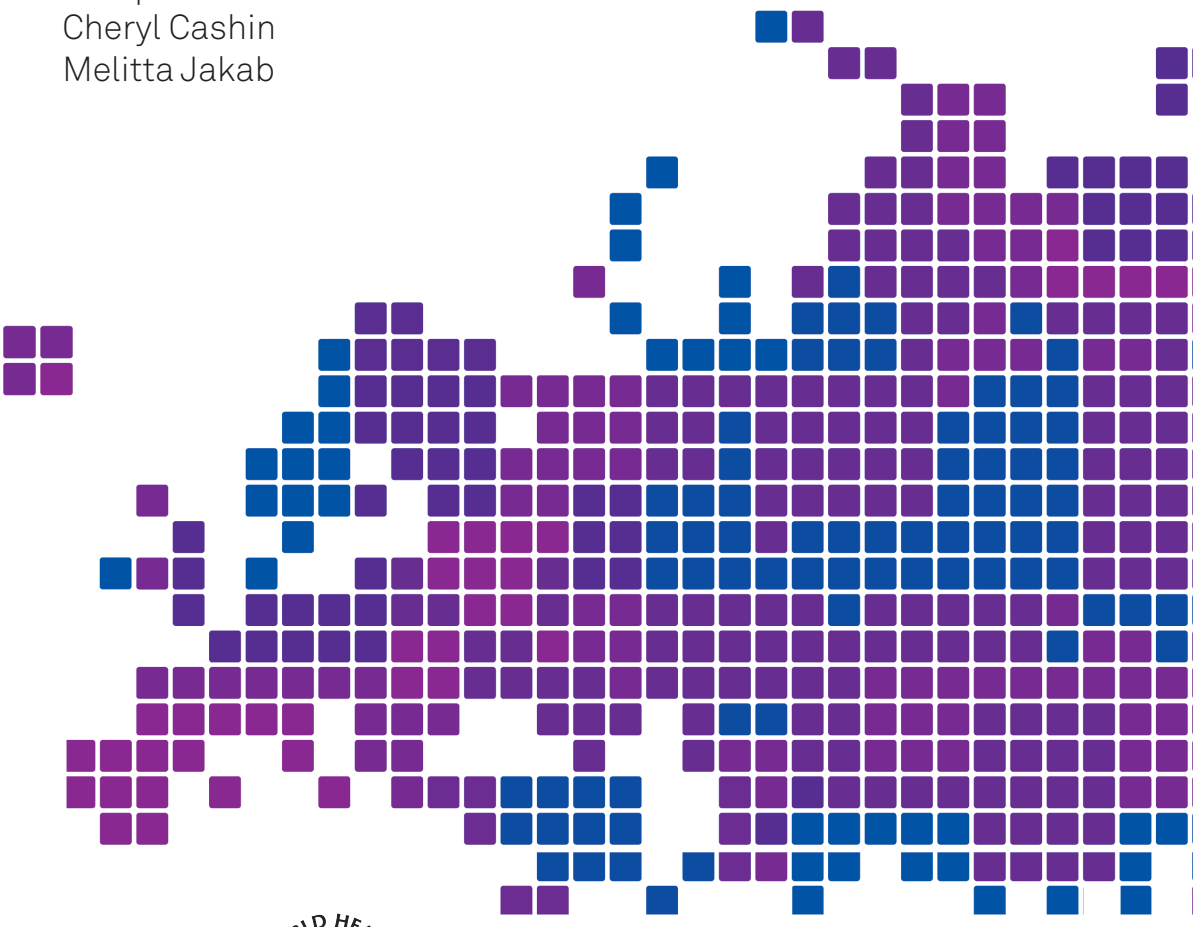
Implementing Health Financing Reform

21
Observatory Studies Series

Lessons from countries in transition

Edited by
Joseph Kutzin
Cheryl Cashin
Melitta Jakab



WORLD HEALTH ORGANIZATION
EUROPE

European Observatory on Health Systems and Policies

Implementing Health Financing Reform

The European Observatory on Health Systems and Policies supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of health systems in Europe. It brings together a wide range of policy-makers, academics and practitioners to analyse trends in health reform, drawing on experience from across Europe to illuminate policy issues.

The European Observatory on Health Systems and Policies is a partnership between the World Health Organization Regional Office for Europe, the Governments of Belgium, Finland, Ireland, the Netherlands, Norway, Slovenia, Spain, Sweden and the Veneto Region of Italy, the European Commission, the European Investment Bank, the World Bank, UNCAM (French National Union of Health Insurance Funds), the London School of Economics and Political Science and the London School of Hygiene & Tropical Medicine.

Implementing Health Financing Reform

Lessons from countries in transition

Edited by

Joseph Kutzin, Cheryl Cashin, Melitta Jakab

European Observatory on Health Systems and Policies

Keywords:
FINANCING, HEALTH
HEALTH CARE REFORMS – economics
NATIONAL HEALTH PROGRAMS – organisation and administration
EUROPE

ISBN 978 92 890 4211 6

Printed in the United Kingdom

Contents

Foreword

The collapse of the Berlin Wall brought with it massive economic, social and political changes for the countries that emerged from the Communist era. Health and health systems were greatly affected by these, and while the countries seemingly came from a similar starting point, differences became apparent in country contexts, policy responses and outcomes. Because changes in the economic context of most countries came very quickly and often brought severe consequences, reforms in health system financing were particularly high on the policy agenda.

The nature of the health financing reforms implemented in the so-called *transitional* countries were closely linked to the underlying changes occurring in these societies. In many cases, this gave a strong ideological flavour to the reform process, as it was viewed as part of a wider shift towards a more liberal economic environment. Frequently, however, many aspects of the pre-transition system remained highly resistant to change, and the specific mix of reform instruments and key contextual factors varied substantially across countries. By the late 1990s, most countries were not satisfied with the progress made on either the implementation or the effects of their reforms, despite the limited empirical evidence on which to base an objective assessment. Increasingly, countries began to undertake analytic work on their reforms, often with the support of academic institutions and international agencies. As a result, a body of evidence has emerged that allows for a comparative assessment of the health financing reforms in these countries. That is the focus of this book.

This book analyses the experience with the financing reforms implemented by the countries of central Europe, eastern Europe, the Caucasus and central Asia. The assessment criteria by which reforms are judged are derived from the conceptual framework first put forth in *The world health report 2000*, and later adapted into a political agreement of all member countries of the World Health Organization's (WHO) European Region in the Tallinn Charter on Health Systems, Health and Wealth, signed in June 2008. The book does not, however, rely on cross-country comparison of a common set of performance indicators.

Instead, in-depth analyses of particular reform experiences demonstrate how some countries have made progress on key objectives, while others have lagged.

Interestingly, the findings do not yield strong conclusions about specific reform instruments, such as single- versus multiple-payer health insurance arrangements, particular provider payment methods, or co-payment regimes. Instead, the lessons that emerge from the evidence focus more on reform processes, sequencing and coordination of actions. Of critical importance was the identification of both fragmentation and inappropriate incentives as priority problems to be addressed; and then the development, implementation and monitoring of reform strategies to reduce fragmentation and align policy instruments to create appropriate incentives for more efficient and equitable systems. The specific combination of instruments used to address these concerns successfully were not the same from country to country, because underlying (especially economic) contextual factors diverged substantially in the post-transition period. Hence, there is no "one-size-fits-all" reform strategy. Nevertheless, countries that have made greater progress in their performance have been those that implemented consistent and comprehensive implementation processes tightly focused on reducing fragmentation and aligning incentives in an explicit attempt to promote greater efficiency in the health service delivery system, equity in the distribution of resources and services, financial protection and transparency.

This book is somewhat different from others in the Observatory's series in that most of the authors are – as their primary vocation – actively engaged with health reform processes in the countries concerned, rather than from an academic base. This befits the focus of this book on deriving lessons from *implementation*. The participation of a large number of WHO and World Bank staff and consultants as chapter authors also reflects the very real partnership between our two agencies in country support for health system reform. As with all other volumes in the Observatory series, of course, the book does not attempt to tell policy-makers what to do, and also warns against any belief in "magic bullet" reforms. The evidence suggests strongly that "the devil is in the details", and the comprehensive analysis contained in this book helps decision-makers – and their advisors – to understand these details and the lessons learned from how countries have coordinated (or not) the various instruments of health financing policy. On behalf of all the Partners of the Observatory, therefore, I am pleased to introduce this volume. I am confident it will contribute to better policy-making, not only in the transitional countries but also in the other countries of this region and in other parts of the world.

Nata Menabde
Former Deputy Regional Director, WHO Regional Office for Europe
Copenhagen, 14 August 2009

Acknowledgements

This volume is one of a series of books produced by the European Observatory on Health Systems and Policies. Production of the book would not have been possible without the support of the WHO Regional Office for Europe and the World Bank, each of which made available substantial time on the part of their staff. We wish to thank both Nata Menabde and Armin Fidler in particular.

We appreciate the efforts of the Observatory and Josep Figueras in particular for the original idea to write this book, and the contribution made by Reinhard Busse and Jonas Schreyögg for its original conception.

We also wish to thank the Semmelweis University's Health Services Management Training Center, which generously hosted a very productive authors' workshop to discuss first chapter drafts. Particular thanks go to Peter Gaál and Tamas Evetovits for the leadership and support provided for the workshop.

Thanks are also due to the staff at the WHO Barcelona Office for Health Systems Strengthening. The Office promotes better performing health systems through the diagnosis and development of health system policies, particularly health financing policy, in the countries of the WHO European Region. It also supports capacity building and institutional development for health financing and policy analysis at the national and regional levels.

Finally, we are most grateful to all our authors for responding promptly in both producing and amending their chapters, and for their patience throughout the process. In addition, many authors also contributed greatly as reviewers of chapters other than the ones with which they were directly involved, and we believe that this enhanced greatly the quality of the final product.

List of tables, figures and boxes

Tables

Figures

List of abbreviations

ALOS	Average length of (hospital) stay
ARH	Regional hospital agencies (France)
ARV	Anti-retroviral
BOOT	Build Own Operate Transfer model
CAM	Complementary and alternative medicine
CCS	Clinical Center of Serbia
CDC	Centers for Disease Control and Prevention
CE	Central Europe
CE/EECCA	Central Europe, eastern Europe, the Caucasus and central Asia
CHIP	Consolidated Health Investment Program (Latvia)
CMEA	Council of Mutual Economic Assistance
CPI	Consumer price index
CSF	Central Sickness Fund (Estonia)
CSR-CIHC	Center for Social Research (Moscow) and Center for International Health Care of Boston University
CZK	Czech koruna (crown)
DHIF	District Health Insurance Fund (Romania)
DOT	Directly observed treatment
DRG	Diagnosis-related group
EBRD	European Bank for Reconstruction and Development
EHIF	Estonian Health Insurance Fund
ESCo	Energy services company
EU	European Union
EU12	Member States that acceded to the EU between 1990 and 2006
EU15	Countries belonging to the EU in May 2004
FAP	Rural physician assistant and midwife post
FBiH	Federation of Bosnia and Herzegovina (within Bosnia and Herzegovina)
FGP	Family Group Practice
FSF	Federal Solidarity Fund (Bosnia and Herzegovina)
GDP	Gross domestic product
GDR	German Democratic Republic
GFATM	Global Fund to Fight AIDS, TB and Malaria
GP	General practitioner
HBS	Household Budget Survey

HCSO	Hungarian Central Statistical Office
HeSPA	Health and Social Programs Agency (Georgia)
HIF	Health Insurance Fund
HII	Health Insurance Institute (Albania)
HIIS	Health Insurance Institute of Slovenia
HIV/AIDS	Human immunodeficiency virus/acquired immunodeficiency syndrome
HUF	Hungarian forint
HZZO	Health Insurance Fund (Croatia)
IAIS	International Association of Insurance Supervisors
IDU	Intravenous drug user
IFC	International Finance Corporation
IMCI	Integrated Management Childhood Illness programme
IMF	International Monetary Fund
IVF	In vitro fertilization
KGS	Kyrgyz som
KIHS	Kyrgyz Integrated Household Survey
KM	Bosnia and Herzegovina convertable marka
LOO	Lease Own Operate model
LSE	London School of Economics
MDR	Multidrug-resistant
XDR	Extensively drug-resistant
MHIF	Mandatory Health Insurance Fund (Kazakhstan and Kyrgyzstan)
MoH	Ministry of Health
MoSA	Ministry of Social Affairs (Estonia)
MTBF	Medium-Term Budget Framework
MTEF	Medium-Term Expenditure Framework
NEM	New Economic Mechanism
NFC	National Framework Contract
NGO	Nongovernmental organization
NHA	National Health Accounts
NHF	National Health Fund (Poland)
NHIC	National Health Insurance Company (Republic of Moldova)
NHIF	National Health Insurance Fund
NHS	National Health Service
NIHD	National Institute of Health Development (Estonia)
NOBUS	National Sample Survey of Household Welfare and Participation in Social Services (Russian Federation)
NSSI	National Social Security Institute (Bulgaria)
O&M	Operate and Maintain model
OECD	Organisation for Economic Co-operation and Development
OEP	National Health Insurance Fund Administration (Hungary)
OOPS	Out-of-pocket (payments)
PEM/PFM	Public Sector Expenditure and Financial Management
PHC	Primary health care

PLN	Polish zloty
PPP	Purchasing power parity
PRSP	Poverty Reduction Strategy Paper
R&D	Research and development
RLMS	Russian Longitudinal Monitoring Survey
RS	Republic Srpska (within Bosnia and Herzegovina)
SCHIA	State Compulsory Health Insurance Agency (Latvia)
SES	Sanitary-Epidemiological Services
SF	Social Fund
SGBP	State-Guaranteed Benefits Package
SHA	State Health Agency (Armenia)
SIZ	Communal Insurance Association (Yugoslavia)
SMIC	State Medical Insurance Corporation (Georgia)
SPF	State Patient Fund (Lithuania)
STI	Sexually transmitted infection
SUB	Rural hospital
SUSIF	State Unified Social Insurance Fund (Georgia)
SWAp	Sector-Wide Approach
TB	Tuberculosis
TDMHIFs	Territorial departments of the MHIF Kyrgyzstan
TEH	Total expenditure on health
TFCHIs	Fund of Territorial (Russian Federation) Compulsory Health Insurance
TPF	Territorial Patient Fund (Lithuania)
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNIC	A state-owned insurance enterprise in Uzbekistan
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USSR	Union of Soviet Socialist Republics
VAT	Value-added tax
VHI	Voluntary health insurance
VZP	General Health Insurance Company (Czech Republic)
WHO	World Health Organization

Country abbreviations (based on the ISO country codes)

AL	Albania
AM	Armenia
AZ	Azerbaijan
BA	Bosnia and Herzegovina
BG	Bulgaria
BY	Belarus
CZ	Czech Republic
EE	Estonia

GE	Georgia
HR	Croatia
HU	Hungary
KG	Kyrgyzstan
KZ	Kazakhstan
LT	Lithuania
LV	Latvia
MD	Republic of Moldova
MK	The former Yugoslav Republic of Macedonia
PL	Poland
RO	Romania
RU	Russian Federation
SI	Slovenia
SK	Slovakia
TJ	Tajikistan
UA	Ukraine
UZ	Uzbekistan
YU	Serbia and Montenegro

List of contributors

Lucie Bryndová is an advisor to the Minister of Health of the Czech Republic, Prague, Czech Republic.

Cheryl Cashin is Research Fellow at the Nicholas C. Petris Center on Health Care Markets and Consumer Welfare, School of Public Health, University of California, Berkeley, United States.

Sarbani Chakraborty is Senior Health Specialist with the World Bank, Washington, DC, United States.

Milan Martin Cvikl is Member of Parliament, National Assembly of Slovenia, Ljubljana, Slovenia.

Christopher Davis is Reader in Command and Transition Economies, University of Oxford and Fellow, Wolfson College, Oxford, United Kingdom.

Antonio Duran is the CEO of Técnicas de Salud, a health systems and policies consulting firm based in Seville, Spain.

Tamas Evetovits is Senior Health Financing Specialist at the Barcelona Office for Health Systems Strengthening, WHO Regional Office for Europe.

George Gotsadze is Director of the Curatio International Foundation in Tbilisi, Georgia.

Armin Fidler is Lead Adviser, Health Policy and Strategy, the World Bank, Washington, DC, United States.

Hernan L. Fuenzalida-Puelma is an independent health financing and policy consultant based in Ohio, United States.

Peter Gaál is an associate professor of health policy at Semmelweis University, Budapest, Hungary.

Dominic S. Haazen is Lead Health Policy Specialist with the Africa Region of the World Bank, currently based in Dar es Salaam, Tanzania. At the time of his contribution to this book, he was in the World Bank's Europe and Central Asia Region.

Alexander S. Hayer contributed to this book as part of an internship with the World Bank in Washington, DC, United States. He recently completed a B.Sc. in biology at Simon Fraser University, Burnaby, British Columbia, Canada, and currently is pursuing graduate studies in public health or medicine.

Pavel Hroboň is Deputy Minister of Health of the Czech Republic, responsible for health insurance and pharmaceutical policy, Prague, Czech Republic.

Melitta Jakab is Senior Health Financing Policy Analyst at the Barcelona Office for Health Systems Strengthening, WHO Regional Office for Europe.

Gintaras Kacevicius is Director of the Insurance Development Department, National Health Insurance Fund, Vilnius, Lithuania.

Jenni Kehler works as Technical Officer in Health Financing and Health Policy, WHO Regional Office for Europe.

Joseph Kutzin is Regional Advisor for Health Systems Financing and Head of the Barcelona Office for Health Systems Strengthening, WHO Regional Office for Europe.

Jack Langenbrunner is Lead Economist, Health, East Asia and Pacific Region, the World Bank.

Mark McEuen is Principal Associate, Abt Associates, Inc., Cambridge, MA, United States.

Nata Menabde was Deputy Regional Director of the WHO Regional Office for Europe.

Sheila O'Dougherty is Director, USAID-funded ZdravPlus Project, Abt Associates, Inc., Cambridge, MA, United States.

Panagiota Panopoulou is with the Ministry of Health, Mexico City, Mexico.

Pia Schneider is Senior Economist, Health, Europe and Central Asia Region, the World Bank.

William D. Savedoff is visiting fellow, Center for Global Development and Senior Partner, Social Insight, Washington, DC, United States.

Igor Sheiman is Research Professor, State University – Higher School of Economics, Moscow, Russian Federation.

Sergey Shishkin is Vice-Rector, State University – Higher School of Economics, Moscow, Russian Federation.

Sarah Thomson is Senior Research Fellow, European Observatory on Health Systems and Policies and Research Fellow and Deputy Director, London School of Economics (LSE Health), United Kingdom.

Part one:

Background to health financing systems and reforms in countries in transition

Chapter 1

Conceptual framework for analysing health financing systems and the effects of reforms[1]

Joseph Kutzin

Policy-makers in countries in transition,[2] as in all countries, are faced with the challenge of improving the performance of their health systems. However, these countries share a common historical experience – the period and collapse of communist rule – and all embarked on an unprecedented social, political and economic transition that began at the end of the 1980s. Despite this common history, differences emerged or became more apparent in the early years of transition. Most obviously, there are large economic differences between the countries, with the richest among them – Slovenia – having a per capita gross domestic product (GDP) in 2004 that was more than 17 times (adjusted for purchasing power parity) that of the poorest, Tajikistan (World Bank 2006). Parallel to this, most of the countries had similar types of health financing system and expenditure pattern at the end of the 1980s but there are now important differences between these systems, as countries responded in various ways to the challenges and opportunities created by the transition experience.

1 Valuable contributions on multiple drafts were provided by Peter Gaál. Reinhard Busse, Tamas Evetovits, Melitta Jakab, Jenni Kehler, Claudio Politi and Jonas Schreyögg also provided useful input.

2 The countries that are the focus of this book include the former Communist countries of central and eastern Europe (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Hungary, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia, and the former Yugoslav Republic of Macedonia) and those that were formerly part of the USSR (Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Latvia, Lithuania, Republic of Moldova, Russian Federation, Ukraine, Tajikistan, Turkmenistan and Uzbekistan). Because terms that are used to identify or group these countries (such as Commonwealth of Independent States) change frequently, for the purposes of this book we will use the geographic identification central Europe, eastern Europe, the Caucasus and central Asia (CE/EECCA). We also will refer to this group of countries as "in transition" or "former communist".

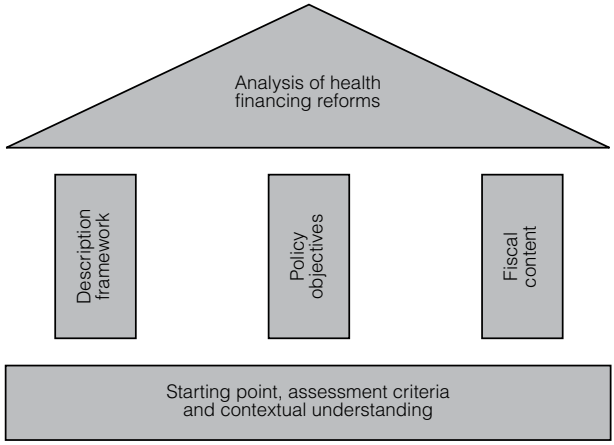


Fig. 1.1 *Three pillars for analysing health financing policy*

Source: Adapted from Kutzin 2008.

Given this combination of similarities in historical experience with the vast differences in the current situation of these countries, the conceptual approach used for this study is guided by the assumption that lessons from experiences relating to implementation of health financing reforms can be derived by using (1) a common set of explicit policy objectives as assessment criteria; (2) a function-based framework as a basis for describing health financing systems and reforms; and (3) identification and analysis of key contextual factors with implications for particular reform options and their effects. This standardized approach to assessment and description will enable lessons to be generated, particularly from those countries that have carried out "deep" reforms of their financing systems. Such lessons will be of interest not just to the countries in transition, but for countries in other parts of the world as well.

A. Framework for analysis

The conceptual approach is built on three pillars (Fig. 1.1). The first is a standard set of objectives for health financing policy derived from *The world health report 2000* framework (WHO 2000). These serve as the criteria against which health financing reform experience is assessed.

Second is a standard approach to describing the functions and policies associated with all health financing systems (adapted from Kutzin 2001). *The world health report 2000* identified health financing as one of the four functions of the health system[3] and the *health financing system* consists of specific

3 The other functions are stewardship, resource generation (investment in human and physical capital and inputs) and service delivery (personal health care and population-based health services).

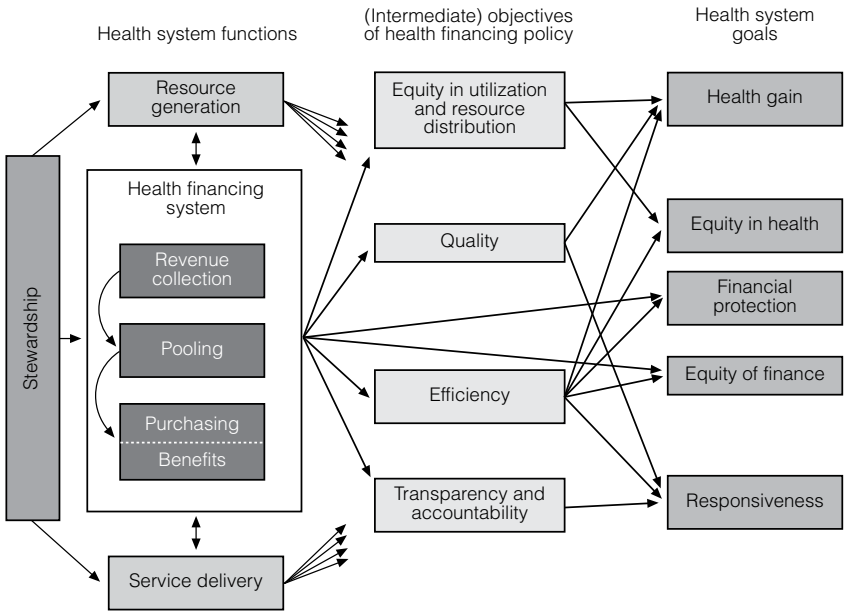


Fig. 1.2 *Links between health financing system and policy objectives, other system functions and overall system goals*

Source: Kutzin 2008.

sub-functions and policies – revenue collection, pooling of funds, purchasing of services, and policies to define and ration benefit entitlements (most commonly through patient cost-sharing obligations). This is used to describe and analyse the "starting point" of pre-transition health financing systems (see Chapter 2) and the various reforms that countries have carried out in a consistent manner, irrespective of the model or label (such as Beveridge and Bismarck) typically applied to them. The financing sub-functions and policies are the topics for the chapters contained in Part two of the book, while the policy objectives are used as the criteria against which the reforms described in Parts two and three are assessed. The connection between health financing, other system functions, the health financing policy objectives and overall health system goals is summarized in Fig. 1.2. The main focus of the analysis is on the thicker arrows in the diagram: these depict the connection between the instruments and objectives of health financing policy.

