacco consumption. As in the NIS, rates among men have long been extremely high. Indeed, during the 1990s, Hungary experienced the highest death rates from lung cancer ever recorded. Mostly, this reflects the long history of high levels of smoking in that country although it may be exacerbated by the traditional Hungarian diet, which lacks many factors (especially those found in fruit and vegetables) that exert a small degree of protection against the effects of smoking in other populations.

The CEE countries have also suffered from the attentions of the international tobacco industry, although with mixed results. Some countries succumbed to the influence of the industry and delayed enacting effective controls of tobacco marketing. Indeed, in Bucharest in the early 1990s the traffic lights were adorned with camels, promoting the cigarette of the same name. In contrast, others, most notably Poland (Fagerstrom et al., 2001), have been in the vanguard of tobacco control policies, setting an example to some of the more hesitant countries in the European Union, in particular Germany, which has regularly blocked effective international action to control this hazardous substance (Gilmore et al., 2002). During the 1990s male smoking rates in Poland fell from 60% to approximately 40% and female smoking rates dropped from 30% to 20% (Zatonski, McMichael & Powles 1998).

Once again, some factors are specific to certain countries. One example is the epidemic of AIDS in Romanian children caused by the use of contaminated blood transfusions in a misguided attempt to treat undernourished children (Kozintez, Matusa & Cazacu, 2000). Although the absolute numbers are relatively low, by the end of the 1990s, death rates among children aged 5–9 years in Romania had doubled, largely attributable to AIDS. Romania, like some of its neighbours, had a large population of institutionalized children (usually incorrectly labelled as orphans). These children have been clear beneficiaries of transition as the orphanages have been renovated or closed.

In this region transition has also had consequences for infectious diseases. As in the NIS, rates of sexually transmitted disease have increased in many countries; one factor is the growth of sex tourism in some countries. Another factor is changing patterns of settlement and agriculture, such as the increase in leptospirosis (Stoilova & Popivanova, 1999), an infection spread by rats, which has accompanied changing patterns of irrigation in Bulgaria.

One group, the Roma, is especially disadvantaged in this region (Braham, 1993). These people, who are thought to have moved from India to Europe in about the tenth century, have long been discriminated against. Policies that act to exclude them from mainstream society, for example, requiring them to be educated in schools for children with special needs, as well as barriers to employment, mean that many still experience poor living conditions. Initially they fared poorly with transition as, in some countries such as Slovakia and the

Czech Republic, their situation deteriorated in the early 1990s with the emergence of extreme nationalist movements. However, subsequent developments are bringing benefits.

Until recently, most research on the health of Roma people had been from the perspective of the majority population, seeing them as a threat either from infection or damage to the gene pool (Hajioff & McKee, 2000). This is changing, with Roma people beginning to be participants in research rather than only subjects of it. It is now clear that their life expectancy is much lower than that of the majority population, with much of the gap explained by diseases of poverty (Koupilova et al., 2001). Their needs are now firmly on the political agenda as a consequence of provisions in the European Union accession process to protect the rights of minorities (European Commission, 2002).

In summary, as in the economic sphere, the transition in CEE has been more successful. Having stagnated throughout the 1980s, life expectancy is now improving rapidly in all countries in this region. The reasons are numerous and, at the risk of simplification, can be seen as evidence of countries entering a virtual, rather than vicious, cycle, in which economic growth and improved health mutually reinforce each other. The explanations for the relative success, compared with many parts of the NIS, include different starting conditions, in particular stronger social cohesion (Kennedy, Kawachi & Brainerd, 1998), better developed infrastructure, and much greater exposure to the international scientific and policy community. Looking ahead, however, the gap between these countries and the 15 countries of the EU is narrowing only slowly, and at present rates will take many decades to close completely. The direction of movement is satisfactory but there is much more to be done.

The transition in southeast Europe

The final region to be considered is southeast Europe. For the present purposes this is taken to include the countries of the former Yugoslavia, except Slovenia, which is on the brink of European Union accession, and Albania. The transition in this region was dominated by the wars of the 1990s, initially involving Serbia and Croatia but later spreading to Bosnia and Herzegovina, Kosovo and the former Yugoslav Republic of Macedonia. Albania also suffered widespread violence in the aftermath of a pyramid selling scandal.

As a consequence, it is not possible to present the usual statistics of life expectancy; massive population movements mean that denominators were uncertain for most of the 1990s, a problem compounded by a breakdown in data collection systems (Bozicevic et al., 2001). Censuses were conducted in most countries in 2001 and are now being analysed but few results are available yet.

In these circumstances it is unsurprising that the consequences of transition for health have been largely negative in this region, even setting aside the direct effects of war. Infrastructure has been destroyed, and many people with the skills needed for recovery have emigrated. In many areas agricultural recovery is prevented by the large number of uncleared landmines. War damage also led to widespread environmental pollution, in particular following attacks on chemical facilities during the air war with Serbia and from the use of depleted uranium munitions. The environmental situation is exacerbated by inadequate inspection and enforcement in some places, in particular Albania where there is growing evidence of health consequences of heavy metal pollution.

The breakdown of civil society has permitted a burgeoning of organized crime, with some countries playing a major role in international networks trafficking drugs, contraband cigarettes and people. The last of these is particularly troubling. The widespread trafficking of young women, lured with promises of wealth into exploitation in the sex trade in western Europe is now well recognized (Arnold & Doni, 2002) but less well known is the evidence of trafficking of children for organ donation. As in the NIS, the growth in use of intravenous drugs is fuelling a future epidemic of AIDS.

Otherwise, the issues surrounding many of the important determinants of health are similar to those in the CEE. For example, the international tobacco industry is actively targeting the region (and of course the industry has been complicit in the smuggling through the region, in particular involving Kosovo). Yet, as in other regions, some countries, such as Croatia, have implemented strong anti-tobacco campaigns.

Within this region, one country requires special consideration. Albania had long been isolated within Europe, ringed by mountains on the land side and malarial marshes towards the sea. During the communist era its isolation increased. Repression was severe, information from abroad was strictly controlled and even in the late 1980s agriculture was largely unmechanized and the few cars were reserved for senior party officials. Yet, despite its low level of economic development, life expectancy was relatively high (Gjonca, 2001). This seems largely attributable to consumption of a traditional diet; within Albania the regional distribution of cardiovascular disease coincided with the distribution of olive oil production (Gjonca & Bobak, 1994). The gulf between the pre- and posttransition periods in Albania is greater than anywhere else. Unfortunately, with the exception of mortality data, there is almost no information on health in Albania prior to 1990. The exception is a survey of the prevalence of diabetes undertaken in 1980; when this was repeated 20 years later it was found that it had increased fourfold (Shapo et al.). As a consequence, there are concerns that the previously advantageous position, at least in terms of health, enjoyed by Albania may be lost.

Summary

The transition has brought winners and losers, but the picture is extremely complex. Some countries have fared better than others; some groups within countries have fared better than others.

Health does not exist in a vacuum. Successful economic and political transition goes hand in hand with successful health transition. Where political and economic transition have been less successful, health has suffered. However this is a two-way relationship. Health outcomes are clearly related to economic performance; indeed, many of the fluctuations in life expectancy observed in the 1990s can be attributed to changing economic circumstances. Conversely, health has an impact on economic performance, not least because people who are healthy can contribute to the economy, and if they have a reasonable expectation of life they are more likely to invest in the future.

Looking ahead, in some countries there are grounds for cautious optimism. Life expectancy is moving in the right direction. Yet, even in these countries there are concerns that all are not benefiting to the same extent. A particular concern is the health of the Roma people, who have not shared adequately in the benefits of transition.

In many other countries, however, transition has not been a success for health. Life expectancy is continuing to fall, a situation unprecedented outside war time or major epidemics (such as the HIV epidemic in Sub-Saharan Africa). This must be cause for serious concern, especially as the signs suggest that this deterioration is likely to continue, with growing mortality from tobacco-related causes among women (Bray, Brennan & Boffetta, 2000) and the frightening combination of rapidly increasing rates of AIDS and multidrug-resistant tuberculosis (Kazziony et al., 2001). When the now record low birthrate in many places is also taken into consideration, it is clear that many communities, especially in the more remote areas of the Russian Federation, will be unsustainable.

Although the progress of nations is often measured in terms of wealth, using gross national product per capita, this is at best an incomplete assessment. What is now needed is a level of political interest in health that comes close to that already focused on wealth.

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Chapter 3 Facing the challenges of health care financing

by Anna Dixon, Jack Langenbrunner, and Elias Mossialos

The financing of health systems was the subject of early and radical reforms in central and eastern Europe (CEE) and the newly independent states (NIS) of the former Soviet Union.[1] In most countries the intention of the reforms was to shift away from the centralized, integrated state model of Semashko to decentralized and contracted social health insurance. This was modelled in part on the basic features of the Bismarck model found in western Europe, but significant differences also emerged as it was adapted to the particular context of CEE and NIS.

The shift changed the way money was both collected and pooled and created a new relationship between purchasers and providers of care. Legislative reform was, however, not always matched by concrete change on the ground, and in some cases the objectives set out in policy were not fully or even partially attained. The countries of CEE and NIS face a new and challenging environment, not only in terms of total funding for health care but also of the efficiency of their health care services with the funding available and the development of sufficient government and technical capacity.

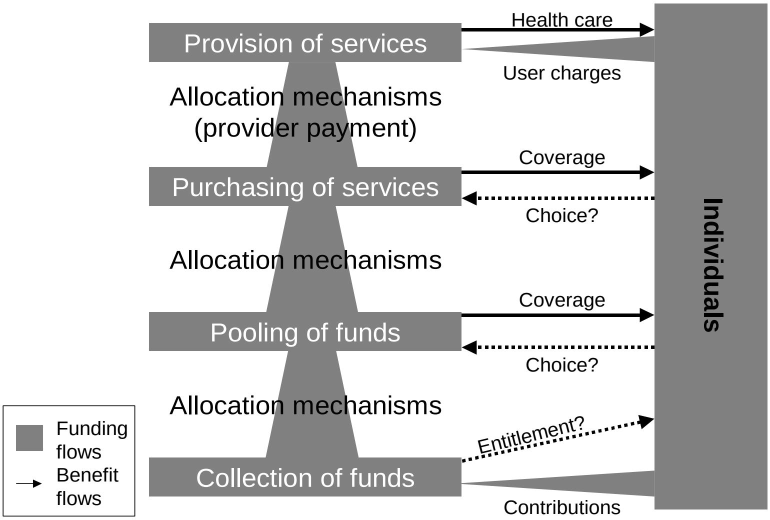
The purpose of this chapter is to set out a conceptual framework for understanding the financing of health care, to describe and analyse some of the trends in the CEE and NIS, to evaluate the experience and to draw some conclusions. The main body of the chapter is organized into three sections: revenue collection, the pooling of financial resources and the purchasing of services.

Conceptual framework

Confusion often arises in debates about health care systems because the systems are crudely defined (for example, Beveridge, Semashko or Bismarck). The assumption is that the source of funds for health care somehow determines the organizational structure. This traditional thinking is being challenged (Kutzin, 2001). A number of tools have been developed to facilitate analysis of health care financing in the region. One of these tools identifies distinct functions within the health care system: revenue collection, pooling, purchasing and provision (Fig. 3.1). Revenue collection refers to the process of mobilizing resources, usually from households or corporate entities, but also from external donors. Pooling refers to the spreading of financial risk across the population or a subgroup of the population through the accumulation of prepaid health care revenues. Pooling facilitates solidarity, primarily between the healthy and the sick and, depending on the method of funding, between the rich and the poor. Purchasing is the process of obtaining services from providers on behalf of the covered population. The provision of services, and how these are delivered and by whom, is not within the scope of this paper.

It is possible to identify related policy issues for each of these functions. These issues are outlined in Table 3.1. Decisions on each of these policy issues will shape the overall structure of the health care financing system. For example, the equity of the financing system will depend both on the level and on the distribution of the contributions. Equity of access will depend on who has access and to what services, as well as on user charges and informal payments. Efficiency will be influenced largely by the extent of pooling and the methods of provider payment. Depending on the extent of decentralization and fragmentation in the system, these functions and the associated decisions may be carried out by different bodies. For example, the central government might decide the contribution rate and the proportion to be paid by the employer and the employee, while collection of the contributions might be the responsibility of regional branches of the health insurance fund.

Fig. 3.1 Functions of health system financing and population links



Source: Kutzin, 2001.

Table 3.1 Policy issues related to different financing functions

Financing function	Related policy issue
Collection of funds	• *How much* money to collect and *from whom?* • *Who and what* to cover?
Pooling of funds	• *How* to pool resources? • *How* to allocate resources to purchasers?
Purchasing of services	• *From whom* to buy and *how* to buy? • At *what price* to buy and *how* to pay?

Source: Adapted from Preker et al., 2000.

Theoretical issues

Before describing and analysing the systems of health care financing that have been introduced in the CEE and NIS, we present a short synopsis of the theoretical debate on the advantages and disadvantages of different funding methods. The extent to which practice reflects these theoretical advantages and disadvantages will depend largely on the country context (politics, economy, culture, history and technical capacity).

The main sources of revenue for health care are taxes, social insurance contributions, voluntary insurance premiums and user charges (formal and informal). Most countries rely on a mix of these sources. There are no pure systems relying on a single source of revenue. Indeed, all systems at least combine some out-of-pocket payments or user charges with prepaid sources of funding. Taxes are compulsory for the whole population and are levied by the government. Social insurance contributions are compulsory for all or some of the population; they are kept separate from other government revenues and are usually managed by a fund or funds independent of the government. In CEE and NIS countries, the term “social insurance” is often used to describe payroll taxes that are in fact levied by government and managed by a fund that the government largely controls. Nevertheless, for the purposes of this paper we use the term social insurance to include payroll taxes.

In terms of equity, direct taxes (that is, those levied on individuals, households or firms) are usually set progressively – the higher the income the higher the proportion paid. In contrast, indirect taxes (that is, those levied on goods and services) are regressive because those on lower incomes spend a greater proportion of their income on consumption. Social insurance contributions are usually levied in proportion to income. Where an income ceiling is applied, above which income is exempt from contributions, social health insurance becomes mildly regressive. Furthermore, because contributions are levied only on earned income (not on profits or income from investments and savings) they place a heavier burden on those with lower incomes. In contrast, private health insurance and user charges are higher for those in greatest need, thus relating how much you pay to how ill you are (or are likely to be). While there is little evidence from CEE on how informal payments affect utilization, patients who cannot afford the payments either cannot obtain treatment, cannot access the same level of services or have to wait longer for care. In addition to the financial barrier imposed by fees, patients in some countries are further deterred by the uncertainty about prices caused by informal payments (Mills & Bennett, 2002). There is no evidence as to whether official fees affect equity more strongly than informal payments.

In terms of efficiency, taxation tends to be associated with strong public expenditure control as there is a global budget limit on these funds (however, in some countries deficits are allowed to build up and result in higher allocations in subsequent years, thus weakening this expenditure control effect); it draws on a broad revenue base and, when collected nationally through a single collection agent, is administratively efficient. Depending on the organization of social insurance, public expenditure control might be strong if there is a single fund or the government caps the overall budget or sets contribution rates. Social insurance draws only on earned income and therefore adds to the cost of labour with a potentially negative effect on economic growth. If separate systems of collection are implemented, this will add to administrative costs.

In theory, taxation is usually associated with universal coverage as entitlement is based on citizenship or residence, whereas under social health insurance entitlement is usually (but not always) based on contribution status. User charges and voluntary health insurance relate access to ability to pay (Mossialos et al., 2002). These issues are summarized in Table 3.2. Some of the advantages and disadvantages will depend on the perspective taken and the objectives that are being pursued.

The extent of pooling will depend on how much of the revenues collected are pooled through a single fund and whether different sources of funding are pooled or remain separate. For example, tax revenues may be pooled together with social insurance contributions to enable funds to purchase health care services on behalf of all citizens. Alternatively, pooling may be limited if tax revenues are kept separate to provide public services directly for those who do not make insurance contributions.

Where there is decentralization or multiple collection agents, pooling may occur at the national level if mechanisms exist to redistribute through a central pool. For example, if regional taxes are levied and retained by local government, pooling operates only at the local level. However, if central taxes are used to compensate regions for the different income levels and/or different health needs of the populations covered, then pooling is extended to a national level. Similarly, systems of risk-adjusted resource allocation may be used to pool funds between competing insurance funds. Larger pools enhance efficiency because these reduce the incentives for risk selection. Larger pools also increase equity

Table 3.2 Summary of the theoretical advantages and disadvantages of different methods of revenue collection

Method of revenue collection	Advantages	Disadvantages
Direct taxation	Wide revenue base (all income) Administratively simple Usually progressive and promotes solidarity Large risk pool Allows trade-offs with other areas of the public sector Universal coverage	Compliance may be difficult Allocations subject to political negotiation Potential tax distortions
Indirect taxation	Visible source of revenue (all transactions) Administratively simple Compliance easy	Potential tax distortions Allocations rely on consumption levels Usually regressive
Social health insurance	Earmarked for health Separate from other government revenues Visible source of revenue (formal wage bill), easy to deduct at source (Potentially) low resistance to increases Independent management of funds May allow choice of insurer	Compliance difficult for self-employed and non-formal-sector workers Links entitlement to contribution, problem of ”uninsured“ Increases costs of labour and may reduce international competitiveness Revenue follows economic cycle Strong regulatory framework Narrow revenue base (only applies to earned income) Need for special mechanisms to fund contributions on behalf of unemployed, informal sector, pensioners, etc.
Voluntary health insurance	May allow choice of insurer Provides insurance protection against costs not covered by public system (supplementary)	Strong regulatory framework needed Adverse selection (results in escalating premiums) Risk selection (leaves some uninsured) May relate payment to utilization Access related to insurance coverage Usually regressive Limited pooling of funds
User charges	May reduce utilization of noneffective goods and services (if applied differentially)	Relates payment to utilization May deter access to necessary services Access related to ability to pay Regressive No pooling of funds

Source: Authors’ compilation.

and solidarity principles by sharing risks across a larger population, hence allowing greater potential for cross-subsidy from the healthy to the sick. Voluntary health insurance may, if it is group rated, pool risks among the employees of a company or, if it is community rated, among the residents of a particular area. Usually, however, voluntary health insurance is initially individually risk rated (and may subsequently be experience rated) and therefore pooling among subscribers is extremely limited and the pooling is fragmented, undermining the purpose of insurance. If user charges are retained by the providers who collect them there is little pooling of funds, but revenues from user charges may by pooled with other revenues to provide services for a specific population.

In theory there are two main models of purchasing[2]: integrated models (under which the providers are owned and managed by the purchaser) and contract models (under which the providers are separate from the purchasers). Many countries have been moving from integrated command and control models of publicly operated provision towards one or another new form of "purchasing," in which public (or quasi-public) third-party payers are kept more organisationally separate from health service providers. The rationale for this "purchaser–provider split" model (Figueras et al., 2001) is as follows.

- To improve services by linking plans and priorities to resource allocation, such as to shift resources to more cost-effective interventions and across care boundaries, for example, from inpatient to outpatient care. Purchasing, in this sense, can be regarded as an alternative way to make plans operational through more explicit targets and incentives for providers.

- To better meet population health needs and consumer expectations by building them into purchasing decisions.
- To improve the performance of providers by giving purchasers policy levers, such as contracting or financial incentives or monitoring tools, which can be used to increase provider responsiveness and efficiency.
- To facilitate decentralization of management and the devolution of decision-making by allowing providers to focus on the efficient production of services as determined by the purchaser.
- To introduce competition or contestability among providers and thereby use market mechanisms to increase efficiency.

In several European countries, the shift to contracting has been accompanied by a shift away from historical or norm-based budgeting to activity- or performance-related pay. The new forms of provider payment are intended to increase productivity and efficiency and ensure the high quality of services provided. However, they rely on good information systems and may be costlier to administer.

In addition, there is the direct purchasing of services by patients from providers ("formal" if in the private sector and "informal" within the public sector) using out-of-pocket payments. Informal payments can abate government efforts to improve accountability and management, and they also reduce the formal revenue base upon which the health system may rely (Shahriari et al., 2001). Providers that can extract informal payments from patients are less responsive to reimbursement mechanisms designed to influence behaviour and improve efficiency.

In the following sections we review the experience of financing health care in CEE and NIS over the past 10 years, describing what has happened and offering some analysis of the implementation process.

Collection of funds

Prior to the transition to market economies, revenue for health care was generated mainly from state-owned enterprises. Private sources were negligible except for informal payments to providers. As in tax-financed systems, health competed with other areas of public spending, and expenditure on health was the outcome of political negotiations and reflected priorities (these tended not to favour health, which was seen as an “unproductive” sector). During transition two new sources of funding emerged: social health insurance contributions and out-of-pocket payments (both official user charges and informal payments) (Preker et al. 2002). There were a number of reasons why many of the CEE and NIS countries shifted to social health insurance:

- to break the monopoly of government over the ownership and financing of health services;
- to increase the responsibility of individuals for their own health and the financing of health care;

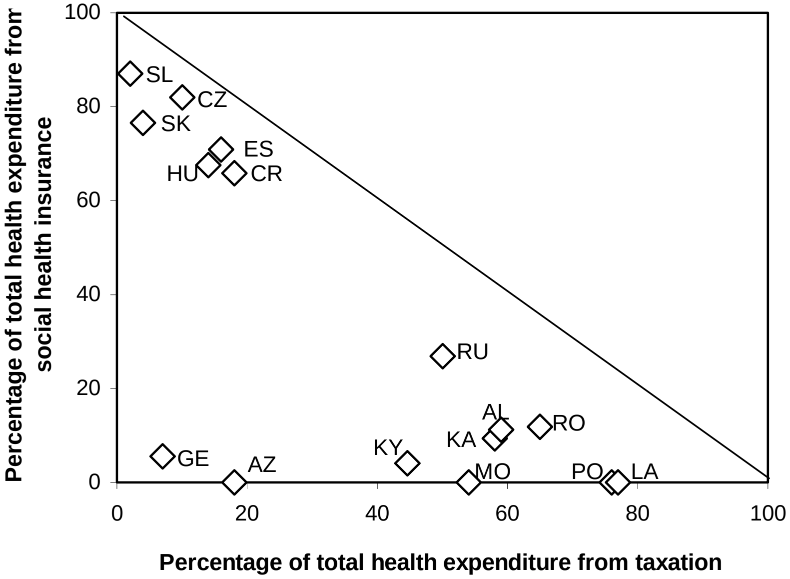
- to improve efficiency by making health care providers more accountable for the use of resources (Chinitz et al., 1998); and
- to give responsibility for health care to organizations independent of government (this was mainly the result of ideological concerns about the role of the state).

The extent to which these assumptions held true in practice is less clear. For example, many social health insurance funds established in the CEE/NIS have not been independent from government with ministries of health or finance controlling them. Despite the switch to social insurance contributions, general tax revenues continued to play a significant role in health care funding in many countries. Voluntary health insurance was intended to develop as a supplementary source of revenue. However, the market in private health insurance remains small in most countries and does not contribute significantly to health care expenditure. Private funding, in the form of informal payments for health services within the public health care sector, is much more significant. However, the level and scope of these payments varies significantly between countries (Lewis, 2002).

Defining contributions

Total expenditure on health in the region in 1997 ranged from as low as 3.3% of gross domestic product (GDP) in Albania to 11.3% in the Republic of Moldova. Per capita spending was highest in the Czech Republic, Slovakia and Slovenia and lowest in Albania, Azerbaijan, Georgia and Romania (all less than US $100 purchasing power parity [PPP]; Preker et al., 2002). Fig. 3.2 shows the relative importance of taxation and social health insurance in the countries of CEE and NIS towards the end of the 1990s.[3] The distance from the diagonal represents the share of private funding. In the region, there were seven countries that funded health care predominantly from taxation: Albania, Kazakhstan, Latvia, Poland, the Republic of Moldova, Romania and the Russian Federation. Six countries relied predominantly on social insurance contributions: Croatia, the Czech Republic, Estonia, Hungary, Slovakia and Slovenia. In Armenia, Azerbaijan, Georgia and Tajikistan forms of prepayment almost totally collapsed, and health care was predominantly funded by out-of-pocket payments. In Kyrgyzstan and the Republic of Moldova, out-of-pocket payments accounted for more than 40% of total expenditure on health.