The third pillar consists of a recognition and analysis of how key contextual factors limit the extent to which a country can sustain achievement of the policy objectives, and may affect the feasibility of implementing certain reform options. The most important of these is the ***fiscal context***. This refers to the ability of government to mobilize tax[4] and other public revenues, and the need

4 This includes all forms of compulsory contributions, such as income and value added taxes that become part of general public revenue, and payroll taxes that are specifically earmarked as social security health insurance contributions.

for balance of these revenues with total public spending. As shown in Chapter 3, there is great diversity among the transitional countries in terms of their fiscal context, and this is reflected in their attainment of key objectives, such as financial protection, equity in finance and equity in utilization. The reason for this is that systems that rely more on public funding tend to attain these objectives more readily, and the more money a government has, the more it can spend on health. Within this framework, therefore, the concept of fiscal sustainability[5] is treated not as a policy objective but rather as essentially equivalent to the budget constraint facing health systems. Hence, particularly when comparing countries in very different fiscal contexts, the effects of health financing reforms should be assessed in terms of the attainment of the health financing policy objectives relative to what could possibly be attained while meeting the requirement for fiscal sustainability.[6] Since health systems cannot run deficits year after year, there must be explicit or implicit rationing, which, in turn, means trade-offs with the health financing policy objectives. The more constrained the fiscal environment, the harsher these ***sustainability trade-offs*** will be.

i. The first pillar: proposed objectives for health financing policy

The health financing policy objectives serve as criteria that we use to assess the attainment and performance of health financing systems and the effects of reforms. These are derived from the overall health systems performance *goals* described in *The world health report 2000*,[7] by considering the goals that health financing arrangements influence. On this basis, we derive the following set of ***health financing policy objectives***.

- Financing policy objectives that are essentially identical to broad health system goals, by
  - promoting universal protection against financial risk; and
  - promoting more equitable distribution of the burden of funding the system.
- Financing policy objectives that are instrumental, intermediate objectives to the broad health system goals, by
  - promoting equitable use and provision of services relative to the need for such services;

5 Heller (2005) defines fiscal sustainability as "… the capacity of a government, at least in the future, to finance its desired expenditure programmes, to service any debt obligations … and to ensure its solvency" (p. 3).

6 This is akin to the distinction between health system attainment and health system performance (WHO 2000).

7 These goals are to improve the level and distribution of population health, to improve the level and distribution of responsiveness of the health system to the expectations (other than health) of the population, to improve the "fairness" of financial contributions to the health system made by the population, and to improve overall system efficiency, that is, maximizing the attainment of the previous goals, subject to the constraints of available resources.

– improving transparency and accountability of the health (financing) system to the population;
– promoting quality and efficiency in service delivery; and
– improving efficiency in the administration of the health financing system.

While the specific ways in which countries operationalize these objectives vary, as does the relative emphasis they give to each, they are proposed here as universally applicable and independent of the labels or models by which health financing arrangements are identified. Moreover, these objectives can be translated into concrete measures that have served as the target for practical policy interventions. The concepts and some of the measures are reviewed here, while noting that many measures are truly country and situation specific.

Protection against the financial risk of ill health, or ***financial protection***, is a goal that can be summarized simply as follows: people should not become poor as a result of using health care, nor should they be forced to choose between their physical (and mental) health and their economic well-being. Indeed, this issue reflects one of the most direct associations between health and wealth: the extent to which people become impoverished by health expenditure or, conversely, the effectiveness of the health financing system in protecting people against the risk of becoming poor while enabling their use of services. Standard measures of this objective exist (see, for example, Wagstaff and van Doorslaer 2003):

- percentage of households that experienced a "catastrophic" level of health expenditure (health spending that exceeded a certain threshold percentage of total or non-subsistence household spending); and
- impoverishing expenditure, measured as the impact of health spending on the "poverty headcount" (number or percentage of households that fell below the nationally defined poverty line as a consequence of their health spending) or "poverty gap" (extent to which households fell below the poverty line as a consequence of their health spending).

Financial protection as a goal aims at reducing the impoverishing effect of health expenditure. In principle, this includes the total health spending attributable to households, both directly – in the form of out-of-pocket spending (OOPS) and categorical pre-payments for health insurance – and indirectly, in the form of unearmarked taxation. In practice, however, most of the available evidence relates to the effect of OOPS in particular, and its financial impact as either catastrophic or impoverishing. Although important from a broader social policy perspective, we do not go beyond this and take a broader look at the impacts of ill health on the economic well-being of households, but instead

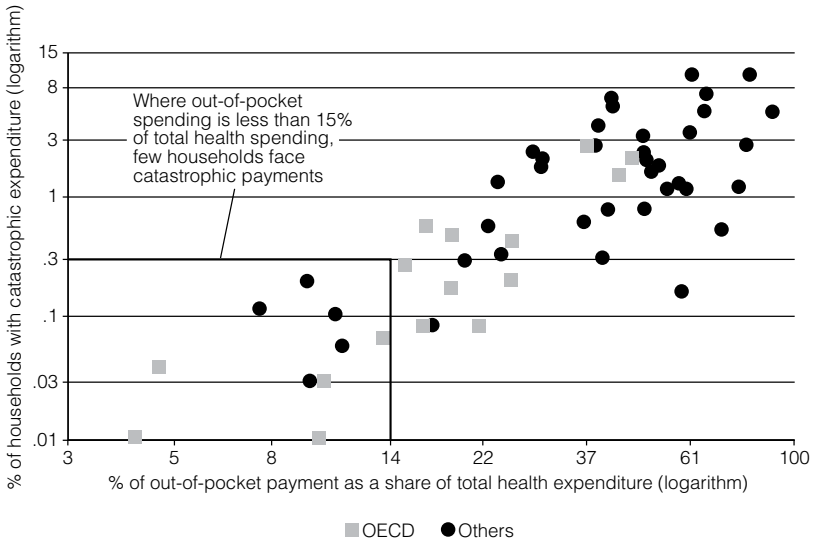


Fig. 1.3 *Proportion of households with catastrophic expenditure versus out-of-pocket payments as a share of total health expenditure*

Source: Xu et al. 2005.

Note: OECD: Organisation for Economic Co-operation and Development.

focus more narrowly on the relation between health financing reforms and health care spending by households.

Even without an in-depth analysis of survey data to determine catastrophic and impoverishing effects, international evidence suggests strongly that high levels of OOPS should be cause for concern. Analysis of data from nearly 80 countries (Fig. 1.3) reveals a strong correlation between OOPS as a share of total health spending and the percentage of families that face catastrophic[8] health expenditure (Xu et al. 2005). Hence, even in the absence of more sophisticated data analysis, the share of OOPS in total health spending may be a useful proxy for the objective of financial protection.

A related but distinct objective is that the health system should be ***equitably funded***. This means that, relative to their capacity to pay, the poor should not pay more than the rich (the distribution should be progressive or at least proportionate to income). The objective of equity in funding is hence closely linked to the concept of solidarity. As with financial protection, equity analysis should consider all sources of health spending. These can be attributed back to the households from which they originated, both directly – in the form of OOPS and (voluntary and compulsory) pre-payments for health insurance – and indirectly, in the form of unearmarked taxation. A full analysis of this requires identifying the various sources of health system funds, analysing their

8 This analysis uses a catastrophic threshold of 40% of household non-subsistence income (income available after basic needs, such as food, have been met).

distributional impact (that is, who pays) and aggregating these by their relative contribution to total health system funding. International evidence drawn principally from high-income countries (Wagstaff et al. 1999) suggests that compulsory pre-paid sources (general taxation and payroll contributions for compulsory health insurance) tend to be more equitable; voluntary pre-paid sources (voluntary health insurance (VHI)) are less equitable; and OOPS is the most regressive.

Considerations of financial protection and financial equity are not sufficient for an assessment of a country's health financing system. The reason for this is that these financial objectives do not incorporate the effects of the system on people's utilization of health services. Indeed, because OOPS occurs, by definition, at the time of service use, and because this method of payment has harmful consequences for financial protection and financial equity, measures of these policy objectives will show improvement, to the extent that poorer people do not utilize care.[9] For a sensible policy interpretation, therefore, the impact of the health financing system on the use of services must be considered concurrently with the financial objectives (Pradhan and Prescott 2002).

The objective of ***equity in utilization*** can be established as follows: health services and resources should be distributed according to need, not according to other factors such as people's ability to pay for services. If the financing objectives are principally concerned with how money is raised to pay for the health system, the utilization objective is concerned (in terms of the contribution of health financing policy) more with how money is *spent* by the health system. Hence, our concern with equity in the use of services as an objective calls for equity in the distribution of health spending and resources as the means to pursue this objective.

While the objective itself is not hard to understand, consistent measurement and assessment is a challenge, because there is no routine and low-cost methodology available to provide an objective measure of *need*. However, this need not be an insurmountable obstacle to practical and policy-relevant approaches. We interpret equal access for equal needs in relation to the need for care within the confines of the publicly defined benefits package on the assumption that this is the practical concern of policy-makers. While it is true that those who can afford to pay may access care more quickly or obtain services that are not covered by going outside the defined package, our concern is simply that this should not decrease the chance of receiving needed care in the context of the benefits package for the rest of the population.

9 If poorer people are disproportionately deterred from using services because of their cost, then both utilization of care and out-of-pocket payments by richer individuals will make up a greater share of the total. As a result, household survey data on health spending will show that the financing of the system will appear to be more equitable than if the poor and the rich used the services equally and paid the same amounts.

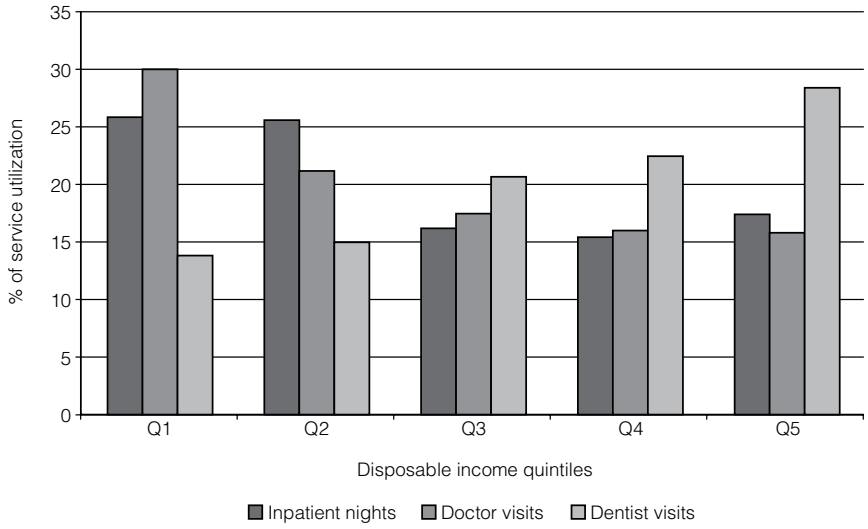


Fig. 1.4 *Shares of service utilization by disposable income quintiles in Ireland, 2000*

Source: Layte and Nolan 2004.

In terms of measurement, many studies rely on answers to survey questions and, hence, try to relate service use to self-assessed health status or self-assessed need. Such measures are imperfect but may have practical application, to the extent that reasonable assumptions can be made about how to interpret data on utilization and need. For example, Fig. 1.4 summarizes an analysis of survey data from Ireland on the use of different types of health services across the income distribution. The poorest 40% of the population (the two lowest income quintiles) accounted for over half of all nights spent in hospital and general practitioner (GP) visits. By comparison, the opposite pattern is indicated for dentist visits, with over 28% of visits accruing to the richest 20% of the population (Layte and Nolan 2004). The "pro-poor" distribution of the utilization of GP and inpatient care might be explained by differences in actual need, as well as by the effective protection provided by the Irish health financing system against the costs of using these services. Conversely, the pro-rich distribution of dental care utilization is unlikely to reflect the real needs of the population, and may instead relate more to the presence of charges for dental visits at the point of delivery, which are more likely to deter care utilization by lower income individuals.

The objective of improving ***transparency and accountability*** of the system for the population also poses challenges in terms of interpretation and measurement. Conceptualizing these objectives and assessing the impact of reforms pose a challenge, so boundaries are required in order to make the concepts managerially

useful. Transparency and accountability can be interpreted in many ways, but for our purposes there are two principal areas of focus:

- transparency in terms of people's understanding of the benefits to which they are entitled and their obligations under the benefits package (and the understanding of health workers as well), along with the extent to which these are realized in practice;
- transparency and accountability in the health financing agencies (for example, reporting requirements, audits, and so on).

In a very simple but useful conception, [lack of] transparency in the definition, understanding and realization of entitlements and obligations is reflected in the presence of informal payments in the health system – in the form of direct contributions by patients (or those acting on their behalf, such as family members) made in addition to any payments required by the terms of entitlement (in cash or in kind) to health care providers for services and related inputs to which patients are entitled (Gaál and McKee 2004). The extent of such payments can be a direct reflection of lack of transparency because the obligation to pay is not specified and yet exists in reality, while the promise of the benefits package is not fulfilled in practice. Other measures may also be considered, such as qualitative or quantitative evidence that captures people's understanding of what they are supposed to pay for care; what services and means of using services they are entitled to; whether or not those in exempt groups are aware of this, and so on. Reforms aimed at reducing informal payments are the focus of Chapter 12.

Transparency and accountability of health financing agencies is perhaps more difficult to define precisely and therefore to measure and assess. According to Brinkerhoff (2004), the core concept of accountability is ***answerability***: that is, being obligated to answer questions about decisions and/or actions. Beyond this, "the availability and application of sanctions for illegal or inappropriate actions and behavior uncovered through answerability constitute the other defining element of accountability". To make this more operational, it is useful to distinguish three kinds of accountability: financial, performance and political/democratic. All are relevant to the concerns of this book. The first relates to tracking and reporting on financial resources (such as audit). The second relates to the ability to demonstrate and account for performance relative to some agreed-upon targets or measures. The last is concerned with enhancing the legitimacy of government in the eyes of citizens. While these objectives will be considered in various chapters, we also devote an entire chapter (Chapter 13) to accountability issues for "health financing organizations", such as compulsory health insurance funds or other public agencies that manage the financial resources of the health system.

Financing arrangements should contribute to good ***quality*** care and ***efficiency*** in the organization and delivery of care through appropriate incentives. We focus on the ***contribution*** of the financing system, noting that improvements in quality and efficiency are not solely a product of financial incentives but instead arise from the combination of these with associated measures in service delivery, resource generation and stewardship. While quality has many dimensions, the principal focus in this book is clinical quality related to the health gain (or outcome) of the health intervention. In addition, the effects of reforms on the "interpersonal dimension of quality" are also considered, relating to the nonmedical aspects of health services, including amenities, behaviour of the staff, and so on. This latter consideration reflects (interpersonal) quality as an intermediate objective for the goal of responsiveness, as shown in Fig. 1.2.

In the context of *The world health report 2000* framework, efficiency corresponds to the overall performance of the health system: maximization of a combination of the "health system goals" shown in Fig. 1.2 relative to what could potentially be attained given the external (non-health system) context of a country, such as income and education levels. Here, however, the focus is on efficiency as an intermediate objective. This is closer to the concept of technical efficiency, which requires the minimization of production costs for any given output, whatever that may be. Technical efficiency can be interpreted at the level of health service providers, as well as financial organizations (explained below) or the entire health system. A common target for reform in transitional countries, for example, has been the downsizing of the service delivery infrastructure. At its core, this is related to reducing the fixed costs of service delivery and re-allocating available resources in favour of variable cost inputs, such as pharmaceuticals and medical supplies. In this context, improving technical efficiency in the service delivery system serves as an intermediate objective to all the health system goals, in that more efficient use of available resources enables the health system to deliver more health, more equity in health, more financial protection, more responsiveness, and so on, within the limits of the resources that are available.

Promoting ***administrative efficiency*** involves a focus on minimizing duplication of functional responsibilities relating to administering the health financing system. This does not imply a broad agenda of reducing administrative costs; indeed, many such costs are necessary and contribute to the performance of the health system. Hence, the focus should equally be on trying to maximize the cost–effectiveness (in terms of impact on policy objectives) of administrative functions. The cost–effectiveness of specific administrative functions – such as processes used by a purchasing agency to check the appropriateness of hospital admissions – depend on how well they are performed, and whether

responsibility for implementing this is duplicated across several agencies. In some cases, the health financing system itself generates what might be termed "pure costs" from a societal perspective, in the sense that costs are incurred to implement things that make no contribution to the performance of a health system. An example of such costs is the investments made by competing insurers to identify and enroll relatively healthy people; the insurers making such investments gain from them, but they contribute nothing towards attainment of the public policy objectives defined here. Administrative costs (and any associated benefits) should be considered at the system level rather than solely at that of an individual insurance scheme, because full consideration of efficiency effects must consider the administrative costs of each individual insurer, plus any added administrative burden at the regulatory and provider levels (Kutzin 2001).

Because quality and efficiency problems, as well as the reforms aimed to address these, are country and situation specific, the evidence reported in this book does not rely on standard measures of these objectives.[10] Instead, the measures used and reported here reflect the effects of reforms on the specific quality or efficiency challenges they were intended to address.

ii. The second pillar: framework for descriptive analysis of health financing systems and reforms

Often, health financing systems are categorized by model or label (for example, Beveridge, Bismarck, Semashko). Such labels can be useful to convey important political meanings or to reflect a cultural context in which the health system is considered a "way of life" (Saltman and Dubois 2004). In many transitional countries, for example, labelling reform as a change to an "insurance system" has been used to transmit a message of change from the former hierarchically controlled health system and economy. Looked at more narrowly, however, through the lens of health financing policy, these broad classifications are not particularly helpful for understanding existing systems, for assessing possible reforms, or for experimenting with new ideas for health care reform. The models are defined principally by the source of funds from which they draw (that is, general budget revenues versus payroll tax revenues), but there is growing recognition that countries can (and have) introduce significant reforms to their financing systems without altering the source of funds. Conceptually, the source of funds need not determine the organization of the sector, the mechanisms by which resources are allocated or the precision with which entitlement to benefits is specified. Hence, not only are labels like "tax-funded systems" or

10 Unlike the measures for financial protection and equity in the funding and utilization of the system, which are more standardized.

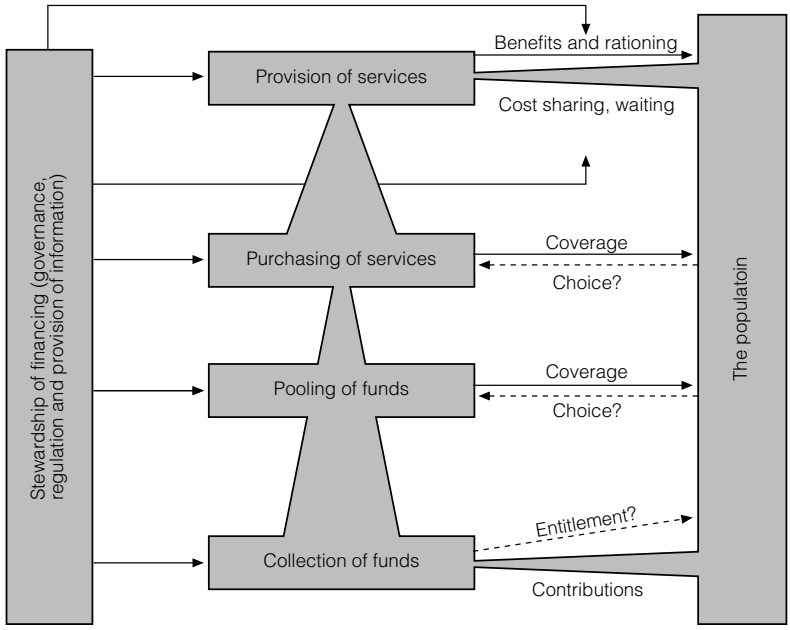


Fig. 1.5 *Conceptual framework for understanding the organization of health financing systems*

Source: Adapted from Kutzin 2001.

"social health insurance systems" conceptually inadequate, such ways of thinking about health financing systems may in fact restrict consideration of possible policy choices or focus attention on the success or failure of particular schemes rather than on the impacts for the system, and population, as a whole (Kutzin 2001).

The framework we use to describe the various health financing systems and reforms that have been introduced in the region integrates the various health financing *sub-functions* and policies depicted in Fig. 1.5 – revenue collection, pooling, purchasing and policy on rationing benefit entitlements – and makes explicit the interactions of these, how they relate to the population and to the health system functions of service provision and the "stewardship of financing". This latter concept is operationalized as the governance arrangements for the agencies that implement the financing sub-functions, as well as the provision of regulation and information to enable the system to deliver better results. In that sense, each financing sub-function can be thought of as a market, with governance, regulation and information essential for aligning these markets with socially desirable outcomes (that is, the policy objectives). The approach supported by this framework thus promotes a comprehensive view of a health

financing system, facilitating an emphasis on the interactions between different parts of the system rather than a narrow focus on particular reform instruments. Its fundamentals are described in this chapter, and it provides the basis for the structure of Part two. The framework itself is derived from earlier work on the analysis of health financing in low- and middle-income countries, where the models imported from western Europe were found to be of little help in terms of understanding fragmented health financing systems and reform options (Frenk 1995; Londoño and Frenk 1997; Kutzin 2000, 2001; WHO 2000; Baeza et al. 2001).

Whether Beveridge, Bismarck, Semashko or somewhere in-between, the sub-functions, policies and relationships depicted in Fig. 1.5 are common to all systems (even if not explicit in all). Detailed knowledge of each of the "boxes and arrows" is essential in order to understand the existing health financing system of a country and – in combination with an assessment of system performance in terms of the achievement of the policy objectives described above – for a thorough description and assessment of reforms.

Revenue collection. As shown in Fig. 1.5, the link between revenue collection and the population reflects the fact that the population is the source of all funds (apart from funds received from other countries or external aid agencies). The reverse link, labelled "entitlement?" signifies that in some systems, entitlement to benefits depends on the contributions made by or on behalf of individuals, whereas in others, entitlement is a condition of citizenship or residence. The presence or absence of this contribution–entitlement link is the one important conceptual distinction between the Bismarck and Beveridge models of health financing.

Analysis of this sub-function involves consideration not only of the agencies that collect revenue for the health system, but also the contribution methods used and the initial funding sources. Government is not a "source", but collects tax revenues from the people.[11] Hence, the categories typically used to classify funding sources actually refer principally to contribution mechanisms include general (that is, unearmarked) tax revenues; payroll tax revenues that are usually earmarked for compulsory health insurance (often called "social health insurance contributions"); voluntary pre-payment (usually for VHI), and direct OOPS at the time of service utilization. Within these broad categories there are also variations that can have important implications for policy objectives. For example, the distributional consequences of different sources of general tax revenue – such as income tax, corporate tax and value-added tax (VAT) – are different. Similarly, there are different contribution mechanisms for voluntary

11 This may not be strictly true, in the sense that governments (local, regional or central) may own revenue sources completely (for example, public enterprises) or own shares in companies and derive revenue from these.

pre-payment, for example experience-rated versus community-rated premiums, which also have different implications for equity. Because financing reforms may involve changes to contribution mechanisms and/or the introduction of new collection agencies, and because such changes may have distributional consequences for the initial contributors, it is useful to "unpack" the revenue collection sub-function, as described in Chapter 4.

In many low- and middle-income countries, there are contextual constraints that limit choices among potential alternative revenue sources for the health system. An important example of such a constraint is where a country has a high percentage of the population that is not working in the formal sector of the economy. In such contexts, taxing income or earnings is difficult, and hence countries tend to have a greater reliance on consumption taxes (such as VAT) as a share of total tax revenues (Gottret and Schieber 2006). Although revenue collection is a sub-function of health financing policy, contextual constraints limit the scope for reform in many countries, rendering revenue sources and collection agencies more a product of the wider context than objects that can be affected greatly by health financing policy reforms.

Pooling. In its most generic sense, pooling of funds refers to the accumulation of pre-paid revenues on behalf of a population. The position of pooling between *collection* and *purchasing* – as shown in Fig 1.5 – suggests the importance of understanding the relationships (particularly the allocation mechanisms) between these sub-functions. This implies the need to analyse the *horizontal* market structure of pooling (for example, single or multiple, choice of pool, territorially distinct or overlapping, and so on) in a particular country, as well as whether or not pooling agencies are *vertically* integrated with (or separate from) agencies responsible for revenue collection and purchasing.

Pooling occurs when funds are allocated from collection agencies (according to different possible allocation mechanisms) to one or several pooling organizations. Sometimes, this allocation is internalized within a single organization (such as a private insurance fund that collects premiums and pools them on behalf of contributors), while in other cases functional responsibilities may be separate (for example, collection of payroll taxes by a tax authority or multi-purpose "social fund", with allocation of the health part of these revenues from this agency to a compulsory health insurance fund). A wide variety of public and private agencies pool funds for health services, including national health ministries, decentralized arms of health ministries, local governments, social health insurance funds, private profit-making and non-profit-making insurance funds, community-based nongovernmental organizations (NGOs), and others. In turn, these organizations allocate the pooled funds to the purchasers. In most cases, pooling and purchasing are undertaken by the same agency, and

so this allocation is implicit and internalized within that agency. However, there may also be resource allocation among pooling agencies, as with risk-adjusted allocation of revenues to competing insurance funds or to non-competing territorial health authorities.

Changes in the way that funds are accumulated can affect not only the extent to which people are protected against the financial risk of using health care, but also the equity in the distribution of health resources, the ability of systems to provide incentives for efficiency in the organization of service delivery and the efficiency in the overall administration of the health system. Hence, it is useful to consider not only the objective of risk pooling for financial protection but also how pools might be reorganized to facilitate progress in terms of other policy objectives. Among other things, this extends consideration of pooling issues beyond personal health care services to the overall health system, including the financing of population-based services and categorical/vertical programme interventions. Such concerns, addressed in Chapter 9, constitute largely unexplored territory in the health financing literature.

Purchasing is a generic term that refers to the transfer of pooled funds to providers on behalf of a population. Together with pooling, and as reflected in the arrows shown in Fig. 1.5, purchasing enables *coverage* to be provided for individuals. In other words, funds are pooled and services purchased on behalf of some or all of the population. Key issues in purchasing relate to the agencies that implement this sub-function, the market structure of purchasing and the mechanisms used to purchase. Agencies and market structure issues are very similar to those relating to pooling, given the usual situation in which both sub-functions are implemented by the same agency. Much attention has been given to the need to move from passive purchasing to active or strategic purchasing, which at a minimum requires linking at least some of the provider allocation to *information* regarding their performance or the health needs of the population. Hence, changing the contents and role of information systems has been integral to the process of implementing purchasing reforms throughout the region. Specific mechanisms involve changes in the way in which providers are contracted and paid in order to change incentives to improve the quality and efficiency of service delivery. There may be retrospective administrative procedures associated with this, to check on the quality and appropriateness of care, or at a minimum to detect fraudulent reporting (Figueras, Robinson and Jakubowski 2005).

A key issue related to ensuring that strategic purchasing methods have their intended effects is the *alignment* of such methods with organizational and institutional arrangements for service providers. For example, it may be ineffective to change how public sector facilities are paid if their managers do

not have the right to make autonomous financial management decisions (that is, if they do not have the right to shift funds across predefined budget line items). Similarly, the introduction of provider payment methods designed to shift financial risk to providers is likely to be of little value if the providers are not financially responsible for their debts. This has been the experience of several countries in the region in which, for example, public hospitals can pass on their deficits to the overall fiscal deficit, simply roll over their deficit from one year to the next, or – more generally – face a "soft budget constraint" (Duran et al. 2005; Hensher and Edwards 2005; Chawla 2006).

Coverage: benefits package and rationing measures. Critical issues for health financing policy include decisions regarding coverage. As described in Chapter 7, we disaggregate coverage into three dimensions: the extent of the population that is entitled to services paid from pooled funds ("breadth"), inclusion or exclusion of specific services from coverage ("scope"), and the cost that patients must incur to obtain these services ("depth"). This cost is typically in the form of patient cost sharing, but it can also be operationalized through non-price-rationing measures, such as waiting lists. From a policy perspective, it is useful to separate these three dimensions: who is covered, what services are covered, and to what extent the covered services are covered (for example, how much co-payment is required from the patient). As reflected in the dotted arrow labelled "entitlement?" in Fig. 1.5, the breadth of coverage may be determined by the way in which the health system is funded (that is, in some systems entitlement is based on a contribution made by or on behalf of specific individuals within the population, whereas in other systems there is no specific link and entitlement is based on citizenship, residence or other criteria).

Policies to define and ration entitlements entail perhaps the most direct connection between the health system and the population. In the framework used here, there are two ways to conceptualize the benefits package. First, it is useful to define the benefits package as those services (and the means of accessing services) that the purchaser(s) will pay for from pooled funds. This definition implies that what is not included in the package (fully or partially) must be paid (fully or partially) by patients, within or outside of the publicly funded system. This makes explicit the link between benefits and rationing (that is, partially covered services are subject to rationing measures – cost sharing or waiting lists), moving these policies into the integrated health financing policy framework and away from being isolated measures to ration services, raise extra revenue or deter demand. By including "means of accessing" in the definition, the benefits package can be seen as one of the instruments available to steer utilization in a desired manner (for example, making entitlement to specialist care dependent on the obligation to be referred from primary care) (Kutzin 2001).

Second, it is useful to remember that, at its core, the benefits package consists of the entitlements and obligations of the (covered) population with regard to personal health care services. This dimension links the package closely to the objective of promoting transparency. The entitlements consist of the available services, and the obligations consist of the rules that must be followed to obtain the entitlements, such as paying co-payments, following defined referral channels and so on. Hence, one objective for financing reforms is to improve people's understanding of the benefits package and to enable both the entitlements and obligations to be realized in practice.

Putting the pieces together. In addition to the analysis of each sub-function and policy of the health financing system, the approach suggested by this framework involves also looking beyond the specifics of each and to the overall architecture of the system. To what extent is there vertical integration or separation of functional responsibilities? Are the arrangements for collection, pooling, purchasing and benefits coherently articulated and aligned with the institutional arrangements governing service provision? Given the nature of each sub-function as a market, what is the content of the *stewardship* of the financing system?

Because reforms are often not confined to one sub-function and the interactions between them are critical, it is essential that analysis includes the links between functions. This is carried out within each chapter in Part two, as well as in the synthesis chapter at the end of the book. The stewardship issues are disaggregated into three categories: governance, regulation and provision of information. These are integral to the reform experience, in terms of each sub-function. Governance is particularly important with regard to "health financing institutions", such as health insurance funds (Chapter 13), with key issues including responsibility for overall design of the system, accountability and reporting requirements. Regulation and information are relevant public policy interventions to enable each of the sub-functions to be better aligned with policy objectives.

iii. The third pillar: fiscal constraints and other contextual factors

As noted above, the capacity of countries to attain the objectives of health financing policy, along with the feasibility or consequences of particular reform strategies, is affected by factors emanating from outside the health system. In order to set realistic objectives and design reforms appropriately, these factors must be understood. The main contextual factor is the fiscal context, while other important factors relate to the rules governing the wider public sector financial management system and the political–administrative structure of government.

Fiscal context. The fiscal context refers to a government's current and expected future capacity to spend. A good measure of the current fiscal context is the ratio of public expenditure (or revenue) to GDP. Global evidence (Schieber and Maeda 1997; Gottret and Schieber 2006) indicates that richer countries tend to be more effective at mobilizing tax revenues (relative to the size of their economies). Tax collection is usually more difficult in poorer countries because a higher proportion of the population tends to live in rural areas or work in the informal economy. As shown in Chapter 3, this relationship between national income and fiscal capacity also applies to the CE/EECCA countries. However, it is not a completely deterministic relationship; individual countries exhibit substantial variation around the trend. Other important factors affect fiscal capacity, including demography (size of the working-age population relative to the entire population) and the effectiveness of the tax system itself (for example, ability to enforce compliance, collections and so on). Of course, public policy choices in terms of the mix of taxes and level of tax rates are also important. These factors indicate why it is essential to understand the fiscal situation and not just the level of income when analysing the context surrounding health financing policy in a specific country.

Governments must be mindful of their budgetary limits; they cannot simply spend to meet all the needs of their societies. This applies to health financing systems as well. However, the fiscal sustainability of one sector of public expenditure, such as health, is an elusive concept. The amount that a government spends on health depends in part on its overall fiscal constraint and in part on decisions that it makes with regard to priorities. Mathematically, public spending on health as a percentage of GDP is the product of total public spending as a percentage of GDP and the share of that spending allocated to the health sector. As shown in Chapter 3, this share – reflecting the priority that governments accord to the health sector[12] – reveals great variation across the countries of the region.

As noted above, we treat fiscal sustainability not as an objective of health financing policy but rather as an obligation that must be met, and this, therefore, limits the extent to which countries can attain the policy objectives. There is consequently a very important distinction between efficiency and fiscal sustainability. By treating fiscal sustainability as the obligation to live within a budget rather than as an objective, the focus of policy shifts from an emphasis on deficit reduction to a broader focus on how to address existing inefficiencies as the means to minimize the impact on health system objectives while meeting the requirement for fiscal balance.

12 While it is reasonable to use the share of government spending devoted to health as an indicator of public sector priorities, it is imprecise to say that this percentage reflects purely the priority that governments give to health. A more accurate statement is that this reflects the priority (implicit or explicit) given to putting money into the health sector.

Public sector financial management system. The public finance context involves not only understanding the capacity of the state to mobilize tax revenue, but also understanding how the wider public sector management system operates. This environment encompasses areas such as civil service regulations and the rules governing public sector financial management. This system provides an *incentive environment* that enables health financing reforms to have their intended consequences; conversely, it may inhibit implementation of certain health financing reforms or provide a set of perverse incentives that cause reforms to have undesired consequences. Experience with health financing reforms in CE/EECCA countries reveals that failure to consider this wider environment results in either perverse consequences or simply an inability to implement these reforms (see Chapter 10).

Political–administrative structure. A third critical contextual factor for health financing policy is the structure of government or, put another way, the extent of political–administrative decentralization within a country. This can be critically important because the structure often has direct implications for the organization of certain health financing sub-functions (mostly pooling and purchasing, and often service provision as well). In Bosnia and Herzegovina, for example, the organization of the health financing system mirrors the organization of the highly decentralized government administration, resulting in decentralized pooling arrangements (social health insurance fund pooling and purchasing at the level of cantons and entities, with little or no scope for cross-subsidy between them). Further, organization of public provision is also fragmented in this way, and the combination contributes to inefficiency in the form of excess capacity (Cain et al. 2002). Similarly, in many former Soviet countries, inherited arrangements for pooling, purchasing and service provision were vertically integrated and organized by level of government (republican, *oblast* and *rayon*). In these countries, the health financing reform agenda has had to address the "decentralization" agenda. Here, and elsewhere, conflicts arise when part of the health financing reform agenda has been to centralize pooling (in order to improve risk protection), when other sectors of government are decentralizing.

The aforementioned and other contextual factors must be taken into account when considering health financing policy in any particular country. While it is certainly useful (and necessary) to learn lessons from the experience of other countries, policy instruments cannot simply be transplanted from one country to another. The critical issue for national policy-makers is to identify and understand how factors outside the health system constrain what can be attained and what health financing reforms can be implemented.

B. Application of the framework to this book

The objective of this study is to assess experience with the implementation of financing reforms in CE/EECCA countries, with the ultimate aim of drawing lessons for policy-makers in these countries and elsewhere. This aim has led to the design of this book. Following this conceptual chapter, the chapters contained in Part one describe the historical background of the health financing systems of the CE/EECCA countries, and then provide the basic "facts and figures" with regard to fiscal context and health expenditure patterns. This is essential to provide a clear picture of the starting point and context for reforms. Part two follows the conceptual framework (Fig. 1.5) of the "second pillar". While the performance objectives (the "first pillar") are not used as chapters per se, they are used within each chapter of Part two and many in Part three as the criteria against which reform experience is assessed. Part three is *issue driven*; some chapters (8–10) are devoted to issues of great importance that we believe have not been given adequate attention in research and policy. Others (11–12) address what might be considered as *hot topics* on the agendas of many countries. Chapter 13 is the only one that is entirely focused on a particular policy objective. The concluding chapter of the book synthesizes the experiences of the countries, including the major issues and challenges for implementation; draws lessons for policy; and provides a guide for policy-makers on how to approach health financing reforms.

The strategy of the book is to (1) apply a consistent, function-based conceptual framework to describe and to analyse financing systems and reforms in the region; (2) describe the main features and trends, identifying key commonalities and differences among the countries; (3) analyse selected strategies and experiences considering significant contextual differences; (4) identify particular bottlenecks and enabling factors; and (5) draw practical lessons for policy-makers. We believe that deriving lessons from experience will be facilitated by the conceptual approach described here. Health financing reform experience demonstrates that "the devil is in the details". Categorization runs the risk of losing the fine details of implementation that may differentiate successful and unsuccessful approaches. Hence, our emphasis is on identifying the factors that contribute to success or failure in particular countries and contexts, not on categorizing these experiences.

References

Baeza C et al. (2001). *Towards decent work: social protection in health for all workers and their families. Conceptual framework for the extension of social protection in health*. Geneva, International Labour Organization, Strategies and Techniques against Social Exclusion and Poverty (STEP) program.

Brinkerhoff DW (2004). Accountability and health systems: towards conceptual clarity and policy relevance. *Health Policy and Planning*, 19(6):371–379.

Cain J et al. (2002). *Health care systems in transition: Bosnia and Herzegovina*. Copenhagen, European Observatory on Health Care Systems.

Chawla M (2006). Controlling health expenditures. In: Laursen T, ed. *Current issues in fiscal reform in central Europe and the Baltic states 2005*. Washington, DC, World Bank:99–134.

Duran A et al. (2005). Purchasers, providers and contracts. In: Figueras J, Robinson R, Jakubowski E, eds. *Purchasing to improve health systems performance*. Maidenhead, Open University Press:187–214.

Figueras J, Robinson R, Jakubowski E, eds. (2005). *Purchasing to improve health systems performance*. Maidenhead, Open University Press.

Frenk J (1995). Comprehensive policy analysis for health system reform. *Health Policy*, 32:257–277.

Gaál P, McKee M (2004). Informal payment for health care and the theory of 'inxit'. *International Journal of Health Planning and Management*, 19:163–178.

Gottret P, Schieber G (2006). *Health financing revisited: a practitioner's guide.* Washington, DC, World Bank.

Heller PS (2005). *Understanding fiscal space*. IMF Policy Discussion Paper, PDP/05/4. Washington, DC, International Monetary Fund.

Hensher M, Edwards N (2005). *WHO workshop on hospital debt in Poland: report of WHO consultants on the recommendations by workshop participants*. Copenhagen, WHO Regional Office for Europe, Health Systems Financing Programme.

Kutzin J (2000). *Towards universal health care coverage: a goal-oriented framework for policy analysis*. HNP Working Paper. Washington, DC, World Bank Health and Population Advisory Service.

Kutzin J (2001). A descriptive framework for country-level analysis of health care financing arrangements. *Health Policy*, 56:171–204.

Kutzin J (2008). *Health financing policy: a guide for decision-makers*. Health financing policy paper. Copenhagen, WHO Regional Office for Europe.

Layte R, Nolan B (2004). *Equity in the utilization of health care in Ireland*. Working Paper 2. Dublin, Economic and Social Research Institute. (http://www2.eur.nl/ecuity/public_papers/ECuity3wp15LayteNolan.PDF, accessed 30 May 2006).

Londoño JL, Frenk J (1997). Structured pluralism: towards an innovative model for health system reform in Latin America. *Health Policy*, 41:1–36.

Pradhan M, Prescott N (2002). Social risk management options for medical care in Indonesia. *Health Economics*, 11:431–446.

Saltman RB, Dubois HFW (2004). The historical and social base of social health insurance systems. In: Saltman RB, Busse R, Figueras J, eds. *Social health insurance systems in western Europe*. Maidenhead, Open University Press:21–32.

Schieber G, Maeda A (1997). A curmudgeon's guide to financing health care in developing countries. In: Schieber G, ed. *Innovations in health care financing: proceedings of a World Bank Conference, 10–11 March 1997*. Discussion Paper Number 365. Washington, DC, World Bank.

Wagstaff A, van Doorslaer E (2003). Catastrophe and impoverishment in paying for health care: with applications to Vietnam 1993–1998. *Health Economics*, 12:921–934.

Wagstaff A, et al. (1999). Equity in the finance of health care: some further international comparisons. *Journal of Health Economics*, 18(3):263–290.

WHO (2000). *World health report 2000. Health systems: improving performance.* Geneva, World Health Organization.

World Bank (2006). *World development indicators database* [online database]. Washington, DC, World Bank (http://devdata.worldbank.org/dataonline/, accessed 25 June 2006).

Xu K et al. (2005). *Designing health financing systems to reduce catastrophic health expenditure*. Technical briefs for policy-makers, N. 2, WHO/EIP/HSF/PB/05.02. Geneva, World Health Organization.

Chapter 2

Understanding the legacy: health financing systems in the USSR and central and eastern Europe prior to transition

Christopher Davis

A. Introduction: organization and objectives of the chapter

During the Soviet period, the Union of Soviet Socialist Republics (USSR) and the communist countries of central Europe (hereafter referred to as CE countries) differed considerably with respect to size of territory and population, economic significance, geographic location and nationality composition. The features of their health systems, the methods of financing them and their effectiveness varied as well, but more superficially than substantively. In the late Soviet era and initial transition period, these health financing systems experienced myriad problems of growing intensity, and by the early 1990s it was clear that the inherited systems required radical reforms. The objectives of this chapter are to analyse (1) the structure, incentives and consequences of pre-transition health financing systems in these countries; and (2) the implications of changes wrought by economic transition in the early 1990s for the performance of the unreformed health financing systems and their ability to cope with the new circumstances. By so doing, this chapter provides the "starting point" (see Chapter 1) for understanding the reforms described later in the book.

The common communist political systems and economies in these countries, reviewed below in Section B, exerted strong influences on health sectors and health-related policies that generated convergence at a deeper level. This is evident in the analysis of the organization (Section C) and performance (Section D) of health financing systems prior to transition. Section E synthesizes the critical organizational and performance legacies of the past, and the intersection of these with the new challenges to health financing systems that developed in the early transition period as a consequence of the changes that took place in the wider economic and political context.

B. Political, social and economic context for health financing systems of the USSR and CE countries

i. Political systems

The USSR and CE countries had variants of the communist party political system and, therefore, had fundamental similarities in political processes (Hough and Fainsod 1979; Rakowska-Harmstone 1984; Schöpflin 1993). At an abstract level, a salient feature of the political system was the dictatorial social choice mechanism. This meant that the preferences of the self-selecting party elite determined state priorities and choices between alternative policies. However, the communist leaderships often were divided into factions with conflicting policy agendas. In federal states, such as the USSR and Yugoslavia, divisions in the party elite at times reflected differences between major nationality groups (for example, Serbs and Croats). As a consequence, there usually was greater conflict over social choices and more high-level representation of popular preferences than a simplistic totalitarian model would imply. Although the central political authorities tried to gain complete control over the population (notably in Romania under Ceausescu and Albania under Hoxha), this proved impossible due to the complexity of the societies, the waning of coercion and the lack of necessary information. The imperfect nature of central control meant that there was some room for independent manoeuvre by lower level institutions, groups and individuals. This was reflected in phenomena such as ministerial empire building, party bureaucracy resistance to central directives, regionalism, nationalism, corruption and informal (black market) economic activity (Hough and Fainsod 1979; Sampson 1987; Schöpflin 1993).

ii. Economic systems

The USSR developed the prototype of the *command* (or "shortage") economy and its system was adopted in CE countries in the immediate post-war period (Kornai 1980, 1992). The activities of the producing and trading units were

governed primarily by compulsory state plans, not markets. Although legal markets connected buyers and sellers, they were highly constrained by the state. Budgets were passive, in the sense that allocated funds were unable to buy goods freely and were subordinate to plans based on physical indicators. Quantity signals (such as the intensity of shortages) and processes (such as rationing) were much more important than price signals (such as costs, profits).[13] Although the demand for goods and services chronically exceeded their supply, thereby generating shortages, this excess demand did not directly affect prices or production decisions. Interactions between sectors (for example, the energy needs for heating a hospital and operating its equipment) were similarly based on quantities rather than prices. In any event, prices of identical goods were not the same across all sectors and in many cases were set below costs. As a result, there were substantial "hidden subsidies" in the economy. Transactions in markets were invariably dominated by the supplier (that is, sellers' markets existed). There was significant informal activity by institutions and their agents (Sampson 1987; Davis 1988a). The socialist governments made extensive use of rationing and queuing to cope with excess demand (Kornai 1992).

Decision-making was highly centralized, and vertical relations (from above to below) were much more important than horizontal ones (between buyer and seller). The state owned all land, production enterprises (factories, farms) and service-sector institutions (such as health facilities, pharmacies, pharmaceutical factories, biomedical research and development institutes). The state had a monopoly on foreign trade and carefully controlled the flow of goods (such as medicines), services and currencies across its borders. The targets of State plans reflected the objectives of the party leadership: to ensure survival of the communist system, to stimulate rapid industrialization and to achieve economic self-sufficiency (Schnytzer 1982; Gregory and Stuart 1999).

Among sectors of the economy, highest priority was given to the military, defence industry, heavy industry and transportation. The traditional low-priority sectors were agriculture, light industry and public consumption (including the health system) (Davis 1989a). Marxist–Leninist political economy influenced the priority ranking of health. One of its notable concepts was that national income was generated by the productive branches of the economy, primarily industry and agriculture, and was consumed by the less important "non-productive sphere", which included health and welfare (Popov 1976; Pravdin 1976).

The low-priority status given to health had important implications. During planning, this was reflected in low relative wages, stingy financial norms linking plans to budgets, inadequate investment to maintain the capital stock, and

13 This is why the command economy is also referred to as the "shortage economy" model (Kornai 1992).

unresponsiveness of resource allocation to identified health sector problems (Davis 1983, 1989a). When inconsistencies between plans and the needs of the economy were revealed during implementation, resources were redistributed from low- to high-priority sectors, which caused a tightening of constraints in the less important branches and made it more difficult for them to fulfil plans. For these reasons, the health sector suffered disproportionately from the symptoms of the shortage economy: high shortage intensity, harder-than-average budget constraints, and chronic under-fulfilment of supply, investment and output plans.

The pressure on managers to achieve ambitious plan targets resulted in continuous efforts to expand production (the "quantity drive"). In the health sector, this was reflected in efforts to increase inexorably key plan indicators, notably hospital beds and doctors, despite the low level of financial resources attached to these (Davis 1983). There was a lack of incentives to attain other objectives, such as improving efficiency, quality and technological development (Gregory and Stuart 1999).

During the 20 years that Brezhnev and his elderly successors dominated the Soviet political system – 1965–1985 (later described as "the years of stagnation") – the economy expanded at a decelerating rate and numerous economic and social problems intensified (for example, shortages and alcoholism). During this period, numerous economic reforms were introduced in central European countries (such as Yugoslavia and Hungary) but none effectively altered the fundamental nature of the economic system, in part because power remained concentrated among the party elite (Kornai 1992, Chapters 20, 21; Schöpflin 1993). Similarly, the reforms of the *perestroika* period (1985–1991) in the USSR were not able to correct the many deficiencies in the politico-economic system. Economic growth became negative and repressed, open inflation increased and the foreign debt burden rose significantly. These economic deficiencies contributed to the systemic crises that resulted in the collapse of communist power and the fragmentation of the USSR, Czechoslovakia and Yugoslavia (Schöpflin 1993; Gregory and Stuart 1999).