Fig. 3.2 Percentage of total expenditure on health from taxation, social health insurance and other sources (includes voluntary health insurance and out-of-pocket payments) in selected CEE and NIS countries, 1997 or latest available year



AL: Albania; AZ: Azerbaijan; CR: Croatia; CZ: Czech Republic; ES: Estonia; GE: Georgia; HU: Hungary; KA: Kazakhstan; KY: Kyrgyzstan; LA: Latvia; MO: Republic of Moldova; PO: Poland; RO: Romania; RU: Russian Federation; SK: Slovakia; SL: Slovenia.
Note: The distance from the diagonal line represents the proportion of total expenditure from private sources (out-of-pocket expenditure and voluntary health insurance).

Source: Preker et al., 2002.

With the shift to social health insurance in many CEE and NIS countries, the burden of contributions has largely fallen on labour costs. The size of the contributions and the respective shares between employers and employees in different countries are shown in Table 3.3.

Table 3.3 Contribution rates, employer–employee share and income ceiling in selected CEE and NIS countries

Country	Contribution rate for salaried workers	Employer–employee share
Bulgaria	6%	75:25
Croatia	18%	100:0
Czech Republic	13.5%	66:33
Estonia	13%	100:0
Georgia	4%	75:25
Hungary	14%	79:21
Kazakhstan	3%	100:0
Kyrgyzstan	2%	100:0
Poland	7.75%	0:100
Romania	14%	50:50
Russian Federation	3.6%	100:0
Slovakia	13.25%	50:50 (additional 0.53% for occupational diseases and injuries)
Slovenia	13.25%	53:47 (additional 0.53% for occupational diseases and injuries)

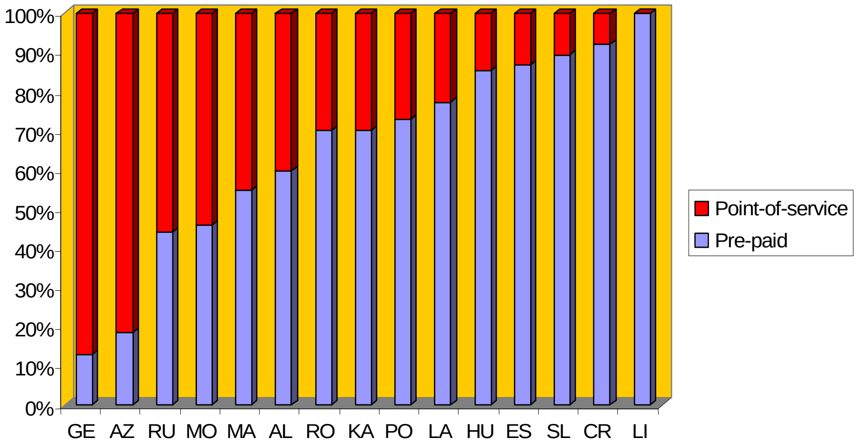
Source: Preker et al., 2002 and authors' compilation.

The significant drops in output and the accompanying fiscal reductions during the initial stages of the transition put additional pressure on social sector budgets, particularly in the health sector, which evidenced a significant oversupply of resources. Fig. 3.3 provides an overview of revenues from pooled channels of funding versus individual out-of-pocket payments at the point of service.

The reasons for the existence and persistence of informal payments are less well understood or documented. Informal payments take a number of forms and may exist for a number of reasons. They range from the ex post gift to the ex ante cash payment. These payments or gifts may be part of the culture or may result from the lack of a cash economy, the lack of finances to pay health care workers, the lack of drugs and basic equipment to treat patients or weak governance. At their worst they may be a form of corruption, undermining official payment systems (Ensor & Duran-Moreno, 2002; Ensor & Langenbrunner, 2002).

Informal payments made by patients and families to supplement formal coverage are common. The estimated frequency of informal payments in the

Fig. 3.3 Prepaid vs. out-of-pocket payments in CEE/NIS countries



Source: Preker & Jakob, 2001.

region is typically high (Lewis et al., 2000). The percentage of patients reporting that they had been required to make some payment for a service was 60% in Slovakia, 66% in Tajikistan, 70% in the Republic of Moldova, 74% (of hospital patients) in the Russian Federation, 75% in Kyrgyzstan, 78% (of inpatients) in Poland, 78% in Azerbaijan and 91% in Armenia. The level of payments is highest for inpatient care, with drugs and outpatient care subject to lower levels. In relation to household income, out-of-pocket payments for health care on average account for as much 21% of average monthly income in Georgia, 9.1% in Albania and 4.1% in Romania (Lewis, 2002). These average data hide the fact that for some families hospitalization costs may exceed family income, forcing families to draw on other assets (such as selling cattle, property or borrowing from other family members).

According to Kornai (2000), approximately 38% of average salaries received by physicians in Hungary comprised official income; the remaining 62% was from informal payments. In a survey of Hungarians (1400 sample), 31% agreed that some informal payments should be made for a routine injection, 48% for a routine gynaecological examination, and 86% for a house call made at night (Gai et al., 2003). Informal payments are more widespread in gynaecological and surgical hospital services compared with internal medicine and mental health services. It appears that the high number of physicians in Hungary and low salary levels have exacerbated the problem.

In contrast, informal payments are relatively low in the Czech Republic where doctors' salaries have risen above the rate of inflation of average wages. A 2000 survey of health care staff revealed that 5% of Czech doctors confessed to accepting "something more" than a small gift (Miller et al., 2000). However, poor pay alone may not completely explain the willingness of physicians to accept informal payments. Czech physicians (as well as those in Bulgaria and Slovakia) were 18% more likely than the average government official to report a second income, and were also well above average in reporting having a “family income” that was enough for a “fair” or “good” standard of living (Miller et al., 2000).

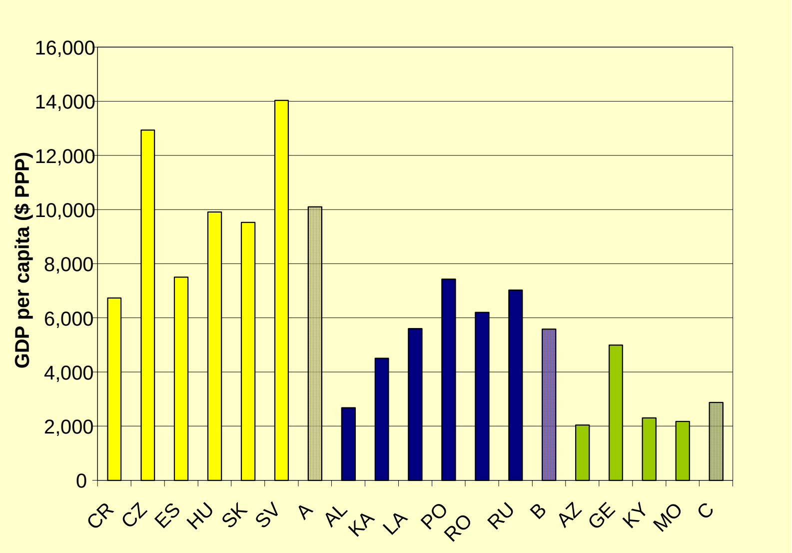
Voluntary insurance was conceived in many countries as a complement to social health insurance, covering those services excluded from the benefits of the social health insurance scheme. In practice the boundaries between public and private insurance were not defined, partly because of the failure of many countries to define a basic benefits package (as described in the next section). There was some demand for private insurance to duplicate or supplement social health insurance coverage, owing to the inadequacy of access. In most countries the experience with private insurance has been problematic. In Kazakhstan in the mid-1990s, several companies selling private health insurance went out of business owing to lack of regulation or oversight of their solvency. In Uzbekistan, government joint stock companies now sell private health insurance, and in the Russian Federation, where there are numerous companies, there appears to be little regulation of their operation. Other countries, such as Slovenia, have taken a more cautious approach initially, limiting the sale of voluntary insurance to the insurance funds (responsible for social insurance). These are often supplementary policies that include cover for co-payments under public insurance. Following accession to the European Union, the market for voluntary insurance in these countries will have to open up to competition from private insurance companies and will be subject to limited regulation. If private health insurance markets are to operate effectively, clear boundaries need to be set between the public and private sectors in terms of benefits and beneficiaries, and there needs to be proper regulation of their activities to protect consumers.

Problems with social health insurance

In practice, health care contributions in most countries are a mix of taxation, social insurance, voluntary insurance and out-of-pocket payments, partly because of the failure of social insurance to generate a significant proportion of health care expenditure. There are a number of possible reasons for this.

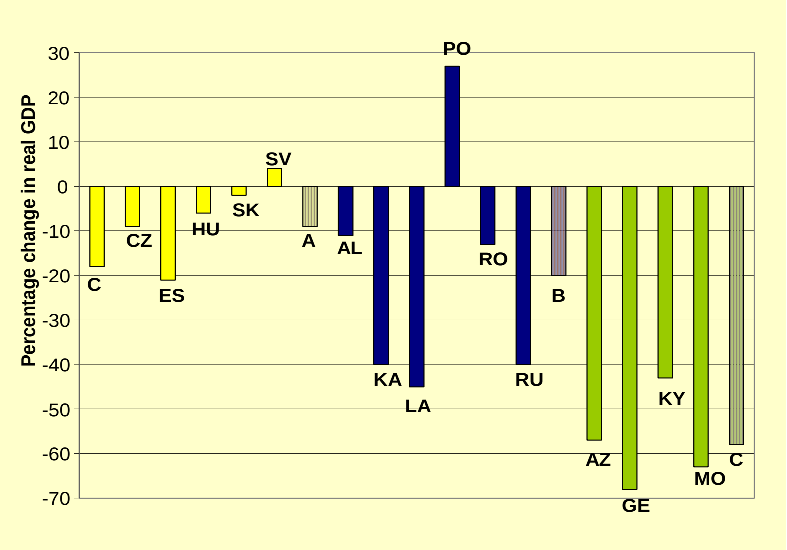
- Weak macroeconomic context. Figs. 3.4 and 3.5 show per capita GDP for selected countries from the region and the change in GDP over the period 1990–1997, respectively. They provide the macroeconomic context in the region during the 1990s. The countries have been clustered into three groups: A, B and C. There is a high correlation between those countries with low per capita GDP and negative economic growth (Group C) and a high reliance on out-of-pocket expenditure. Except Poland, all countries in Group B have experienced negative growth. These countries are those that, despite introducing social health insurance, continue to rely on general taxation as the main source of funding for health care. The countries that have been more successful in making the transition to social health insurance contributions (accounting for more than 60% of total expenditure on health) are also those with the highest levels of per capita GDP (Group A).

Fig. 3.4 GDP per capita in selected CEE and NIS countries, 1997



Source: Preker et al., 2002.

Fig. 3.5 Percentage change in real GDP in selected CEE and NIS countries, 1990–1997



Source: Preker et al., 2002.

- Labour market features. High levels of unemployment mean that the proportion of the population in formal employment is low, thus creating a very narrow revenue base from which to draw contributions. The numbers of people in formal employment are low, and therefore few employers are required to contribute. Many of those in formal employment are public employees, thus the employer share has to be made by government out of tax revenues. In addition, there are large numbers of self-employed and a large agricultural labour force, for whom contribution rates are lower and only levied when a profit is declared (which is not usual).

- Low compliance. Compliance has been extremely difficult, owing in part to some of the features of the labour market mentioned above. The large informal economy that developed following transition has meant widespread evasion of contributions (and taxes). Corruption in the economy as a whole, and the health care system in particular, may affect the population's ability to pay and may undermine people's acceptance of social insurance if they have to make additional informal payments. Low levels of compliance are further exacerbated because there is often no link between contributions and benefits. Many countries retained the constitutional right to health care for all, which was the historical legacy of the socialist era. Thus from the outset, entitlement to health care benefits under social insurance has been universal and unrelated to contribution status. This contrasts with social health insurance in western Europe during the twentieth century, which gradually expanded to different population groups as economic development progressed. Thus in eastern Europe, there are reduced incentives to contribute concurrent with large expenditures for the funds.

- Lack of transfers to health insurance. Contributions to the health insurance funds on behalf of the nonworking population should, in most countries, have been made through transfers from other social insurance funds, such as unemployment and pension funds, or from government revenues. Owing to chronic deficits across the social security system, however, these transfers were in many cases not made, and substantial arrears built up. Health insurance funds were often obliged to provide health services to the whole population, despite the lack of contributory income. The result was large financial deficits in the health insurance funds (see Box 3.1).

Beyond these possible reasons, there are also likely to be political factors which may explain the pattern of revenue collection across the region and the (lack of) success of implementation. The sustainability of health care systems in the region depends largely on the ability to generate sufficient revenue. This is a key challenge, given the number of contextual and structural problems in the

Box 3.1 Kyrgyzstan

A payroll tax for health of 2% was introduced in 1997 as an addition to the general payroll tax system. The total payroll contribution (employer/employee) is about 38%, of which the majority is for pensions. There is a single payroll tax collection agency, the Social Fund (SF), which collects these taxes for pensions, health, unemployment and cash benefits. The SF was supposed to transfer the 2%, plus fixed amounts from the pension fund for pensioners and from the unemployment fund for (registered) unemployed persons to the Health Insurance Fund (HIF). However, the transfers were never made to the extent required by law, with the transfers for pensioners and unemployed running at very low rates. In 2001 the SF transferred about 35% of expected revenues to the HIF. In addition there have been extreme month-to-month fluctuations. In effect, what was meant to be an earmarked tax for health has become a discretionary transfer by the SF (contrary to the law). As a result the HIF now has very large arrears to providers.

region. Nevertheless, to match funding to benefits and beneficiaries, policymakers must also make decisions about who and what to cover.

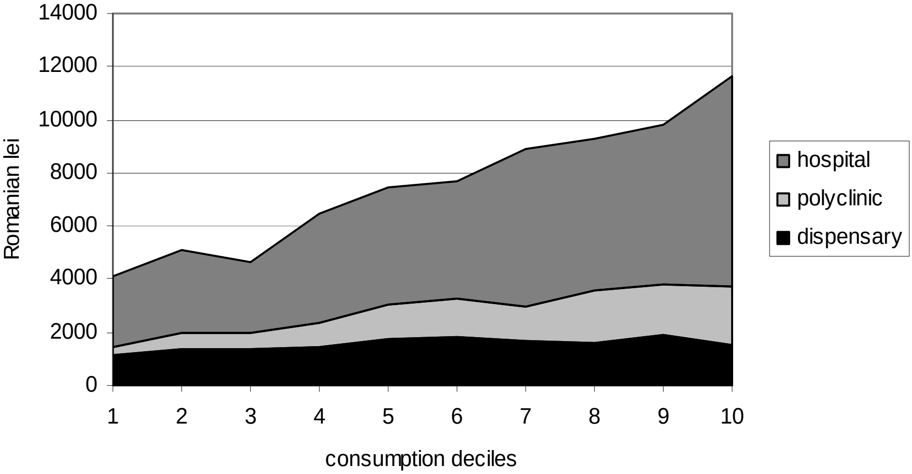
Defining beneficiaries and benefits

In theory, entitlements to health care benefits have remained universal (100% of the population) in most countries. Anecdotal reports from Kazakhstan and Poland, however, indicate that those who do not pay insurance contributions directly (and there are significant numbers in the region, such as the self-employed, those in small informal businesses, farmers, the unemployed, students and pensioners) are treated as "uninsured." This demands either that contributions are subsidized by other public revenues or that people are asked for out-of-pocket payments at the point of service (Chawla, 2000; Langenbrunner et al., 1994). This highlights the importance of distinguishing between being theoretically insured and "functionally insured" (that is, actually having physical and financial access to needed care at an affordable cost).

Even where entitlement is universal, there may be substantial differences between population groups in their ability to access services. Several studies in the CEE and NIS (Chakraborty, 2002) show that public expenditure on health care and social assistance programmes are not always well targeted. The non-poor often benefit disproportionately. In addition, there are marked differences in resource allocation between capital cities and other cities, and between urban and rural areas. Despite the ideology of equity, these disparities were prevalent during the pretransition phase, and in many countries have not been corrected. Indeed, some longitudinal analyses show disparities growing over the past decade, as in Uzbekistan (World Bank, 2002). Fig. 3.6 illustrates estimates from 1994 data from Romania, showing per capita spending by income decile. It shows that higher-income groups benefit more than low-income groups, particularly from hospital services.

Utilization data from Estonia indicate that low-income patients have reduced access to care compared with their high-income counterparts, as measured by health care utilization data (Kunst et al., 2003). In contrast in Bulgaria, age and self-reported health status were found to be the most likely predictors of utilization, thus suggesting that the health system has remained equitable despite economic restructuring in the 1990s (Balabanova & McKee, 2002). However, utilization data mask unmet need and important differences in the type and quality of medical care sought and received. The poor often obtain services at poor-quality state facilities (where there are no or limited user charges). Utilization data often refer to primary care, yet the poor may be more likely to face limits in access to higher levels of care (Balabanova & McKee, 2002).

Fig. 3.6 Per capita spending on health care by type of facility and income decile, Romania, 1994



Note: 1 = lowest, 10 = highest income decile.

Source: World Bank, 1997.

Ethnic minorities make up an important part of the population, whether they are Roma (Gypsies) in some southern and eastern European countries or ethnic minorities in Balkan countries. Coverage and disparities in equity of access have become a bigger issue in some cases over the past few years (Paci 2002).

A few countries have actually rolled back universal coverage to focus on the poor and clinically vulnerable. In Armenia, for example, certain secondary services are only covered for the poor.

Historically, most CEE and NIS countries provided comprehensive coverage in theory. In practice services were rationed. Countries in both western Europe and CCEE and NIS are attempting to cope with funding the many and expensive medical and health services. Defining a package of benefits (that is, limiting what is covered) has been seen as one option to cope with the discrepancy between available (public) resources and existing (perceived) demands.

Many countries in the region have attempted to define a more concise or "basic" benefits package, to be financed from the national budget and/or via national health insurance. For a while, Georgia developed and implemented a basic benefits package that covered mostly primary care and some secondary care. Armenia has developed a similar package of outpatient services, with secondary care only for the poor. Kyrgyzstan has developed an innovative outpatient drug package for insured persons targeted to a limited list of items, including drugs for four specific conditions for the explicit purpose of trying to shift patients from an inpatient to an outpatient setting (Kutzin et al., 2002).

In other cases, however, changes in benefits packages were made in an incremental way or not at all. In most instances, attempts to develop a systematic "basic package" failed. Why did so many countries in the region initiate the process, yet not succeed? Should the lack of success also mean that countries should stop attempts altogether, or are there other, better ways of addressing this issue?

Many factors/issues made it difficult to determine a package and implement it. Some of the challenges have been technical, others more political. For example, exhaustive information about the cost–effectiveness of interventions in a particular setting is not available and would be extremely costly to obtain. Where entitlements are defined, they tend to focus on individualized curative interventions rather on the wider population interventions and public health initiatives (McKee, in press). Meanwhile, citizens and politicians see comprehensive and free health care as a right, and are not ready to accept cuts in benefits. Providers, who depend on the income, similarly oppose it (Bultman 2002).

Those who are entitled to benefits because they contribute may be identical to those covered by the pooled funds. However, the pool may cover a larger population than just those who directly contribute. For example, where social health insurance funds are expected to cover the whole population, including the nonworking and therefore noncontributing population, transfers from tax revenues and transfers from other social insurance funds (for example, employment and pension funds) are needed. Where there is no explicit entitlement to certain benefits, but the system is in theory comprehensive, purchasers (such as regional authorities or insurance funds) tend to make decisions about what to buy, thus undermining equity of access across the population. Where a basic package of benefits is defined, purchasers may have the freedom to offer supplementary benefits, though this is rare in the CEE and NIS region.

Pooling of funds

The second important function of health care financing is to pool the resources collected from various sources and to allocate these to purchasers. The two important aspects are the pooling mechanisms and the resource allocation methods. In many CEE and NIS countries the main purchasers of services are insurance funds. In some countries, however, regional authorities are also responsible for purchasing. In some cases funds are collected and retained by the purchaser (that is, collection, pooling and purchasing are integrated), in which case there is no explicit allocation mechanism. Where there is pooling, either through a central fund or central government, resource allocation mechanisms are used to allocate resources to purchasers.

Pooling mechanisms

A well-designed pooling function can be judged by the extent to which multiple revenue streams are integrated or fragmented and by the size of the population across which pooling occurs. In smaller countries predominantly funded by social insurance, such as Croatia, Hungary, Slovenia and others, revenue streams are less fragmented (Preker et al., 2002). Problems still persist owing to the lack of pooling of resources for operational expenditures (from social insurance contributions) with capital investment (usually from other sources such as central and local taxation). Some additional funding is also allocated directly from general government revenues to teaching hospitals.

Decentralization in many countries has included the devolution of revenue collection to regional government or to regional funds (for example, Bosnia and Herzegovina, Poland and Romania). To ensure adequate pooling between regions, resource allocation methods were designed that aimed to ensure some redistribution according to the health needs of the population covered. However, in some countries regional governments, such as those in the Russian Federation, have been reluctant to surrender revenues that they have collected to central government for redistribution to other regions, at least for the health sector. Similar political tensions exist in Italy, where a similar redistribution mechanism has been introduced in the health sector (Taroni, 2000).

Resource allocation to purchasers

With the transition to social health insurance, particularly in countries that created multiple insurance funds (or have regional insurance funds), pooling of funds has become more fragmented. Several countries – Latvia, Lithuania, Poland, the Republic of Moldova, Romania, the Russian Federation, Slovakia and Tajikistan – have developed new allocation formulae based on per capita or "demand-side" principles rather than the older, "supply-side" Semashko-driven norms. In Poland, for example, an Equalisation Fund is used to redistribute across insurance funds on the basis of age and average income (McMenamin &

Timonen, 2002), while in Latvia, funds are distributed via capitation based on the size and age structure of the population (Karaskevica & Tragakes, 2001). In Romania, the National Health Insurance Fund can reallocate up to 25% of collected funds to underfunded districts (Bara & van den Heuvel, 2002). In Slovakia, the standard characteristics of age and sex structure of the population are used for reallocation of funds. This has resulted in redistribution towards the General Health Insurance Company (VsZP), which covers 68% of the Slovak population, since a greater proportion of children and elderly are covered by this fund.

One premise in this approach is that it results in reallocation of resources according to population needs, as well as consumer preferences and priorities. In process terms, this involves access to certain technical skills (for example, public health skills to assess health needs and evaluate outcomes, and access to evidence on the cost and effectiveness of interventions). Often the information and technical expertise required is scarce or nonexistent. Estonia is relatively unusual in having public health involvement in the purchasing and supervision of health services. Mechanisms for needs assessment are conspicuously absent from most countries in the region (Figueras et al., 2001).

Purchasing of services

The inherited model in most CEE and NIS countries was characterized by an emphasis on supply-side input norms and planning. This was perceived as too rigid, and the norms also contained structural incentives that encouraged overly expensive specialized care compared with more cost-effective primary and outpatient care. Countries in transition found themselves with too many staff, beds and facilities. There was a related perception of underpayment to individual physicians and nurses, regardless of specialty (Ensor, 1993; Sheiman, 1993).

As early as 1987, some countries in the region began testing new organizational and financing models to improve efficiency and ensure better funds flows. The New Economic Mechanism, for example, picked a number of geographical demonstration areas, reorganized the polyclinics into family practice groups and initiated fundholding arrangements. The objective was to shift the locus of care to less expensive outpatient and primary services. There were early successes, but also unintended consequences, as in St Petersburg where patients who needed hospital care were never admitted owing to underdeveloped quality assurance mechanisms (Sheiman, 1993; Langenbrunner et al., 1994; Schieber, 1993).