C. Organization of health care financing in the USSR and CE countries

Many features of the organization of health care in the USSR/CE countries were similar, due to the common characteristics of their political and economic systems, as well as the universal nature of the health production process and the influences of modern scientific medicine and medical technology. However, there were some important differences that reflected their inheritances from

the pre-socialist era and country-specific post-Stalin reforms. Taking these factors into account, Yugoslavia is considered separately from the USSR and the other CE countries (Council of Mutual Economic Assistance (CMEA) 6 and Albania).[14]

i. The USSR system of health financing

Overview of health system organization. The health system in the USSR was the world's largest in terms of doctors and hospital beds and it provided the prototype of a national health service in a socialist country. All medical assets were owned by the state, development was in accordance with centrally determined plans, and health services were provided free of direct charge (Field 1967; Kaser 1976; Ryan 1978; Davis 1988b, 1989b). The national health service was governed in general terms by the Ministry of Health (MoH) of the USSR, but approximately 10 other ministries (such as the Ministry of Railways and the Ministry of Defence) controlled "departmental" sub-systems of health care. Each of the 15 republics had an MoH that managed facilities in its territory. Republics were divided into regions (*oblast*), which had *oblast* health departments. Health services in large and medium cities were managed by a city health departments. Cities and rural areas were divided into districts (*rayon*) and these were managed by a *rayon* health departments. Although the state owned all health institutions, administration was highly fragmented due to the multiplicity of territorial and departmental bodies that managed them.

The MoH of the USSR had primary responsibility for the preparation and implementation of health plans. The Planning-Finance Main Administration of the Ministry – in conjunction with the Health and Medical Industry Department of Gosplan USSR – provided subordinate units with general targets and a planning methodology involving 2000 indicators (*pokazateli*) and norms (*normativi*) in 17 groupings (Popov 1976, Chapter IV). The Planning-Finance Administrations of each republican MoH was formally responsible for health planning in its territory, but in reality its activities were tightly controlled by the central Ministry. Detailed health plans and budgets were prepared by the regional, city and rural district health department planning sections, in accordance with centrally determined targets, physical and financial norms, and wage rates. Hence, the overall system can be characterized as centrally planned but organizationally fragmented.

Primary care for most of the population was provided by doctors and nurses in outpatient polyclinics, typically organized as follows: adults were treated by therapists (general doctors), children by paediatricians and many women by gynaecologists/obstetricians. In large urban areas, these were usually organized

14 The CMEA 6 were Bulgaria, Czechoslovakia, German Democratic Republic (GDR), Hungary, Poland and Romania.

as separate polyclinics (for example, adult microdistrict polyclinic, childrens' polyclinic, womens' advisory clinic) (Vinogradov 1962, Chapters IV–VII). However, in smaller cities, outpatient facilities were combined into a general polyclinic. First-contact doctors often referred patients to specialist doctors in the polyclinics and general hospitals, in many cases without adequate examination. Popov (1976, p. 194) cites two empirical studies that indicated that 60–65% of patients were admitted to hospital without having been diagnosed properly. They then could be referred to specialized city, regional, republican or USSR-level hospitals. Employees (and their families) of certain ministries and large factories were served by closed (that is, not open to the general public) health facilities in departmental sub-systems or by a closed medical-sanitary centre (a combination of a polyclinic and general hospital) within a large enterprise. There were well-developed emergency services in urban areas. Preventive health care was organized by the Sanitary-Epidemiological Service (SES).[15]

The legal markets connecting health institutions as buyers and sellers existed, most notably between patients and outpatient clinics providing first-contact services (Davis 1989a). These markets were characterized by excess demand, domination by sellers, unresponsiveness to market signals and shortages of services that did not have monetary prices. To cope with the excess demand, the government made extensive use of rationing through sub-systems of health care (elite, departmental, large urban, enterprise, medium city, rural) and queuing in accordance with socioeconomic criteria (Davis 1988b). However, demand spilled over into informal flexible-price markets. The scale of the informal health sector and the pervasiveness of informal payments for health care varied across the 15 republics and their regions, being greatest in the Caucasus and central Asia (Knaus 1981; Sampson 1987; Davis 1988a).

Collection/sources of funds. In the USSR, the state budget was the overwhelmingly dominant source of health finance. Most revenue was collected through the general taxation system at local, regional or federal levels of government.[16] In addition, health facilities obtained small amounts from direct official payments ("special means") by patients for specified medical services (such as medical examinations for social insurance purposes). A small share of direct payments for health services flowed into the general MoH budget from subordinate bodies as a form of tax.

Pooling of funds. In the Soviet health system, pooling of funds was vertically integrated with purchasing and service provision through a hierarchically

15 In the USSR, hospitals dominated health care and absorbed approximately 60% of state budget expenditure. Primary care provided through polyclinics and dispensaries received approximately 30% of health expenditure. Preventive health services provided by the SES absorbed approximately 5% of funding (Babanovskii 1976; Popov 1976, Chapter XI).

16 Following a 1965 economic reform, the Ministry of Finance collected contributions out of the sociocultural component of the profits funds of large-scale enterprises to support medical-sanitary centres and health programmes for its employees (Gregory and Stuart 1981, Chapter 9).

determined budgetary process (Babanovskii 1976; Popov 1976). Hence, the structure of pooling was reflected as well in that of purchasing and the organization of service delivery. At the federal USSR level, the state determined the allocations of tax revenue for health purposes to pools for the MoH, departmental health systems (such as defence and railways), and specific large-scale enterprises (primarily to cover capital costs). The MoH of the USSR then used budgeting formulas to allocate its funds to federal health facilities, to the 15 republican ministries of health, to the pools of the departmental health systems (to cover specified activities) and to large-scale enterprises (to cover current costs, such as wages of health staff). Each republican MoH allocated its budget to republic-level health facilities (for example, specialized hospitals), *oblast* health departments and medical facilities of republic subordination (Vinogradov 1962; Popov 1976). The last redistributed their funds to *oblast*-level health facilities (such as specialized hospitals) and to pools for city and rural *rayon* health departments located within the *oblast*. The final distribution was to pools for specific health facilities (polyclinics, dispensaries, hospitals) within the geographic area covered by the lower level health department. The result was a highly fragmented pooling structure that also duplicated geographic coverage of the population (because, for example, cities and districts existed within *oblasts*, and the *oblasts* within republics, so the same population could be served by facilities subordinate to three different authorities). As a result of the vertical integration of provision, duplication of health facilities also existed (for example, a city children's hospital and a more specialized *oblast* children's hospital functioned in many capital cities of regions).

Purchasing of services. The Soviet health system operated primarily in accordance with detailed centrally determined plans based on quantity signals. Quantities of labour (doctors, nurses), capital equipment and supplies (diagnostic machinery, ambulances), current inputs (food, fuel) and services (construction, maintenance) were distributed to and used by health establishments on the basis of plans that were built around simple quantity indicators, such as doctor positions in polyclinics and hospital beds (Popov 1976; Davis 1983, 1987). These plan indicators were linked to inputs by technical coefficients or norms of utilization, such as bed occupation rates and outpatient consultations per day. Budgets (financial plans) were of secondary importance in governing the flows of real resources and activities and were compiled once the indicators of provision had been specified down to the level of supplier of the service. They were calculated using financial norms (for example, an amount of rubles for medicines per hospital bed-day) and were disaggregated into carefully specified budget items.

The budget funds in the aforementioned lower level pools were transferred to providers of health services as the annual plans were being implemented. However, in reality, there was no "buying" of goods or services because money was *passive* (that is, it was used for accounting rather than for buying goods in markets), wholesale markets did not exist, and labour markets were controlled by the bureaucracy. In formal terms, the purchasing and provision of health services were combined into single bureaucratic units (health departments). This vertical integration of purchasers and providers and the reliance on incremental change meant that the performance of health establishments with respect to quality and efficiency was not a major influence on resource allocation. This combination of structural arrangements and incentives enabled Soviet health planners to pursue the quantity drive through an "extensive" development strategy: growing outputs of health services (of relatively low quality) were produced, using increasing quantities of basic inputs, such as doctors and hospital beds (Davis 1987, 2001a).

Control over health facility resources by managers. Managers of Soviet health facilities had formal responsibility for the utilization of allocated resources, but severely limited control over the allocation of their budgets. Funds were automatically transferred out of accounts as planned supplies were received or services were provided. Managers could not use budget funds in a spontaneous manner to purchase goods and services due to the lack of markets, nor could they shift funds freely from an underspent budget item to an overspent one. Given these circumstances, managerial performance in the financial sphere was of secondary importance.

Official benefits package and cost sharing by patients. The official Soviet benefits package entitled all members of the population to health services free of direct charge. In reality, however, population groups were served by the different sub-systems of health care that provided varying arrays of services. The full range of sophisticated health services was only available in the elite sub-system. In medical facilities open to the general public, many services and medicines that were provided to patients in western countries were not on offer, and there were chronic shortages of specialized personnel, equipment and medicines. The government authorized health facilities to charge for a small number of non-essential health services. However, throughout the Soviet health system, patients and their families routinely made informal payments to administrators, doctors, nurses and orderlies (Knaus 1981; Sampson 1987).

ii. Health financing in the CMEA 6 and Albania: variants of the Soviet model

Overview of health system organization. The organization of health care in these countries reflected their inheritances from the pre-communist period

and differing adaptations of the Soviet model (Kaser 1976; Gjonça, Wilson and Falkingham 1997). Before the adoption of the communist system after the Second World War, all of the countries had some form of compulsory social insurance for urban workers and their families that, to varying degrees, provided access to health care and sickness benefits and subsidized the purchase of prescription medicines. The social insurance systems containing comprehensive health benefits were in the GDR and Czechoslovakia, while the most limited ones were in Albania, Bulgaria and Romania. In the less-developed and predominately agricultural countries, large shares of urban residents (such as service workers and craftsmen) and almost all peasant families were not included in state insurance systems.[17] They obtained their health care from the private sector, which included both scientific and folk health practitioners.

After the Second World War, all these countries adopted important features of the Soviet model. Health facilities, pharmacies and pharmaceutical factories were nationalized, placed under a national MoH and governed by compulsory state plans. Health systems were organized by the administrative level of government, with the vertical hierarchy moving down from the national (federal) power to the regional (provincial, county) health departments (boards, institutes) to the municipal health departments to rural district health departments to health micro-districts.[18] As in the USSR, all countries had health facilities that were closed to the general public. The MoH managed facilities for the Communist Party and state elites as well as factory health centres. Other ministries (such as the Ministry of Defence, Ministry of the Interior, Ministry of Railways) maintained departmental health systems for their employees.

Hospitals tended to dominate health systems and offered varying degrees of specialization and quality, depending on their administrative subordination: elite, national public, regional, departmental, factory, municipal or rural district. All countries had Soviet-style specialized and general polyclinics, dispensaries for specific diseases, and preventive health establishments (for example, SES). However, most also had other institutions in outpatient care that reflected their specific traditions (such as GPs in Poland and Hungary).

The CE countries tended to adopt the Soviet extensive health development strategy. Medical care tended to be labour intensive, although in 1985 the average number of doctors (2.8) per 1000 population in the CMEA 6 was well below that of the USSR (3.9) and close to that of the countries that were

17 This situation is similar to other countries (including many low- and middle-income countries today), in which social health insurance exists but relatively large proportions of the population are outside the formal workforce.

18 In the case of Czechoslovakia, a 1969 reform devolved substantial management powers from the national MoH to the ministries of health of its two constituent republics (Czech Lands and Slovakia), which was similar in form to the USSR arrangement with its 15 republics (Kaser 1976).

members of the European Union (EU) at that time (2.7).[19] The doctor provision indicators ranged from 2.1 in Romania to 3.6 in Czechoslovakia in the CMEA 6 and from 1.5 in the United Kingdom to 3.8 in Italy in the EU.

There was greater variation in the treatment of the private sector. Private health care was tolerated to varying degrees in Czechoslovakia, the GDR, Hungary and Poland, but was illegal in Albania, Bulgaria and Romania (Kaser 1976). The GDR, Hungary and Poland had substantial numbers of health staff engaged in private practice (for example, 4000 private doctors out of a total of 25 000 doctors in Hungary), while Czechoslovakia tolerated more limited official private provision of health care (primarily by retired or top clinical doctors). The GDR was unique in allowing the existence of private charitable hospitals.

Health financing system. The organization of collection, pooling and purchasing was largely similar to that which existed in the USSR. This convergence took place over a period of time (after 1945), as the central European countries shifted from social insurance to state budget financing. By the 1980s, the source of most funds (over 90%) for health care (excluding prescription medicines) in these countries was the state budget, whereas social insurance contributions were negligible (up to approximately 10% in Hungary), with the exception of the GDR.[20] Direct payments by patients were the third source of funds. In most countries, state health facilities were permitted to charge the majority of patients (but not, for example, the disabled or war veterans) for a limited range of non-essential medical services, such as work-related medical examinations. Small numbers of fee-paying polyclinics also existed. It is likely that direct legal contributions from patients did not exceed 10% of total health funds collected in any country (Kaser 1976; Burenkov, Golovteev and Korchagin 1979).

Pooling arrangements were similar to those of the USSR, with fragmentation between the MoH, other ministries and large-scale industrial enterprises, as well as fragmentation and territorial overlap of pools reflecting the level of public administration. These pools were vertically integrated with purchasing and provision; hence, the pattern of duplicate service delivery coverage found in the USSR was replicated in these CE countries.

Most of the earlier observations concerning purchasing and health facility financial management in the USSR also apply to CE countries (importance of physical plans, subordinate role of budgets, absence of wholesale markets for

19 The doctor provision indicators were calculated by the author using statistics from the 1988 CMEA statistical yearbook, the 1988 Eurostat Basic Statistics of the Community yearbook, and the WHO Regional Office for Europe Health for All database.

20 In the GDR, compulsory social insurance funds (one for state employees and their dependants and the other for members of cooperatives and the self-employed) devoted approximately 10% of their expenditure to reimbursements for prescription medicines and approximately 20% to support medical treatment. The latter represented about two thirds of total official expenditure on the health system (most of the remainder coming from the state budget). State employees contributed 10% of their earnings to the social insurance fund and the self-employed 14%. Employers contributed 10% of wage payments to social insurance (Kaser 1976, Chapter 5).

medical goods, dominance of hospitals, inflexible line-item budgets, integration of purchaser and provider), albeit with some variation. For example, Poland calculated hospital budgets on the basis of admissions, rather than by using the indicator of bed-days provided (Burenkov, Golovteev and Korchagin 1979). As a result of the reforms associated with the New Economic Mechanism (NEM), Hungary placed greater emphasis on indicative plans and markets. However, Kornai (1992) argued that even in that country there was substantial "indirect bureaucratic control" that undermined the functioning of markets. This made it difficult for health facilities to obtain goods contrary to the wishes of their controlling state bodies.

There were differences in benefits and cost sharing, particularly in the early *command* period, due to the strong influence of social insurance concepts in a context of only limited state sector employment. As a result, entitlement to health care free of direct charge was initially restricted to state employees and their dependants in most countries. Non-entitled individuals (the self-employed in cities, peasants in the countryside) were required to pay full or subsidized prices for treatment in state facilities and for prescription medicines. However, over the decades, entitlement became universal, as coverage was extended to collective and private farmers and the self-employed.

Significant legal and informal cost sharing took place in the CE countries. Some payments were made directly to state health facilities for non-essential medical services or to clinics that were entitled to charge fees. Patients and their families also regularly made illegal but tolerated payments to administrators, doctors, nurses and orderlies working in state health establishments, either as an inducement to obtain better care or as a reward for those who had provided treatment (Kaser 1976; Miskiewicz 1986; Sampson 1987; Pataki 1993; Vinton 1993).

iii. Yugoslav system of health financing

Overview of health system organization. During the initial years of communist rule in Yugoslavia, many elements of the Soviet model of health care were adopted (state ownership of facilities, MoH, compulsory central planning), but the pre-Second World War legacy of social health insurance remained. State employees (such as industrial workers) were covered by compulsory social insurance and other urban inhabitants had access to state-supported health care. Rural inhabitants had to rely on the private sector.

Radical changes were made to the organization of health care following the 1948 split with the Stalinist USSR. These were based on the concepts of decentralization, removal of the state ("de-etatization") and democratization

(Parmalee 1989). Responsibility for managing health facilities was decentralized from the national MoH to six republican Committees of Public Health, which then devolved responsibility down to health facilities that were controlled by their Workers' Councils in 500 territorially based communes (with an average population of 44 000). The development of health care in the republics was influenced by indicative plans rather than determined by compulsory plans. Health facilities were taken out of state control and transformed into "socially owned" properties, with the intention that they would use their "social capital" and labour to produce health services according to contracts agreed with insurance associations. Each facility was run by a management board that was appointed by its Workers' Council, which included members of staff, the public, insurance bodies and local government. State-owned social insurance agencies (the Communal Insurance Association, or SIZ) were turned into semi-autonomous public service organizations (officially called "Self-managing Communities of Interest"), which were co-managed by a bicameral assembly of users from the community (Council of Consumers) and providers of health services (Council of Providers). The SIZ was managed by a permanent administrative unit that was staffed by professional insurance personnel.

Most first-contact care was to be provided by GPs in neighbourhood health centres. They were supposed to act as "gatekeepers" to ensure that there was not excessive demand for hospital treatment. However, GPs formed only about half of the physicians working in primary care; a substantial number of other specialists were retained to work in polyclinics or in maternal, child health and occupational health clinics (Saric and Rodwin 1993, p. 227).

The organization of the hospital sector was similar to that elsewhere in central Europe, with facilities ranging from highly specialized national ones to specialized facilities in large urban areas to small general hospitals in rural districts. Despite many reforms in Yugoslavia, the usual ministries (defence, police, railways) maintained their own health systems and large self-managed enterprises supported closed health centres for their workers. Legal private health care was virtually eliminated by the end of the 1950s, but it was subsequently re-legalized on a small scale in several republics – notably Croatia – due to fiscal crises and growing unemployment of health personnel (Parmalee 1989; Saric and Rodwin 1993).

The findings of Parmalee (1989), as well as Saric and Rodwin (1993) also indicate that the reality of the organization and functioning of the Yugoslav health system deviated considerably from the ideal Workers' Self-Management model and resulted in many of its features being quite similar to those of other CE countries. The Communist Party actually made all major decisions, and federal or republican state officials severely constrained the freedom of nominally

independent worker-managed entities, as well as routinely intervening in the decision-making of the Workers' Councils of health facilities and of the assemblies of users and providers of the SIZs. Due to their poor training and lack of incentives, GPs tended almost automatically to refer patients to outpatient specialists or hospitals. Hospitals dominated health care in a manner that was similar to elsewhere in central Europe.[21]

Collection/sources of funds. The mix of revenue collection mechanisms was radically different in Yugoslavia compared with the rest of central Europe and the USSR. By the 1980s, government budget revenues derived from general taxation provided less than 5% of total health expenditure and approximately 20% of capital investment in health. Enterprises in communes often provided extra funds to support the local health system, especially for the purchase of capital equipment and supplies. Approximately 80% of revenue came from compulsory insurance contributions. By the end of the 1960s this funding system resulted in the health share of GDP rising to a high 7.1% (Saric and Rodwin 1993).

Both employees and employers made contributions to the Yugoslav compulsory medical insurance funds. An obligatory 8% was deducted from each employee's wage for medical insurance. Employers contributed through a health care tax on the enterprise's total revenue. These funds were collected by the local SIZ within the commune. The central government established minimum standards of insurance benefits for the whole country, but the six constituent republics were given the right to set benefits above the minimum on the understanding that their insurance organizations would collect the necessary funds. Republican legislation also prescribed the basic benefits that SIZ associations were obliged to finance. Throughout the final decades of the existence of Yugoslavia there was a tendency for its more affluent republics to promise their populations more generous health benefits packages than those existing in economically deprived regions.

Despite the higher level of resources coming into the health sector relative to the USSR, there were persistent deficits in the health insurance funds due both to high cost structures (such as generous wages, expensive imported medicines) and the repeated efforts of the central government to stabilize the economy by constraining public expenditure through the imposition of limits on spending and the annual rates of contributions for health and social insurance. One consequence was that the health share of GDP fell to 5.7% in 1975 and to 4.0% in 1987 (Saric and Rodwin 1993).

21 Despite the official commitment to give primary care the highest priority in funding, the distribution of health financing by branch of the health system was similar to that in other eastern European countries, in that hospitals absorbed the largest share of resources. In 1986 approximately 33% of total Yugoslav health expenditure was devoted to primary care, whereas 60% was allocated to hospital care (Saric and Rodwin 1993).

Legal direct payments by patients made a minor contribution to health financing (Parmalee 1989; Saric and Rodwin 1993). Local health facilities routinely charged patients for abortions (for example, 60% of the estimated cost of the procedure), cosmetic operations (for example, 80% of the estimated cost), health examinations and prosthetic devices. The chronic deficiency of health financing relative to perceived needs stimulated greater efforts by health facilities to extend the use of fee-for-service payments. However, even in the 1980s, there remained tight ideological constraints on marketization and privatization of health care. It is estimated that legal OOPS contributed to only approximately 3% of total health financing.

Pooling of funds. Although pooling arrangements in both the USSR and Yugoslavia were fragmented, the nature of this fragmentation was very different. Most Yugoslav health financing was collected and pooled by the 500 communes using the mechanisms described above. The existence of many small pools caused inefficiencies and high shares of public spending on health administration. The commune health pool was augmented by modest contributions from the state budget and local enterprises, mostly for capital investment. The largest and most successful enterprises financed and managed closed health facilities for their workers and dependants, further fragmenting the system. According to Saric and Rodwin (1993), "Using its purchasing and political power, big business had succeeded in building a parallel health care system that obviated their reliance on both public facilities and, more importantly, public health insurance (SIZ)."

In a manner similar to that of the overall system in the USSR, the small amounts of health funds collected through Yugoslavia's federal budget were distributed to pools for the national Committee for Public Health (the equivalent of the MoH) to support national specialized health establishments and programmes, elite and departmental health systems (such as those relating to defence and railways), and "solidarity funds" to be allocated to poorer regions with insufficient local finance. Revenue collected through the budgets of the republics and their subordinate levels of government was directed to pools for the Republican Committees for Public Health to support specialized facilities and republic-wide programmes, for special capital investment projects within the republic and to subsidize health care in poor regions.

Purchasing of services. The economic environment of the Yugoslav health system was substantially different from the norm for CE countries due to the decentralization of decision-making and the greater reliance on market coordination in the Workers' Self-Management system. These organizational arrangements suggested less direct, centralized bureaucratic control and greater reliance on market-related determination of transactions between buyers

and sellers. The SIZs purchased health services for the insured population in the commune on the basis of "self-management agreements" with providers (outpatient clinics, hospitals). However, the terms and targets tended to change in a predictable, incremental manner. As in other countries, health budgets were disaggregated by item and were relatively inflexible.

Despite these differences in the organization of purchasing, in reality the same type of "indirect bureaucratic control" existed, as Kornai (1992) noted in the case of Hungary, as a factor in limiting the freedom of manoeuvre of purchasers and providers, despite the reforms of the NEM. Local governments had the right to intervene in negotiations concerning self-management agreements if either a contract acceptable to both sides could not be formulated or its contents were considered to be "socially harmful" (inflationary, for example). Parmalee (1989) found that the federal and republican governments intervened regularly to hold down cost increases in health, often by restraining agreements between insurance associations and providers, which in theory should have been outside the control of the state. Hence, although the structure suggested a purchaser–provider split, the scope for independent decision-making at purchaser level (and provider level – see next subsection) was severely constrained by these government practices.

The state also had the power to control all major investment decisions. In periods of economic prosperity, this control could be slack and allow the uncoordinated acquisition of excessive amounts of equipment by communes, which resulted in duplication and inefficiency. In the more frequent periods of economic crisis, the government could order drastic cut-backs in capital investment and in the purchase of foreign pharmaceutical products, even if domestic equivalents were unavailable (Tyson and Eichler 1981; Saric and Rodwin 1993).

Control over health facility resources by managers. Health managers in Yugoslavia had limited control over their health establishments. Managers were appointed by Workers' Councils and therefore were constrained by factors such as the need to look after the welfare of employees (for example, maintain employment and pay bonuses). The Communist Party was active in all establishments and ensured that managers took into account the Party line. Local government exerted a strong influence on decisions to purchase labour (often demanding new personnel to be hired) and to terminate the employment of personnel (this was made almost impossible). The remuneration of health staff was tightly regulated by the state. The range of salaries for all workplaces in a given commune was established through social agreements negotiated between these workplaces and respective government authorities. Managers were not allowed to show initiative in raising extra-budget revenue because the Party imposed rigid controls on direct charges to patients and prohibited private health care.

Although Yugoslav health establishments were not governed by compulsory economic plans, health insurance associations required them to operate in accordance with detailed norms that specified maximum time and resource inputs into the production of services, quantities of services to be delivered and quality standards. Managers had limited authority to shift resources from one budget item to another. Their freedom to purchase key inputs, notably foreign medicines and equipment, was often limited by government.

This suggests that – despite some important structural differences – in practice the Yugoslav system operated in a manner similar to the Soviet one. However, local government and insurance agencies in Yugoslavia placed greater pressure on managers to cut costs through the rationalization of production than did their equivalents in the USSR. Calls were made for the elimination of duplication of diagnostic equipment; reduction of overtime work by health staff; the merger of inpatient and outpatient facilities into unified health centres; the substitution of cheaper health services for more expensive ones (that is, substituting nurses for doctors, relying on primary care instead of hospitalizations); and the externalization of costs (for example, organizing home care for the sick as an alternative to hospitalization) (Parmalee 1989). However, managers were impeded from achieving savings in labour costs. Republican governments minimized the ability of managers to either raise or lower the salaries and bonuses of their staff in accordance with performance. In any event, managers had only weak personal incentives to reduce costs and reform practices because most savings achieved did not benefit either them or their institutions, but instead were absorbed by the insurance associations.

Official benefits package and cost sharing by patients. In Yugoslavia entitlement to free health care followed the pattern prevalent throughout central Europe of being extended over time, through compulsory insurance, from state employees (70% of the labour force) in cities plus their dependants to agricultural workers (25% of the labour force) and their families (Parmalee 1989; Saric and Rodwin 1993). The urban self-employed (5% of the labour force) and their dependants were given access to VHI programmes. By the 1980s most of the population was covered by compulsory medical insurance, with the small residual proportion relying on VHI and services paid by fee for service. However, as in other countries, certain population groups had access to better health care through closed sub-systems (elite, departmental, large enterprises). The medical benefits guaranteed to insured farmers were less generous than those for urban workers, which resulted in higher OOPS and lower utilization rates in the former category. Furthermore, there were substantial variations in per capita insurance payments and health expenditures across regions in Yugoslavia, in accordance with their differing levels of development, which

(given the fragmented pooling arrangements and absence of any meaningful redistribution mechanism) resulted in large differences in the availability of health care across communes. There was also variation in charges for health services according to category of patients. Health facilities in a commune would charge another commune a higher price for the treatment of its visiting patients than the one that would apply for local patients.

There was limited cost sharing in the Yugoslav health system. Health establishments were allowed to ask patients for "participation payments" for a narrowly defined range of non-essential services: house calls, health examinations, abortions, cosmetic surgery, meals and above-average accommodation in hospitals, and treatment in health spas. As was the case throughout central Europe, patients and their families in Yugoslavia made informal payments to health personnel for their care (Healy and McKee 1997; Kunitz 2004; Mastilica and Kušec 2005; Lewis 2006).

D. Performance of the health financing systems in the USSR and CE countries: 1965–1991

Economic stagnation combined with the low priority given to the health sector in most countries meant that constraints on resource allocations tightened over time and undermined the potential effectiveness of health systems. This occurred against a background of substantial population growth, ageing and a shift in illness patterns towards a predominance of chronic degenerative conditions (for example, cardiovascular disease, cancers) affected by stress and unhealthy consumption patterns (such as cholesterol, tobacco, alcohol).[22] In this context of economic stagnation and rising demand/need for health services, many general health objectives – such as reducing mortality rates – were not achieved. In addition, economic factors and the deficiencies identified in Section C (above) contributed to the worsening abilities of health financing systems to achieve their objectives.

A critical factor for improving the performance of these systems was their ability to generate an increase in available resources. Despite the status of health as a low-priority sector, the Soviet Government was able to increase the real level of health spending (Davis 1983, 1987, 2001a). From 1965 to 1985, state budget health spending through the MoH grew from 6.6 to 17.5 million (current) rubles. Expenditure from other sources (ministries, enterprises, farms) grew more rapidly, so total spending tripled from 7.8 to 22.4 billion rubles and per capita spending increased from 34 to 81 rubles. Inflation was low, so this reflected a

22 For more on the demographic and health conditions in the region during the command period see Kaser 1976; Dutton 1979; Davis and Feshbach 1980; Feshbach 1983, 1993; Eberstadt 1990; Ellman 1994; Davis 1998; Cornia and Paniccia 2000.

substantial growth in real expenditure. However, this real increase did not keep pace with the overall growth of the economy and public spending. The health share of the state budget dropped from 6.5% to 4.6%.[23] During this period, the rate of growth of health spending declined from 11% per annum in 1965–1970 to 4% in 1980–1985, reflecting both the wider economic stagnation and the reduced priority given to health. Overall, the USSR devoted approximately 3.0% of GDP to health, which was low by Organisation for Economic Co-operation and Development (OECD) standards (6.5% in the United Kingdom and 12.9% in the United States in 1985) (Davis 2001a).

In the *perestroika* period the Soviet Government significantly increased total official health expenditure in nominal terms, but inflation accelerated in these years. Estimated health spending in constant terms increased from 22.5 billion rubles in 1985 to a peak of 28.7 billion rubles in 1989 and then dropped to 24.1 billion rubles in 1991. The health share of the state budget increased to a peak of 5.6% in 1990, and then fell slightly (Davis 1993a, 2001a).

Health spending patterns in CE countries were largely similar, although Yugoslavia's pattern deviated somewhat from the rest. There, current and real health spending rose significantly in the period 1950–1975. Over the following 15 years, however, the pattern became erratic, with years of real growth followed by reductions arising from austerity programmes. Health spending as a share of GDP fell from 7.1% in 1969 to 4.0% in 1987. In 1980 Albania, Bulgaria and Romania had relatively low levels of health spending (below 3.0% of GDP); Poland and Hungary had medium levels (3.6% and 4.6%, respectively); and Czechoslovakia and the GDR were relatively high spenders (4.9% and 5.2%, respectively) (Davis 1998). These proportions of health expenditure as a share of GDP were substantially below those found in OECD countries.[24]

The tightness of constraints on health spending and the sector's low-priority status were evident. In the USSR, for example, the average wage of health workers fell from 82% of the whole economy average in 1965 to 70% in 1985, despite the fact that the mean educational level of its workers was one of the highest of any sector (2.3 times the economy average) (Davis 1989a). The overwhelming majority of the poorly paid health labour force was female (in the Soviet context, this was a sign of low priority) and it was difficult to entice doctors and staff to work in the countryside or remote regions. Similar patterns of relative wages existed in CE countries (Kaser 1976; Miskiewicz 1986; Eberstadt 1990; Healy and McKee 1997).

23 These are extremely low percentages by today's standards. In 2004, for example, only 4 of the 52 countries of the WHO European Region allocated less than 7% of total public spending to health (WHO Regional Office for Europe 2008).

24 Although these shares of public spending on health relative to GDP were below those of most OECD countries, it should be recognized that the CE countries were in a different phase of demographic transition and had lower per capita incomes than those in western Europe. Kornai and McHale (2000) argued that if these and other factors are taken into account, the health shares in central Europe were reasonably high by international standards.

The financial norms that determined the budgets of the health system for capital construction, building repairs and acquisition of other inputs were kept unrealistically low (Davis 1989a). The low levels of allocation had important implications for policy objectives. In the early 1980s in the USSR, for example, the expenditure norm governing acquisition of medicine per patient bed-day in a therapeutic ward was 90 kopeks, but many single dosages of medicines cost several times more than that, suggesting that patients either did not receive adequate medication or had to make private payments to get the medicines they needed. The difficulties experienced by Hungary, Poland, Romania and Yugoslavia in servicing their foreign debt resulted in frequent but unplanned cutbacks in imports of needed health system inputs. Inadequate investment in new construction and capital repairs had a negative effect on the quality of health facilities. The growth of the hospital bed stock outstripped new construction – a situation that caused overcrowding in hospitals (Davis 1983, 1987; Miskiewicz 1986; Eberstadt 1990; Saric and Rodwin 1993).

i. Performance of the USSR health financing system relative to objectives

Equitable funding of universal protection against financial risk. Although data are scarce, it is likely that the Soviet method of health financing was relatively equitable, because almost all funding was provided by the state and obtained from general taxation or from taxes on the "profits funds" of economic enterprises. As a result of this, the USSR was also largely successful in protecting all its citizens from the risk of financial hardship due to illness. Most health services and medicines related to hospital treatment were provided to the population free of formal direct charges, with only relatively small sums for non-essential treatment or services, such as provision of medical certificates for social insurance purposes. The state subsidized prescribed medicines related to outpatient care and gave its citizens adequate sickness pay and disability pensions. However, the practice of making unofficial payments for admission to a hospital, and/or for treatment or for services provided in hospitals was pervasive (Knaus 1981; Sampson 1987; Davis 1988a, 1989b).

Reduce inequalities in the use and provision of health services. Average levels of health service utilization (for example, consultation and hospitalization rates) were high compared with other countries, but there were significant inequalities in health and service utilization across the 15 republics and 120 regions of the USSR. Variations in health indicators between the best and worst regions were wider than those between the republics. Measures of inequality differed even more when compared across the districts that were subordinate to the regions. Quality standards were also higher in elite, departmental, enterprise and large city sub-systems than in medium cities and rural districts. There is also clear

evidence of differentials in service use. In conjunction with the 1970 and 1979 censuses, the Soviet authorities carried out large-scale surveys of population health status and use of services. The general finding was that in urban areas about two thirds of illness was reported to doctors and one third went unreported (Popov 1976, Chapter V; Davis 1988b). In rural areas the ratios were reversed. The share of illness reported varied considerably by disease category. For example, inhabitants in one rural district failed to report only 12% of skin diseases, while 88% of nervous illnesses went unreported. These studies confirmed the existence of a "morbidity iceberg" and differences in the extent to which it existed in a system in which there was, in principle, no price barrier to the use of needed medical services.

The inequalities in the quality and utilization of health care reflected differentials in levels of public funding. With respect to the sub-systems of health care, health expenditure was above the average for the whole population in the elite, departmental, industrial enterprise and large city sub-systems, whereas it was below average in the medium city and rural *rayon* sub-systems (Davis 1988b).

Improve the quality of health services and the efficiency of their delivery. There was much inefficiency in the Soviet health system that reflected shortcomings in planning and budgeting; lack of incentives to economize or to promote better quality of care; existence of incentives to expand capacity irrationally (the "quantity drive"); absence of competition between producers of health care; and disruptions caused by the malfunctioning shortage economy. By the 1980s, the average Soviet citizen visited a doctor as an outpatient 10 times per year; there were 20 hospitalizations per 100 population, and the average length of stay in hospital was a high 19 days. This was achieved by increasing quantities of facilities, personnel and services provided in accordance with the extensive growth strategy and the budgetary incentives supporting this. The number of doctors per 1000 population rose from 1.5 in 1950 to 4.2 in 1991 (versus 1.6 doctors in the United Kingdom) and the number of hospital beds per 1000 population increased from 5.6 to 13.1 (versus 5.4 beds in the United Kingdom) (Davis 2001a).

While "progress" was achieved in terms of expanding physical capacity and quantity of services provided, less was achieved in improving the quality and effectiveness of diagnostic and curative medical services, which remained low relative to standards in western European countries. For example, the risk of infections in Soviet health facilities was higher than that in the western Europe (due to the absence of disposable medical technology) and most 5-year survival rates of patients receiving health treatment for degenerative illnesses were lower (Feshbach 1983, 1993; Davis 2001a).

Improve transparency and accountability. One of the key principles of the Soviet political system was that decisions should be made by the Communist Party leadership and that it should be accountable to Party bodies, not to the population. In the health sphere this was reflected in the lack of accountability of health establishments to non-state groups. Managers were accountable for overseeing the line-item budgets of the facilities within the administrative level directly under their control. Lines of accountability for the performance of the entire system, the interactions between sub-systems and – more generally – accountability for population health were not clear. Considerable efforts were made to ensure that decision-making was opaque and the state censorship system prevented the publication of key information about the functioning of the health system. In the *perestroika* period the government policy of *glasnost'* ("openness") resulted in modest improvements in transparency in the health sphere. Despite this attempt, however, the very structure of the system compromised these efforts (Field 1967; Hough and Fainsod 1979; Knaus 1981; Davis 1988b; Ellman 1995).

Improve efficiency in the administration of the health financing system. Since health budgets were reflections of the health plan of each government level, and financial flows were mechanically determined by the quantity-oriented planning system, the issue of efficiency in the administration of the health financing system was not considered to be important. In retrospect, however, it is evident that there was substantial duplication in administrative responsibilities associated with the system of overlapping population financial and service delivery responsibilities in urban areas (for example, between city and *oblast* health departments). Due to the nature of the politico-economic system within which the health sector operated, these administrative features were not recognized as problematic.

ii. Performance of the CMEA and Yugoslav health financing systems relative to objectives

Equitable funding of universal protection against financial risk. In the early phase of socialist development in CE countries, there were significant inequities in the funding of health care. Governments accorded highest priority to the health care of state workers and urban residents, and as a result heavy self-financing burdens were imposed on the self-employed and rural residents. Over time, however, the comprehensiveness of health coverage increased, which resulted in substantial reductions in inequities in health financing. As in the USSR, all CE countries achieved the goal of providing universal protection of citizens against the risk of financial hardship due to illness by supplying most health care and inpatient medicines free of direct charge, subsidizing medicines

prescribed for outpatients and providing adequate sickness pay and disability pensions. In all countries, however, patients and their families routinely made unofficial payments in cash and in kind to health staff in state facilities, which may have reduced equity in financing to some extent (Kaser 1976; Miskiewicz 1986; Sampson 1987; Healy and McKee 1997; Kunitz 2004; Lewis 2006).

Reduce inequalities in the use and provision of health services. At the start of the period of Communist rule, there were wide inequalities in the quantities and quality of health care provided by the underdeveloped health systems in Albania, Bulgaria, Poland, Romania and Yugoslavia. Differences between the health care provided to urban and rural residents were especially pronounced. The more advanced health systems of Czechoslovakia, the GDR and Hungary had less inequality, but had been heavily damaged during the war. As the socialist governments extended state-funded health coverage to all population groups, inequalities between republics, regions and districts were reduced. For example, in Yugoslavia the index of provision (100 for the country as a whole) of doctors in the less-developed regions (Bosnia and Herzegovina, Kosovo, Macedonia, and Montenegro) rose from 45 in 1952 to 75 in 1984, whereas the index for the more developed regions (Croatia, Serbia, Slovenia and Vojvodina) dropped from 125 to 115 (Parmalee 1989, pp. 178–183).

As in the USSR, however, significant inequalities between richer and poorer regions of countries continued to exist. Most central governments redistributed health funding to deprived regions to close these gaps. In the more economically advanced states, such as Czechoslovakia and Hungary, these efforts were reasonably successful (Kaser 1976; Burenkov, Golovteev and Korchagin 1979). In Yugoslavia, however, there was no significant redistribution between the commune-level health insurance funds, and in this context it proved difficult to reduce significantly (let alone eliminate) regional inequalities. In 1984, for example, health insurance expenditure per capita varied from a low of 4995 dinars in Kosovo to a high of 13 875 dinars in Croatia, and the number of doctors per 1000 population varied from 0.9 in Kosovo to 2.5 in Serbia (Parmelee 1989). Urban–rural differences in the provision of health care – especially if quality is taken into account – were substantial in most countries, due to factors such as the higher priorities of cities in the planned economies and the reluctance of doctors to live in the countryside. It is likely that these differences remained significant throughout the command period (Kaser 1976; Davis 1988b; Parmalee 1989).

Other inequalities were associated with the sub-systems of health care. As a rule, the sophistication of health care in elite health facilities increased to close to West European standards over time, whereas the quality in public territorial health facilities was well below the average for the West. Thus the gaps between

elite and public care in CE countries may well have widened in the 1980s. The closed departmental and industrial enterprise health systems also had higher standards of care than those prevailing in the open territorial health sub-systems.

Improve the quality of health services and the efficiency of their delivery. The quality of health care in CE countries was adversely affected by the low wages and poor incentives of health personnel, chronic shortages of many key inputs, inadequate investment in buildings and slow technological progress in the biomedical sphere. As a result, the quality of care was lower than that found in western Europe. However, there were significant variations in the quality of health care between CE countries, regions, sub-systems and health branches. As a general rule, the quality of care was highest in the GDR and Czechoslovakia and lowest in Albania, Bulgaria and Romania. As was the case in the USSR, countries offered better health care in their more economically advanced regions than in the poorer ones. As economic difficulties mounted in the 1980s, shortages intensified, health performance declined and the quality of health care deteriorated.

The efficiency problems identified for the USSR, as well as their causes, were also characteristic of the health systems in CE countries. These countries relied on an extensive development strategy that generated growing numbers of doctors, hospital beds and other basic inputs. In Bulgaria, for example, the number of hospital beds per 1000 population increased from 7.7 in 1970 to 9.7 in 1989. The number of visits to doctors per patient was high by international standards: in 1980 it was 10.2 in Czechoslovakia, 6.9 in Romania, 5.9 in the GDR, 5.7 in Poland, 5.4 in Hungary, and 5.0 in Bulgaria. The average lengths of stay of admitted patients in CE countries were high (by 2007 standards), ranging from 11.8 days in Romania to 15.0 days in Hungary, but were not that different from those in western Europe at that time (in 1989 they were 12.5 days in France and 14.8 days in the United Kingdom) (Kaser 1976; Burenkov, Golovteev and Korchagin 1979; Davis 2001a, Appendix A). In outpatient care there was a high ratio of doctors to mid-level health personnel, which led to substitution of the former for the latter. Doctors did not act effectively as gatekeepers, so there were excessive referrals to more expensive outpatient specialists and to hospitals (Saric and Rodwin 1993). The provision of health services to the populations increased in most countries, without interruption, until the mid-1980s. Due to the nature of the shortage economy, however, this expansion was a reflection of the "quantity drive".

Improve transparency and accountability. In the more orthodox communist CE countries (Albania, Bulgaria, Czechoslovakia, GDR and Romania) attitudes of the State toward transparency and accountability were as negative as those

of the Soviet Government. Greater openness in the management of the health system existed in Hungary and Poland, although the constraints imposed by their communist political systems meant that information provision about conditions and decision-making in the health sphere was only slightly better than that in the pre-*perestroika* USSR. In contrast, Yugoslavia had an official commitment to local accountability. As mentioned above, medical establishments were run by Workers' Councils, and commune health insurance organizations involved both providers and users in their decision-making. However, there was significant indirect bureaucratic control, and limits were imposed on discussions of issues that raised fundamental questions about the extent of transparency and accountability present, even in the most open socialist country (Parmalee 1989; Saric and Rodwin 1993). In all the countries, the means by which accountability was exercised (that is, controlling inputs rather than producing or improving outputs) was similar to that employed in the USSR, and structural fragmentation was also an obstacle to clear lines of accountability (Hough and Fainsod 1979; Kornai 1992; Schöpflin 1993).

Improve efficiency in the administration of the health financing system. In the majority of CE countries, central planning determined developments in health systems, and health budgets played subordinate roles. As in the USSR, this context meant that the efficiency with which the system was administered was not a major concern (that is, structural inefficiency existed but its consequences were not recognized). The nature of fragmentation in the Yugoslav system – with so many small (commune-level) insurance organizations – was a major source of inefficiency, and almost certainly contributed to the persistent financial problems of the system, despite its comparatively high level of public funding. In Hungary, the NEM reforms reduced the role of central planning and attempted to make health budgets more influential. But this reform was not particularly successful, due to systemic impediments and growing economic difficulties.

E. Organizational and performance legacies and the context of transition

The characteristics and performance of the health financing systems in the USSR and CE countries at the start of the transition period were legacies of the Command Era. They were conditioned by the politico-economic system (see Section B) and comprised priorities of the communist elite, state ownership, centralized control, compulsory planning, non-price rationing, passive money and inactive budgets. Revolutionary changes occurred in the CE/EECCA countries in the early 1990s in political, social and economic spheres. This

altered the general environments of their health sectors (leading, for example, to new political priorities, new fiscal reality and introduction of a market-oriented economic system), worsened health conditions, changed governmental objectives for health and health financing, and stimulated the introduction of numerous health reforms.[25] The key organizational and performance legacies of the past – as well as the critical contextual factors that changed at the time of transition – constitute the "starting point" for understanding the reform experience that is analysed in the rest of this book.

i. Organizational legacies: health financing systems at the dawn of transition

The structure of health financing systems can be characterized in terms of the organization of functional responsibilities (such as collection) and key policy dimensions (such as benefit entitlements). In addition to characterizing the specific functions and policies individually, understanding these systems also requires an overall "cross-functional" assessment. From this perspective, two broad types of health financing system organization can be identified: (1) that of the USSR, most CMEA and Albania; and (2) that of Yugoslavia (and the GDR, to a certain extent). In all of the countries, systems can be characterized as having a decentralized structure and the appearance of decentralized decision-making (in regions, cities, enterprises), although in reality local managers had severely limited room for manoeuvre. They were centrally planned and controlled but structurally fragmented.

The Soviet system integrated service delivery and financing through a hierarchical budgeting process. More specifically, the functions of pooling and purchasing were integrated with service delivery. This meant that, in effect, there were "health systems" organized at each administrative level of government, as well as within the sub-systems (elite, departmental, enterprise, for example). Revenue collection was separately administered, but the centrally planned allocation procedures effectively collapsed separate resource allocation decisions into one (that is, from collection to pools, from purchasers to providers, and within providers to inputs). The consequence of this was a system marked by substantial duplication of responsibility for administering financial resources and providing services to the population. The experience of this was greatest in urban areas in which, for example, city and *oblast* health facilities existed and were available to the local population. The organization of the system by level of government administration did not enable population-based planning to occur.

25 For information on developments in health conditions and health systems during the early transition period, see UNICEF 1994; Heleniak 1995; Chelleraj et al. 1996; Goldstein et al. 1996; Cornia and Paniccià 2000; Ellman 2000; Davis 2001b; WHO Regional Office for Europe 2008.

While parts of the Yugoslav system were similar to that of the USSR (particularly the relatively small part of the system funded from general government revenues), the main part of the system was organized quite differently. In particular, the functions of revenue collection, pooling and purchasing were integrated and organized at the level of each commune. As a result, the relative amount of funding available to purchase services was a direct reflection of the relative economic well-being of the commune. Service delivery units were administratively separate from the financing system, although – as noted above – there were substantial bureaucratic, political and regulatory limits placed on the extent to which the insurance funds could purchase services in a strategic manner.

Revenue collection and sources of funds. In most countries (except Yugoslavia and the GDR), general public revenues were the predominant source of funds. The underlying philosophy of health as a low-priority sector was reflected in the low shares of total public spending and GDP allocated to the sector. In Yugoslavia, the predominance of earmarked wage-based and employer contributions collected by the commune-based health insurance associations meant that funding levels there – along with the proportion of health-related spending as a share of total public spending – were the result of the contribution formulas used. As a result of this very different mix of funding sources, the level of public funding for the Yugoslav health sector was not a "victim" of the explicitly low-priority status given to health in the Soviet economic system, although constraints on it tightened in the 1980s due to the intensifying economic crisis in that country. In all the countries, some official private OOPS existed for official co-payments, but it is likely that most private spending took the form of informal payments.

Pooling. A critical structural legacy was the fragmentation of pooling and, because the pooling and purchasing functions were integrated within the same agency, the same applies to the structure of purchasing. In most countries (again, except for Yugoslavia and the GDR), pooling was fragmented in two ways. The principal form was the organization of pools by level of government administration. Each level managed a pool of funds for its "own" facilities, and also allocated downwards to the next level of administration in a hierarchical manner. Because the lower levels exist within the next higher level (for example, cities are geographically within regions), the pools overlapped, resulting in duplication of responsibilities for the population served by the systems existing within the same territory (in practice, this was observed to a greater extent in urban than in rural areas). A second form of fragmentation was the existence of separate pools for the closed health sub-systems: the elite, departmental and large enterprise systems, typically organized at national or republican levels.

In Yugoslavia, pooling was also highly fragmented, but in a different way. Health insurance was organized in very small pools at commune level, with limited mechanisms for redistribution across them, although some general budget funds were used to supplement the budgets of insurance funds located in poorer regions. In addition, large enterprises could establish their own separate pools. Other general revenues used in the system (relatively small compared with the insurance contributions) were distributed to pools organized for the elite and departmental sub-systems, set up in a manner similar to that which existed in the USSR.