Contracting mechanisms[4]

Concurrent with the shift to social health insurance in the CEE and NIS, contracts are increasingly used as a new model of relationships between purchasers and providers. Currently, there is no comprehensive account of contracting or existing evidence on its impact in Europe (Duran et al., in press). CEE and NIS countries have tended to use “soft” agreements rather than selective provider contracts that contain full accountability. Nevertheless, many countries continue to push for contracting that is more performance based, as in Romania with primary care physicians (see, for example, Vladescu & Radulescu, 2001).

There are two main forms of contracts: all willing (accredited) provider contracts and selective contracts. One expectation of selective contracting is that it can encourage greater competition between providers and allow for a greater diversity of provision. To date there has been a lack of selective contracting by purchasers from among both public and private sector providers, especially in the case of NIS countries. The Russian Federation, for example, enacted legislation in 1993 but its insurance purchasers have never contracted with nongovernmental providers. In other instances, low payment rates have discouraged providers from seeking contracts, as in Poland. Whether purchaser or provider driven, this has prevented competition or contestability among providers and has thereby not fully utilized possible market mechanisms to increase efficiency. Another way of driving provider competition is by allowing financial resources to “follow the patient” within an all willing (accredited) provider contract.

Contracting for services in CEE and NIS countries has been challenging for a number of reasons.

- Inadequacy and low predictability of funding. Since contracts express the clear-cut commitment of a purchaser to reimburse the cost of provided services (contracts in many CEE and NIS countries are regulated by the Civil Code and therefore legally binding), attempts to start contracting require a realistic evaluation of available funding. Experience in Kazakhstan, Kyrgyzstan, the Russian Federation and the Caucuses suggests that, with public funding at 2–4% of GDP, contracting may not be fully viable. Insurers simply cannot pay all providers’ bills. Payments are not fully predictable or timely. Debts increase, payment rates must be adjusted downwards, and providers lose interest in contractual provisions.

- Low operational autonomy of providers. To act as contracting parties, providers must have flexibility to respond to purchasers’ demands and, in particular, be able to increase or decrease capacity, acquire and dispose of excessive capacity, borrow money within limits, and take financial responsibility for performance. The trend has been to provide facilities with greater rights and responsibilities (Preker & Harding, 2001). The Baltic countries have restructured state-owned polyclinics into free-standing practices and independent contractors. In Bulgaria, the Czech Republic, Estonia, Kazakhstan, Latvia and Lithuania, state-owned hospitals have gained the status of public non-profit organizations, with new contracting rights and responsibilities.

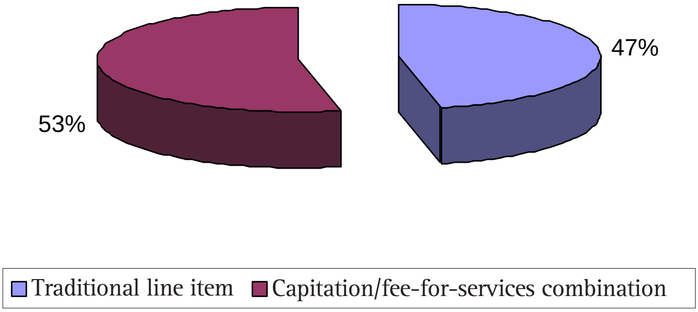
- Lack of timely information and routine information systems. In both eastern and western Europe, contracting is limited by insufficient information. The minimum information requirements for effective contracting cover patient flow data, cost and utilization information across specialties or diagnostic groups, and demographic and risk groups. Large investments are often required for information systems, including the capacity to process contracts and monitor outcomes.
- Technical capacity and management skills. Contracting requires particular skills (for example, identifying cost-effective medical interventions, negotiating and monitoring providers' performance, communication strategy, etc.) that are not needed under direct public service provision. The corresponding capacity-building exercise has been patchy and discontinuous. Other than some examples in eastern Europe, such as Budapest and Krakow, there are few health system management schools in the CEE and NIS.

Provider payment

With the former Semashko model, the line-item budgeting system was used in all countries. Line-item budgeting meant that allocation primarily reflected historical budgets plus some inflation factor; there was limited or no reallocation across categories or from year to year; and, under difficult economic constraints, salaries, food and medicines took priority.

Health insurance funds and even ministries of health are now moving towards the use of performance-based systems to pay for services. For primary care services, capitation is used more often than not, as seen in Fig. 3.7. The countries utilizing some variant of this approach include the Baltic countries, Armenia, Croatia, Georgia, Hungary, Kyrgyzstan, Poland, Slovakia, Slovenia and Uzbekistan. Payment can go to the physician directly or to the primary care facility. Some of these models offer the traditional mix of services (for example, minor surgery) or "carve out" priority services such as immunizations, either using fee for service (Estonia, Romania) or paying a bonus for rural placement (Georgia, Estonia, Lithuania). This fee for service and bonus add-on to the capitation model is important, as some capitation models (for example, Kazakhstan) have been shown to reduce the utilization of preventive services (Langenbrunner et al., 1994).

Fig. 3.7 Percentages of CEE and NIS countries with traditional line-item budgets and capitation/fee-for-service combinations in paying for primary care



Source: European Observatory on Health Care Systems, 1998–2002.

Many countries are also developing new hospital payment systems that pay for a defined unit of hospital output. The most popular approaches in the early years of transition were systems based on per-diem and per-case payment. These were most often developed not only because they required few data or little capacity to design and implement, but also because they were seen as methods to promote greater productivity by providers and generate increased revenues. Individual countries started at different levels of expertise and interest and have progressed differently. Most have combined different levels of per-diem and simple case-mix measures, and typically include only recurrent costs rather than capital costs or depreciation. Nevertheless, these steps serve as a developmental framework for examining these countries in terms of alternative hospital payment models. A summary of per-diem and per-case systems is provided in Tables 3.4 and 3.5.

Providers have responded to these incentives. These per-diem and case-mix systems have driven up the volume of cases admitted and put fiscal pressures on the purchasing organization (for example, Croatia, Czech Republic, Hungary, Russian Federation). Decreasing numbers of beds and lower average lengths of stay were offset by increasing admissions – a trend that started in the mid-1990s in the CEE, and the late 1990s in the NIS when these began utilizing new payment methods (see Box 3.2). Most purchasers have had little capacity or experience with quality assurance or administrative mechanisms to stem the rapid increases in volume driven by the underlying incentives (Healy & McKee, 2002).

A number of CEE and NIS countries are now shifting policy objectives, from revenue enhancement and increasing provider income to goals more related to cost containment and efficiency. With this shift, hospital global budgets and capitation are emerging as the “next generation” of payment incentives beyond

Table 3.4 Features across countries of per-diem payment systems for hospital services

	Design features:			
Country	Case-mix adjuster	Facility adjuster	Overall expenditure cap[1]	Other features
Croatia		X	X (1999)	Point system for providers
Slovakia		X	X	
Slovenia	X (bed days and adjuster for high cost cases)		X	
Estonia	X		X	Fee-for-service for some procedures

[1] This is a budget cap set on all hospital services, not just at the level of the facility.

Source: Langenbrunner & Wiley, 2002, updated by authors.

Table 3.5 Features across countries of per-case payment systems for hospital services

	Design features:				
Country	Payment categories	Payment rate calculation basis	Facility adjusters	Outlier payment feature[1]	Overall spending cap
Latvia	64	Historic level of bed days	X		
Lithuania	160	Historic level of bed days		X	X
Poland	9–29	Estimated payroll tax revenues			
Russian Federation	50-55 000	Varies	X		
Georgia	30	Historic budget and productivity standards			
Kazakhstan	147	Step-down costing[2] to departmental level, further breakdown by relative ALOS within department	X		
Kyrgyzstan	139	Step-down costing to departmental level, further breakdown by relative ALOS within department			X (hospital specific caps)
Hungary	758	Historic costs	X	X	X

[1] Additional payments made for statistical outliers (typically 2 standard deviations from the mean), based either on length of stay or on cost per case. In most countries these outliers constitute about 5% of all cases.

[2] Step-down costing is an accounting method for allocating costs per case by successively allocating costs across all departments, and from indirect costs (for example, administration) to direct costs (drugs and supplies) to reach an estimated amount overall.

Source: Langenbrunner & Wiley, 2002, updated by authors.

per-diem and per-case systems. Global budgets are being developed in seven of the countries for which information is available, and already exist in five others (Table 3.6), with capitation pilot schemes in a number of countries, such as Hungary, Poland and the Russian Federation (Langenbrunner & Wiley, 2002). Some countries (Croatia, Hungary, Kyrgyzstan) face fiscal pressures such that they cannot wait for sophisticated risk-adjusted payment cap systems; instead subsectors (primary care, outpatient care, hospital care) are being capped at a national level (or even at the level of specific facilities) as a first step to stopping the current haemorrhaging of expenditure.

A summary of countries and hospital payment systems is provided in Table 3.6.

Box 3.2 Lithuania

In Lithuania, a simple per-case payment system was developed that relied upon historic bed costs (including salaries and ancillary expenses) and disease group classifications, while an upward adjustment of the rates was made for university hospitals (Dobravolskas & Huivydas, 2003, Logminiene, 2001). The average number of beds in Lithuania fell following the start of the new payment system, decreasing from 95 per 10 000 population in 1991 to 12.5 per 10 000 population in 1998, although even this latter figure remained significantly above the EU average. Moreover, the per-case incentives for higher throughput reduced the average stay over this period from 17.6 days to 11.7 days. However, the number of hospital admissions increased from 18.6 per 100 population in 1991 to 24.2 in 1998, despite concurrent improvements in primary care that were expected to encourage the use of more appropriate (that is, less expensive) care settings (Logminiene, 2001). One explanation is that primary care physicians were paid capitation and therefore had incentives to minimize their costs (and thus the services they provided) and refer patients to hospitals or other care settings.

While the number and types of new payment systems in the region show a clear change from the previous decade, results have been mixed to date. This is because of a number of the issues discussed above, as well as other specific issues that await future policy leadership. The latter include the following.

- Fragmented public sector pooling and purchasing. The scope for payment incentives to change behaviour is limited by the disintegration of health finance pooling. Newly emerging insurance systems have often coexisted with the old financing mechanisms through direct (noncontractual) allocation of government resources to providers. In many CEE and NIS countries, too many actors are allocating funds (insurance, central and local treasuries and health authorities, and sometimes commercial insurers), each trying to control its portion of the money.

Table 3.6 Hospital payment systems in CEE and NIS countries

	Line item	Per diem	Per case	Global budget
Country				
Albania				X
Armenia			X	X
Azerbaijan	X			
Bosnia and Herzegovia				Developing
Bulgaria			X	Developing
Croatia		X		Developing
Czech Republic			X	X
Estonia		X	Developing	
Georgia			X	X
Hungary			X	
Kazakhstan	X		Partially implemented	
Kyrgyzstan			X	
Latvia		X	Developing	
Lithuania			X	
The former Yugoslav Republic of Macedonia	X			Developing
Poland			X	
Republic of Moldova	X			
Romania			X	X
Russian Federation		X	X	X
Slovakia		X		Developing
Slovenia			X	?
Tajikistan	X			
Turkmenistan	X		X	Developing
Turkey	X			
Ukraine	X			Developing
Uzbekistan	X			

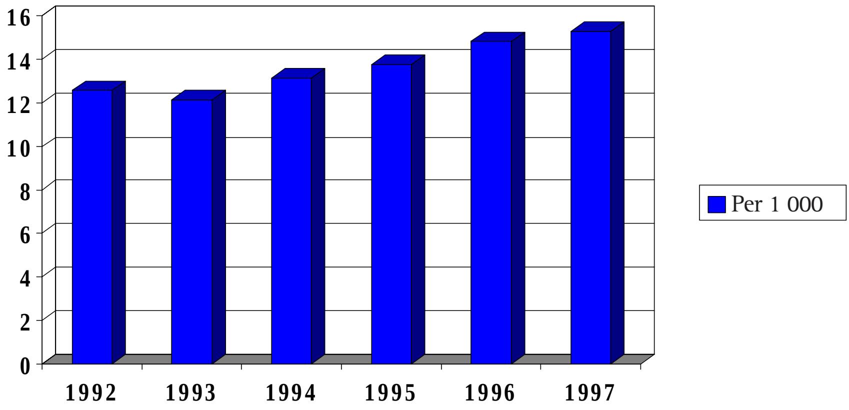
Source: Langenbrunner et al., in press.

There are nevertheless successes. In the Baltic countries, the Czech Republic, Hungary, Kyrgyzstan, Slovakia and Slovenia, insurers control most (>70%) of public funds. Purchasing is increasingly integrated, thus facilitating financial planning and planning of medical services delivery (both strategic and operational), with the focus on increased efficiency and predictability of flows of funds. The most recent positive example is Kyrgyzstan, which has started the shift to a single-purchaser model by integrating general budget revenue and mandatory health insurance contributions (Kutzin et al., 2002). But in other countries, such as the Russian Federation, numerous health pools exist.

- Poor complementarity of design. Payment reforms across settings often do not complement one another, thus damaging efficiency of allocations. In Croatia, primary care capitation for physicians was “matched” with fee-for-service payments at the specialist referral and inpatient settings. That meant that both primary care physicians and specialists had the incentive to refer up the delivery structure, instead of managing more patients at the primary care level. As a result, the share of inpatient spending (Fig. 3.8) and hospital admissions increased in Croatia between 1993 and 1997, even as the World Bank loan of nearly US $50 million was targeted to primary care reform.

Similarly, closed subbudgets (for primary care, specialist outpatient care and inpatient care) now being applied are important tools for cost-containment, but will these generate adverse incentives for purchasers? Are patients being “dumped” from other subsectors? Are there adequate risk-sharing mechanisms and, if not, will this cap only result in a complete shift of all risk onto the providers, which is both inequitable and inefficient?

Fig. 3.8 Croatia: increasing hospital admissions during the years of primary care reform



Source: Staines, 1999.

- Institutional impediments. New pilot schemes and payment programmes are often blocked by legal or administrative impediments, such as civil service reform or decentralization. There are, moreover, significant vested interests concerned with preserving the current system, particularly in those areas that could lose from change.

- Deficits. In the CEE in the early 1990s, public providers became indebted to their suppliers, and often appealed to the government for subsidies or bailouts. In many of the former Soviet republics, debt has been almost constant, such that much spending occurs not on a cash basis but through a process of mutual debt settlement. A facility wishing to use part of its budget for, say, building maintenance, must first find a contractor with an outstanding debt with the local administration or insurance fund (depending on the source of funding). This debt is then cancelled or reduced in return for repairs to the building to an agreed value. If a debtor cannot be found for the service or commodity required, a facility may be tempted to obtain some other commodity, just to ensure that the budget is spent. This mutual debt-settlement system helps to ensure that services can be provided even in cashless circumstances, but does lead to suboptimal allocation decisions and is administratively costly to operate (Ensor & Langenbrunner, 2002).

- Monitoring and quality. Each payment system design brings with it unintended consequences and opportunities for changing levels of quality of care, both better and worse. The monitoring capabilities of the purchaser are, however, too often underdeveloped. Future directions for purchasers in the region should include providing support to ensure that quality is safeguarded and optimised.

- Out-of-pocket payments. One of the major changes in health systems in the CEE/NIS region over the last decade is the increased reliance on out-of-pocket payments (Preker and Harding, 2001). Because these payments are large for the lower income countries in the region, however, their impact on the supply side, as a form of fee-for-service provider payment, must be considered as well.

Out-of-pocket payments can influence treatment choice as patients tend to make larger payments for riskier interventions such as surgery. Increasingly, quality of care and waiting times are dependent upon a patient’s ability to provide gratitude money (Lewis, 2000). In addition, indirect payments from medical equipment suppliers and pharmaceutical companies may also distort incentives (Orosz & Hollo, 1999).

Informal payments by patients are pervasive in the poorer countries of the region, most extensively in the Caucasus and Tajikistan, but also elsewhere in central Asia, the NIS and some CEE countries. Converting informal payments into formalized cost-sharing arrangements requires compliance from providers who may lose substantial income, especially if income is to be declared for tax purposes. Securing such compliance is not an easy task. Such a conversion would also depend upon the development of appropriate payment incentives for providers and the existence of suitable information systems to support accounting and auditing. Evidence from the single-payer reform in Kyrgyzstan indicates, however, that it is possible to reduce informal payments through a coherent set of incentives and purchasing arrangements. For inpatient care, there is an explicit inverse relationship between what the purchaser pays from pooled funds and what the patient is meant to pay as a co-payment.[6] The single-payer reform worked in two important dimensions: (a) average spending by patients where the co-payment was implemented was about the same after the policy as before, with the formal co-payment largely replacing previous informal payments, particularly for drugs and medical supplies and payments to health workers; and (b) being insured and being exempt in the single-payer regions had significant negative effects on both total and informal out-of-pocket spending by patients (Langenbrunner et al., in press).

Policy discussion

During the 1990s, CEE and NIS countries undertook sweeping and ambitious reforms in health care financing systems. As key measures, the reforms aimed at:

- switching to social insurance complemented by voluntary insurance, with the concomitant need to define both benefits and beneficiaries;
- decentralization to regional purchasers or insurance funds, with national pooling through the use of needs-based resource allocation such as risk-adjusted capitation; and
- the introduction of performance-related purchasing, such as contracting and new remuneration methods for providers.

Health insurance was expected to eliminate the subordinate role of the socialist health care system and ensure stable, growing resources. Moreover, the autonomy of health insurance funds and performance-related provider payments was expected to make health insurance funds efficient purchasers of health care services. Allowing them to identify and reward high-performance providers was expected to improve the efficiency and quality of the health care services, including improved responsiveness to patients.

In practice, however, revenues generated by social health insurance were limited, and governments were often forced to continue funding health care through general tax revenues, similar to the experience of many low- and middle-income countries in other parts of the world. Voluntary health insurance developed slowly or failed. The costs of health care in many countries were shifted onto the individual in the form of formal and informal user charges. Mechanisms for pooling resources were inadequate, and in many cases fragmented pools developed with different insurance funds and different regions and, in some cases, between taxes and social insurance contributions (with the former controlled by the ministries of health and the latter by the newly created health insurance funds). Purchasers were unable to utilize contracting to elicit efficiency gains or to use incentives to increase the responsiveness of providers.

The expectations of reform have yet to be fulfilled, partly owing to:

- the weak and unstable macroeconomic context;
- low levels of employment and formal sector activity;
- low compliance and high levels of corruption;
- the lack of transfers to health insurance from taxation or from other social security funds;
- the failure to define a core benefits package;
- the maintenance of universal entitlement without sufficient funding;
- decentralization and fragmentation of pooling;
- the inadequacy of information, technical capacity and political will to establish needs-based resource allocation mechanisms;
- the inadequacy and low predictability of funding;
- the low operational autonomy of providers;
- the lack of information and of technical and management skills for contracting;
- fragmented public sector pooling and purchasing;
- poor complementarity of design of provider payment methods;
- institutional impediments; and
- financial deficits.

Overall, the reform measures failed to produce the necessary conditions, such as adequate incentives, information and organizational frameworks, which would make the key actors of the health care system accountable for their decisions.

Tackling these issues will not be simple. There are no straightforward alternative policy solutions, or a linear process for establishing the necessary conditions.

Economic recovery and capacity building in the region will go some way towards increasing the revenue collected through general (direct and indirect) and payroll taxes. In higher-income countries with higher levels of formal employment (Croatia, the Czech Republic, Estonia, Hungary, Slovakia and Slovenia), social insurance appears to have been an effective way of mobilizing resources for the health sector. Lower-income countries in the region, such as Albania, Kazakhstan and Romania, with little formal employment, found that insurance contributions were not viable. Further efforts to ensure compliance are necessary (as they are with the collection of general tax revenues). However, the delegation of responsibility for revenue collection to quasi-state agencies or independent insurance funds has created significant challenges for the state in this respect. Lack of compliance in the health sector is likely to be solved only if corruption in the wider economy is reduced.

Another option is to further diversify funding sources, for example, through subsidies from other forms of taxation or by pooling out-of-pocket payments. Transfers from other public sources already do or should occur; these need to be transparent and to ensure that funds are not penalized (for example, by reduced subsidies)[7] for increasing their revenue and/or efficiency. Where there is a large informal economy, direct taxation (that is, taxes levied on income or profits) is likely to face problems of compliance similar to those encountered by social health insurance. However, it places less of a direct burden on labour costs and may therefore have less negative consequences for the development of the economy. Indirect taxes (that is, those levied on goods and services) are more visible and may be less easily evaded, but they are more regressive.

Experience from low- and middle-income countries outside Europe with, for example, community health insurance, suggests that formalizing out-of-pocket payments and establishing systems of prepayment (or insurance) will be extremely difficult (Mills & Bennett, 2002). Informal payments are partly a response of the health care system, particularly health care providers, to the lack of financial resources and the response of patients to a system that is unable to provide adequate access to basic services. Governments should ensure that the limited resources are targeted more effectively in order to secure access to basic services, for example by shifting resources from secondary and tertiary care to primary care, through incentives as well as clinical skills upgrading and rationalization. Using similar tools, technical efficiency in the provision of care must improve as well. If there are seen to be clear benefits, and patients are not also expected to pay informally, willingness to contribute to a formal system of prepayment should be higher.

The commitment to fund both universal coverage and comprehensive benefits is unrealistic and unsustainable in some countries in the region. Despite political and technical difficulties, countries may need to consider defining more limited entitlements to ensure that public revenues are targeted on the most cost-effective interventions and the most needy populations. As revenues increase, so too will the benefits and the levels of coverage, thus providing a motivation to the population and employers to comply. For those countries (Azerbaijan, Georgia, Tajikistan) able to spend less than US $15 per person per year on health care from the public purse, one important policy option, at least in the short term, could be to change the coverage rules to benefit the poorest and most needy.

Mechanisms for pooling revenues need to be strengthened. Other sources of public expenditure should be pooled with social health insurance contributions to ensure the most effective use of funding. Where multiple funds or regional governments currently collect revenues and are expected to reallocate resources to poorer/high-risk funds or regions, revenue collection could be centralized and resources allocated based on a simple risk-adjusted capitation. This would overcome some of the inefficiencies in having multiple collection agents and the difficulties of establishing national pooling through reallocation.

The technical and administrative capacity of purchasers needs to be strengthened, both through the development of information systems that can deliver timely and accurate data from providers, and through the training of personnel. Government regulation and stewardship will also be vital in ensuring that purchasers act in the best interests of the population.

Financing systems are only one among many factors needed to cope effectively with the undoubted inefficiency within the health sector, whatever the context. The multifaceted problems faced in the region demand a well-conceived and long-term health sector reform strategy, with specific programmes, a clear governance framework, skilled and committed health care management and administration and support from health care professionals and the public for the aims and goals of the reforms. Unfortunately, none or few of these elements have been assembled so far in the region to the extent needed. These are but a few of the challenges that lie ahead for the region in the next 10 years, and perhaps beyond.

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Notes

[1] The region referred to in this analysis covers the countries of central and eastern Europe and the former Soviet Union. Different terms are used to refer to these countries. This chapter adopts the World Health Organization (WHO) terminology of CEE and NIS.

[2] Purchasers may refer to the ministry of health, regional or district health authorities, county council, sickness fund or primary care organization.

[3] These data are likely to have changed. For example, since 1998 Poland has had a 7.5% social health insurance contribution.

[4] This section draws on some of the discussions found in Duran et al. (in press).

[5] Step-down costing is an accounting method for allocating costs per case by successively allocating costs across all departments, and from indirect costs (for example, administration) to direct costs (drugs and supplies) to reach an estimated amount overall.

[6] More specifically, the amount paid per case is least for uninsured patients, higher for insured patients, and highest for patients meant to be exempt from co-payment. Conversely, the co-payment level is highest for the uninsured, lower for the insured, and zero for exempt persons.

[7] There is some evidence to suggest that those countries that shifted to social health insurance were better able to maintain levels of spending on health care (Preker et al., 2002). Anecdotally, however, social health insurance revenues were simply used by the ministry of finance to substitute for general revenues, and overall funding for the health sector did not increase as a result of the introduction of social health insurance contributions.

Chapter 4 Reforming the continuum of care

by **Martin McKee** and **Armin Fidler**

This chapter concerns the issues facing health policy-makers in central and eastern Europe (CEE) and the new independent states (NIS) of the former Soviet Union as they seek to deliver effective and equitable health care. It looks at the challenges policy-makers face in an environment of often contracting economies and erratic health budgets and the choices they must make.

These countries inherited health care delivery and public health systems that had many weaknesses. They reflected a model of care that has become obsolete. Large hospital facilities were designed for patients with diseases that resolved spontaneously, were quickly cured by basic treatments or were equally rapidly fatal. Staff, who had little access to the technology and pharmaceuticals required for effective intervention, required only basic training. Conversely, the absence of labour-saving technology, combined with low skills meant that large numbers of staff were needed for these basic tasks. Primary care was especially weak, serving largely as a funnel for directing the sick to secondary care or as a means of controlling absence from work because of sickness. Patients, used to shortages in every area of their lives, grudgingly accepted unresponsive and poor-quality services as inevitable.

This chapter looks at options for change, first setting out a framework for analysis. Second, it examines what has happened in this region in the past decade of transition. Third, it looks at the evidence that should inform change. Fourth, it draws on recent experiences to understand the barriers to and opportunities for successful reform. Finally, it sets out a series of lessons learned from these experiences and recommends policy options for the region.

A conceptual framework

Too often, health policy has taken a reductionist approach, focusing on the individual elements of a health care system. It looks at, for example, hospital reform, primary care, public health or financing. This approach may be administratively tidy, especially in health ministries that have separate departments dealing with, for example, hospitals or primary care, but it ignores the reality in which health care delivery takes place – a complex network of settings, each with its own role to play but each connected to the others. This is even more important as we increasingly focus on overall health system performance, emphasizing health outcomes, user satisfaction and service quality.

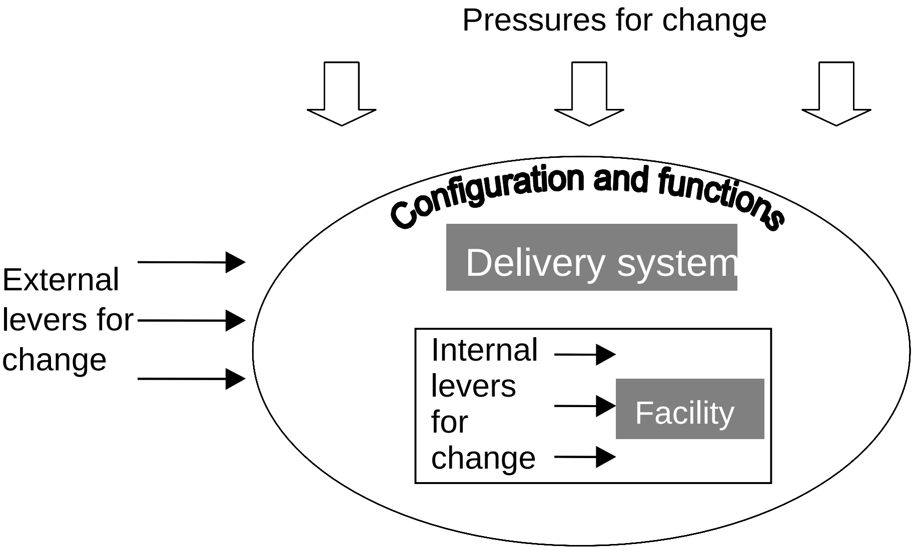
Too often, difficulties with these connections are the reason for problems in health care delivery. In many countries, general practitioners lack the skills and facilities, appropriate economic incentives and the professional ethos to provide treatment for many disorders, with the result that these patients are unnecessarily referred to hospitals. Other patients, with diseases that are treatable if detected early, are seen by specialists when it is too late to do anything. The problem is illustrated by a brief consideration of misalignment of incentives. For example, when a general practitioner is remunerated on a capitation basis, the incentive is to attract as many patients as possible but to refer as many as possible to higher levels of care. In turn, if a general practitioner is paid on a fee-for-service basis there is an incentive to over diagnose and over treat, resulting in cost escalation. Thus, a combination of capitation and fee-for-service with capping may render the most appropriate mix of incentives.

Investigation of many common conditions follows a pathway that can be clearly defined. For example, a woman with a lump in her breast that turns out to be malignant will undergo mammography, biopsy, surgery and rehabilitation, yet a failure to coordinate care pathways can make this journey seem like a pioneering exploration. People with chronic diseases also often follow an unnecessarily complex pathway on the interface between primary and secondary care, seeking the skills of each sector when needed but with little to guide them. And patients often remain in hospital for longer than necessary because of an absence of alternative, more appropriate facilities. The challenge facing health policy-makers is how to implement a system that recognizes this interconnectedness. Increasingly in health systems in industrialized countries a family doctor serves not only as a primary care giver, but also as a competent manager who helps the patient negotiate ever more complex choices by interpreting diagnostic and treatment options and offering a focus of continuity.

The interconnectedness of health care delivery is a key element in the conceptual framework used in this paper (Fig. 4.1; McKee & Healy 2002a). This sees health care delivery systems responding to many different pressures for change (McKee et al. 2002). Systems respond by changing the way they are configured and how they work. Change is brought about by actions at all levels of the system, some at the level of government and some within the health care system. Those acting within the health care system do so within and across facilities, and across boundaries with nonclinical settings such as long-term care, home care and hospice care.

A challenge facing any systems analysis is where to draw the boundary of the system. This is especially difficult here given the interrelationships of health systems with, for example, systems for education and social protection. For the present purposes, and drawing on the definition used in the 2000 world health report, this chapter defines the system as those elements whose primary objective is the improvement of health. The boundary is also defined, primarily in response to space constraints, in such a way as to limit consideration to the formal health care system. It is important to recognize that this has the effect of excluding the large amount of care that is provided informally, within families and communities. However, some of the issues that arise in respect of this are dealt with in chapters 6 and 7, on community mobilization and public health, in this volume.

Fig. 4.1 A conceptual framework



Source: McKee & Healy, 2002a.

At the outset, it is important to recognize that health care delivery takes place within a wider context. In particular, the health needs of the population being served are changing. This has important implications for health care delivery.

Most obviously (although surprisingly frequently overlooked by those who undertake international comparisons of health care expenditures), sicker populations require more health care (Wanless, 2002). This highlights the importance of having a health policy that seeks to reduce future demand for care through promotion of health, as well as ensuring that the need for care today is met to the extent possible with the resources available to the health system. However, the main consequence of differing disease patterns is that the types of care provided will also differ. Older populations suffer from chronic conditions and may have more complex disorders, often with multiple disease processes, requiring care from coordinated teams of health professionals with a central role for the primary care physician. Populations that have experienced high rates of smoking have not only high rates of lung cancer and heart disease but are also much less likely to have an uncomplicated recovery from anaesthesia, thus requiring additional postoperative facilities. Populations with low birth rates require fewer obstetric facilities, but those with high rates of teenage pregnancy will have more low-birthweight babies and so require additional neonatal intensive care facilities. Societies with high rates of violence will require additional trauma facilities.

In some cases, it is the health care system itself that is bringing about change. Inadequate and partial treatment regimes have fuelled a dramatic increase in rates of antibiotic-resistant infection (Dornbusch et al., 1998). The most alarming example is multidrug-resistant tuberculosis, a disease that is entirely preventable but that is now reaching alarming levels in many NIS countries (Kammerling & Banatvala, 2001). This has been exacerbated with the neglect of the interface between the civil and penitentiary health systems.

In addition, efforts to decentralize services have sometimes jeopardized formerly effective programmes, resulting for example in a breakdown of the vaccine cold chain in many NIS countries. This has resulted in unprotected populations and has led to outbreaks of vaccine-preventable diseases.

Another factor that is changing is public expectations. The consumer society is now firmly in place in many former communist countries, as multinational companies open ever more branches. The new IKEA store close to Moscow airport has the highest takings per square meter of floor space within the IKEA chain. The old-style hotels, with their missing bath plugs and unhelpful staff, are giving way to ones that actually make you feel welcome. People see that service can be provided in comfortable facilities and with a smile, and they are asking why this has yet to happen in many of their health care facilities. Yet in many countries in the region, the humanity with which patients are treated is still far from ideal (Platt & McKee, 2000).

The nature of health care and how it is provided is also changing. Advances in technology have made it possible to treat conditions that were once fatal. Again, this has profound consequences for health care delivery. An early example is the discovery of insulin at the beginning of the twentieth century. This changed type I diabetes from a rapidly fatal disorder of childhood into a condition involving lifelong treatment by specialists, including endocrinologists, ophthalmologists and vascular surgeons. More recently, many cancers have been transformed from growths that surgeons simply removed (while hoping for the best) to systemic diseases requiring integrated teams of surgeons, oncologists, radiotherapists and, if cure is impossible, palliative care specialists.

It is not just technology that is changing: health care staff are also changing. They have much higher skills, and thus higher expectations of financial and other rewards. Changes in society mean that there are many other career pathways open to them, especially in the often better-paid private sector, so health services need to compete to retain staff in a way that they previously never needed to. The “brain drain” of both nurses and doctors is a severe problem in NIS and CEE countries. The acute nursing shortage in the European Union and the United States provides a powerful incentive for nurses from such countries to seek higher-paid jobs and better living and working environments in these areas. Similarly, many doctors, particularly those with postgraduate degrees from western universities, find attractive employment opportunities within and outside the health sector abroad.

An effective response by the health care system to these pressures involves actions at many levels. Change is required at the level of the individual, as health professionals and others embrace the concept of lifelong learning. It was never possible to equip a medical or nursing student with enough knowledge to practise effectively until retirement. The increasingly rapid pace of change has reduced the “shelf life” of knowledge ever further. During the past 10 years of transition in the CEE and NIS, the need for change in the paradigm in which medical, paramedical and nursing training is based has received inadequate attention. It may require a generational change, coupled with intensive investment in training facilities and curricula, to produce professionals who are able to apply evidence-based principles to their professional practice in medicine, nursing or social work.

Change is also required at the level of the facility. To achieve optimal outcomes, those who provide care should be able to influence the use of resources, while those managing resources should promote quality of care. This means investing in people, facilities and equipment to bring together the many inputs required in ways that promote effective care.

But facilities do not act in isolation. Patients with complex disorders will move between different levels of the system. If given adequate resources, with trained staff and appropriate facilities, much health care can be provided in the primary care setting. In addition to the large number of self-limiting or easily treatable conditions, such as many common infections, primary care teams are increasingly taking on the management of many chronic disorders such as asthma, hypertension and diabetes, with only occasional referrals to specialists when a particular problem arises. In other cases, such as cataract extractions, decisions about definitive treatment may be made in primary care with specialists seeing the patient for the first time in the operating theatre, thus eliminating unnecessary referrals to surgical clinics. At the same time, changing models of rehabilitation mean that those patients who do go into hospital stay for a shorter time, with their primary care team taking a greater responsibility for their recovery.

The implications for health care delivery are clear. Much closer links between primary and secondary care are needed to create a seamless interface across which the patient can move with ease. This means revisiting many of the concepts that have too long been taken for granted, such as the optimal configuration of a hospital.

The role of the hospital is changing beyond recognition (Healy & McKee, 2002a). Shorter stays, and in particular the growth in ambulatory surgery, mean that hospitals have to use operating theatres more intensively but need fewer beds. Those patients who do stay in hospital are much sicker, so that each bed needs more staff to support it. At a more mundane level, staff need more equipment, so the bed needs access to more electrical sockets … and so on.

Modern health care delivery thus involves much more than just individual general practices and hospitals. Rather, it involves integrated networks of different types of facility, potentially including free-standing, low-risk obstetric and nonurgent surgical facilities, minor injury centres and dedicated rehabilitation centres. This, too, has important implications. It means that there is a need for some structure that has oversight of the range of health facilities serving a defined population, and that is capable of promoting change in both the configuration of services and their ways of working.

Finally, change requires action by those who have an overview of the entire system. The concept of stewardship embraces a range of activities that are necessary if the health care system is to be able to respond effectively to changing circumstances. While the process of change will require actions by many different actors it is the state, acting as a steward for the health care system, which must ultimately be responsible for putting in place the conditions for optimal care.

Increasingly, we realize the state's responsibility for the facilitating environment in which health care exists. These responsibilities include a clear health strategy, an effective system of regulation and incentives for cooperation between those who can contribute to health care. But other prerequisites outside the health sector must also be in place: a free and informed press will be a better advocate for the consumer; a functioning judicial system is required to enforce the law against abuse, fraud, corruption and malpractice; and the creation of self-help, information and advocacy groups will minimize the discrepancy in information that exists between patients and doctors.

Other sectors of government also play a role. It is important that the ministry of finance provides predictable health budgets and appropriate transfers from the budget (or extrabudgetary funds) to health insurance agencies to cover the uninsured or others such as pensioners or the unemployed. The creation of an appropriate system of financing, insurance and risk pooling, and incentives for access, equity and quality, require close coordination between the ministry of finance and the ministry of health.

It is also important to work closely with those other ministries responsible for issues that affect the key inputs into health care, such as trained staff, pharmaceuticals and technology, and knowledge from research and development. Without concerted government action, it is likely that many of these inputs will either be under produced or inappropriately specified to meet the needs of the health care system or, where imported, inaccessible because of tariff and non-tariff barriers. Government, acting through ministries of education, trade, science and others, has a central role in ensuring that these inputs are available to the health care system and are of appropriate quality.

Comparative overview

Superficially, it may seem easy to describe what has happened to health care delivery systems in this region by looking at the available data on hospitals and other routinely collected statistics. But what is meant by the word "hospital"? Is it somewhere that can provide a wide range of complex and invasive treatments, or is it simply a place where people can rest while they either recover or die? In the Soviet system, hospitals were traditionally required to deal with many social ailments, compensating for the lack of long-term care and an absence of social workers for community outreach, as well as to provide housing of last resort for "social cases" such as the elderly and orphans.

Another commonly used measure is the number of hospital beds. Again, this has little meaning. A bed is simply an item of furniture. It contributes almost nothing to health care unless it is supported by trained staff and functional equipment and is contained within a coordinated organizational structure. Too many of the hospital beds that are recorded as existing in this region are simply beds. As hospital reimbursement during the communist period was based on the number of beds and the number of staff, it is not surprising that many hospitals established a system of "virtual" beds in order to attract higher allocations from the health budget.

Another approach is to examine policy documents. Space does not permit a comprehensive overview of the policies adopted since transition, but a few common themes emerge.

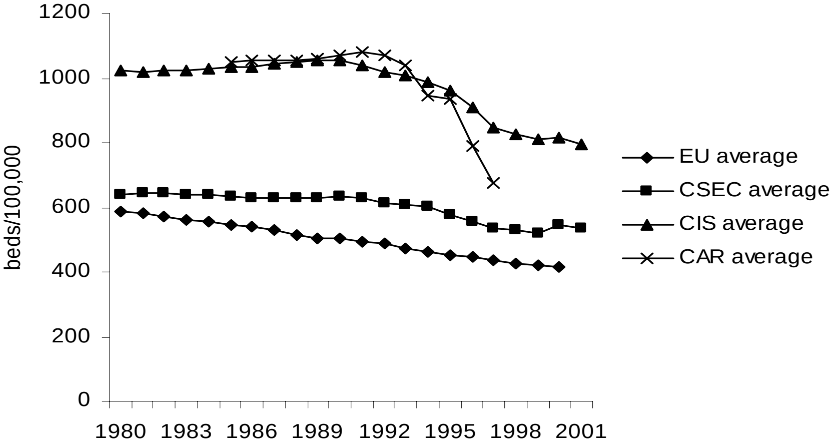
Many countries have adopted new provider payment mechanisms. In particular, there has been considerable enthusiasm for systems based on diagnosis-related groups (DRGs). Two issues arise, the first being the law of unintended consequences. In Hungary, for example, the introduction of a DRG-based system led (as expected) to a reduction in length of stay, but also to a rise in the number of admissions as hospitals compensated for the lower payments they were receiving for each admission (Orosz & Hollo, 2001).

In several countries, reductions in payments for ambulatory care have led to higher rates of hospital admission. The otherwise successful introduction of DRGs in Austria resulted in patients being admitted for day surgery for procedures that had previously been carried out on an outpatient basis, as the latter was not adequately reimbursed in the new system (Hofmarcher & Rack, 2001). The second issue is that these systems are often unnecessarily complex. For example, the payment scheme in the Russian Federation was vastly more detailed than that used in the United States, despite being intended for hospitals with extremely basic information systems (Sheiman, 2001).

Another theme is that, with a few exceptions, there has been little reduction in hospital capacity or investment in alternative facilities. Here, superficial examination of published data can be confusing. For example, official figures suggest substantial reductions in hospital beds throughout the NIS, with the greatest falls in the central Asian republics (Fig. 4.2). However these falls can largely be attributed to closure of beds in small rural facilities that typically operated at low occupancy levels and provided only basic care. Indeed, many of these rural hospitals did not have running water (Kulzhanov & Healy, 1999). There may be a need for the care they provide but it is misleading to describe them as hospitals.

Notwithstanding the limitations of comparisons, it is apparent that the number of beds is still much higher than in western Europe. Of course, it cannot be assumed that the goal should be to reach the western European average; the pattern of disease and the alternative settings available are different and, as already noted, provision of facilities should reflect what is needed and not some arbitrary norm. Furthermore, it cannot be assumed that large-scale closures would release resources as, in many cases, so little is currently spent on them. However, it is also true that many of the existing beds are underused, with long lengths of stay and low levels of occupancy.

Fig. 4.2 Acute hospital beds per 100 000 population



EU: European Union; CSEC: 15 central and southeast European countries; CIS: 12 former Soviet republics (excluding Baltic states); CAR: 5 central Asian republics.

Source: WHO Health for all database.

Many governments, however, have decentralized ownership. Privatization has largely been restricted to pharmacies, dental and some primary care pharmacies and dental clinics, with few examples of hospital privatization despite much political rhetoric. More frequently, hospitals have been transferred from central to local government. This has progressed in tandem with the introduction of new management structures within hospitals, supported by new information systems and training programmes. Decentralization has made hospital reform more difficult. In any municipality the hospital is a major employer, and doctors and hospital mangers wield more influence over local politicians, making restructuring extremely difficult politically. In some of the NIS, reform of the hospital payment system has also had negative consequences: in Armenia, elimination of the line-item budget has given hospital directors more discretion in spending but has also increased corrupt behaviour, rent seeking and misallocation of scarce resources.

Finally, many countries have sought to develop primary care, with innovative training programmes in medical schools, investment in facilities and new methods of payment. Nevertheless, experience shows that this will require a major shift in medical education, not just the retraining of general practitioners. Some countries, such as Georgia and Turkey, have experienced diminishing returns from ever-increasing investment in primary care infrastructure. Logistical challenges in remote areas and high costs of ensuring adequate supplies of staff, pharmaceuticals and medical equipment stretch the capacity and budgets of health systems beyond their limits, raising important questions of sustainability. Consequently, countries with dispersed rural populations must explore alternative delivery methods for primary health care, such as mobile outreach services for the most remote populations.

While policy statements are informative, there is often a gap between the intention and the reality. A proper understanding of the changing nature of health care delivery would start with the experiences of those who use it. How has this changed? Unfortunately the evidence remains fragmentary, although there is some relevant research. This suggests, unsurprisingly, that the fortunes of the health care system reflect those of the broader economy, with improvements in those countries that have done well economically and deterioration in those that have not. For example, there have been considerable improvements in the survival of low-birthweight babies in the Czech Republic and the territory that was formerly the German Democratic Republic (Koupilová et al., 1998), reflecting investment in equipment and facilities. In contrast, deaths from diabetes and some other chronic disorders have increased markedly in some of the NIS, reflecting the breakdown of the previous health care system. Other research looking at the process of care again shows a mixed picture. In particular, the rapid growth in direct payments for care in some countries is a major barrier to access (Delcheva et al., 1997). In Georgia, for example, there is evidence that more than 80% of health financing occurs at the point of service, either in the form of official payments, co-payments or illegal payments. This results in huge inequities and leaves the poor fully exposed in the event of a catastrophic illness.

Options for change

This section examines four issues facing policy-makers as they seek to enhance the quality of health care provided to their populations: improving hospital performance, restructuring health care delivery, the interface between primary care and secondary and tertiary care, and strengthening and modernizing primary care. In the limited space available, it is not been possible to examine these issues in detail. Those wishing to learn more should consult either the references cited or publications by the European Observatory on Health Systems and Policies, on which this paper is largely based.

Improving hospital performance

Strategies to improve hospital performance must be enacted at many levels. Ultimately, governments retain responsibility for overall health system performance. They, or agencies acting on their behalf, are responsible for ensuring that there is an overall strategy for promoting health that includes the health care sector and that identifies the resources that the health care sector needs to work effectively. These resources are not simply financial. The health care sector can function effectively only if it has access to trained staff, means of ensuring their optimal distribution, systems for procuring and distributing appropriate technology and pharmaceuticals (while limiting acquisition of inappropriate items), and methods for raising capital for investment in facilities. In addition, the system requires a facilitating environment with functioning financial, regulatory and legal systems. In particular, it is important that the financial incentives are aligned with the goals of the system. In particular, it is important that any perverse incentives, such as those that encourage either inappropriately long lengths of stay or inappropriate transfer of the burden of care to others through premature discharge, are eliminated. Given the power of financial incentives to change behaviour, if designed with care they can offer an important lever for change, albeit one whose impact must continuously be monitored.

Similar issues confront those working in hospitals. High-quality care involves attention to inputs (people, facilities and equipment), to processes (linking management of resources to quality assurance) and to the environment, in particular a supportive culture (Healy & McKee, 2002b).

The most important and the most expensive resource available to a hospital is the staff who work in it. Yet this resource is often extremely poorly trained and managed. This section focuses on two key issues – skill mix and good employment practices.

In many countries in this region, the roles of different professional groups, such as doctors and nurses, have changed little despite the enormous changes in medical practice. Responsibilities remain rigidly demarcated. Yet many western European countries have seen major changes in how different health professionals work. One change has been substitution, with nurses in particular taking on many roles previously regarded as requiring a physician (Shum et al., 2000). This includes not only a greatly extended technical role (for example, in intensive care units or performance of endoscopies) but also responsibility for the routine management of common diseases, such as asthma and hypertension, including prescribing within guidelines. Another change has been the creation of new occupational groups, such as phlebotomists to take blood samples.

As the attractions of employment in the private sector increase, it will become more difficult to retain skilled staff in the health sector. One issue is, inevitably, money. Unless salaries are competitive, recruitment and retention are bound to be difficult. But people also have other expectations (Grindle & Hildebrand, 1995). One is to provide a system of educational development, recognizing the importance of lifelong learning. Another is to recognize the changing composition of the workforce in many countries by adopting family-friendly policies, such as workplace crèches and opportunities for part-time work. A third is to create a sense of ownership by involving staff at all levels in decision-making.

There is also increasing recognition in wealthy countries of the ethical dilemma in accepting migrant health professionals (also in the context of European Union accession and the acceptance of free movement of people), who are in search of better living conditions, more opportunities and a better life for their families. This is not only an important “brain drain” from countries in this region but is also an economic hardship for countries that fund the education of health professionals who are then not available to the local health care market.

Management also involves ensuring that those who are employed are actually contributing to the work of the organization. This means tackling abuses, such as unauthorized private work undertaken from public facilities. It also means tackling sickness absence. High levels of sickness absence are more likely to indicate a problem with the organization than with the individual and, where they exist, should provoke questions as to why people do not seem to want to come to work.

One reason might be the state of the premises. Many health care facilities were obsolete 20 years ago and have since deteriorated further. They are often totally inappropriate for current models of care. Too many health care facilities do not take account of the fact that many people who use them will be disabled or partially sighted. Their configuration often physically separates departments that should be working together. Conversely, emphasis on the hospital as an institution often acts as a barrier to alternative ways of providing care, such as freestanding facilities for nonurgent surgery or minor injury units. The financing mechanisms in many countries provide a strong disincentive to investment in renewing facilities.