Purchasing and purchaser–provider relations. The organization of purchasing was fragmented in the same manner as that of pooling. Throughout the region, purchasing was a passive operation determined in a rigid manner by centrally planned norms oriented towards the increase in capacity and the quantity of services provided. Although there were "purchasers" operating at many levels (for example, *oblast*, city, *rayon*), they followed a uniform set of rules. Even in Yugoslavia where there was – in structural terms – a purchaser–provider split, the process of purchasing was largely incremental, and the government determined employment and salary levels. Throughout the region, managers of health facilities had very limited control over internal resource allocation decisions, budgets were inflexible with respect to the movement of funds from one expenditure item to another, and there were no real incentives to innovate or promote efficiency. Communist party and state directives and rules severely constrained the ability of managers to charge for health services, to restructure production processes to improve efficiency (for example by shedding labour) and to acquire the inputs they considered to be most suitable.

Benefit entitlements. Benefits were broad and generous, with very limited formal co-payments. Informal payments were probably widespread, however, as legal entitlements in most countries were not linked to the level of resources allocated. Another reality of the benefits package was that the actual availability of services (quantity and quality) differed considerably across population groups, determined by politico-economic characteristics (party elite, industrial workers, peasants) and by territorial factors (urban–rural, regions).

ii. Performance legacies: achievements and challenges at the end of the Command Era

Equitable funding of universal protection against financial risk. This was perhaps the greatest achievement of the Communist health financing systems. In general, each of the countries provided universal financial protection for their populations (that is, it is very unlikely that many people were pushed into poverty out of the need to make health care payments). Despite the presence

of informal payments and limited formal co-payments, public funding predominated, suggesting a relatively equitable distribution of the burden of funding the system.

Equity in the use of services related to equity in the distribution of health spending. Despite universal coverage, substantial inequities remained in health spending and in the services that were available to the population. In the USSR and most of the CMEA 6 countries, there were two main sources of inequity in health spending (and consequently in the quantity or quality of service availability). One was the existence of closed sub-systems (elite, departmental, enterprise, for example) that were funded to differing extents. The other – more important as a legacy – was an urban–rural differential. This latter inequity arose from the hierarchical organization of the financing and delivery system by level of government, reinforced by budgetary incentives, which led to the concentration of resources and facilities in urban areas. There was a gradient of quality/quantity, from top to bottom as follows: capital city of country, capital of territory or republic (relevant in the USSR and Czechoslovakia), capital of *oblast*/region, small city and rural *rayon*/district.

In Yugoslavia, inequity in per capita health spending and the availability/quality of services arose directly from the means of funding the system (contributions to compulsory health insurance), the fragmentation of pooling by commune level with no means of redistribution across pools, and insufficient equalization provided from general budget revenues. As a result, the level of per capita health spending (and hence service availability) was a direct reflection of the economic status of the commune.

Efficiency and quality in service delivery. The structure of the health financing and delivery system resulted in duplication of service delivery coverage for the population, while the incentives of the financing system rewarded quantity, not quality. These factors – combined with the way that health workers were trained, the lack of any tradition of evidence-based medicine and the philosophy of the system (emphasis on specialization, low status of primary care) – led to perhaps the most obvious legacy of the Command Era health systems: very high levels of physical infrastructure and human resources, excessive service utilization and unwarranted rates of referral to specialists relative to systems elsewhere in the world. In addition, managers of health facilities were unable to respond to changing circumstances or errors in planning because their job was simply to administer strict line-item budgets. Finally, the low level of health spending, particularly in the context of economic stagnation in the latter part of the era, resulted in quality problems due to lack of inputs and failure to invest adequately to maintain the capital stock.

Transparency and accountability. This was not a high priority for health systems prior to transition. As a legacy, this was more than just a matter of political philosophy: two systemic factors contributed to accountability problems. One was simply that accountability was input oriented, not oriented towards objectives or results. This encouraged a narrow focus on budget execution, rather than the achievement of policy objectives. The second factor was the extreme fragmentation of the system. Management was oriented towards facilities or programmes under the direct subordination of a level of government administration (or department), but the structure of the system did not enable clear responsibilities to be identified for the entire health system or the population (either nationally or in territorially distinct areas). The system encouraged a very narrow view, with ministries of health (at national and subnational levels) seeing their job as managing MoH facilities rather than guiding the entire health system towards the achievement of its objectives. Transparency problems were also present in the form of widespread informal payments, suggesting the existence of a gap between what systems were promising and what was actually available to the population. However, the nature of informal payments makes it difficult to ascertain with great confidence whether they were perceived as a serious problem, a nuisance or rather just accepted cultural/historical practices.

Administrative efficiency. As with equity in health spending and efficiency in service delivery, the fragmented structure of the Command Era health financing systems was problematic in terms of administrative efficiency. In the USSR and CMEA countries, the overlapping population coverage in urban areas was reflected in duplication of administrative responsibility. Hence, in the same territory, different levels of public administration were responsible for the pooling and purchasing (and provision) functions (for example, city health department, *oblast* health department). In Yugoslavia, administrative inefficiency was mainly the product of a large number of very small insurance funds, each responsible for collecting contributions, pooling them and paying providers. Even though Yugoslavia tended to have higher levels of public spending on health (relative to GDP) than elsewhere in the region, it is very likely that an unduly large share of this spending was allocated to administrative costs, namely staffing of the insurance funds.

iii. Changes in the political, social and economic environments of health sectors in CE/EECCA countries during the early transition period

Political and social changes. In the transition period all the CE and former USSR countries attempted to shift from communist dictatorships to more democratic governments, but progress varied. In many countries the authority

of central government weakened, which led to problems of "state desertion" and deterioration in civic order (Ellman 1995; Field, Kotz and Bukhman 2000). Leadership in general, and in the health sector in particular, was often unstable. For example, in the Russian Federation there were five Ministers of Health in the 1990s. The majority of these governments attempted to introduce – on a simultaneous basis – democratizing and marketizing reforms in all institutions, thereby diffusing scarce administrative and material resources. In the larger countries, the central governments could not impose their policies on political elites in influential regions, which enabled the latter to adopt policies at variance with national ones (Field, Kotz and Bukhman 2000; Shishkin 2000). Governmental reforms were often impeded by the growing assertiveness of stakeholders, who had been restrained by communist controls in the past, and by the emergence of new interest groups that pursued their own agendas. The inter-state and civil wars in the former USSR and Yugoslavia damaged health sector assets and resulted in illness, death and the emergence of refugees.

In the social sphere, the strains of the transition process undermined many of the collectives (family, friends, work colleagues) that had been important in people's lives. To the extent that it had existed, popular belief in the effectiveness and fairness of the state was eroded and citizens became more oriented towards the pursuit of individual interests. The opening up of these societies increased awareness of conditions in the West and raised expectations regarding future living standards.

Economic and fiscal changes. Economic transition involved the adoption of wide-ranging, radical reforms that transformed economic systems and their relations with the global economy: liberalization of domestic prices and trade, macroeconomic stabilization, marketization, privatization, industrial restructuring, foreign trade liberalization and establishment of convertible currencies (Gros and Steinherr 1995; World Bank 1996). The success of economic reforms in individual countries was influenced by factors such as the design of policies, credibility and effectiveness of governments (for example, ability to collect taxes), popular support and external factors (such as the EU accession process).[26]

During early transition the majority of countries experienced substantial declines in aggregate output (GDP), bouts of high inflation and growing unemployment and job insecurity. There were cuts in real wages, widening income inequality and increased poverty. Only slow progress was achieved in developing market institutions (such as wholesale trade) to replace those of the old planning–rationing system (such as central rationing of supplies). The disruption of supply linkages generated shortages and "disorganization"

26 For more on this, see the annual European Bank for Reconstruction *Transition Report Series* (EBRD 1994–2007).

in industry that contributed to drops in production (Blanchard and Kremer 1997). As a result of these developments, health systems functioned in hybrid economies with unclear property rights, imperfect markets, distorted price signals, arbitrary interventions by the state and fiscal crises.

Perhaps the most critical change was not the result of deliberate policy, however; a decline in public revenues took place that was truly extreme in some countries (for example the Caucasus, the Republic of Moldova, and parts of central Asia). In 1989 in the USSR, general government revenues were approximately 41% of GDP, according to the International Monetary Fund (IMF) (Cheasty 1996). By 1995 this had fallen to an unweighted average of 25% for the 15 countries of the former USSR. However, this average masks a range that spanned from 5% in Georgia to 44% in Belarus. The reasons for this varied, but included faster declines in economic sub-sectors that had formerly produced the most public revenue (such as state enterprises) than in the general GDP; a new complexity in the tax structure; challenges to the legitimacy of governments; and, importantly for the former USSR states at least, a loss of intergovernmental transfers from Moscow after 1991 (Cheasty 1996).[27] Of course, these percentages relate to a GDP that had also dropped precipitously. Georgia's 1995 GDP is estimated to have been only approximately 28% of its 1990 levels, while that of Belarus was estimated at approximately 65%. Stabilization efforts resulted in the freezing of budgets in current terms in the face of rapidly rising prices, which meant cuts in real expenditures. In a number of countries (notably Georgia and Armenia) the public sector of the economy contracted in a drastic manner. Subsidies from the state budget for agriculture, energy, transportation and consumption were slashed, and there were also obvious implications in terms of the ability of governments to spend on health. In Kyrgyzstan, for example, public spending on health fell from 3.3% of GDP in 1991 to 1.9% in 1992, largely because total government spending fell from 28% to 17.4% of GDP following the withdrawal of budget transfers from Moscow in January 1992 (World Bank 1993).

Transition and the reorganization of health sectors. Many CE/EECCA health sectors were forced into major organizational transformations. The number of health sectors in this region (excluding the GDR) rose from 8 in 1990 to 27 in 1995. The Czechoslovakian health sector was partitioned into new ones within the independent Czech Republic and Slovak Republic. More disruptive divisions in the former Yugoslavia produced independent health sectors in Bosnia and Herzegovina, Croatia, Macedonia, Serbia-Montenegro,[28] and Slovenia, while the dissolution of the USSR spawned 15 more. By 1995,

27 For example, Cheasty (1996) reports that for the central Asian countries, such transfers had amounted to 20% or more of GDP by the late 1980s.

28 The number grew in 2006 when Serbia and Montenegro became two separate countries.

only five of these health sectors had the same geographic boundaries as they had in 1990 (Albania, Bulgaria, Hungary, Poland and Romania). In the case of the EECCA countries, the Russian Federation inherited the most complete set of health institutions, even if they were seriously flawed (Davis 1993b). Many of the new ministries of health (for example, that of the Uzbek Soviet Socialist Republic) had limited capacities for policy-making and active management because during the Command Era the powers of their predecessor organizations had been limited to administration of centrally determined plans.

iv. Implications of the new context for the inherited health financing systems

In order to ameliorate the serious problems in health systems and in health financing inherited from the past and engendered by the transition process, governments in CE/EECCA countries introduced numerous reforms in the early 1990s.[29] It would have been difficult to implement successfully the wide-ranging (and often radical) reforms of this early period even in the best of circumstances. However, conditions were far from ideal. In addition to the obstacles posed by unstable environments and severe resource constraints mentioned above, three other challenges existed. The first was to coordinate economic and health reform policies. This was difficult to accomplish because virtually none of the top economic decision-makers had any professional knowledge of health economics, and few leaders in the health system – who usually were doctors – had much knowledge of the functioning of market economies. The second challenge was to ensure that the decision-makers in the different institutions within the health sector (such as health facilities, insurance agencies, pharmacies, pharmaceutical factories) coordinated intra-sectoral reforms to ensure consistency and feasibility. The third challenge was to coordinate national health reform policies with the activities of the myriad foreign governmental, multinational and nongovernmental agencies that became involved in health projects in CE/EECCA countries.

The fiscal and economic changes wrought by transition had important implications for the health financing systems of the region. In large part, the implications for the attainment of policy objectives were negative, at least in the short run, but the extent of the problem was closely linked to the extent of fiscal shock that was experienced and the length of time it took for economic recovery to proceed. For the objectives of equity in finance and financial protection, the relative success attained prior to 1990 was challenged by the overall decline in public revenues that reduced the capacity of post-transition governments to

29 Detailed descriptions and evaluations of them are provided in previous publications (see Davis 1993a, 1993b, 1998, 2001a, 2001b; Preker and Feachem 1995; Chernikovsky, Barnum and Potapchik 1996; Klugman and Schieber 1996; Sheiman 1998; Shishkin 2000; Kornai and Eggleston 2001; Kutzin et. al. 2002) and the other chapters of this volume.

spend on all sectors, including health. At the same time, the wider context of economic disruption challenged the ability of many families to earn sufficient income to meet their basic needs. The capacity of governments to spend on health diminished (to varying degrees across the countries concerned; see Fig. 2.1), leading to the growth of both legal and informal charges for health care services and a reduction in subsidies for prescription medicines, at the same time that the economic vulnerability of individuals and families had increased. The combination of these circumstances caused deterioration in protection for the population against the financial risk of health care costs. Although problems already existed in terms of inequities in health spending and access to services, these problems were made much more severe with the decline in public spending and increase in poverty that was experienced in the early transition period (UNICEF 1994; Ellman 2000). The severity of the problems associated with high levels of OOPS was greatest in the most economically deprived regions (the Caucasus, central Asia and the southern Balkans) and least in those countries where economic recovery proceeded most rapidly (Slovenia, Czech Republic) or where the economic transition had not taken place (Belarus).

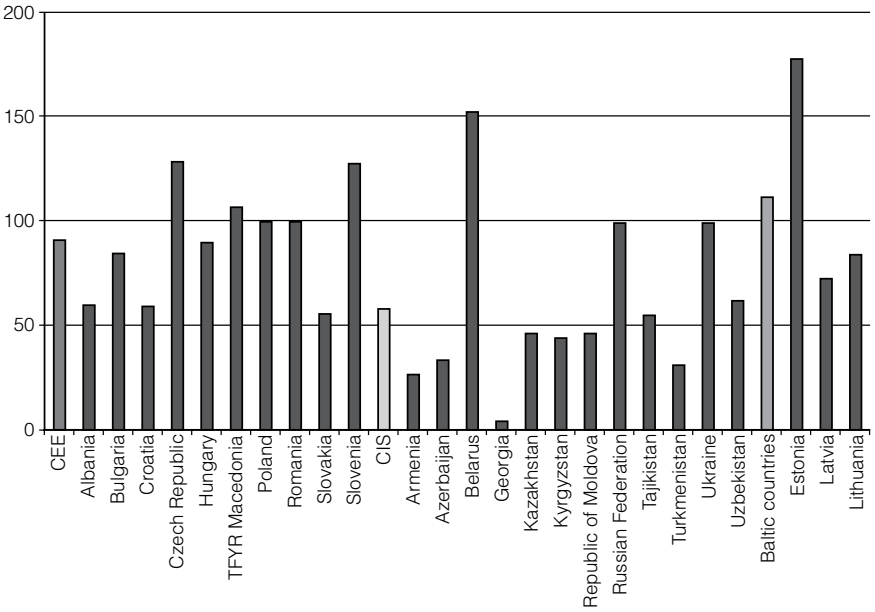


Fig. 2.1 *Index value of real public spending on health in 1994 relative to estimated 1990 levels*

Sources: The primary sources for this table were WHO Regional Office for Europe 2008, the United Nations Children's Fund (UNICEF) TransMONEE database (UNICEF 2008), and various World Bank documents. In addition, some values were estimated by the author from available indices relating to gross domestic product (GDP) and the health shares of GDP. Unweighted averages are reported for central and eastern Europe (CEE), the Commonwealth of Independent States (CIS), and the Baltic countries. Statistics for Bosnia and Herzegovina and Serbia–Montenegro (now the independent states of Serbia and Montenegro) were not sufficient to construct reliable estimates.

While both the organization of and incentives relating to financing and delivery systems were major contributors to the inefficiencies of pre-transition health systems, the consequences of these inefficiencies were not felt acutely prior to transition. This was because important input prices were very low (for example, for staff, medicines and energy) and public revenues were sufficiently high to provide for these. The transition not only brought about a fiscal shock (Cheasty 1996) that greatly constrained the ability of governments to spend on health, but it also led to increases in key input prices. As CMEA trade relationships broke down, for example, prices of imports of necessary medicines rose. In many countries, implicit subsidies for energy costs provided to budgetary units (like public hospitals) could no longer be sustained. Put simply, governments, health systems and the populations they served had less money and faced higher prices. In this new context, the extensive infrastructure, high levels of utilization and excessive referrals to specialists that were inherited from the previous era began to be recognized as problematic. The problems were not only related to an inefficient distribution of inputs per se. Because such inefficiencies required a greater share of public spending to be devoted to fixed inputs such as utility costs, it meant that there was less public money to spend on patient treatment items that had also become more expensive (medicines, for example). At least in the most affected countries (those of the Caucasus and some in central Asia), this signified a greater need for patients to fund and provide these inputs directly. Hence, the systemic inefficiencies also created problems of financial inequity because they were translated into a greater dependence of systems on OOPS.

The difficult political, social and economic circumstances created by the initial phase of transition intensified or made more explicit many of the inherited deficiencies in health financing systems (such as weak incentives, high fixed costs) and spawned new ones (such as growing inequities in health funding and health care associated with a growing dependence of systems on OOPS). It therefore became imperative for the transition states to introduce and implement more radical health financing reforms to address the underlying structural and incentive problems inherited from the previous era. The following chapters of this volume examine the goals, features and timing of health financing reforms since the mid-1990s and evaluate their success in overcoming obstacles and solving the inherited and new problems.

References

Babanovskii IV (1976). *Voprosy finansirovaniya zdravookhraneniya v SSSR.* Moscow, Meditsina.

Blanchard O, Kremer M (1997). Disorganization. *Quarterly Journal of Economics*, 112 (4):1091–1126.

Burenkov S, Golovteev V, Korchagin V (1979). *Sotsialisticheskoe zdravookhranenie: zadachi, resursy, perspektivy razvitiya*. Moscow, Meditsina.

Cheasty A (1996). The revenue decline in the countries of the former Soviet Union. *Finance and Development*, 33:32–35.

Chellaraj G et al. (1996). *Trends in health status, services and finance: the transition in central and eastern Europe,* Volume II. World Bank Technical Paper No. 348. Washington, DC, World Bank.

Chernichovsky D, Barnum H, Potapchik E (1996). Health care reform in Russia: the finance and organization perspectives. *Economics of Transition*, 4(1):113–134.

Cornia G, Paniccià R, eds (2000). *The mortality crisis in transitional economies*. Oxford, Oxford University Press.

Davis C (1983). The economics of the Soviet health system. In: U.S. Congress, Joint Economic Committee, *The Soviet economy in the 1980's: problems and prospects.* Washington, DC, United States Government Printing Office:228–264.

Davis C (1987). Developments in the health sector of the Soviet economy, 1970–1990. In: U.S. Congress, Joint Economic Committee, *Gorbachev's economic plans.* Washington, DC, United States Government Printing Office:331.

Davis C (1988a). The second economy in disequilibrium and shortage models of centrally planned economies. *Berkeley-Duke Occasional Papers on the Second Economy in the USSR*, No. 12. Durham, NC, Duke University Press.
Davis C (1988b). The organization and performance of the contemporary Soviet health system. In: Lapidus G, Swanson G, eds. *State and welfare, USA/USSR: contemporary policy and practice*. Berkeley, CA, University of California Berkeley Institute of International Studies:95–142.

Davis C (1989a). Priority and the shortage model: the medical system in the socialist economy. In: Davis C, Charemza W, eds. *Models of disequilibrium and shortage in centrally planned economies.* London, Chapman & Hall:427–459.

Davis C (1989b). The Soviet health system: a national health service in a socialist society. In: Field M, ed. *Success and crisis in national health systems: a comparative approach*. London, Routledge:233–262.

Davis C (1993a). The health sector in the Soviet and Russian economies: from reform to fragmentation to transition. In: U.S. Congress, Joint Economic Committee, *The former Soviet Union in transition*. Washington, DC, United States Government Printing Office:852–872.

Davis C (1993b). Eastern Europe and the former USSR: an overview, and, the former Soviet Union. *RFE/RL Research Report, Special Section on Health Care Crisis*, 2(40):31–43.

Davis C (1998). Morbidité, mortalité et réformes du système de santé dans les États en transition de l'Ex-U.R.S.S. et de l'Europe de l'Est. *Revue d'Études Comparatives Est-Ouest*, 29(3):133–185.

Davis C (2001a). The health sector: illness, medical care and mortality. In: Granville B, Oppenheimer P, eds. *Russia's post-Communist economy.* Oxford, Oxford University Press:475–538.

Davis C (2001b). Reforms and performance in medical systems in the transitional states of the former Soviet Union and eastern Europe. *International Social Security Review*, 54(2–3):7–56.

Davis C, Feshbach M (1980). *Rising infant mortality of the USSR in the 1970s*. International Population Reports, Series P-95, No. 74. Washington, DC, U.S. Census Bureau.

Dutton J (1979). Changes in Soviet mortality patterns, 1959–1977. *Population and Development Review*, 2:267–291.

Eberstadt N (1990). Health and mortality in eastern Europe 1965–1985. *Communist Economies*, (2)3:347–371.

EBRD (1994–2007). *Transition Report Series, 1994–2007*. London, European Bank for Reconstruction and Development.

Ellman M (1994). The increase in death and disease under katastroika. *Cambridge Journal of Economics*, 18:329–355.

Ellman M (1995). The state under state socialism and post-socialism. In: Chang H-J, Rowthorn R, eds. *The role of the state in economic change.* Oxford, Clarendon Press:215–236.

Ellman M (2000). The social costs and consequences of the transformation process. *Economic Survey of Europe 2000*, No. 2/3:125–145.

Feshbach M (1983). Issues in Soviet health problems. In: US Congress, Joint Economic Committee, *Soviet economy in the 1980's: problems and prospects*. Washington, DC, United States Government Printing Office:203–227.

Feshbach M (1993). Continuing negative health trends in the former USSR. In: U.S. Congress, Joint Economic Committee, *The former Soviet Union in transition*. Washington, DC, United States Government Printing Office:840–851.

Field M (1967). *Soviet socialized medicine: an introduction*. New York, The Free Press.

Field M, Kotz D, Bukhman G (2000). Neo-liberal economic policy, 'state desertion', and the Russian health crisis. In: Kim J et al. eds. *Dying for growth: global inequality and the health of the poor*. Boston, Common Courage Press:155–173.

Gjonça A, Wilson C, Falkingham J (1997). Paradoxes of health transition in Europe's poorest country: Albania 1950–1990. *Population and Development Review*, 23(3):585–609.

Goldstein E et al. (1996). *Trends in health status, health services and health finance: the transition in central and eastern Europe:* Volume I. World Bank Technical Paper No. 341. Washington, DC, World Bank.

Gregory P, Stuart R (1981). *Soviet economic structure and performance*, 2nd edn. New York, Harper & Row.

Gregory P, Stuart R (1999). *Comparative economic systems,* 6th edn. Boston, Houghton Mifflin.

Gros D, Steinherr A (1995). *Winds of change: economic transition in central and eastern Europe*. London, Longman.

Healy J, McKee M (1997). Health sector reform in central and eastern Europe: the professional dimension. *Health Policy and Planning*, 12(4):286–295.

Heleniak T (1995). Economic transition and demographic change in Russia, 1989–1995. *Post-Soviet Geography*, 36(7):446–458.

Hough J, Fainsod M (1979). *How the Soviet Union is governed*. London, Harvard University Press.

Kaser M (1976). *Health care in the Soviet Union and eastern Europe*. London, Croom Helm.

Klugman J, Schieber G (1996). *A survey of health reform in central Asia*. World Bank Technical Paper No. 344. Washington, DC, World Bank.

Knaus W (1981). *Inside Russian medicine: an American doctor's first-hand report*. New York, Everest House.

Kornai J (1980). *Economics of shortage*. Oxford, North Holland.

Kornai J (1992). *The socialist system: the political economy of communism*. Oxford, Clarendon Press.

Kornai J, Eggleston K (2001). *Welfare, choice and solidarity in transition: reforming the health sector in eastern Europe*. Cambridge, Cambridge University Press.

Kornai J, McHale J (2000). Is post-communist health spending unusual? A comparison with established market economies. *Economics of Transition*, 8:369–399.