The third input is appropriate technology. Some of the first people to take advantage of the opening of borders in the early 1990s were selling medical technology that was either unaffordable or unnecessary. Partly in response to these excesses, some countries have developed health technology assessment programmes or are drawing on assessments undertaken elsewhere, but there is still much to be done to ensure that the distribution of medical technology supports the development of integrated care. Moreover, some elements of the multinational pharmaceutical industry have taken advantage of the breakdown of continuing medical education and medical ethics, as well as low salaries and the receptiveness to free-market practices. In many countries, these companies provide the only continuing medical education available, resulting in product bias and sales incentives that ultimately hurt the consumer.

Mechanisms to promote quality of care are the subject of chapter 5. They will therefore not be examined in detail here, except to make one point: In many hospitals, management of resources is separate from management of quality. It is essential that the two systems be much more closely linked, so that when problems are identified the resources required to address them can be brought to bear.

The final issue in relation to hospital performance has emerged from research on the relationship between organizational culture and quality of care. This research has found that hospitals that are seen as good places in which to work, with ease of communication between different professional groups and an open process of decision-making, achieve better outcomes. Conversely, major organizational change can have profound implications for the hospital workforce; while hospitals must adapt to their changing environment, radical restructuring may damage staff morale and so adversely affect the quality of patient care (Aiken & Sochalski, 1997).

Restructuring health care delivery: rethinking secondary care

Too often, reconfiguring systems of health care delivery is seen simply as a matter of closing hospital beds. The reality is much more complex. As noted above, in the Soviet model of health care the hospital was dominant. Yet hospital care was also highly fragmented. As well as the geographical hierarchy, with the most specialized facilities in capital cities and sometimes extremely basic facilities in rural areas, hospitals were also classified according to the diseases they treated and the occupations of the patients they admitted. Another factor in Warsaw Pact countries was that some hospitals were also built for military purposes, as a strategic reserve in case of war. As a result, many medium-sized cities have inherited many different hospitals with few links between them. Compared with western Europe, hospital capacity seemed excessive. Basic indicators, such as the number of hospital beds per 1000 population, suggest levels of provision that are about 50% higher than in the west. It is, however, too simplistic just to say that this excess capacity should be closed. This argument fails to recognize the very different nature of hospitals in many countries in this region. Unlike those in western Europe, they remain the main providers of social care as well as health services. Nevertheless, this model is rarely the most humane or cost-effective means of service provision. Western European countries, which once used this model, now provide most social care through mobile community outreach services or by supporting families through cash transfers. Shortage of appropriate technology, a failure to develop alternatives in the community and lack of knowledge of alternative models of care mean that there are few other options for many patients. Closure will be essential at some stage, but it must proceed in tandem with reconfiguration and the development of more appropriate care packages.

The challenge is to develop a network of facilities that provide care in the setting that is most appropriate. This may mean radically rethinking the nature of the hospital and querying whether the traditional groupings of services are still appropriate. Most of the CEE and NIS have inherited a wasteful duplication of services. In all capitals one finds a network of “republican hospitals” – usually complex tertiary care and teaching hospitals – as well as municipal hospitals essentially providing the same services. For example, in the case of Chisinau in the Republic of Moldova, this led to the establishment of 17 tertiary care facilities (both republican and municipal) for a total population of about 4 million.

A detailed exploration of these issues has been undertaken elsewhere (Edwards & McKee, 2002), and we only briefly consider some of them here.

Beginning at the front of the hospital, emergency departments typically combine many different functions, such as management of both major and minor trauma, substituting for primary care, observation of patients for whom the diagnosis is in doubt, and acting as a waiting area for those being admitted to wards. In trying to do all of these things, emergency departments often fail to do any of them well (Edwards, 2001). It takes little imagination to see how these roles could be separated, with an intermediate structure diverting patients to more appropriate settings. In some cases, such as observation units and minor injury centres, these facilities may need to be created.

As hospitals admit fewer but sicker patients, the demands placed on medical and surgical units are also changing. In addition, in specialties such as gastroenterology, changing technology means that increasing numbers of patients require the combined skills of surgeons and physicians. These developments are leading some hospitals to reconfigure their inpatient facilities in terms of the severity of the condition rather than specialty.

The majority of patients attending an outpatient clinic in one of the major surgical specialties will have one of perhaps three or four conditions, each requiring a standard set of investigations. There is enormous scope for systematizing their management by creating integrated pathways, such as those in "one-stop clinics" (Waghorn et al., 1997).

Looking to the future, developments such as near-patient testing and new forms of imaging will change the way in which laboratory and radiology facilities are provided.

The implication is that hospitals should be designed with built-in flexibility. The precise nature of health care delivery in the future may not be predictable. What is certain is that it will be different from what it is now.

The interface between primary care and secondary and tertiary care

Interfaces have two qualities. One is that they provide an opportunity to insert filters so as to limit who crosses them, for example, to ensure that referrals are appropriate. Second, they should facilitate movement for those who meet the criteria to cross them, ensuring that not only the patient moves freely but also the information that is required to optimize his or her treatment (Hensher & Edwards, 2002).

There are two important interfaces between primary care and hospitals. The first is the inward interface, through which patients are referred to hospital. The second is the outward interface, across which they are discharged. Each raises different issues. In addition, many patients (especially those with chronic diseases) will move repeatedly across both interfaces, raising important problems of coordination.

Turning first to the inward interface, there is evidence from many countries that many patients admitted to hospital would be more appropriately managed in a different setting. These studies also show that, in most cases, a more appropriate setting does not exist (Coast et al., 1996). Yet some things can be done. One way is to look at how common diseases are managed and whether more management could be undertaken within primary care (see below). Another is to recognize that many patients are admitted to a hospital ward for a period of observation and investigation to decide whether they require further treatment. This has led to the creation of medical assessment units, which enable a coordinated series of investigations to be undertaken without admitting the patient to an acute ward. A third approach relates to nonurgent surgery, where the advent of short-acting anaesthetic agents and new surgical techniques has made it possible to perform many operations without admitting people to hospital.

The outward interface, through which patients are returned to the community, can also be made to work more effectively. Once again, one challenge is to create the appropriate settings for care. These may include a variety of types of residential facility for the most frail, various types of rehabilitation facility, or the strengthening of community support to enable people to remain in their own homes. A second challenge is to place sufficient emphasis on discharge planning. Ideally, this should begin as soon as the patient is admitted to hospital, thus ensuring that all necessary arrangements are put in place for their discharge. Good communication between the hospital and the referring doctor is a crucial aspect of high-quality, cost-effective follow-up after discharge, but this is not yet well developed in most countries in this region.

Developing primary care

The final issue facing policy-makers as they reform health care delivery is the strengthening of primary care. Under the Soviet system, primary care was the "poor relation" of the hospital sector. Staff were poorly paid and of low status, and the inadequacy of their facilities and equipment meant that their role was limited to referring for specialist care or regulating sickness absence.

Almost all countries have accepted that this must change. In some cases progress has been considerable; in others it has only just begun. Reform should focus on two broad areas. The first is organizational reform that will give primary care more power and control over other levels of care. This typically involves giving primary care professionals or institutions new ways of steering patients to the most appropriate care setting, whether in hospital, nursing home or their own home. Where these reforms have been successful they have enhanced the position of primary care at the centre of the different health care delivery sectors, facilitating a process of "virtual integration."

The second area is organizational reform to expand the range of services and functions of primary care. This includes the provision of new or enhanced services as well as the adoption of services previously delivered at other levels of care. New services fall into several categories. Some were either not previously provided (such as rehabilitation) or were often underprovided (some health promotion measures). Others were provided at other levels (hospital or community care), thus reflecting "substitution" by primary care as the new provider. Substitution, in turn, encompasses both total substitution, in which primary care provides the entire service (as in minor surgery or specialized diagnostic services) and partial substitution, in which primary care collaborates with other levels to produce the service (as in shared care programmes). The reform of primary care, with the strengthening of family medicine, will play a key role in achieving these goals.

Successful change requires that certain conditions be in place. These often involve a mix of new mechanisms or related institutional changes. They include changes in technological resources (for example, telematics) and human resources (for example, new training and skill-mix arrangements) employed in primary care settings. Change also requires policies that increase the autonomy of primary care, promote teamwork, create incentives for coordination with other levels of care and increase the quality and responsiveness of service provision. This may require a generational change, since in most countries the current medical education system is poorly suited to the new situation confronting primary care.

Similarly, there is a need to incorporate modern public health concepts at all service levels. A functioning interface is needed with all levels of clinical service and public health. In many countries this will be extremely challenging, as the current Sanepid system operates in virtual isolation from clinical practice, resulting in a costly focus on medicalized interventions and a dependence on technology (much of which is obsolete) at the expense of population-based preventative interventions.

Conclusions

This chapter illustrates the interconnectedness of health care systems. Effective reform involves looking across the entire system and, further, understanding the political, geographical, economic and cultural context within which it operates. Health care systems must respond to a wide range of circumstances that are continually changing. Prediction is fraught with problems; perhaps the only thing that is certain is that the future will be different from the present. This means that health care systems must be designed to have flexibility, to adapt to the increasingly complex circumstances they are confronted with. This poses a considerable challenge for those involved in developing and implementing health policy and highlights the need for countries to invest in the skills and tools that they require to be effective.

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Chapter 5 Improving the quality of health systems

by **Michael Borowitz, Rashad Massoud,** and **Martin McKee**

The fundamental goals of a health care system include improving health outcomes and responding to the legitimate expectations of the populations that they serve (WHO, 2000). Clearly, there are certain prerequisites if a system is to achieve these goals. It requires adequate resources, which are not just financial but include trained staff, appropriate facilities, equipment and pharmaceuticals. The system should be organized in a way that makes it possible for those providing care to do so in a way that meets the needs of its population.

Consequently, it must be accepted that the lack of resources and inherited, often inappropriate, structures place the health care systems in the newly independent states (NIS) of the former Soviet Union at a disadvantage as they seek to promote high quality care. Yet, even in these difficult circumstances it is apparent that the quality of care that is provided is often much worse than it need be. In some countries many treatments provided are ineffective, employing resources that could be better used in other ways. Simple maintenance issues, such as provision of adequate lighting or safe electrical wiring, are ignored, while hospitals invest in sophisticated technology that is underused. Patients are treated with little respect, in ways that contrast with the changing nature of personal interaction in the growing commercial sector.

Other chapters in this volume look at the experiences of those countries that were once part of the USSR and those in central and eastern Europe (CEE) that were part of the communist bloc. This chapter focuses more narrowly on the former. These countries face particular challenges that, in many cases, differentiate them from their CEE neighbours. These challenges stem largely from the degree of isolation from developments taking place in other parts of the world in the postwar period and the ideological basis of Soviet science. However, their experiences were not entirely unique, and there are some parallels in other countries, such as Romania, which we also cover where relevant. Furthermore, even within the USSR there were variations, with some parts, such as the Baltic republics, more easily able to obtain access to information elsewhere, while others, such as central Asia, were especially isolated.

This chapter argues that lessons can be learned from the experience of industry, where there is a long history of using quality management systems to improve quality (for example, the car manufacturing industry), increase customer satisfaction (the hotel industry) and reduce errors (the aviation industry). Since the 1990s, with popularization of the work of organizational theorists such as Deming and Juran, the concepts of industrial quality management have become increasingly influential in health care. Its advocates claim it is as effective in service industries as manufacturing, and that it has great potential in health care (Berwick, 1989; Berwick, Godfrey & Roessner, 1990). While recognizing that the provision of health care is much more complex than most industrial processes, there is now compelling evidence that the application of these techniques can also bring improvements in health outcomes. For example, deaths related to anaesthesia occurred at rates of 25 to 50 per million in many industrialized countries. Improved monitoring, the widespread adoption of practice guidelines and other systematic approaches to reducing errors have reduced this rate to less than five per million (Ross & Tinker, 1994; Lunn & Devlin, 1987; Eichorn, 1989).

To begin with, however, it is necessary to diagnose the problem. The first part of this chapter argues that the Soviet model of health care provision, despite its achievements in providing basic universal care, had many important weaknesses. Some of these weaknesses, such as an inappropriate deference to opinions of senior professionals even when not supported by evidence, were also present in western countries at one time and, in many, still are. However, understanding of evidence of effectiveness, and its role at the heart of efforts to enhance quality of care, has advanced greatly since then. Thus, the second part of the chapter provides a definition of quality and explores its components, proposing a framework that could be adopted to bring about change. Finally, we examine some experience of improving quality in the Russian Federation.

The Soviet health care system and the nature of scientific knowledge

At the heart of the issue of quality of care in the NIS countries is the nature of medical knowledge during the period of communist rule. The challenge is revealed by looking in detail at clinical practice, where superficial comparisons have tended to obscure the magnitude of the differences in routine treatment for many common disorders. At the outset, however, it is important to stress that even within the USSR there was variation, in particular in the three Baltic republics, which were able to maintain greater contacts with developments elsewhere.

Even now, many NIS health facilities still contain equipment for which there is no evidence of effectiveness. Examples include an array of machines to provide electric, magnetic, laser, and ultraviolet light therapy. Many common treatments are similarly unevaluated. They include the use of ATP and co-carboyxlase for the treatment of myocardial infarctions, the use of hepato-protectors for hepatitis, antibiotics for asthma, and auto-injection therapy for allergies. Why did these treatments become accepted medical practice in the Soviet health care system?

One key factor is the ideological domination of science during the communist period. Marxist–Leninist theory taught that many threats to health were transient, attributable to the transition to communism and thus expected to resolve spontaneously over time (Deacon, 1984). There was a rejection of experimental methods, an absence of open and effective peer-review and an extremely hierarchical academic structure. As a consequence, knowledge accumulated only with age, and many ideas that had no scientific basis and which were often harmful were allowed to persist. In passing, it should be noted that the USSR was not unique, and the use of transfusions to treat undernourished children in Romania provides a further example. This misguided policy led to the infection of many children with HIV, with consequences that are still being seen at the beginning of the twenty-first century as these unfortunate children are dying from AIDS (Dolea, Nolte & McKee, 2002).

The nature of Soviet science is exemplified by the legacy of a Ukrainian agriculturalist, Trofim Lysenko (Joravsky, 1970). Lysenko rejected Mendelian ideas, arguing that change in plants arose from adaptation to changing circumstances within a few generations. Although he was eventually discredited in the 1960s, his views remained widely held for several decades. He was a product of an academic culture in which scientific arguments were decided on the basis of ideology rather than on evidence and in which many senior Soviet scientists were trained. Their observations of the serious consequences for those who expressed views challenging the official orthodoxy did not create a fertile environment for innovation (Soyfer, 2001). Although many of the specific beliefs that emerged from this system are now of only historical interest, yet many have persisted, their true legacy is of a culture in which dissent and open debate, especially with those in senior positions, are often strongly discouraged.

The issues involved can be illustrated further by considering a specific example: the use of hyperbaric oxygen chambers. Hyperbaric oxygen chambers are enclosed chambers containing oxygen at increased atmospheric pressure. They increase oxygen levels in the blood and thus the body tissues. In theory, this might be thought to have a positive effect when a disease is characterized by lack of oxygen, such as a myocardial infarction. Of course, while the problem may be a localized lack of oxygen in body tissues, the cause may be, for example, a lack of blood supply, so that increasing concentration in the blood will have no effect. This is confirmed by the lack of effect found in randomized controlled trials undertaken in the west, which have identified only two clinical conditions for which hyperbaric therapy is effective: decompression problems in divers and gas gangrene. Yet in the USSR hyperbaric oxygen treatment was specified for more than 100 clinical indications, and the treatment remains in widespread use throughout the NIS. Those using this treatment are quite convinced of its effectiveness in treating conditions as diverse as liver cirrhosis, myocardial infarction and prematurity. The reason for these different beliefs only becomes clear when we examine the justification for using them. It is true that there are many papers in the Soviet literature that support these uses. However, the vast majority are from research in basic science, in particular from experts in biophysics and physiology. In a laboratory situation, hyperbaric oxygen chambers can increase oxygenation of tissues in certain circumstances. Yet, the real question is whether the findings in these rather artificial settings translate into a measurable clinical effect. This question can only be addressed by a properly designed study based on the principles of clinical epidemiology.

Unfortunately many Soviet medical research papers suffered from methodological limitations. They were typically studies undertaken in a single centre, using historical controls (a before-and-after design that takes no account of other things that may have changed). Randomized controlled studies were rare, and Soviet medicine was isolated from the emerging developments in clinical epidemiology and evidence-based health care. As a consequence, those seeking to promote the concept of evidence-based health care must first understand whether those involved are applying the same paradigm. This is seen by some as the greatest issue in addressing quality of care in the NIS. It will require a profound change in understanding of evidence.

The challenges are most apparent in the few areas where there has been sustained international contact concerning detailed clinical management. Evidence for the effectiveness of directly observed treatment, short course (DOTS) for tuberculosis has met with resistance and, although implemented in pilot projects, it has not been possible to change practice more generally in the network of Russian Federation tuberculosis dispensaries, where ineffective treatments, such as vitamin C injections and artificial pnemothoraxes, remain common. Similarly, there has been little success in implementing modern syndromic methods of outpatient management of sexually transmitted infections.

A second factor was the lack of consumer orientation that pervaded the communist system. Individuals were limited in their ability to employ either of the usual strategies to force an improvement in how they were treated: exit (by going elsewhere) or voice (by expressing publicly their concerns). As a consequence, services in all sectors were unresponsive to their clients. This problem was accentuated in health care, which was a low political priority (a “nonproductive” sector) and where the inevitable information asymmetry, which places health professionals in a position of power over their patients, was exacerbated by the absence of alternative sources of information.

Yet, formally, the Soviet Union did place an emphasis on quality control. This included the development of standards and norms related to the organization of health care and to clinical practice, a system of quality assurance reviews and mechanisms of regulation. This system incorporated an elaborate system for setting standards in health care. These standards covered a broad range of issues, including what health care facilities are "needed" for a particular population in a particular setting. This was elaborated in terms of levels of care, what services should be provided at each level and their staffing, equipment and supplies. This had the effect of inhibiting the development of innovative responses to problems identified locally or to changing circumstances.

Another important aspect was the so-called "volume of services" to be provided in each clinical diagnostic entity. This was a set of instructions that outlined what a physician should use in terms of diagnostic tests, procedures, treatment, and other services for different diseases. In cases of disputes, this was the reference against which physicians could be held accountable.

The standards were set by senior physicians appointed by the ministry of health. Most often, they would be developed by an expert from one of the large number of institutes in the major cities. It would then go through a review by one or more peers after which a designated staff member of the ministry of health would authorize it, making it the official standard (the Soviet term is "normative standard"). Standard setting was a top-down process, and the perspectives of practicing physicians and other staff, and the realities they faced, were not taken into account. There was no systematic process for updating the standards. The standards took different forms, including books published for use by the different organs of the ministry of health. The standards related to "volume of services" were published in the form of directives (*prikaz*), or "methodological recommendations" which often accompanied the *prikaz.*

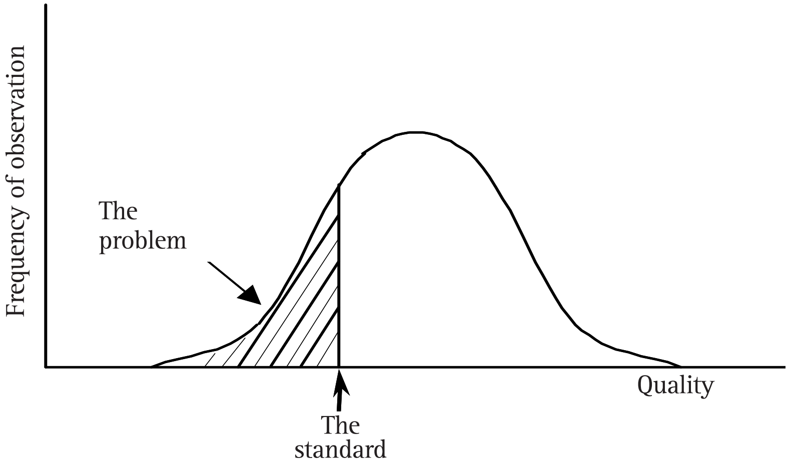
The Soviet health care system also had a mechanism that was designed to undertake quality inspection, the so-called *sanitarno-epidemiologicheskaya slujba,* or sanitary-epidemiological system. Interestingly, this was quite separate from the ministry of health and so acted as an independent arm of the government. It consisted of inspectors who systematically examined health facilities to check for compliance with the standards. Their roles went beyond health care delivery facilities and included, for example, restaurants and other food outlets. They focused on structures, record-keeping, equipment, and cleanliness rather than on clinical practices. Much of what they practiced was conceived as contributing to infection control, although in practice this effort was often ineffective, in part because of an inadequate knowledge of modern microbiological issues.

The inspection system was able to ensure some level of compliance with the standards. However, it also had weaknesses. It was understood that inspectors would invariably find issues of non-compliance. Consequently, the process and its outcome depended on the relationship the inspected facilities could strike with the inspectors. This created perverse incentives to try to please the inspectors, especially in the poorer, more remote facilities where the staff were "less connected" (with local leadership) and hence more vulnerable. It also created opportunities for corrupt payments to inspectors.

Finally, some other regulatory mechanisms also existed in the NIS. As an organ of government, the ministry of health was responsible for the licensing of physicians, certification of the facilities, and issuing directives to govern medical practice in the country. However, virtually all physicians worked for the government. Importantly, the professional associations, which have played an important part in quality assurance in western countries, had a minimal role.

In its essence, this model was one of command and control, operating in the same way as many other sectors of the Soviet economy, and with the same problems. It was based on developing standards, then measuring different providers against these standards, and giving some assessment of how they measured against these standards. The providers had no say in developing the standards or judging whether they were feasible. Graphically, this can be expressed as follows (Fig. 5.1). For any given measurement of quality, one can express quality as a continuous variable along the x-axis of the graph. Somewhere along this continuous variable lies the standard, which has been developed for this particular quality issue. The standard becomes the cut-off point below which quality is unacceptable. Depending on how stringent our standard is, more or fewer facilities will lie on either side of the cut-off point.

Fig. 5.1 Measuring quality in the former Soviet Union



There are many weaknesses in this quality assurance framework. First, it is extremely difficult to develop standards that fulfil all the criteria required for a process of this nature. Ideally, the standards need to reflect the best available knowledge (which, as noted above, was a major problem), they need to be set high enough without being unrealistic and they need to reflect the values of a society and its available resources. They also need to be applicable to a variety of different settings, continually updated and properly communicated. The Soviet model failed in almost all these aspects, except possibly the last.

Second, it does not provide a means for improvement. It is necessary to do more than identify that a problem exists. It is also necessary to understand what causes it and what can be done to rectify it. This is especially the case when the quality measurement is the result of a complex system (as with most results which interest us in health care), not an individual action.

In summary, although there was a formal commitment to improving quality of health care during the Soviet era, it was largely unsuccessful. Obviously, as noted at the outset, one factor was a lack of resources. The USSR simply could not obtain the modern equipment and pharmaceuticals being developed in the west, either because of a shortage of hard currency or, in the case of computerized equipment, western export controls. However, it also faced major structural problems. In part, these reflected isolation from developments elsewhere that are collectively referred to as quality improvement and evidence-based care, as well as a failure to see the weaknesses of its own system for accumulating medical knowledge. Another problem was the low priority given to consumer demands, unsurprisingly, as consumers had no choice but to accept what they were given.

In these circumstances even the most dedicated advocate of quality care would face problems, Unfortunately those who did try to tackle the situation adopted a model that, although perfectly in tune with the prevailing ideology based on norms and on command and control, exhibited the same weaknesses in health care as it did in agriculture and the wider economy. As a consequence, like the larger Soviet model, it was unable to meet the challenges it faced.

Moving forward: towards an understanding of quality in health care

There was a profound change in thinking about quality of health care in the west in the 1990s. Drawing on earlier, seminal work by Donabedian (1966), which drew a distinction between structure, process and outcome, it is often referred to as the “Outcomes Movement.” The new approach goes beyond earlier approaches, such as the Soviet model described above, and has two distinctive elements. The first is a departure from the former emphasis on setting standards and inspecting the structures within which care is provided, instead focusing on the outcomes of that care. The second involves a recognition that it is rarely individuals who are responsible for adverse events, but rather problems in the relevant system (Chassin, 1988; Leape, 1994; Kohn, 1999).

This approach has been operationalized in a widely used definition of quality in health care that has been developed through a process of consensus by the

United States' Institute of Medicine. This is "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (Lohr, 1990). This definition offers a helpful framework in which to think about some of the key issues involved in quality and to examine what some of these terms mean in practice.

The next section examines the measurement of health care quality and the ways in which its determinants can be understood.

What are the "desired outcomes"?

At first glance, the desired outcome of health care should be obvious: decreasing mortality and extending life. Unfortunately, mortality is an incomplete measure of *desired* outcomes. First, differences in outcome of many interventions take time to become apparent. Clearly, differences in five-year survival following treatment for cancer can only be detected six or more years after the treatment was administered.

Second, as deaths following many interventions are uncommon, differences may simply reflect random variation resulting from small numbers. In contrast, measures of process may make it easier to detect differences in a timely manner. Thus, an analysis of monitoring scenarios to detect differences in management of myocardial infarction showed that use of process measures could identify important differences that would only show up in mortality after 73 years of data collection (Mant & Hicks, 1995).

Third, mortality neglects quality of life. Many health care interventions do not decrease mortality but they increase the quality of life. Such interventions include hip replacements, cataract extraction or treatment of mental illness. Furthermore, there is often a trade-off between survival and quality of life, most apparent in palliative care for those with advanced cancer. Patients may reject an intervention that will improve survival, but only by a few weeks, but which will make them so sick that they have to be hospitalized. This illustrates the importance of taking into account patients' preferences as part of desired outcomes. There are now many measures that can be used to measure quality of life. These can be divided into profiles, which measure quality of life on several dimensions, such as pain or mobility, and do not attempt to combine them, and into indexes, which bring these measures together into a single value. They can also be divided into generic measures, which relate to overall quality of life, and disease-specific measures, which focus on a single condition, such as arthritis or ischaemic heart disease.

These instruments have often remained as research tools. Some, such as the Short Form 36 (SF-36), a generic profile based on 36 questions, have, however, been adopted into routine practice in some places as a means of monitoring outcomes, for example, following nonurgent surgery. The immediate importance for policy-makers and professionals in countries in transition is the need to be aware that such measures exist and to be able to interpret research that uses them.

A second issue is the relationship between the outcome achieved and the cost of achieving that outcome. Discussion of desired outcomes should take into account cost–effectiveness, a topic on which there is now a large amount of evidence (World Bank, 1993; Maynard & Sheldon, 1997; Drummond, 1993). It is, however, important to note that cost–effectiveness studies are highly context-specific (Sassi, McKee & Roberts, 1997), as both the combination of inputs and their costs will vary from one setting to another. A finding that treatment A is more cost-effective than treatment B in the United States does not mean that the same will be true in Ukraine.

Of course, improving health outcome is only one goal of health systems. Another is to enhance responsiveness to legitimate demands by citizens. This raises a series of further methodological issues that go beyond the scope of this chapter.

What determines the "likelihood" of achieving the desired outcomes?

The definition of quality emphasizes the importance of increasing the likelihood of desired outcomes. This indicates the importance, when comparing performance, of taking into account the role of statistical probability. Specifically, if two hospitals are found to have different outcomes, can it be assumed that there is a true difference? There are other possible explanations. First, it may be due to chance, because the numbers involved are small. Second, it may be that the two hospitals are treating quite different types of patients, with different levels of initial severity. The first question is amenable to standard statistical techniques that make it possible to determine the probability that an observed difference is real. The second question can be addressed by the use of additional data on severity to adjust for the characteristics of patients, although this is less straightforward and results should be treated with caution.

What is "current professional knowledge"?

The definition sets as its standard "current professional knowledge.". This is one of the most contentious issues in quality and it has been at the heart of the evidence-based health care movement that emerged in the 1970s. The most famous proponent of a rigorous approach to evidence of effectiveness was Archie Cochrane, whose seminal book, *Effectiveness and efficiency,* was first published in 1972 and who gave his name to the International Cochrane Collaboration, which has taken a leading role in the development of evidence-based health care.

Traditionally, in the west as in the communist bloc, knowledge of effectiveness was largely based on opinions of senior professionals, who based their judgements on their own experience, coloured by the prevailing culture, custom and practice. Although, in a very few cases, the effectiveness of an intervention may be obvious, as was the case with penicillin when it was introduced in the 1940s, this process is subject to numerous biases and it is now well recognized that it has not only delayed the introduction of effective treatments, such as treatment with streptokinase for myocardial infarction, but also allowed ineffective treatments to remain in use.

In nearly all cases it will be necessary to assess the effectiveness of a clinical intervention formally by comparing it with either no treatment or another established treatment (a control). However, it is essential to ensure that those subject to the intervention being tested are identical to those in the control group. This is usually achieved by allocating subjects to the two groups at random. In a few cases randomization may be difficult or impossible, in which case comparison of groups may still be possible, but only with great care (McKee et al., 1998). However, a single, randomized, controlled trial may be insufficient to establish the effectiveness of an intervention as there may be questions about whether the findings can be generalized to different settings or whether the study was sufficiently large to be confident that the result was not due to chance. These concerns have led to the development of systematic review, which seeks to identify and assess the quality of all studies that have examined the intervention in question. There is now a large methodological literature on both identification of studies and critical appraisal of their findings, which has revealed the potential for bias and thus misleading findings if studies not undertaken with adequate rigour. An associated technique is meta-analysis, a statistical method to combine the results of different studies.

Cochrane (1979) had once challenged health care professionals, saying: “It is surely a great criticism of our profession that we have not organized a critical summary, by speciality or sub-speciality, adapted periodically, of all relevant randomised clinical trials.” His ideas were taken up by individuals such as Chalmers and led to the publication of a major systematic review of the effectiveness of interventions in obstetrics, a specialty that had been notorious for using interventions that were often based on little more than folklore, such as the use of enemas and perineal shaving before labour (Chalmers, Enkin & Keirse, 1989). This process evolved into the International Cochrane Collaboration, a network of researchers and practitioners who collaborate to collect and synthesize evidence, and whose methods have been adopted widely by organizations responsible for advising health policy-makers in industrialized countries, such as the British National Institute for Clinical Excellence. In 1998, the first Cochrane Centre in the NIS was established in the Russian Federation.

The next section moves on from diagnosis to treatment, asking how change can be implemented in practice.

From evidence to guidelines

After identifying any weaknesses in the quality of care that is provided, the next step is to implement change. Implementing high-quality care is not as straightforward as it might seem, especially where evidence is lacking or contradictory. As with the methods used to assess effectiveness, those used to develop and disseminate clinical guidelines are now increasingly well understood.

Eddy (1984, 1988), one of the leading experts on quality, has outlined six steps which should be carried out in developing practice guidelines:

- a clear formulation of the problem to be evaluated;
- a complete search of the medical literature;
- a formal analysis of the information contained in the medical literature;
- estimation of the magnitudes of important outcomes and the uncertainty associated with each outcome;
- assessing patients' preferences for the various outcomes; and
- design of the guidelines.

Eddy's definition makes it clear that not all clinical guidelines are evidence based. The traditional approach collapses these into a single step, which Eddy calls "global subjective judgement."

There are now many sources of evidence-based guidelines, such as the British National Health Service Centre for Reviews and Dissemination. All of these have in common a reliance on systematic reviews of the literature rather than on expert opinion of senior clinicians.

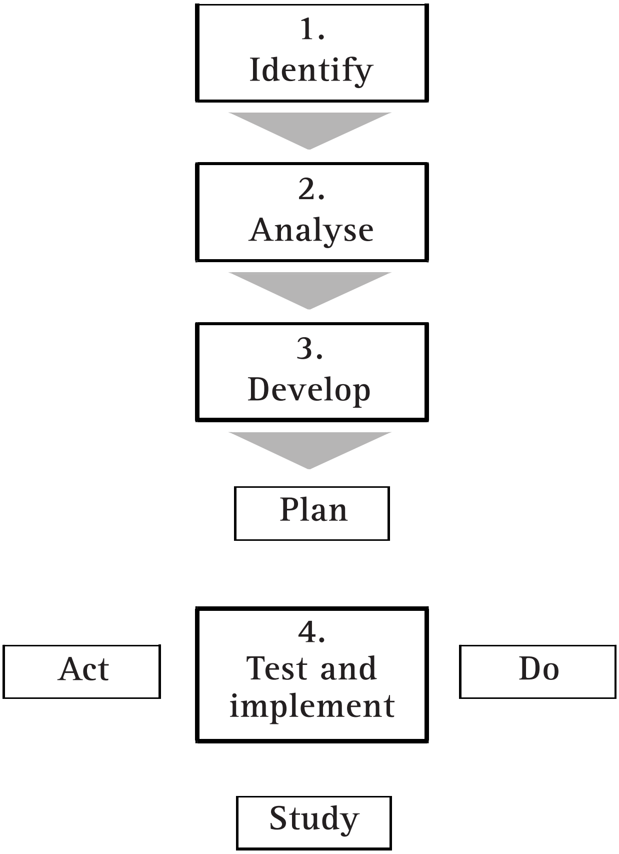
As experience with evidence-based guidelines has accumulated it has become clear that their production is insufficient to change clinical practice. Similarly, individual interventions, such as education sessions, are often of limited effectiveness. Instead, change is most likely to be brought about as a result of a multifaceted strategy combining a range of methods within an environment that is supportive of quality. We discuss this in more detail later in this chapter.

An approach to health care quality improvement

Quality improvement is not simply a technical exercise. It involves a change of culture that emphasizes improvement in health outcomes, in the patients' experience of care, and in efficiency of health care delivery. This improvement is seen as the core work of the organization, not as an add-on. It is a culture that focuses on the system in which care is delivered. Consequently, individuals are not blamed for poor quality. It is also a culture that acknowledges the role of different professional roles in health care delivery and incorporates this understanding in its approach to improvement. Thus, teams of professionals become decision-makers. It is a culture in which leadership is facilitative and empowering. Thus the old-style command-and-control system becomes obsolete. Importantly, as an organizational philosophy, it requires adaptation to the cultural environment in which it is to be implemented. This is a cornerstone for its successful implementation. In particular, it has often been most successful where it has been internalized by health professionals, working through their associations. Unfortunately, in many former Soviet republics, such professions are still poorly developed, although there are increasingly encouraging signs.

One framework for quality improvement consists of four steps (Fig. 5.2).

Fig. 5.2 A conceptual framework for quality improvement



Identify: The first step is to state explicitly what improvement is to be made. This is usually done by reviewing existing data in the light of knowledge of priorities for improvement among relevant professionals. An example from primary care might be to improve the quality of care of patients with hypertension. The system of care is conceptualized, and its various components are determined. In this case, components might include updating clinical guidelines in accordance with the best evidence, organizing the process of health care delivery, developing a screening programme appropriate for the population at risk and re-allocating resources to make the system work.

Analyse: Those providing care analyse existing systems of health care delivery, both clinically and organizationally. The organization of health care processes is commonly represented in the form of flowcharts. Key aspects (such as diagnostic criteria, referral criteria, criteria for different interventions and drug use) of clinical care are also noted.

Develop: The evidence on the effectiveness of different interventions and organizational structures is compiled. The evidence is contrasted with existing clinical practices, and decisions are made on the changes needed in existing clinical practices in order to become compatible with the best available evidence. The organization of health care delivery is reviewed and enhanced, taking into account available evidence on effectiveness, in order to enable the implementation of the updated practices. As already noted, this clearly requires considerable investment in capacity within a country. The new system of health care delivery is normally formalized as a clinical guideline. Indicators of adherence to the guideline are developed and continuously reviewed to enable changes in health care delivery to be tracked.

Test and implement: The team considers how best to test the new systems of care on a small scale (Plan), the tests are then conducted (Do), the results are monitored and interpreted (Study) and, then, depending on the results, decisions are made regarding the next steps. These steps are either to implement the changes where the results are satisfactory, or not to implement them or modify them where the results are not satisfactory.

This approach to enhancing quality is based on a series of beliefs about individuals and organizations that are often markedly different from those that characterized the Soviet health care system. The beliefs are based on the following four key principles.

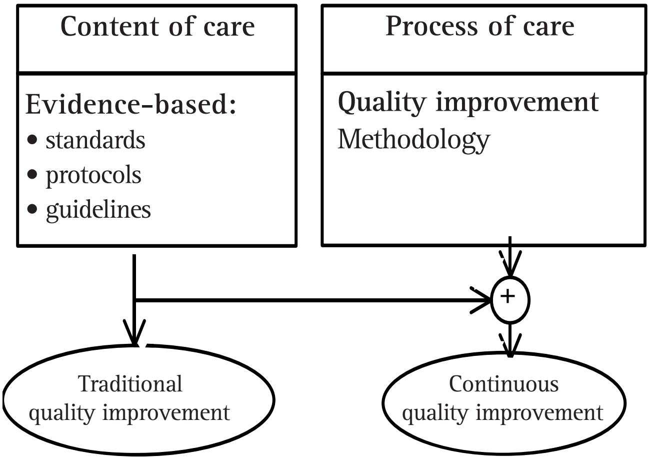
- Understanding work in the form of processes and systems: Delivery of health care can be expressed in terms of various processes that convert inputs from suppliers into outputs for customers by taking them through a series of steps in which different actions transform them. A system is the sum of all processes directed at achieving a single output or outcome.

- The importance of participation: Since different professionals are involved in the various steps of a process, and these professionals have their own insights into the processes they work in, to improve processes we need necessarily to involve the professionals in bringing about improvement. This also plays a major part in their ownership of the new systems and, consequently, their commitment to implementation.

- Customer focus: Quality can be seen as a function of the extent to which we meet the needs and expectations of our customers. This stresses the importance of eliciting and understanding the needs and expectations of patients and striving to meet or exceed them.

- Use of scientific methodology: As outlined earlier, quality in health care is based on evidence of effectiveness of both the interventions and the organizational framework within which they are delivered. These are intimately linked, as illustrated in Batalden's framework (Fig. 5.3), which has proved helpful in several projects in transition countries (Batalden & Stoltz, 1993; Massoud, 2001a).

Fig. 5.3 Batalden's framework for clinical quality improvement



In brief, the framework assumes that to make improvements in health care, one must tackle the two key components that constitute the care: the content of the care and the organization of care. Thus, the content of care must be compatible with the best scientific evidence available. Organization of care means the way in which health care is delivered through the processes and systems of care. This requires reorganizing the processes of health care delivery to enable the implementation of the evidence-based practice.

But who is responsible for implementing change? A high-quality health care system is the result of efforts by many different groups and individuals. Governments should play an important role, one that is increasingly recognized as stewardship. This includes its role in setting strategic direction for the health care system and ensuring that the resources needed for providing care are adequate. As noted above, these resources include not only financial resources but also trained staff, appropriate facilities and effective pharmaceuticals.

Those responsible for purchasing health care, such as insurance funds, should also have an important role, through establishing funding regimes that promote, rather than obstruct, the provision of high-quality care. Although active purchasing for health gain is still poorly developed in all but a few countries, it does have the ability to achieve considerable improvements in health care delivery. It involves assessing health care needs, working with providers to define appropriate packages to meet those needs and monitoring the implementation of those packages of care.

In many western countries professional associations have also played an important role, establishing clinical guidelines and systems of continuing professional development. Finally, responsibility lies with those providing direct patient care, including the health professionals involved and those who manage the environments in which they work.

As even this brief review shows, there is a great need for strengthening the institutional capacity required to support all these groups. Work to enhance this capacity can be thought of as involving three groups of people: those who generate the knowledge about what works and what does not, by means of primary and secondary research; those who translate it into a form that can be used by health professionals; and the health professionals who will use it and who require the skills of critical appraisal to judge what will work in a given set of circumstances. Unfortunately, in most countries of the NIS, there is still a great deal to be done in this respect.

Experience since transition

The final part of this chapter briefly examines experience since the political transition in 1991. Since then, individuals in many countries have formed professional associations to promote quality of health care. For example, groups from many countries in central and eastern Europe and the NIS participate in the European Society for Quality in Health Care and the International Society for Quality in Health Care.

While the proceedings of these associations provide evidence of many local initiatives to enhance the quality of care in particular health care facilities, there is as yet relatively little rigorously evaluated experience available in the published literature about the implementation of systems for quality improvement in the countries of the NIS. However, some indications of what can be achieved can be seen from the experience of the Health Committee of the U.S.–Russia Joint Commission on Economic and Technological Cooperation which, in 1998, with funding from USAID initiated a programme to implement quality improvement methods in several oblasts in the Russian Federation (U.S.–Russia Health Committee, 2000). In a number of cases significant improvements in care were achieved, frequently leading to better outcomes at lower cost. For example, a programme to improve management of hypertension in primary care (Massoud, Korotkova & Melnikov, 2001) increased the number of patients managed in that setting by more than sevenfold. Hypertension-related hospitalizations decreased by 85%, and hypertensive crises by about 60%. Although the cost incurred in primary care increased by 39%, this was outweighed by a reduction of 41% in the cost of hospital care, resulting in a net reduction of 23% in the cost of managing patients with hypertension. An enhanced system of care for women with pregnancy-induced hypertension (PIH; Massoud 2001b; Massoud, Korotkova & Chernobrovkina, 2001a) (PIH) was associated with a reduction in the rate of diagnosing PIH from 43% to 5.6% (based on clearer evidence of what constitutes PIH), and a fall in hospitalizations of 61%. An economic analysis found an 87% reduction in the cost of care. A new programme to improve care for neonates suffering from respiratory distress syndrome (Massoud, Korotkova & Chernobrovkina, 2001b) reduced cases of hypothermia to negligible levels and was associated with a 64% reduction in deaths from respiratory distress syndrome. The obstetric and neonatal programmes are now being implemented in all 42 hospitals in Tver Oblast. The hypertension programme is being implemented in general practices and polyclinics in Tula Oblast. This programme has been associated with a reduction in early neonatal mortality in Tver, from 10.8/1000 in 1998 to 5.3/1000 in 2001, although obviously other factors are involved.

There is now a need for a much better understanding of the reasons for success and, as importantly, failure in such projects, so as to facilitate the exchange of experience and spread of good practice.

Conclusions: enhancing quality of care in the NIS

This chapter has shown how health care systems in many countries that have emerged from the USSR face considerable obstacles to implementing high-quality health care. These obstacles include, first and foremost, the severe lack of resources in the health care system, with a legacy of underinvestment stretching back for decades. However, shortage of resources is not the only factor, and any attempt to implement change must take into account the tradition of Soviet science, which although being eroded, has persisted in various forms in many places.

Yet, the examples given above show that it has been possible to introduce systems to enhance quality of care in the NIS with beneficial effects on effectiveness, efficiency and patients' experience of care. However, the scale of the task is enormous, and quality of care has largely been neglected by the international donor community. Over the past 10 years of health reform, the main goal has been to increase financing and improve efficiency. Funding reform has often involved introduction of health insurance, which has not significantly increased health resources but, more importantly, has failed to improve the quality of health care and improve health outcomes, despite the hopes that quality criteria might be built into contracts to purchase care and enforced by insurers.

In the next decade of health care reform, improving the quality of health care must be at the top of the agenda if health care systems are to maximize their efficiency and effectiveness and best serve patients. This will require a large-scale effort to embed a culture of evidence-based health care in the NIS It will mean profound changes in how research is organized, converted into evidence-based clinical guidelines and how those guidelines are disseminated. This must be complemented by a commitment to efficiency and to the needs and concerns of service users. This implies changes in the organization and financing of health care and the removal of obstacles that impede efforts to improve quality. It will also require a much better understanding of the opportunities for and obstacles to change.

As has been seen in the west, it is not enough just to produce clinical guidelines. The guidelines need to be implemented, and this requires incentives to change behaviour. It also requires significant changes in the fragmented and uncoordinated Soviet model of health care delivery.

In conclusion, there is a need to move beyond issues such as health care financing to focus reform efforts on improving outcomes. This requires a rethinking of health reform. In particular, there is a need for sustained investment in the people and the institutions that will design and implement contextually appropriate systems that will improve the outcomes and responsiveness of health care systems.

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Chapter 6 Citizens' rights and community mobilization

by **Ilona Kickbusch**

> *Democracy is the work of human beings who comprehend their inalienable rights, who respect human rights and who believe in responsibility for their fellow human beings.*
>
> Vaclav Havel, Prague 1990

Health as citizenship

Hannah Arendt developed three dimensions of being fully human: family life, work life and public life, the *vita activa*. Within these arenas, what connects us as human beings are trust, reciprocity and mutuality, dimensions of what increasingly is being called the social capital of societies. Discussing these issues in terms of health presents several difficulties in former closed socialist societies that are now open to the free market and to increasing individualization. It highlights crucial policy conflicts between what is considered a public and collective good and what is considered a private responsibility. Of course, it is quite inappropriate to try to overgeneralize trends in countries that are so inherently different in their historical backgrounds and their present social and economic situations (such as the economic differences between Slovenia and Ukraine). Yet all countries in this region bear a similar legacy of a highly formalized, state-centred system, with forced participation in certain areas of social and public life. Discussing participation in health as an expression of citizenship needs to take into account this legacy and the new environment of rapid change, social insecurity and extreme inequalities. As many authors have stated, high social capital may well be a prerequisite for economic growth – yet high levels of inequality contribute to reductions in social capital and civic cohesion. This chapter therefore tries to look more widely in discussing the interface between civil society and health.

As a principle, the mobilization of citizens and communities for better health embodies both the dimensions of democratization (including joint decision-making and accountability) and of individualization. In the countries of central and eastern Europe (CEE), it was – and is being – experienced in all its ambivalence and ambiguity as many countries moved from a collective to an individualistic understanding of health This is reinforced by moves (and strong pressures from major donors) to reshape the health system and shift responsibilities from the state to other levels of governance, to the private sector and to individuals and families. Any analysis of this process must take into account the political and social contexts within which participatory and collaborative strategies for health are proposed.

For citizens, it includes the ambiguity of gaining a concept of individual human rights or patients' rights yet perhaps losing the collective right to health as a public good and, in the context of the transition, losing access to services. For health professionals, the changes could be seen as a major loss of authority, both towards the general population and towards other sectors with which they were now called on to cooperate. Nothing had prepared them to work in this new manner. For politicians, it meant accepting voices outside the formal political system, a more open democratic process than that represented by political parties.

The public health premise: health is everybody's business

Mobilizing citizens and communities for better health is a central component of what we now call the "new public health," and health promotion, intersectoral action and community participation have been defined as key public health functions. In the work of the World Health Organization (WHO), health promotion has been promulgated since the mid-1980s as a democratic and social participatory health strategy, building on the principles first developed in the Declaration of Alma-Ata in 1978. The Ottawa Charter for Health Promotion identifies "healthy public policy" and "community action" as two of the five key action strategies of health promotion, and a recent publication by WHO on evaluating health promotion (Rootman et al., 2001) states: "... we suggest that the primary criterion for determining whether a particular initiative should be considered to be health promoting, ought to be the extent to which it involves the process of enabling or empowering individuals and communities."

To date, any modern health and development strategy pays at least lip service to a broad participatory approach, and donor agencies and international organizations have included community participation and stakeholder analysis throughout their programmes in the developing world and in the CEE. Indeed, what started with a focus on community participation has been widened to include a broad range of partnerships in order to solve problems, related in particular to prevention, which reach far beyond the health sector and now also include public–private partnerships. With this approach, community participation and intersectoral action moved closer together, as did prevention and treatment such as in the case of HIV/AIDS.