Kunitz S (2004). The making and breaking of Yugoslavia and its impact on health. *American Journal of Public Health*, 94(11):1894–1904.

Kutzin J et al. (2002). *Innovations in resource allocation, pooling and purchasing in the Kyrgyz health system*. Manas Health Policy Analysis Project, Policy Research Paper 21. Bishkek, World Health Organization and Ministry of Health.

Lewis M (2006). *Tackling health care corruption and governance woes in developing countries*. CGD Brief, Working Paper 78. Washington, DC, Center for Global Development.

Mastilica M, Kušec S (2005). Croatian health care system in transition, from the perspective of users. *BMJ*, 331:223–226.

Miskiewicz S (1986). Health services in eastern Europe. *RFE/RL RAD Background Report*, 161:1–41.

Parmalee D (1989). Yugoslavia: health care under self-managing socialism. In: Field M, ed. *Success and crisis in national health systems: a comparative approach*. London, Routledge:165–191.

Pataki J (1993). Health care crisis: Hungary. *RFE/RL Research Report*, 2(40):50–52 (Special Section on Health Care Crisis).

Popov G (1976). *Ekonomika i planirovanie zdravookhranenie*. Moscow, Izdatel'stvo Moskovskogo Universiteta.

Pravdin D (1976). *Razvitie neproizvodstvennoi sferi pri sotsializme*. Moscow, Ekonomika.

Preker A, Feachem R (1995). *Market mechanisms and the health sector in central and eastern Europe*. World Bank Technical Paper No. 293. Washington, DC, World Bank.

Rakowska-Harmstone T, ed. (1984). *Communism in eastern Europe,* 2nd edn. Manchester, Manchester University Press.

Ryan M (1978). *The organization of Soviet medical care*. Oxford, Blackwell.

Sampson (1987). The second economy of the Soviet Union and eastern Europe. *Annals of the American Academy of Political and Social Sciences*, 493(September):120–136.

Saric M, Rodwin V (1993). The once and future health system in the former Yugoslavia: myths and realities. *Journal of Public Health Policy*, 14(2):220–237.

Schnytzer A (1982). *Stalinist economic strategy in practice: the case of Albania*. Oxford, Oxford University Press.

Schöpflin G (1993). *Politics in eastern Europe*. Oxford, Blackwell.

Sheiman I (1998). *Reforma upravleniya i finansirovaniya zdravookhraneniya.* Moscow, Izdatsentr.

Shishkin S (2000). *Reforma finansirovaniya Rossiiskogo zdravookhraneniya*. Moscow, TEIS.

Tyson L, Eichler G (1981). Continuity and change in the Yugoslav economy in the 1970's and 1980's. In: U.S. Congress, Joint Economic Committee, *East European Economic Assessment*. Washington, DC, United States Government Printing Office:963.

UNICEF (1994). *Crisis in mortality, health and nutrition*. Economies in Transition Studies: Regional Monitoring Report No. 2. Florence, United Nations Children's Fund International Child Development Centre.

UNICEF (2008). *United Nations Children's Fund TransMONEE database* [online database]. Florence: United Nations Children's Fund (http://www.unicef-irc.org/databases/transmonee, accessed 15 August 2008).

Vinogradov N, ed. (1962). *Organizatsiya zdravookhraneniya v SSSR*. Moscow, Gosudarstvennoe Izdatel'stvo Meditsinskoi Literatury.

Vinton L (1993). Health care crisis: Poland. *RFE/RL Research Report*, 2(40):56–59 (Special Section on Health Care Crisis).

World Bank (1993). *Kyrgyzstan: social protection in a reforming economy*. Report No. 11535-KG. Washington, DC, World Bank.

World Bank (1996). *World development report 1996: from plan to market*. Washington, DC, World Bank.

WHO Regional Office for Europe (2008). *European Health for All database* [online database]. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/hfadb, accessed 15 August 2008).

Chapter 3

Fiscal context and health expenditure patterns

Joseph Kutzin, Melitta Jakab

A. Introduction

As described in Chapter 1, fiscal capacity is a key contextual factor for enabling/limiting the extent to which countries can achieve health financing policy objectives. In the early transition period, the CE/EECCA countries experienced an unprecedented decline in economic production that greatly reduced fiscal space. Not surprisingly, this led to a reduction in public spending, including within the health sector (see Chapter 2). However, some countries with similar patterns of fiscal contraction experienced a much greater decline in health expenditures than others. Cross-country differences in public resource allocation priorities accorded to the health sector have played a major role in either moderating or worsening the impact of macroeconomic decline on government health spending. Different patterns of decline and recovery in GDP and fiscal capacity – along with differences in prioritization patterns – resulted in a wide range of government health spending levels across the countries, both in absolute terms and as a share of GDP. As we show in this chapter, the level of public spending on health is the main driver of health system dependence on private OOPS. The extent of such dependence has important implications for policy objectives, particularly financial protection, equity in finance and equity in utilization. Hence, it is essential to disentangle key contextual factors (income and fiscal capacity) and resource allocation priorities from differences in policy reforms across countries, in order to obtain a better understanding of the difference between *attainment* and *performance* (WHO 2000) with regard to health financing policy objectives.

In this chapter we take a closer look at health expenditure patterns in the CE/EECCA countries during the transition period, exploring the influence of both the fiscal context and public sector resource allocation priorities. The aim is to continue to set the scene for the rest of the book, moving on from the groundwork laid in Chapter 2 and providing background understanding of health expenditure trends and their determinants as a backdrop to the coming policy chapters. The chapter in its nature is descriptive and exploits some simple cross-tabulations between health expenditure and its determinants. After a description of the data sources in Section B, we present recent trends in public and private health expenditures in Section C. This is followed by exploring some of the explanatory factors behind these expenditure trends: the fiscal context in Section D and the priorities in Section E. Section F integrates these pieces to depict the relationship between government and out-of-pocket health spending, including some country examples that illustrate the interactions between the factors that drive expenditure patterns. Section G concludes the chapter.

B. Data sources

The source of data for this chapter is the WHO National Health Accounts (NHA) Series (WHO 2009a)[30] for the period 1997–2006 (at the time this chapter was written, 2006 was the most recent year for which validated data were available for each country). This database is updated annually through a collaborative process managed by WHO but involving substantial input and feedback from the countries, other international agencies (such as OECD, Eurostat and the World Bank) and various experts. Data on the main aggregates such as GDP and total public spending are derived from the IMF, OECD,[31] and the United Nations national accounts statistics. These are supplemented with (in some cases supplanted by) national data, World Bank reports and other studies. Because governments organize their services in different ways, international comparability remains a challenge. Using the classifications and boundaries of the NHA (WHO, World Bank and USAID 2003) and System of Health Accounts (OECD 2000) as a guide, additional national data are used to create data series that are internationally comparable to the greatest extent possible (WHO 2009b).

Although the WHO NHA Series is the best available source of internationally comparable data on health expenditures for all countries across the world, the data have important shortcomings. The most significant problem in terms of data quality concerns estimates of private OOPS. Some countries conduct systematic

30 The database can be downloaded from http://www.who.int/nha/country/en/index.html.

31 The WHO database uses OECD Health Data (OECD 2009) as the source for information on OECD countries. Four of the CE/EECCA countries are classified within the OECD: Czech Republic, Hungary, Poland and Slovakia.

household surveys with well-sequenced, detailed questions on utilization and health expenditure patterns (for example, Kyrgyzstan, Tajikistan, Georgia and the Republic of Moldova). Other countries (such as Kazakhstan, Uzbekistan and Ukraine) do not carry out similar exercises and it is quite likely that their out-of-pocket expenditures are underestimated.[32] Thus, the figures in the database for those countries without regular and detailed health expenditure surveys are likely to be underestimates (although the magnitude of the underestimation is unknown) and, hence, the relative difference in the reported proportion of OOPS as a share of total health expenditure between countries using more- and less-detailed survey methodologies is likely to overstate reality to some degree. A third group of countries exists in this context, consisting of those for which OOPS estimates are based on detailed health expenditure surveys, but where these are not implemented systematically and use different data sources and survey approaches for their estimates, based on what is available (for example, the Russian Federation and Hungary). Therefore, our analysis aims to portray overall patterns and trends that are less likely to be affected by data problems, rather than taking too much stock in detailed comparisons.[33]

C. Health expenditure patterns

There is great variation in the region in terms of total health spending and the public–private share of total health spending (Fig. 3.1). Tajikistan spent $ 81 (international dollars, at purchasing power parity (PPP)) in 2006 on health care, while Slovenia spent more than 25 times as much ($ 2063). Approximately a third of the countries spent less than $ 500; another third spent between $ 500 and $ 1000; and the remaining (less than a) third spent greater than $ 1000. Similarly, the public–private share of health spending also varies greatly across the region, with private spending accounting for approximately 78% of total health spending in Georgia and Tajikistan and approximately 12% in the Czech Republic. This great variation in health spending translates into great variation in the coverage of population benefits and, as a result, into great variation in the attainment of health system objectives. The divergence in opportunities is so significant that the term "transitional countries" loses much of its descriptive relevance because the economic context of the countries has diverged so much that what is possible for the richer countries to attain is not realistic for the poorer countries.

32 Lu and colleagues (2009) analysed the effects of question disaggregation and recall period on the level of health expenditure reported by survey respondents. They found that, in most countries, asking more detailed questions led to higher reported total health spending, and also that shorter recall periods also led to higher estimates.

33 In the case of Turkmenistan, the data on GDP, total government spending and health spending (public and private) are considered to be sufficiently unreliable as to exclude them from use in this chapter. For example, the reported proportion of health spending as a share of total government spending has remained at exactly 14.9% for every year from 1998 to 2006. Other particular known shortcomings in the data will be noted throughout the chapter, as relevant.

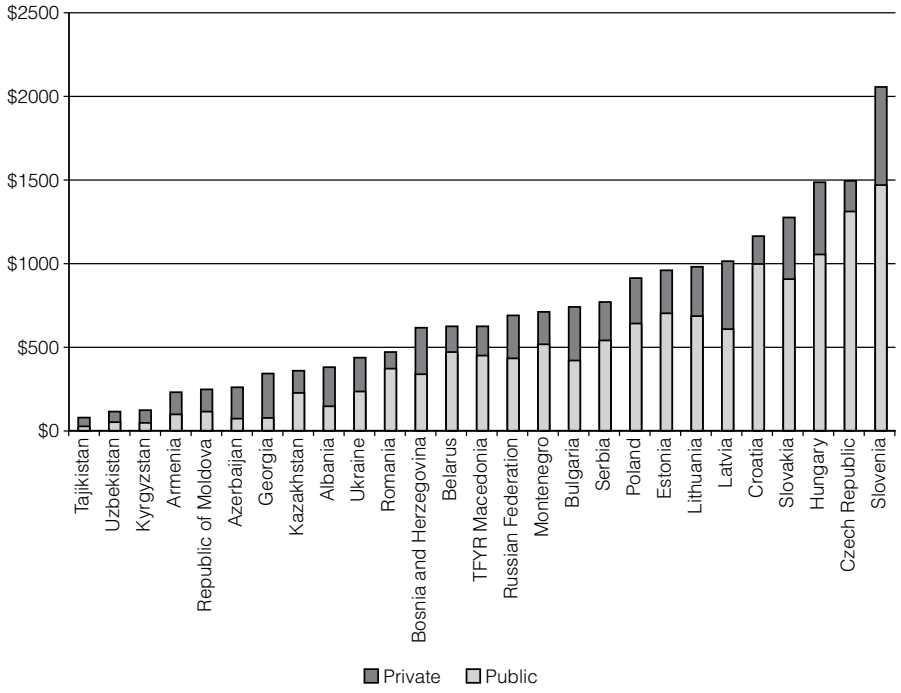


Fig. 3.1 *Total per capita health spending, 2006, international dollars*

Source: WHO 2009a.

The internationally observed relationship between per capita income, government health spending and private OOPS also holds true for the CE/EECCA countries (Fig. 3.2). International comparisons have long shown that poorer countries tend to rely more on private sources and richer countries on public sources (see, for example, Schieber and Maeda 1997). Tajikistan, Georgia and Azerbaijan had the highest proportions of OOPS as a share of total health expenditures at 75%, 72% and 63%, respectively. This is not surprising, since these three countries are among the lowest income countries in the region, and their governments' levels of spending on health care are also among the lowest. More surprising is that, at the same income level as Tajikistan and Georgia, the citizens of Kyrgyzstan and the Republic of Moldova are spending significantly less (54% and 52% of total health expenditures, respectively), and there is a very high level of OOPS in Azerbaijan compared with other countries with per capita GDP of approximately $ 5000 or less. In fact, at any income level there is quite a large variation in the public–private share of health spending, suggesting that other explanatory factors are also at play. Here, we focus on the level of government spending on health, as earlier analyses (Gottret and Schieber 2006; Kutzin 2008) have shown this to also be an important determinant of OOPS, separate from – but related to – per capita GDP.

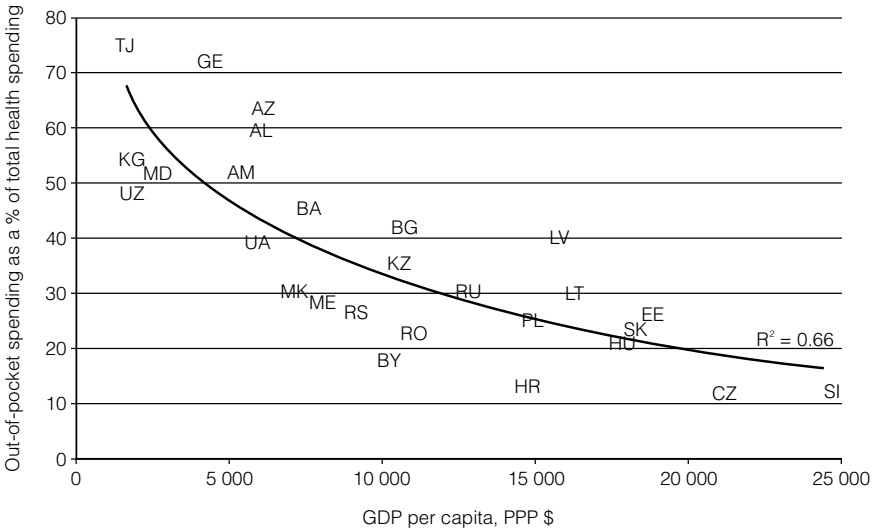


Fig. 3.2 *Out-of-pocket health spending and per capita income in 2006*

Source: WHO 2009b

Notes: AL: Albania; AM: Armenia; AZ: Azerbaijan; BA: Bosnia and Herzegovina; BG: Bulgaria; BY: Belarus; CZ: Czech Republic; EE: Estonia; GE: Georgia; HR: Croatia; HU: Hungary; KG: Kyrgyzstan; KZ: Kazakhstan; LT: Lithuania; LV: Latvia; MD: the Republic of Moldova; ME: Montenegro; MK: TFYR Macedonia; PL: Poland; RO: Romania; RS: Serbia; RU: Russian Federation; SI: Slovenia; SK: Slovakia; TJ: Tajikistan; UA: Ukraine; UZ: Uzbekistan.

As shown in Fig. 3.3, government health spending as a share of GDP has varied greatly across the region during the transition period. In 2006 Croatia was the highest spender, with 7% of GDP dedicated to the health sector, while Azerbaijan and Tajikistan were the lowest spenders, with 1.1%.[34] The high spenders are in the range of government health spending of that of the OECD countries (approximately 6.5% of GDP; see OECD 2009), while the low spenders are on par with low-income developing countries (approximately 1.6%; see WHO 2009a).

Most of the divergence in government health spending occurred in the early transition period and there has been little change in ranking since the end of the 1990s. As Chapter 2 illustrated, great divergence took place between 1990 and 1994 in government health spending across the region. In 1994, governments of the former Soviet Union spent only slightly more than 50% of the 1990 level; governments of central Europe (excluding the Baltics) spent approximately 80–90%; and governments in the Baltic countries increased their spending to approximately 110% of the 1990 level (see Chapter 2, Fig. 2.1). The divergence in health spending stabilized thereafter and most of those who were relatively low spenders in 1997 remained low spenders in 2006, with high spenders also remaining high spenders. As shown in Fig. 3.3, however, there were

34 Recall from Fig. 3.1 that Tajikistan is considerably lower when measured in comparative PPP-adjusted dollar terms, given its far lower GDP per capita than Azerbaijan.

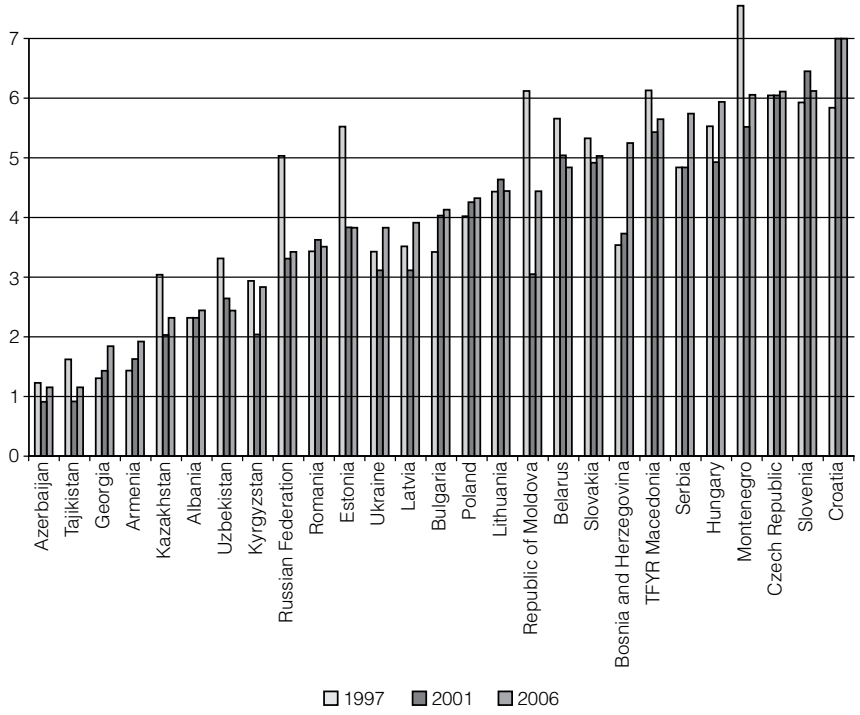


Fig. 3.3 *Government health expenditure as a share of gross domestic product (GDP): 1997, 2001, 2006*

Source: WHO 2009a.

some exceptions to this pattern. For the most part, these are countries whose estimated government health spending as a share of GDP was considerably higher in 1997 than in later years. This likely reflects more change in the denominator (that is, GDP grew considerably faster than public spending on health) than in health expenditure levels per se. There is far less change in the relative ranking between 2001 and 2006, suggesting an even more stable pattern. A few changes indicate real shifts (in the Republic of Moldova, for example), while others may reflect ongoing data problems.[35]

For the entire period 1997–2006, 13 of the countries ended with a higher level of government health spending as a percentage of GDP than when they started; 12 had a lower level, and 2 had about the same. Since 2001, however, most (20) of the countries increased their health spending levels while only a few (5) had lower levels as a share of GDP by 2006. Spending patterns for the new EU countries appeared to stabilize from 2001, with only 6 of the 10 experiencing an increase (usually quite modest), 3 a decrease, and 1 no change. Interestingly,

35 In the former Yugoslav Republic of Macedonia, for example, the data on government health spending do not exclude the non-health expenditures by the national Health Insurance Fund, such as those for sick leave, maternity benefits, and so on. This may result in overestimation of spending levels relative to Serbia.

most (9 of 11) of the countries that were formerly part of the USSR experienced an increase after 2001, and of the remaining non-EU countries, five increased their spending and one (Croatia, the highest spender) experienced no change. These patterns of change brought about some convergence in spending levels by 2006 compared with 2001, but the differences in government spending levels (both in PPP dollar terms and as a percentage of GDP) remain significant between the central Asian and Caucasus countries (mostly under 2.5% of GDP) and the many other "transitional" countries, which now spend between 4% and 7% of GDP.

What explains these patterns? Mathematically, public spending on health as a percentage of GDP is simply the product of total public spending as a percentage of GDP and the share of that spending allocated to the health sector. Hence, ***the amount that a government spends on health depends in part on its overall fiscal constraint and in part on decisions that it makes with regard to priorities***. In the following sections, we disentangle these factors that determine government health spending both in terms of fiscal context and priorities.

D. The fiscal context

A key factor that explains variation in government health spending is the variation in the fiscal context. The fiscal context refers to a government's current and expected future capacity to spend. Global evidence (Schieber and Maeda 1997; Gottret and Schieber 2006) indicates that richer countries tend to be more effective at mobilizing tax revenues (relative to the size of their economies). As incomes increase, national economies tend to become more formalized and urban, and as a result tax collection becomes easier. In turn, this means that richer countries tend to have higher levels of public spending as a share of GDP than do poorer countries. This relationship between national income and fiscal capacity applies to the CE/EECCA countries as well, as reflected in Fig. 3.4, using data for 2006.[36] The data reveal, however, substantial variation around the general pattern. Thus, with very similar levels of per capita GDP in Hungary and Estonia, total public spending in Hungary was nearly 18 percentage points greater. Similarly, public spending in Belarus was approximately 2.1 times greater than in Kazakhstan (47% compared with 22%

36 We use total public spending as a percentage of GDP as a proxy for fiscal context because of its relevance and the availability of data on this indicator. Of course, the real fiscal context includes public revenues as well. By only using expenditures, we assume that public expenditure must be in line with public revenue, and that this figure accurately reflects a government's capacity to spend. To the extent that this is not true in practice (for example, if a government is running a large fiscal deficit), the analysis of expenditure patterns in one year may be misleading. While the accounting identity remains true (public spending as a percentage of GDP multiplied by health as a percentage of total public spending equals government health spending as a percentage of GDP), care must be taken in drawing country-specific conclusions about the ability of a government to sustain higher levels of health spending based on one year's fiscal expenditure data. While public expenditure levels are indeed a useful proxy measure of fiscal capacity – and we are comfortable using this for the international comparisons shown here – country-specific analysis requires additional, country-specific data to draw more informed conclusions about the fiscal context.

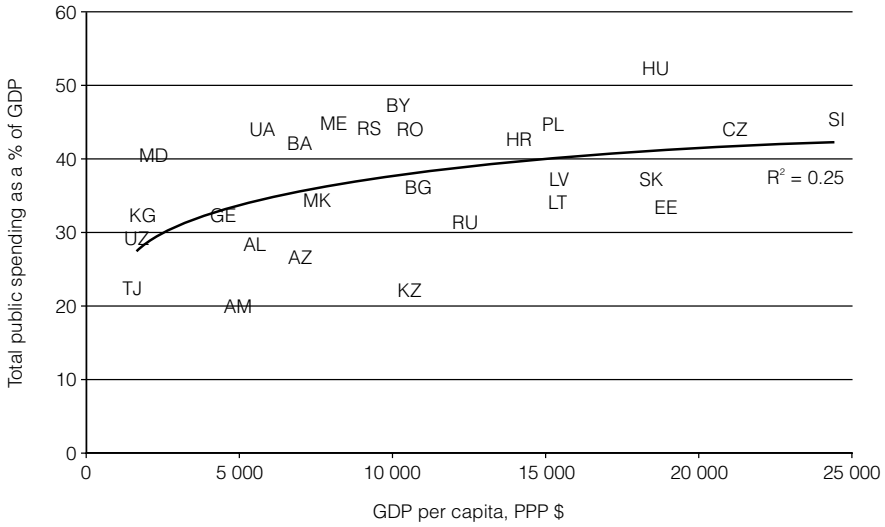


Fig. 3.4 *Relation between "fiscal capacity" and gross domestic product (GDP) per capita, 2006*

Source: WHO 2009b

Notes: AL: Albania; AM: Armenia; AZ: Azerbaijan; BA: Bosnia and Herzegovina; BG: Bulgaria; BY: Belarus; CZ: Czech Republic; EE: Estonia; GE: Georgia; HR: Croatia; HU: Hungary; KG: Kyrgyzstan; KZ: Kazakhstan; LT: Lithuania; LV: Latvia; MD: the Republic of Moldova; ME: Montenegro; MK: TFYR Macedonia; PL: Poland; RO: Romania; RS: Serbia; RU: Russian Federation; SI: Slovenia; SK: Slovakia; TJ: Tajikistan; UA: Ukraine; UZ: Uzbekistan.

of GDP). Therefore, while it is important to understand the overall pattern, it is essential to dig deeper than simply looking at GDP as a determinant of health spending patterns; it is necessary to understand the specific *fiscal context* of each country.