Even before the changes that started in 1989, the WHO Regional Office for Europe – particularly through its health promotion programmes and initiatives such as Healthy Cities – had provided the opportunity for health professionals and local partners and politicians to learn about such approaches. The Healthy Cities project in particular became a conduit for exchange of experiences between local communities in the CEE and western European democracies that reached far beyond the health arena. A similar stakeholder approach was initiated by the Safe Communities initiative, which initially focused on injury control. WHO's health promoting schools programme was deliberately launched in the CEE. It was welcomed by a number of governments, particularly because of its potential to teach democracy at a local level, for example, through the involvement of parents in decision-making – quite a novel concept in many of the countries involved. Other health promotion initiatives in the field of heart health, prevention initiatives such as CINDI programme, tobacco and alcohol control strategies, family planning, women's health and later activities in relation to HIV/AIDS also stressed the importance of cooperation, advocacy, participation and community involvement. WHO's European regional health policy framework, HEALTH21, repeatedly makes the point that health cannot be resolved through the health sector alone but needs to be approached as a joint societal effort: "health is everybody's business."

Combining the civil society puzzle with the "health puzzle"

An analysis by the Carnegie Endowment for International Peace (Ottaway & Carothers, 2000) makes a forceful point about context and attributes many of the failures of civil society assistance around the world to a lack of understanding of what has been termed the "civil society puzzle." Too frequently, well-meaning efforts neglect to take into account:

- the existing civic traditions within a country;
- the variety of organizations that have emerged to tackle key issues; and
- the understanding of the role of citizens and organizations, particularly in relation to the state.

Kevin Quigley (2000), in his analysis of the modest results of assisting civil society in the CEE, points to the existence of two different mind sets: that of the eastern Europeans, who believed that the mass movements that had spearheaded the change during the 1980s would turn rapidly into a "new society rich in associational life characterized by a more humane politics" and that of the American donors, who attempted to recreate eastern European civil society in the American image. He states bluntly, "Eastern Europeans and their donors did not share a definition of democracy."

An analysis of the role of the citizen and communities in health and health care in the CEE needs to be particularly aware of context. In paraphrasing Quigley's point about democracy, it can be stated just as bluntly that eastern Europeans and their donors (in particular the American donors and the U.S.-based consultants used by many of the international organizations) did not share a basic definition of health and health care. The right to health and health care was part of the constitutional right of citizens in many of the CEE countries and a key defining feature of governments' "social contract" with their citizens, reaching back to the first constitution of the Soviet Union written by V.I. Lenin. For a significant period of time (roughly into the early 1980s) universal access to health services and a strong commitment to public health were a source of pride in many of the socialist countries, and constituted a central argument frequently put forward in the debate about the respective superiority of the capitalist and socialist systems of governance. Many a debate about more equity in access in western countries was wiped from the table with the argument that its proponents were intending to create a "socialist system of care," a pattern of response that persists to this day in the United States. It is important to keep in mind that the debate about health care was from the start a central component of the ideology of the cold war, precisely because the approaches in the United States and the Soviet Union were so diametrically opposed. Consequently, the health sector became a key focus (and in some cases a battleground), in both ideological and economic terms, after the fall of the Berlin Wall.

From the late 1970s, most of the CEE countries were not only losing the arms race but were also less and less able to supply high-quality health care, one of the key "public goods" that was providing legitimacy to the regimes in power (this point is analysed in more detail in other chapters in this volume). In addition, the declining health status (as first presented by the WHO Regional Office for Europe in the 1980s) indicated that a broader range of factors needed to be addressed than had traditionally been considered within the highly hierarchical and medicalized health care systems of these countries. Increasingly, experiences from other countries showed that these "lifestyle" problems could only be resolved through cooperation with partners outside the health sector, including the media, and through a cultural acceptance by the public at large. But many central and eastern European governments did not want to draw attention to these developments (for example, the high level of alcohol use), which they saw would be interpreted not only as a "health systems" failure but also as a failure of the "socialist way of life."

Addressing health concerns in relation to "lifestyles" would also require a change in the culture of socialist health systems and in the mind-set and behaviour of health professionals, who were slow to accept that authoritarian, top-down approaches were doomed to failure. In addition, any policy or campaign calling on the population to adopt a "healthy lifestyle" lacked credibility in the context of deteriorating living conditions and the crumbling "social contract" between the people and the state. Health targets and the means to implement them were worlds apart. The recurring attempts in Hungary – starting in 1987 following Hungarian participation in the WHO Ottawa Conference in 1986 – to develop a national health promotion programme document these points clearly. As an extreme example, lack of access to alcohol and tobacco could prove dangerous in already highly volatile political situations. This was the case in the Gorbachev era in the Soviet Union, when social unrest because of a shortage of cigarettes was averted through a special deal with, and emergency supply by, western tobacco companies.

From 1989 onwards, the rapid social change and "double transition" towards a democratic system of government and a market economy left a deep impact on health and its determinants and on the organization of heath care systems. The recent series of interviews with central and eastern European health ministers published in *Eurohealth* highlights the ongoing conflicts they face in finding a balance between collective and privatized systems of health care and in giving appropriate attention to disease prevention and health promotion. Suffice it to say at this point that the interest of donors lay more with the privatization of health care than with its democratization – possibly because the population had little interest in giving up the collective rights to health care, while governments were pressured by professionals from within and donors from outside to embark on "reforms" that basically implied cut-backs in public services and increased privatization. Indeed, it would merit a detailed analysis to understand what role this lack of involvement, information and consideration of people's concerns about health and health care has played in bringing political parties that support universal health care back into power throughout the CEE.

It must also be said that donors (and in the early days even some international organizations, including WHO) were not ready to prioritize health promotion issues, which were considered less essential than health care reform or were in conflict with the promotion of free markets. This resulted, for example, in a lack of resources to help countries develop strong tobacco legislation or to develop and strengthen HIV/AIDS prevention and advocacy. The price of this failure is being paid now. A well-known example is the opposition of the great civil rights advocate, President Vaclav Havel, to strong tobacco legislation, which he sees as running counter to the democratic freedoms gained after 1989.

Not much information is available on how citizen participation and intersectoral action have been systematically fostered in the health sector reforms in the CEE, or how the existing mind-sets in relation to health and civil society (the respective puzzles of tradition, organizational structure and the relationship between citizens and the state) have structured the response. Also, we know little about the extent to which participatory strategies in the health sector have contributed to the development of civil society. The conference for which this chapter was written provided an excellent opportunity to attempt a first review and analysis, and perhaps provide an impetus for more detailed research to follow.

Positioning of health in the context of civil society development

As stated above, the mobilization of citizens and communities for better health is part of the broader understanding and organization of civil society within a country or group of countries and cannot be analysed in a vacuum – it is about how policies are made, how priorities are set and how accountability is ensured. This must be underlined, because there is a significant difference in perspective if we speak of individuals as clients or consumers of health care, or as citizens with a voice and a right, or as citizens seeking their rights, such as people living with AIDS. This is particularly important in the field of health promotion, which defines its remit as the process of enabling people (individuals and communities) to increase control over their health and its determinants. Much of this process takes place outside of the health care system in (as the Ottawa Charter states) the "context of everyday life" where health is created.

As a consequence, the organization of civil society, the realms of decision-making and the opportunities for social learning are critical for the new public health. It is for this reason that health promotion has, on the one hand, developed organizational approaches that increase the commitment to health through healthy public policies and participation in health in the settings of everyday life: schools, workplaces and neighbourhoods; and on the other hand has developed and supported grassroots advocacy movements around major health concerns, including equity and human rights. In the CEE (as elsewhere) it has been difficult for all concerned – politicians, professionals and citizens – to come to terms with a nonmedical model of health.

As in any sphere of intellectual and political endeavour, definitions abound. The following definition of civil society can serve as a guide for discussions

> *Civil society is the critical space between the individual and the state that creates a geographical landscape for social organization and action. It is also a theoretical cornerstone in local community development, a mechanism through which to reassert local priorities through local democracy.*

This definition allows an understanding of a dynamic social and political space, which allows citizens to collaborate for shared interests. Ideally, such a space is inhabited not only by a broad range of actors and stakeholders (a plurality of organizations) but also by a highly pluralistic set of values, views and approaches (political pluralism). Their organizational format can include formally established, private, non-profit, self-administrative, voluntary types of organization (Salamon, 1993) as well as social movements.

The CEE has a long and rich tradition of civil society organization reaching back into the nineteenth century, which was destroyed first by the Nazi takeover and then by the communist state monopolies. For example, in the 1930s more than 5000 societies were active in Czechoslovakia just in the field of charitable and humanitarian care (Fric et al., 1997). Under communist rule, quasi-civil society organizations (usually called "social organizations" or "mass organizations") were established in fields such as sport, education and culture and controlled by the state. In health, the Red Cross was allowed to continue to work but only in close cooperation with the government-run health services. In the 1980s in many of the CEE countries, civil and opposition movements, grass roots circles, ecological movements and human rights groups started to emerge. As the health sector began to erode, self-help groups and voluntary associations, for example for disabled children, were established. The Polish sociologist Ewa Les (1994) states that prior to 1989 the voluntary sector was one of the principal mechanisms for breaking citizens' apathy and promoting solidarity and community. Yet, we must remember that in countries such as Albania and Romania even these openings did not exist.

Civil society organizations take on a number of roles, all of which can be of relevance to health development, particularly if we look beyond health services to include the determinants of health:

- strengthening democracy
- promoting social and economic development
- replacing waning social services
- strengthening social cohesion
- promoting equitable development
- promoting the efficient and socially sustainable functioning of market economies.

It is important to highlight this wide variety because the critical analysis developed in the Carnegie publication underscores the danger of a too-narrow, anti-historical and preconceived definition of citizens' action, focusing on supporting only a certain type of nongovernmental organization (NGO) while neglecting the many other forms of social action and organization. Whereas in the promotion of democracy there was a tendency to focus on policy groups, in the health field there is a tendency to support service-oriented organizations rather than controversial "movement-type" advocacy groups. But particularly with deteriorating living conditions and quality of life and increasing inequity, supporting the mobilization of citizens and communities for better health would imply addressing determinants of health, as many of the environmental groups in the CEE have done. Or, in view of the spread of HIV/AIDS, the support of controversial groups such as sex workers, drug users and gay or bisexual men gains increasing importance, as has been realized by the Soros Foundation. Also frequently undervalued has been the buffer role of civil society in relation to the stresses of everyday life, which points to the need to support groups and associations that neither provide direct services nor are involved in policy, but that help generate day-to-day social support.

The expansion of civil society organizations was extraordinary in some countries. In Poland in 1989, for example, there were about 5000 nationally registered independent organizations. This number grew to about 30 000 by 1997, many of which were tiny organizations involved in service delivery and funded by small individual contributions. A similar trend is true for Hungary, which has about 50 000 civil society organizations, many of them local non-profit bodies created in response to the lack of health care, education and social services. One of the strongest areas for activism was the environment, an area of policy that had been severely neglected under communist rule. In her analysis of the civil society sector in the countries of the CEE, the Hungarian sociologist Elizabeth Vari (1998) shows that while health is still strongly underrepresented in the nongovernmental sector it is rapidly increasing. This might be more because of the need to respond at the community level to a deterioration of services than because of an increase in civic engagement for health per se. Her summary indicates the following (very divergent) percentages for civil society participation in the health field: 7% in Bulgaria, 3–4% in the Czech Republic, 11% in Hungary and 20% in Poland.

In general, these data indicate that health is still seen as a responsibility of the state and of health professionals, and that explicit health advocacy groups have not yet gained strength and prominence. But what health policy in the CEE increasingly needs – given the enormity of the problems of morbidity and mortality – is a broad range of civil society coalitions to address major challenges, such as deteriorating living conditions and human costs of the transition, unhealthy products, prevention, control and treatment of HIV/AIDS and premature male mortality, to name but a few. The health crisis is at the core of eastern European societies, and in some cases is threatening both social cohesion and economic progress. These will not be resolved through a fiscal or medical solution but need broad societal consensus and energy. Donors – as far as they remain active in the CEE (many of them have been too quick to move out given Ralf Dahrendorf's (1990) estimate of time needed for significant change) – should also take note.

The importance of civil society for health

In the light of this enormous challenge, the examples of mobilizing citizens and communities for better health in the CEE could be structured around the following questions.

- What contribution has civil society made with regard to priority health problems?

- How can the role of civil society in health best be enhanced at different levels of governance (national, regional and local)?
- How can health systems facilitate and enable greater civil society involvement?
- What balance is emerging in different countries in addressing policy, advocacy and accountability and service delivery?
- What role can the international and donor communities most usefully play in this context?

The acceptance of the role of civil society in health is related both to understanding the importance of civil society organizations in general and to the contribution it can make in a highly professionalized arena such as health. In the CEE, a not infrequent claim by the new political elite is that the establishment of democracy and political parties makes grass-roots activism and social movements redundant or even illegitimate. Most visible was the conflict between Premier Vaclav Klaus and President Vaclav Havel on the issue of tax relief for voluntary associations in 1994. Also, civil society organizations and social movements experienced a major brain drain, since many of the activists of the 1980s were now running the new political and social institutions and had become active in the new political parties.

It has taken time to understand that a vibrant civil society is a crucial social space of learning and trust building, which helps to mobilize individuals to participate as citizens in the affairs of their societies, and that this also applies to what has been considered a domain for medical professionals. The health sector is still grappling with accepting the role of the empowered citizen, the involvement of other actors and sectors and new forms of accountability for health outcomes. Both eastern Europeans (politicians, professionals and activists) and western donors have underestimated the time and effort this takes. Ralf Dahrendorf (1990), for example, has stated that while it takes 6 years to build a market society it takes 60 years – at least a generation – to build civil society. Democracy is as much a political practice as it is a culture of social tolerance, and the region as a whole still needs to cope with the legacy of paternalism, suspicion of the government (even if democratically elected) and mutual suspicion of one another. And it needs to deal with a certain amount of disillusionment, as not all promises of democracy and market economy have been realized.

In relation to health, two additional important dimensions have to be considered:

- the impact of a vibrant civil society as a key determinant of health; and
- the contribution of health activism to a democratic society – many health issues have a strong dimension of quality of life, and many social issues (such as violence, drug abuse and prostitution) have become part of the health domain.

Robert Putnam (2000) underlines the contribution of social capital not only to "civic health" but also to personal and community health. A large body of research now shows the strong positive connections between social integration and health, as well as the feeling of empowerment and health. Studies in the United States show that health is better in "high social capital states" or, as Putnam expresses it: "What these studies tell us is that social engagement actually has an independent influence on how long we live." For the countries of the CEE, the rapid deterioration in life expectancy has been linked to the (non) functioning of civil society, in particular the low levels of trust, as well as to social isolation and low levels of control over life and control over health. Hertzman & Siddiqi (2000) describe the changes experienced in CEE societies as "the most comprehensive natural experiment in population-wide stress available, short of war or mass starvation." A detailed analysis is still outstanding as to what social coping mechanisms have been developed. Boris Genov (2000), in his analysis of Bulgaria, indicates that almost every second citizen over 18 relies on a survival strategy, which does not leave room for forward-looking organized civil engagement. Many donors, according to a recent United Nations Development Programme (UNDP) analysis (2002), have failed to understand the complexity and painfulness of the transition.

The other dimension is the importance of activist groups to help redefine the health agenda and defend the human rights of vulnerable and disadvantaged people. As is the case throughout the world, CEE government officials are wary of advocacy groups and more easily accept groups willing to be active in service provision, particularly as services are cut and demands rise. For many donors, turning to NGOs was also a cheaper way of getting some things done quickly rather than investing in longer-term organizational and administrative change.

For the health sector, this simple division into policy/advocacy-oriented organizations and those oriented towards service provision does not always hold. This proved to be particularly true in the field of HIV/AIDS, where issues of human rights advocacy and service provision in relation to prevention, testing and care were heavily intertwined. Civil society groups were far in advance of government representatives in recognizing the problem and reacting to it. It is perhaps in the area of HIV/AIDS where the interface of democracy, human rights, civil society and health comes to the fore with the greatest clarity. But it is also in this area – as in the field of family planning – where wide differences in opinion and ideology are frequently played out, and where platforms for dialogue and mediation need to be developed.

Where are we today?

Nikolai Genov (2000) in his analysis of the present situation in the CEE states, "To put it bluntly, what is going on in the central and eastern European region might be shortly defined as the triumph of individualization at the cost of the common good." Under a period of rapid transformation and increased social and personal uncertainty "a typical central and eastern European dilemma" emerges that aims for increased private initiative but wants the security of state-provided services (as in health), yet at the same time mistrusts the state institutions and is disillusioned with the private sector.

The civil society sector continues to be weak. In many countries it still lacks a consistent legal framework. Despite many training workshops and an influx of consultant services from donor countries, most NGOs are still managerially inexperienced, have weak communication infrastructures, show a lack of technical expertise and suffer from a severe shortage of money. A recent UNDP conference in Vlora, Albania, discussed the failure of NGOs to develop greater participatory democracy, stressing that one of the reasons has been the focus on service delivery and humanitarian assistance because of the economic, social and humanitarian crisis in the region. But – as in the Carnegie report – the conference also highlighted structural factors related to the donors. In particular, it pointed to their tendency to support NGOs that were willing to work according to procedures and concepts laid down by the donors, rather than systematically support civil society development at the local level and according to the local societal context. The trend has now moved towards community-based coalitions, a concept spearheaded long ago by WHO's Healthy Cities project and environmental initiatives such as Agenda 21. This includes new approaches to financing: for example, 70% of Hungary's local governments have established municipal foundations to support social services and health care (Szeman, 1997)

In a recent interview, the former Georgian Minister of Health, Avandil Jorbeadze, stated, "Citizens' poor awareness and participation in the reform process, and the realization of their own rights, also pose additional threats for achieving the reform priorities." There is an urgent need to explore the social and political mechanisms that support or hinder citizen and community involvement in health in the CEE. Too easily, the mobilization of citizens and communities for health is framed only in their adherence to healthy lifestyles or rational use of the health system. No systematic efforts are made to create transparency and accountability, promote health citizenship and increase health literacy and empowerment.

Paying attention to context remains a crucial challenge, and the rapid transformations in the societies of the CEE seem to reinforce individualization rather than community – in the health arena as elsewhere. The disarray that ensues as institutions are reformed, and the daily experience of lack of institutional capability, erode trust and social capital. The key conflict facing all modern societies is how to balance personal autonomy and community, and the CEE countries face this choice in the extreme. In the face of weak institutions, more than any other challenge in health this must be faced squarely as a priority political task and a governance challenge of the highest order.

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Chapter 7 Modernizing public health

by **Martin Bobak, Mark McCarthy, Francesca Perlman,**
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The health of populations in central and eastern Europe (CEE) and the newly independent states (NIS) of the former Soviet Union at the beginning of the twenty-first century is substantially worse than in western Europe or North America. The high rates of mortality, morbidity and disability are important for a number of reasons: they constitute a humanitarian tragedy, impose a burden on the health and social sectors and impede prospects for economic prosperity and overall development. Many of these countries are in troubled or postconflict areas, and thus stability within the health sector is important in a geopolitical context as well.

This chapter examines the following issues: (a) the major determinants of the poor health in the CEE/NIS; (b) the role and realistic potential of public health services in improving health, and how steps taken during societal transformation affect this potential; (c) the key factors enabling and obstructing advances in public health in the CEE/NIS; and (d) the policy options available to improve the effectiveness of public health services in the countries in transition.

We present two well-known conceptual models of the determinants of health. These models also illustrate different levels of possible intervention. We believe that social and economic factors are the primary causes of ill health, and that the policy response to improve health needs to be interdisciplinary and multisectoral. We also argue that public health services and medical care alone are unlikely to improve population health, but that they can nevertheless make an important contribution to the process.

Conceptual framework

Efforts to improve population health must address the important determinants of health. Proximal factors, such as obesity, tobacco and alcohol, are important but the adoption of unhealthy lifestyles does not depend solely on an individual's choice (Cockerham, 1997). There is abundant evidence that population health is related to features of society and to social and economic conditions (Marmot & Wilkinson, 1999). Our conceptual framework recognizes the complex nature of determinants of health and the core functions of organized public health, and it identifies the role of the public health system in the process of improving the health of the population.

Public health

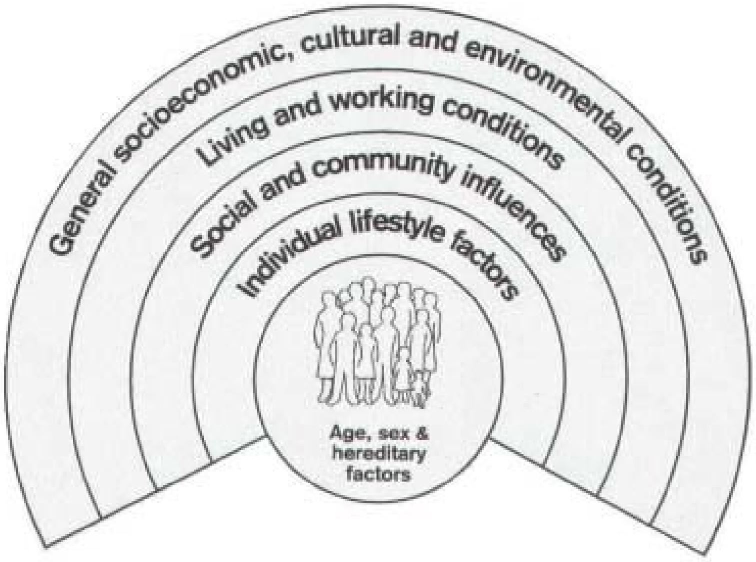
Public health is a broad term with no universal international definition and structure. A useful definition is that it is a process of promoting health, preventing disease, prolonging life and improving the quality of life through the organized efforts of society (Vetter & Matthews, 1999). In some countries, public health includes functions of the state other than health care and public health services (education, housing, transport, etc.); in others it denotes all health service provision and management, especially that paid for by public funds; and in others public health is understood in its narrow sense as the sum of functions provided by the public health services. We advocate the broadest meaning, emphasizing that many of the core functions of public health are really public goods. That is, these functions require public financial support for the greater good of the community. For example, reporting and surveillance of infectious diseases or cancer registration are usually not funded by national health insurance systems but they are essential for prevention and control of diseases.

Despite the differences in defining public health, most specialists agree that the core functions of public health practice include (a) monitoring population health and its determinants; (b) prevention and control of disease, injury and disability; (c) health promotion; and (d) protection of the environment (Bettcher et al., 1998). We believe that these functions cannot be fulfilled successfully by public health services or even the health sector alone.

Determinants of health

Fig. 7.1 shows the main determinants of health as concentric circles, with layers one over another based on Dahlgren, 1995. At the centre is the individual, with his or her personal characteristics such as age, sex, genetic makeup, etc.; these factors are important but cannot be changed. The individual’s health is influenced by his or her lifestyle and health behaviour (the second layer). However, individual lifestyles are influenced by social norms and community networks (the third layer). These, in turn, are influenced by living and working conditions, education, health care, etc. (the fourth layer). All these layers of factors are affected by the overall macroeconomic and environmental conditions of society (the outer layer). Fig. 7.1 illustrates the limitations of the usual reductionist approach to public health, such as focusing on smoking in isolation from other factors.

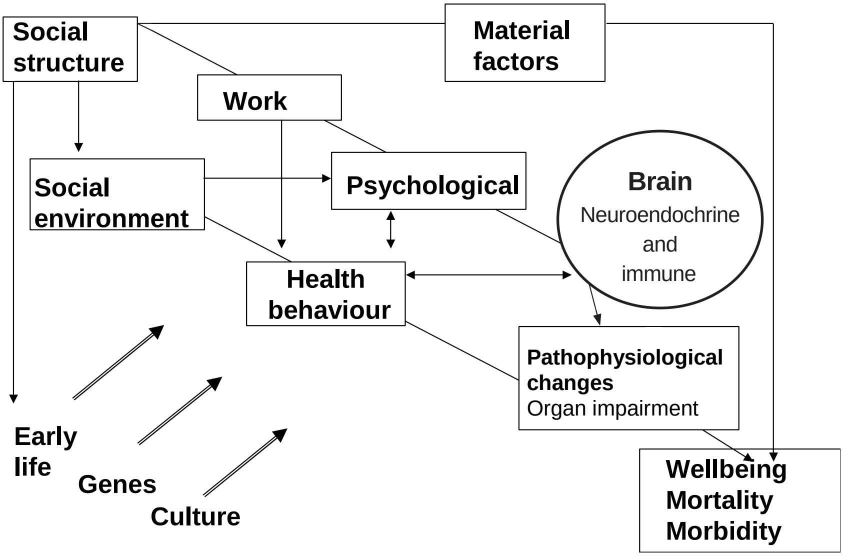
Fig. 7.1 Conceptual model of determinants of health as concentric circles



Source: based on Dahlgren, 1995.

Fig. 7.2 shows a complementary model of the determinants of health (Marmot & Wilkinson, 1999). As in the model shown in Fig. 7.1, the chain of causation starts with the social structure and then follows different pathways to the health outcome(s). The advantage of this model is that it also suggests different points for intervention. Curative services, for example, usually intervene at the level of pathophysiological changes or morbidity, in order to prevent death or disability. Many typical preventive programmes intervene at the level of health behaviour (aiming, for example, to encourage people to stop smoking or to increase their physical activity) or at the level of pathophysiological changes (such as screening for high blood cholesterol and reducing it by dietary or pharmacological means). Policy, by contrast, usually aims to influence the dimensions in the upper left corner of the diagram: social structure, environment, material conditions and work.

Fig. 7.2 Conceptual model of determinants of health



Source: from Marmot & Wilkonsen, 1999.

Both models show that, while such downstream interventions are important, their effect will be limited as long as they ignore the underlying determinants of health – that is, the upstream factors related to the social and economic environment and living conditions. One can ask, for example, why smoking is so common and fruit and vegetable consumption so low in CCEE/NIS. A plausible explanation is that for people with a low sense of control, no hope for the future and low social and financial resources, it makes little sense to worry about the health hazards of tobacco or to spend money on expensive and unnecessary foods (Graham & Der,1999).

The close relation of changes in health status to changes in social conditions in the CEE/NIS during the transitional period (Marmot & Bobak, 2000) further emphasizes the need to focus on the broader determinants of health. In fact, the improvement in mortality in the Czech Republic and Poland after 1990 has been attributed to improved diet rather than to improved health services (Bobak et al., 1997; Zatonski et al., 1998). The improved nutrition, in turn, has largely resulted from the greater availability and lower prices of unsaturated fats and fruits and vegetables. These factors are not entirely beyond the realm of the health services; for example, physician's advice can influence, to some degree, patients' decisions about diet, smoking or alcohol. One difficulty is that most clinicians in Europe and central Asia have not been trained to provide such advice or counselling.

Public health services can and should play an important role in developing policies to improve health. However, as mentioned above, it is unlikely that a substantial improvement in health can be achieved by the health sector alone. Public health services should set up and conduct downstream interventions (for example, changing health behaviour) but public health professionals also need to propose and advocate upstream policies. A wide range of such upstream policy options is given in the independent inquiry into inequalities in health in the United Kingdom (Acheson, 1998).

Comparative overview

Health status in the CEE/NIS

Health in the CEE/NIS is substantially worse than in western European countries. At the end of the 1990s, the difference between the European countries with the highest and lowest life expectancies at birth was more than 10 years in both men and women; virtually all countries with low life expectancy are in the CEE/NIS (WHO Health for all database). Even at age 45, there is an 8-year difference in male life expectancy between the best and the worst European countries (WHO Health for all database).

This difference in health (the much debated east–west gap) has long-term and short-term components (Bobak & Marmot, 1996). After the Second World War, life expectancy improved rapidly in both eastern and western Europe, but the two started to diverge in the 1960s. Western European countries enjoyed a further increase in life expectancy between 1970 and 2000 (by six years on average). However, improvements in the CEE/NIS until the early 1990s were at best negligible, and in Bulgaria, Hungary and Poland male life expectancy at age 15 actually declined (reflecting the increase in mortality among adults).

The situation deteriorated further in most of the CEE after the collapse of communism in 1989. The mortality trends followed those seen in socioeconomic indicators. After a universal deterioration in health in the early years, mortality improved in most CEE countries, where the transition was relatively successful, but it remained high or continued to rise in most NIS, where the negative social impacts of the transition were much worse (Cornia, 1997; United Nations Children's Fund, 2001). However, it should be noted that many of the determinants of high mortality from chronic diseases were well established prior to transition. Therefore, the background for the mortality events was already operative in the 1970s and1990s. Owing to delayed effects of many risk factors (such as smoking and diet), the mortality patterns of the 1990s reflect, at least partly, risks established much earlier.

Determinants of poor health in the CEE/NIS

The diseases responsible for the gap in life expectancy may guide us as to the measures that may help to reverse the unfavourable trends. Of the 6.1-year gap in life expectancy at birth between CEE/NIS countries and the rest of Europe in the early 1990s, only 15% developed in infancy; 43% originated in the

35–64-year age group and 23% in those 65 and older. Cardiovascular diseases accounted for 54%, followed by external causes (23%) and respiratory diseases (16%) (Bobak & Marmot, 1996). Interestingly, cancer is no more common in the CEE/NIS than in western Europe. Separate analyses of German, Hungarian and Russian data confirm these aggregate findings (Chenet et al., 1996; Jozan, 1995; Kingkade & Boyle Torrey, 1992). The contribution of external causes (injury and violence) is higher in the NIS, particularly since the late 1980s (Bobak & Marmot, 1996; European Centre on Health of Societies in Transition, 1998).

A number of studies addressed the question of the causes of poor health in the CEE/NIS. The evidence suggests that medical care contributed only modestly to the long-term east–west divide that has opened up since the 1960s (Bobak & Marmot, 1996; Boys et al., 1991; Velkova et al., 1997); most of the east–west difference is caused by high disease incidence rather than substantially higher case fatality in the CEE/NIS than in the west (Bobak & Marmot, 1996). A possible exception is infant mortality, which decreased more rapidly in countries or areas with better neonatal care technology (Koupilova et al., 1998b; Nolte et al., 2000).

The lack of efforts to control common risk factors for chronic disease (blood pressure, smoking, cholesterol) probably made a substantial contribution to the gap, mostly through the mortality rise since the 1960s. Smoking rates are high among men and are rising in young women (Bobak et al., 2000a). The prevalence of obesity is high in most countries of the region (Principal Investigators, 1989). Nutrition is often poor, with high intakes of saturated fats and low intakes of fresh fruit and vegetables, and leisure-time physical activity is typically low.

Meanwhile, environmental pollution, commonly blamed for high mortality in the region, probably did not play a major role (Bobak & Feachem, 1995; Bobak & Marmot, 1996; Hertzman, 1995).

The causes of the dramatic fluctuations in mortality in the 1990s are not fully understood but there is a general consensus that changes in health are related to changes in social and economic conditions. Social and economic circumstances deteriorated in all countries in the early stages of transition. Unemployment rose and income inequalities increased in all countries, and in some NIS they reached levels seen in Latin America (World Bank, 1996). Social inequalities in health also increased (Bobak & Powles, 2001; Koupilova et al., 1998a; Koupilova et al., 2000; Shkolnikov et al., 1998). The negative economic changes had a large impact on people’s behaviour and health. Indirect evidence suggests that high consumption of alcohol and binge drinking contributed to the changes in mortality, particularly though alcohol poisoning, injuries and violent deaths, and possibly cardiovascular diseases (McKee, 1999; McKee et al., 2001).

Apart from cardiovascular diseases, injuries and alcohol, there are other threats. There has been a sharp increase in a number of communicable diseases in some parts of the region since 1989, such as diphtheria, viral parenteral hepatitis, tuberculosis and human immunodeficiency virus (HIV) infection (Netesov & Conrad, 2001). The latter is closely related to the sharp increase in intravenous drug use. In the Russian Federation and some other countries, illicit drug use has reached epidemic proportions (Blinova et al., 2000; Veekens, 1998). While the absolute levels of these diseases are not high, the steep increase observed over the past few years is alarming. If the current trends continue, hepatitis and HIV and other infections will become a major cause of morbidity and mortality.

Some of the problems in the 1990s resulted from the disintegration of public health services and a lack of funds for drugs and immunization. Nevertheless, the general worsening of health status reflects deeper social problems such as economic instability, unemployment, migration, organized crime, alcoholism and increased availability and use of illicit drugs. All this indicates that the roots of the health crisis in the CEE/NIS lie in the social environment. Psychosocial resources, such as perceived mastery, optimism, sense of control or social networks are, on average, low (Bobak et al., 2000b; Cornia, 1997; Marmot & Bobak, 2001). The worsening in the 1990s can also be attributed to psychosocial stress resulting from acute, transition-related dislocation in the labour market, income inequalities and family disruption, and by a grossly inadequate public policy response to these social emergencies (Cornia & Paniccia, 2000). The major task for organized public health, and for governments in general, is to respond to these challenges.

Public health services in the CEE/NIS before 1990

Before 1990, public health services in the CEE/NIS were organized according to the Soviet model. Responsibility for public health and prevention lay with a highly centralized system of Sanepid services. The system was hierarchical, with sanitary–epidemiological institutes at lower administrative levels (for example, districts) subordinate to higher-level (regional or national) institutes. At the same time, the sanitary–epidemiological institutes were also part of the regional (district) health services structure. The sanepid services combined monitoring, inspection, preventive and (sometimes) research functions. A typical institute serving a larger region had departments dealing with environmental health, general health, occupational health, nutrition and food hygiene, child and adolescent health and communicable disease control (epidemiology and microbiology).

Perhaps the most tangible achievement of the sanepid system has been its contribution to vaccination programmes and communicable disease control, achieving remarkable success in most parts of the CEE/NIS. However, it was relatively ineffective in combatting environmental pollution, occupational diseases and noncommunicable diseases. The failings of the old system were partly related to the lack of real power (for example, the sanepid services monitored air pollution but often had no direct regulatory power), but also to the political regime (opposing party decisions required personal courage).

The sanepid services reported on infections, immunizations, serological surveys, occupational disease and some other outcomes. Information on curative services or noncommunicable conditions was often collected within the health sector (for example, cancer registers) but these data were not often used. There were large differences between countries but it became apparent after 1990 that, in general, the information base for public health was inadequate and often of poor quality. In addition, much of the data on health status (for example, mortality and birth outcomes) came from state vital statistics or other sources (for example, the WHO MONICA Project was the main source of information on the incidence and treatment of cardiovascular diseases and the prevalence of risk factors in many countries in CEE/NIS).

Public health services in the CEE/NIS after 1990

After 1990, public health services, as with most other public institutions, underwent reform in most countries. To our knowledge, there has been no formal assessment of the public health reforms in the CEE/NIS. The following is based on informal observations in a sample of countries. The reforms were different in each country, but there were several common themes.

Decentralization

In some, but not all countries, the public health systems were partly decentralized. In most countries, the subordination to higher administrative levels became weaker, and the link with local government became stronger. In virtually all countries the central public health institutions remained under the control of the ministry of health, but in some countries local public health services were incorporated into local government, or local governments were given more say about public health in their areas. This has had some positive consequences. The public health institutes respond better to local problems, for example, by conducting surveys for local government or by providing specific services (for example, HIV/acquired immunodeficiency syndrome [AIDS] counselling). In some countries, the public health institutes also have freedom to raise extra funding for additional activities.

Changes in funding, legislation and responsibility

In many countries, mostly in the NIS, the national economic crises reduced public sector funding. The impact on public health services was usually larger than that on curative services. As a consequence, the public health services could not deliver the services they used to (for example, vaccination) and could not start new programmes.

Apart from the economic crisis affecting all countries in the region, the changes in financing systems after 1989 are of crucial importance. Before 1990, the health care systems in the CEE/NIS were financed directly from the state budget. By now, the systems are based mostly on national health insurance, sickness funds or privatized schemes that are, at least formally, independent from the government. As a result, much less funding goes to public health agencies than before 1989. In many instances, the financial difficulties forced the public health agencies to sell their services (laboratory analyses, inspections, consultancy) or even to sell some of their facilities (for example, labs) in order to survive. Obviously, this severely affects the ability of public health system to fulfil their functions. While some of the public health functions can be integrated with clinical services (for example, immunization, disease reporting or secondary prevention), other functions, such as surveillance or primary prevention, require specialized public health agencies funded from the central budget. The focus on financing of services leads to leaving behind the public goods on which public health functions are based.

In addition, owing to legislative changes, public health services in some countries lost some of their previous functions. In the Czech Republic, for example, monitoring of environmental pollution was partly moved to the ministry of the environment, the monitoring of food quality to the ministry of agriculture, and radiation hygiene to a new governmental agency for nuclear safety.

Blurring of responsibilities and loss of discipline

While some elements of decentralization and new legislation were necessary, the combination of these changes often brought about a reduction in control and blurring of responsibilities. This, combined with the fall in real funding, often led to a decline in the quality of previously successful functions (for example, communicable disease control). Another by-product of decentralization was that, in many countries, public health was removed even further from the interests of the ministries. Public health is often low among the priorities of local administrators, and funding cuts have affected public health agencies disproportionately.

Reductions in the numbers of staff

Similar to other health services, the public health services were well staffed before 1990. After the political changes there were fewer people working in the system. While some reduction was desirable (Feachem & Preker, 1991), many of those who left the service were the more dynamic and better-trained people. The two main reasons for leaving the service were uncertainty about the future of the service and low salaries.

Introduction of health promotion

Health promotion strategies can be divided into three groups: (a) campaigning strategies (for example, tobacco control policies); (b) responsive strategies (programmes for drug misusers and HIV prevention); and (c) intersectoral collaboration (working with housing, transport or even finance ministries). While health promotion was largely ignored in CCEE/NIS before 1990, it subsequently became one of the core functions of the public health service in many countries; much of this was led by the WHO Regional Office for Europe.

In general, the responsive strategies have received most attention. Most countries have now some policies towards HIV control and harm reduction among intravenous drug users, child development, lifestyle factors, etc. As with many other public health initiatives after 1990, harm reduction activities have been strongly influenced by international agencies, particularly by the International Harm Reduction Development programme of the Open Society Institute, focusing on intravenous drug users and HIV prevention (www.soros.org/harm-reduction, accessed 17 June 2002).

The relative lack of intersectoral programmes may result from the difficulties that national governments have in adopting and enforcing public health legislation (for example, banning tobacco or alcohol advertising or increasing tax on tobacco and alcohol). In many countries, anti-tobacco and anti-alcohol legislation and taxation has been attempted and approved (Kralikova & Kozak, 2000). The tobacco industry has mounted considerable opposition to these initiatives, however, and has often been successful in reversing legislation or blocking its implementation (the most recent example being the reversal of anti-tobacco legislation in the Czech Republic in May 2002). The low priority of public health in government policy is reflected by the lack of communication with agencies in different sectors.

There have nevertheless been a number of attempts to introduce intersectoral approaches to health promotion. A well-known example is the Healthy Cities Network, which promotes intersectoral work at the local level. This approach has been welcomed in CCEE and NIS, since it appears new and encourages health promotion, participation and engagement of politicians with people's concerns. The Regional Office has supported national networks of cities in CCEE and the Russian Federation so that, for example, Croatia has a network with 60 full or affiliated member cities (www.who.dk/healthy-cities, accessed 17 June 2002). Other examples include the European Network of Health Promoting Schools, led by the World Health Organization (WHO) and funded by the European Union (EU) and the Council of Europe, which includes most of the CEE and provides a base for national development of school-based health education; the health-promoting hospitals networks, again mostly in the CEE but also in Kazakhstan; and the Health in Prisons Project, which includes Latvia, Poland, the Russian Federation and Uzbekistan. The problem with many of these activities, however, is the poor measurement of their outcomes and lack of rigorous evaluation. Thus, the real impact of these activities on public health is unknown.

Environmental health

Before 1990, public health services were unable to reduce exposure to environmental pollutants. For political reasons it was often difficult to address the problem. This situation has changed since 1990. The issue of environmental pollution and health has become a priority, and many countries have initiated programmes of training and research. However, health impact assessment has yet to become standard practice. Perhaps the most extensive attempt to integrate research and policy in the area of environmental health is the Czech National Programme of Environment and Health, which integrates the collection of data on exposures and assessment of health status. Another example of a new approach to environmental health is the WHO-led National Environmental Health Action Plans (NEHAPs) adopted by a number of NIS/CEE countries. This framework attempts to coordinate different sectors of the economy and government in formulating sustainable strategies for environment and health. Unfortunately, much of it remains on paper.

Health information systems

Investments have been made to improve the quality of information systems and health monitoring tools. Information systems have been modernized, and many countries now have computerized systems for the reporting of different diseases or health outcomes. Many of these data are reported to WHO, the United Nations Children's Fund (UNICEF) and other international agencies, and some are available in on-line or off-line databases. For example, WHO's European Health for All statistical database (www.who.dk/hfadb, accessed 17 June 2002) contains a large number of health-related and social indicators. The WHO Regional Office for Europe, with other international partners, also supports the development of Health Care Systems in Transition (HiT) profiles, which offer important overviews of the health system and public health issues (www.observatory.dk, accessed 17 June 2002). The computerized information system for infectious diseases (CISID) (cisid/who.dk, accessed 17 June 2002) contains communicable disease surveillance data. Data on cardiovascular risk factors are available through the WHO countrywide integrated noncommunicable diseases intervention (CINDI) programme (www.who.dk/eprise/main/WHO/Progs/CINDI, accessed 17 June 2002). UNICEF has developed the TransMONEE database of health and socioeconomic indicators in 27 countries in the CEE/NIS (www.eurochild.gla.ac.uk/documents/monee, accessed 17 June 2002).

Data quality depends, of course, on the quality of primary data collection, and for some outcomes and countries this information may be unreliable. The use of such data is further limited by a lack of information on the distribution of health outcomes within populations (for example, by socioeconomic group).

In addition, ad hoc surveys or repeated surveys in population samples have been initiated in many countries to collect data on health behaviour and individual risk factors. However, the relaxation of control has also affected health information systems, with many data sets becoming less complete and less reliable. As before, communication between different agencies collecting or maintaining information is generally poor, even within the health sector.

Most health information systems now being developed in the CEE/NIS have more to do with monitoring expenditures rather than with monitoring health. Management systems can and should be combined with health information systems so that evaluations as to cost–effectiveness and efficacy can both be accomplished. Unfortunately, the integration of health information with management information systems is rarely accomplished, leading to a lack of data on health and on health outcomes relating to health care provision.

Public health surveillance systems are public goods, needing finance from central sources. They should be sensitive to the needs of developing health systems in transitional countries, and thus should incorporate elements of disease surveillance, health care utilization, health expenditures, and quality assurance.

Key factors enabling and obstructing advances in public health

Overall macroeconomic and social conditions

As mentioned above, the overall economic situation in many countries is poor. There are also other major societal problems, such as high levels of corruption and crime, weak civic society structures, low social capital, rising unemployment and income inequalities. It is difficult to reform institutions under these circumstances, and all these factors have a negative influence on health (Cornia, 1997).

General attitudes to public health

In many countries the predominant view is that population health is largely a product of medical (curative) services. Most people and policy-makers see medical services as crucial. Most would agree that it is important to maintain immunization programmes and other measures to control communicable diseases. Some people would support health promotion programmes in the area of chronic diseases or substance misuse. But few would assert that actions taken by other sectors (for example, education, transport, pensions) have an impact on health. Very few people consider health as a marker of the successful development of a society. As a consequence, policy-makers in different sectors do not consider the impact of their decisions on health, and it is often difficult to obtain support for health-related initiatives outside the health sector. For example, a review of public health policy documents in the Russian Federation revealed that, while most authors demanded preventive programmes, the vast majority only considered activities within the health sector (Tkachenko et al., 2000). Public health financing is most often separated from health care financing, and thus the integration of public health and clinical care is only rarely recognized.

The inherited system

It will take time to refocus the old system towards health promotion and prevention. Cooperation with other sectors has traditionally been poor and it is difficult to change this attitude.

Lack of a multisectoral approach

Even in newly organized programmes that are set up to be multisectoral, collaboration between different sectors and institutions may be difficult. For example, Parvanova (2001) analysed environmental health policy and practice in six formerly socialist countries in eastern and southern Europe. She found that, in all countries, the importance of both environmental health and a multisectoral approach to it were well recognized. Nevertheless, there was universal difficulty in collaborating with other agencies, often within the same sector.

Training

There is an urgent need for retraining of public health workers in key areas, such as health promotion, medical statistics and informatics, and risk or health impact assessment. The understanding of “evidence” often differs markedly from that in western European countries. The evidence-based approach has not yet been established in the CEE/NIS. Medical schools pay little attention to public health and its determinants and health promotion strategies, and postgraduate training in public health still largely focuses on communicable disease control. Nonmedical professionals are still undervalued in public health services.

Surveillance

Disease surveillance is a critical element supporting public health systems and outcomes research. Both communicable and noncommunicable (as well as behavioural risk factor) surveillance is essential in monitoring the health system, identifying critical new health problems, and in ensuring that services or programmes address high-priority health problems. WHO has provided leadership in establishing disease-specific or program-specific surveillance activities, but at the country level, there is a great need to integrate a national surveillance system with the clinical care systems now being developed and financed.

Policy options

In early 1991, a consultation by the World Bank with the Czech Republic proposed six principles to the future of public health. These were (a) to preserve the good (communicable disease control and vaccination); (b) to attack the bad; (c) to reform institutions; (d) to develop training in public health; (e) to safeguard the public health budget; and (f) to adopt a multidisciplinary and multisectoral approach (Feachem & Preker, 1991). We believe that these principles are still valid.

Preserve the good

It is crucial to preserve or rebuild the capacity of the public health services for communicable disease control, vaccination and the maintenance of child and maternal health programmes. Those countries that preserve the effective parts of the old services are better prepared to meet new challenges than are those that allow the entire public health service to disintegrate.

Attack the bad

The list of public health issues is long and differs between countries. In the medium term, each country needs to prioritize its health problems. These may include new and old infectious diseases, safe practice in health care facilities, health behaviour and risk factors, substance abuse, birth control, and injuries and accidents. Programmes to prevent or control these problems need to take into account the major determinants of each condition and should use multidisciplinary and multisectoral approaches to tackle the determinants of health (see, for example, Acheson, 1998).

Reform the institutions

Reforms should encourage retention of bright and motivated staff, increase the effectiveness of the public health service, and encourage intersectoral and multidisciplinary approaches. Attention should be paid to raising the salaries of public health workers, as these jobs are traditionally noncompetitive with private-practice medicine or other health professions.

Train in public health

Schools of public health have been established in several countries, but they frequently focus on health service management rather than on epidemiology, population health, prevention and health promotion. While sending students abroad may not be feasible, it should be possible to develop new or reform existing schools of public health. There are several examples of successful initiatives. In Hungary, a School of Public Health was established with international assistance (McKee et al., 1995); the American University in Yerevan, Armenia, offers a Certificate in Public Health programme; and there is a public health programme at the University of Varna, Bulgaria, supported by the EU TEMPUS programme. The collaborative effort of the Open Society Institute and the Association of Schools of Public Health in the European Region (ASPHER) (www.ensp.fr/aspher/C_projects/osi/osi_aspher.htm, accessed 17 June 2002), which focuses on education and training in public health in 13 countries of the region, is another considerable resource. Specific opportunities should be available to partner directly between academic institutions. Such partnerships would permit faculty and student exchanges, curriculum development and joint research using external funds.

Protect the budget

Countries need to recognize that preventive services are a public good that should be financed from public funds and that there should be some elements of compulsion and state control. Governments should protect the public health budget, perhaps as a proportion of the total health budget. The rationale is that, although the public values curative services more than public health services, investing in well-designed preventive services has a greater impact on population health.

Adopt interdisciplinary and intersectoral approaches

The causes of ill health in the CEE/NIS (and elsewhere) are complex. While public health service or health sector interventions as a whole can make a valuable contribution to improving health, the problem of poor health of the population cannot be solved without addressing the broader determinants of health. Local services need the support of central government, and coordination among different ministries, public institutions and agencies and nongovernmental organizations will be needed. Public health professionals must advocate this broad approach to health and its determinants.

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