As noted in Chapter 2, the early transition period brought with it not only social and economic disruption but fiscal disruption as well. The magnitude of this decline varied across countries. By 1995, the 15 successor countries of the USSR saw their total public revenues fall to an average of 25% of GDP, relative to an estimated 41% in 1989. Within this was huge variation, with the near collapse of the public sector in Georgia reflected in a level of only 5% of GDP in 1995, and a "non-transition" experience for Belarus, showing only a slight improvement in revenues as a share of GDP (Cheasty 1996). In the span of just a few years, the countries diverged greatly in their fiscal contexts, with those of the Caucasus and central Asia (and the Republic of Moldova) being the most severely affected. The CE countries experienced a decline on average, but to a much less severe extent, apart from those experiencing civil conflict (namely, many of the countries that were formerly part of Yugoslavia, except for Slovenia). Rapid recoveries took place in the Czech Republic, Hungary, Poland, Romania and Slovenia. More recent patterns showing figures for 1997, 2001 and 2006 are shown in Fig. 3.5.

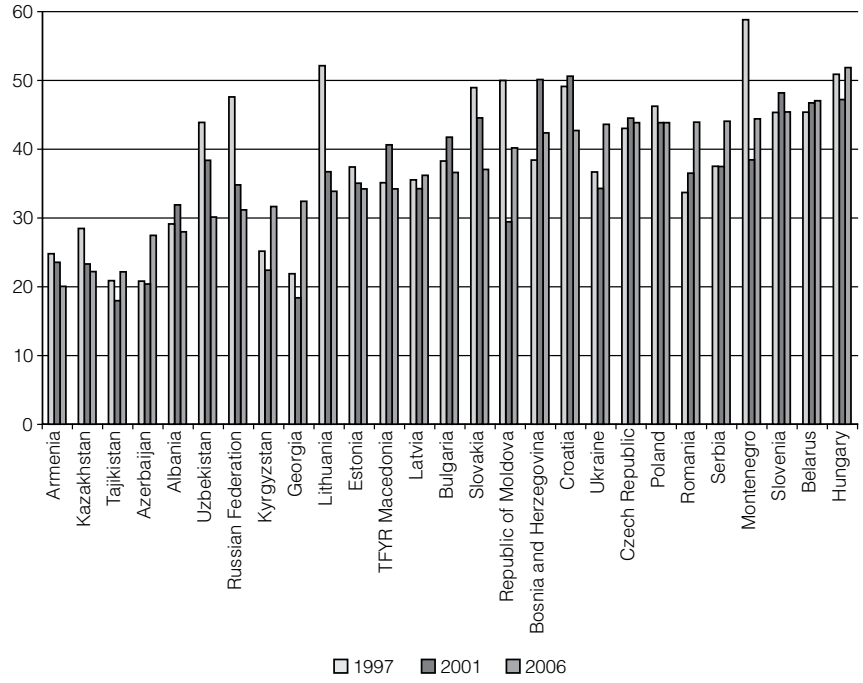


Fig. 3.5 *Total government spending as a percentage of gross domestic product (GDP): 1997, 2001, 2006*

Source: WHO 2009a.

Comparing this ranking of fiscal capacity with government health spending as shown in Fig. 3.3, it is apparent that more limited fiscal space is associated with low government spending on health. Out of the five countries with the lowest overall government spending, four were also the lowest in terms of government health spending as share of GDP (Azerbaijan, Tajikistan, Armenia and Kazakhstan). Similarly, among the high spenders, each of the governments whose health spending was 6% or more of GDP in 2006 had overall government spending levels greater than 40% of GDP.

Significant decline in fiscal space has often been associated with a commensurate decline in government health spending. In Fig. 3.5, for example, fiscal space in the Russian Federation and Uzbekistan (as a percentage of GDP) has shrunk rapidly, and over the full period this has been associated with a decline in government health spending as a percentage of GDP. In Lithuania, however, there was a steep drop in overall public spending but little change in government health spending, and similarly in Croatia total public spending declined between 2001 and 2006 but health spending levels did not change. Alternatively, some countries that experienced fiscal expansion, such as Azerbaijan and Romania, saw little or no growth in government spending on health as a share of GDP.

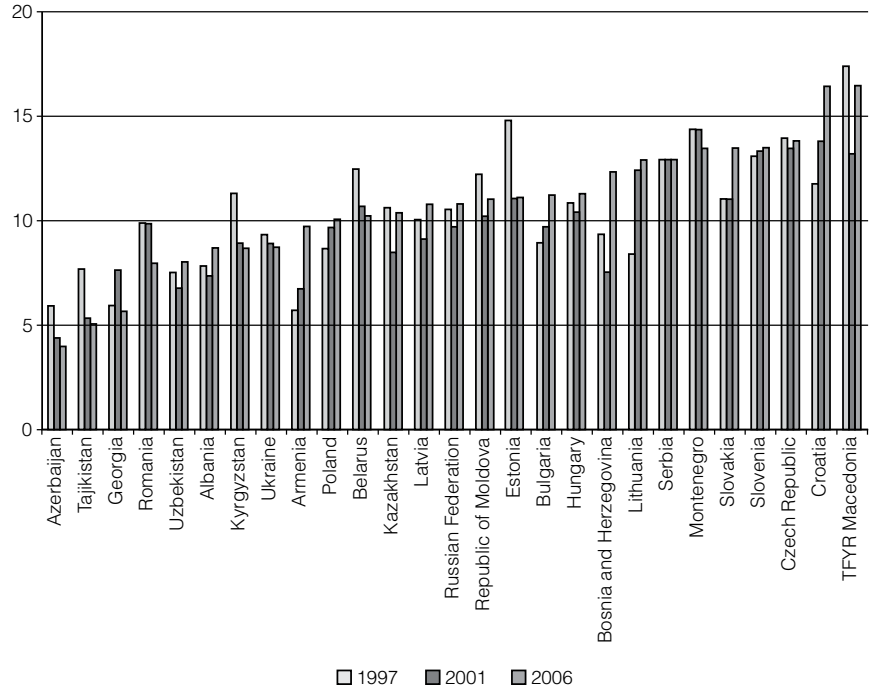


Fig. 3.6 *Health as a percentage of total government spending: 1997, 2001, 2006*

Source: WHO 2009a.

These data demonstrate that changes in fiscal capacity only explain part of the story, and differences in the priority that governments accorded to health sector allocations must be considered.

E. Policy priorities

In addition to the fiscal context, the priority that a government accords to the health sector in its resource allocation decisions also determines the level of total public spending on health. As shown in Fig. 3.6, there is substantial cross-country variation in this factor, ranging from a low of approximately 4% in Azerbaijan to a high of over 16% in Croatia and The former Yugoslav Republic of Macedonia[37] in 2006. As noted in Chapter 2, health was considered a "low-priority sector" in the Soviet economy, whereas the different mechanisms for funding the health system of Yugoslavia led to a higher share of public spending devoted to the sector. Remarkably, these patterns have persisted for nearly 20 years after the break-up of the USSR. Of the 10 CE/EECCA governments that devoted less than 10% of their spending to health in 2006, seven are former

37 As noted previously, it is likely that WHO estimates overstate the level of government health spending in the former Yugoslav Republic of Macedonia by not excluding the non-health outlays by their national Health Insurance Fund.

Table 3.1 *Key health financing indicators by country income group, 2006*

Country income group[1]	GDP per capita in international $	Government health spending as % of GDP	Private health spending as % of total health spending	Total government spending as share of GDP (fiscal context)	Government health spending as a % of government spending (priority)
Bottom third	3922	2.41	57	30.6	7.7
Middle third	9540	4.51	31	38.4	11.7
Top third	17911	5.17	22	41.0	12.6

Source: Authors' own calculations, based on data from WHO 2009a.

Notes: The 27 countries analysed in this chapter were ranked by per capita gross domestic product (GDP) in international dollars in 2006. The countries were divided into three equal size groups with nine members each. Group averages are not weighted for population size. The bottom third includes Tajikistan, Kyrgyzstan, Uzbekistan, the Republic of Moldova, Georgia, Armenia, Albania, Azerbaijan and Ukraine. The middle third group includes Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Belarus, Kazakhstan, Bulgaria, Romania and the Russian Federation. The top third group includes Croatia, Poland, Latvia, Lithuania, Hungary, Slovakia, Estonia, the Czech Republic and Slovenia.

Soviet republics, while the six successor states to Yugoslavia devoted between 12.3% and 16.5% of public spending to health. Overall, the pattern was not greatly different in 1997 or 2001, but some countries did make important shifts in priorities over this period. Notable increases in allocations to health were made in Armenia, Lithuania, Slovakia and Croatia.[38] Others have experienced declines, such as Tajikistan and Estonia. Reasons for these shifts vary. For example, the increase in Armenia after 2002 was directly linked to the implementation of a Medium-Term Expenditure Framework (see Chapter 10), while the decline in Estonia relates to the country's near sole reliance on payroll taxation at a time when the growth rate of wages was less than that of GDP and overall public spending (see Chapter 4). In some cases, declines from initially higher levels were reversed more recently, in a way not reflected in the chart. In Kyrgyzstan, for example, allocations reached a low point in 2004 and have increased steadily since then (WHO 2009a) because of an explicit commitment the government made for five years in the context of a Sector-Wide Approach (SWAp) (see Chapter 10). While health sector policy-makers do not have much scope to alter the fiscal context of their country, the priority allocated to the health sector in the budget process is a genuine policy variable that can be changed, provided there is sufficient political will.

38 Because of the particular years chosen to portray trends in Fig. 3.6, some apparent patterns can be misleading. In Bulgaria, for example, the percentage allocated to health peaked at 12.2% and has declined steadily since that time. The 2006 figure was also about the same as that in 2002, although both of those were higher than the 2001 level shown in the Fig. 3.6. In Lithuania, 1997 was an unusually low year in terms of allocations to health, although there was a strong and steady rise to nearly 15% in 2003, followed by a decline to approximately 13% in 2006 (WHO 2009a).

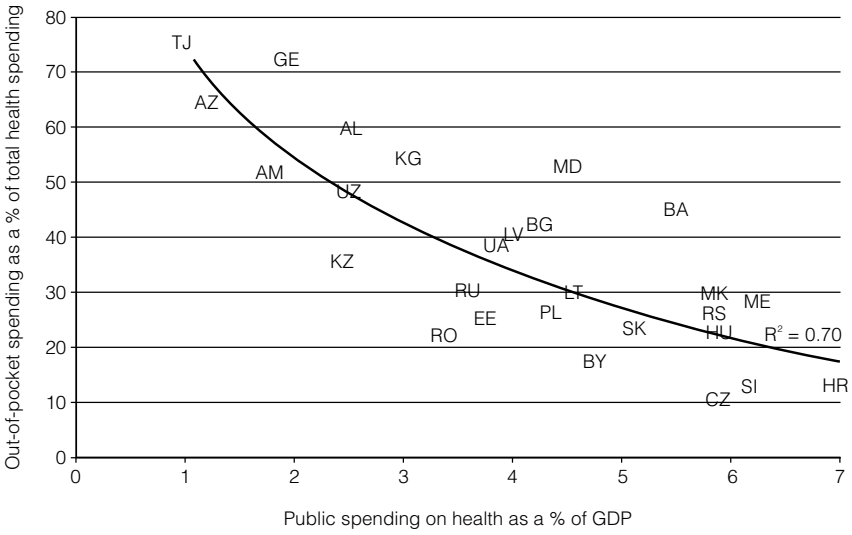


Fig. 3.7 *Relationship between government spending on health as a percentage of gross domestic product (GDP) and the dependence of countries on out-of-pocket payments, 2006*

Source: WHO 2009b.

Notes: AL: Albania; AM: Armenia; AZ: Azerbaijan; BA: Bosnia and Herzegovina; BG: Bulgaria; BY: Belarus; CZ: Czech Republic; EE: Estonia; GE: Georgia; HR: Croatia; HU: Hungary; KG: Kyrgyzstan; KZ: Kazakhstan; LT: Lithuania; LV: Latvia; MD: the Republic of Moldova; ME: Montenegro; MK: TFYR Macedonia; PL: Poland; RO: Romania; RS: Serbia; RU: Russian Federation; SI: Slovenia; SK: Slovakia; TJ: Tajikistan; UA: Ukraine; UZ: Uzbekistan.

F. Interpreting the data

Table 3.1 shows the 27 CE/EECCA countries analysed in this chapter ranked in terms of their per capita income and then divided into three equal-sized groups (each with nine members). This paints a broad picture of how countries have diverged in terms of their economic development and their fiscal context, as well as how the implications of these for health spending patterns have been reinforced by the priority level that governments in the three income groups have tended to accord to health in terms of their allocation of public revenues. It is evident that the nature of the policy challenges – along with what is attainable – is quite different between countries in the "top third" and the "bottom third".

Disaggregating the data further, we illustrate the relation between public spending on health and OOPS in two ways. The first, shown in Fig. 3.7, relates the proportion of OOPS (as a share of total health spending) to the government health spending as a percentage of GDP – the product of the two factors reviewed above, in sections D and E. Because public spending on health is in part determined by policy priorities (rather than the more "contextual" determinants of both GDP and fiscal capacity), this depiction has greater relevance to *actionable* policy decision-making.

Table 3.2 *Actual and simulated heath spending patterns in Estonia, 1996, 2003*

	Total public spending as a % of GDP	Health as a % of total public spending	Public spending on health as a % of GDP	Out-of-pocket payments as a % of total health spending
1996	39.6	14.7	5.8	11.5
2003	34.9	11.1	3.9	20.3
2003 with 1996 priorities	34.9	14.7	5.1	

Source: Authors' own calculations, based on data from WHO 2009a.

Note: GDP, Gross domestic product.

Differences in priorities, given the overall fiscal constraint, can result in a wide range of government health spending levels as a share of GDP, and in turn this can have significant consequences in terms of health financing policy objectives. In Estonia, for example, public spending on health declined from 5.9% of GDP in 1996 to 3.9% in 2003. The decomposition of this decline is shown in Table 3.2. While there was a fiscal contraction during this period, there was also a large decline in the proportion of health spending as a share of total public spending. As shown in the last row of the table, had the 1996 share of health in public spending been maintained at 14%, government health spending would have been 5.1% of GDP in 2003 – more than 1% of GDP higher than was actually experienced. Beyond this, it is notable that OOPS as a share of total health spending rose from 11.5% to 20.3% during this period (WHO 2009a). This country-specific example suggests that the ability of the Estonian health system to *sustain* a lower burden of OOPS was reduced mostly by "choice" and only partly by overall fiscal constraints.

Relating the extent to which health systems depend on OOPS to government health spending *as a percentage of GDP* can be misleading, because this measure does not take account of differences in the relative price of imported inputs in different countries. The prices of some health system inputs, particularly salaries, are likely to vary in relation to a country's income. Others, however, consist of internationally traded goods such as medicines, and the prices for these tend not to vary in relation to national income. As a result, in lower income countries imported inputs tend to have a higher price relative to domestic inputs, compared with the same ratio in a richer country. For this reason, it is also useful to depict the relationship between government health spending in per capita PPP terms and the share of spending that consists of OOPS. This is shown in Fig. 3.8. While the overall inverse relation between public spending and OOPS remains, the position of countries relative to the trend is quite different. The Republic of Moldova, for example, had a relatively high share of spending consisting of OOPS, relative to

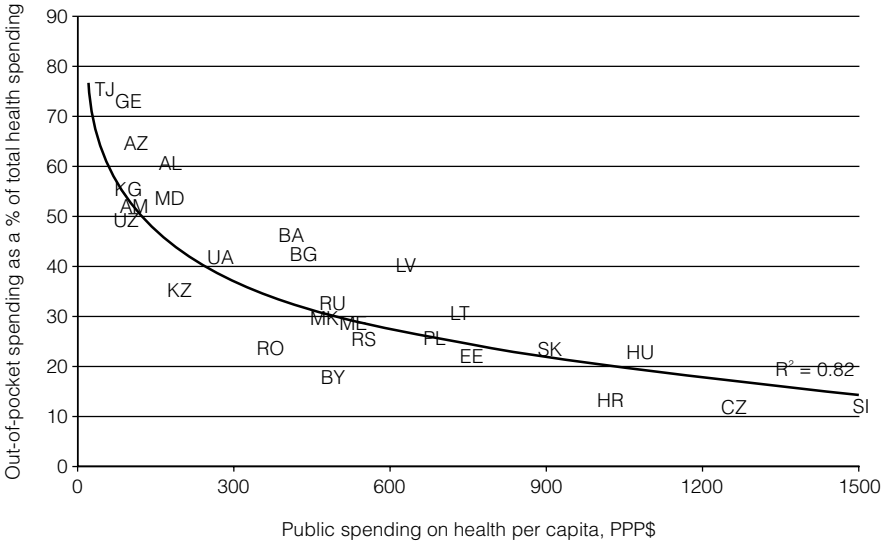


Fig. 3.8 *Relationship between government health spending per capita and the dependence of countries on out-of-pocket payments, 2006*

Source: WHO 2009b

Notes: PPP: Purchasing power parity. AL: Albania; AM: Armenia; AZ: Azerbaijan; BA: Bosnia and Herzegovina; BG: Bulgaria; BY: Belarus; CZ: Czech Republic; EE: Estonia; GE: Georgia; HR: Croatia; HU: Hungary; KG: Kyrgyzstan; KZ: Kazakhstan; LT: Lithuania; LV: Latvia; MD: the Republic of Moldova; ME: Montenegro; MK: TFYR Macedonia; PL: Poland; RO: Romania; RS: Serbia; RU: Russian Federation; SI: Slovenia; SK: Slovakia; TJ: Tajikistan; UA: Ukraine; UZ: Uzbekistan.

its level of public spending on health as a percentage of GDP (Fig. 3.7). Its position as a "negative outlier" is misleading, however, because the country's low level of GDP meant that, in absolute terms, government health spending in the country was still rather low. Consequently, the government's ability to purchase relatively expensive imported medicines was limited, leaving a large proportion that still had to be paid by patients if the inputs were to be provided at all. Portraying public expenditure levels in terms of PPP dollars provides a "fairer" treatment of the situation. This is shown in Fig. 3.8, with the Republic of Moldova's OOPS percentage reflecting the overall trend in the region in relation to its level (in PPP dollar terms) of public spending on health.

Within this broad picture are important differences and various "stories" regarding the interaction of the key variables affecting health expenditure patterns. The following comparison highlights the importance of incorporating data on changes in underlying fiscal and prioritization variables as part of the background context for interpreting expenditure patterns.

Both the Armenian and the Georgian Governments spent under 2% of GDP on health for most of the period, as shown in Table 3.3. In Armenia, this figure reached a low of 1.1% in 2000 before climbing to 2.1% in 2007, with a pattern of steady increase since 2002. In Georgia, spending reached a low

Table 3.3 *Government health spending, fiscal context and prioritization in Armenia and Georgia, 1997–2007*

Year	Armenia			Georgia		
	Government health spending as a % of GDP	Total government spending as a % of GDP	Health as a % of total government spending	Government health spending as a % of GDP	Total government spending as a % of GDP	Health as a % of total government spending
1997	1.4	24.8	5.7	1.3	21.8	6.0
1998	1.6	24.5	6.7	1.2	21.8	5.5
1999	1.6	27.3	5.9	1.0	22.1	4.6
2000	1.1	24.7	4.6	1.2	19.1	6.4
2001	1.6	23.6	6.7	1.4	18.5	7.6
2002	1.4	22.0	6.2	1.4	18.9	7.5
2003	1.5	22.4	6.8	1.3	18.8	6.7
2004	1.7	20.6	8.3	1.3	24.6	5.3
2005	1.8	21.8	8.2	1.7	28.2	5.9
2006	1.9	19.8	9.7	1.8	32.4	5.6
2007	2.1	18.0	11.6	1.5	35.8	4.2

Source: WHO 2009a.

Note: GDP: Gross domestic product.

of 1.0% of GDP in 1999 but climbed to 1.5% by 2007. Unlike Armenia, the pattern of change in Georgia was erratic. Underneath similarly low levels of health spending by both governments are very different patterns of change with regard to fiscal context and prioritization. Armenia is perhaps the most fiscally challenged country in the region, and since 1999 there has been a steady contraction of overall public spending from 27% to 18% in 2007. Despite this, the country increased its percentage of health spending as a share of GDP by means of a substantial increase in the priority accorded to health in public resource allocation. Indeed, by 2006 the Armenian Government devoted more than twice its budget to health compared with the year 2000. In Georgia, conversely, the government experienced massive fiscal expansion since 2003 – a major accomplishment in the light of the near collapse of the public sector that had occurred by 1995. As total public spending increased, however, the priority given to the health sector was reduced from an already low 6.7% in 2003 to 5.6% in 2006 and an estimated 4.2% in 2007 (WHO 2009a). Hence, it may be concluded that the Georgian Government has considerable capacity to spend more on health but chooses not to, whereas the Armenian Government has much less scope for expanding health spending.

There is a "story behind the numbers" for each of the countries concerned. These examples highlight the importance of disaggregating the components

of public spending on health, as a basis for understanding the contextual and prioritization factors that drive it; these factors, in turn, have critical implications on the ability of governments to ensure financial access to health care and financial protection for their populations.

G. Summary and conclusions

This chapter has highlighted a number of important issues with regard to health expenditure patterns that create constraining factors (or conversely opportunities) for the extent to which health financing policy reforms can achieve progress in terms of the objectives of financial protection and equity of access to care.

- Most countries need to work on improving health expenditure data, particularly as far as private health expenditures are concerned. Systematic surveys, repeated every three years – with a well-sequenced and disaggregated set of health expenditure questions linked to the routine national household budget survey – would provide policy-makers with a range of useful health financing indicators, regarding not only the level of private spending and its dynamics but also its distribution across socioeconomic groups.
- This chapter has demonstrated that the variation across the region in terms of all health spending indicators has become so great that the term "transitional" does not carry much meaning. The level of per capita GDP, fiscal context, the priorities and the resulting overall government and private spending create vastly different opportunities and constraints for the health systems of this region. For any country, it is essential to explore the variables identified in this chapter to understand its particular context and how this conditions what is feasible for the country to attain.
- As a result of such variation in both the fiscal context and government priorities, the level of OOPS also varies enormously, with huge implications for one of the main policy objectives that most countries aim to achieve: financial protection. Financial protection varies from being "very weak" in countries in which patients have to pay for virtually all their care out of pocket (such as Tajikistan and Georgia) to being "good" in those in which patients mostly pay for outpatient medicines but service utilization itself is relatively low cost (such as Slovenia, Czech Republic and Croatia).
- During the Soviet era, the health sector was accorded a low priority in the budget allocation process, as it was considered part of the "non-productive sphere" of the economy. Analysis of current resource allocation patterns shows that this practice has continued, with most of the former USSR

countries continuing to give relatively low priority to the health sector. Some, however, have broken out of this pattern. Health policy-makers need to pay more attention to this indicator, rather than simply looking at spending as a percentage of GDP. Prioritization of available public resources is more feasible to influence than is government health spending as a share of GDP, as this latter also depends on a country's overall fiscal context.

- Comparing the effectiveness of the health financing reforms implemented by different countries requires that these considerations of context be taken into account. It is not the case that one country has done a "better" job of promoting financial protection simply because it has lower dependence on OOPS than another. Instead, such analysis needs to consider what a country has attained *relative to what it could realistically hope to attain* given its economic and fiscal context. It is from this perspective that we assess the health financing reform experience in the rest of this book. The data presented in this chapter suggest that – in simple terms – the attainment of health financing policy objectives depends in part on context, in part on priorities, and in part on policy implementation. It is this last factor that is the focus of the rest of the book.

References

Cheasty A (1996). The revenue decline in the countries of the former Soviet Union. *Finance and Development*, 33:32–35.

Gottret P, Schieber G (2006). *Health financing revisited: a practitioner's guide*. Washington, DC, World Bank.

Kutzin J (2008). *Health financing policy: a guide for decision-makers*. Health financing policy paper. Copenhagen, WHO Regional Office for Europe.

Lu C et al. (2009). Limitations of methods for measuring out-of-pocket and catastrophic private health expenditures. *Bulletin of the World Health Organization*, 87:238–244.

OECD (2000). *A system of health accounts*. Paris, Organisation for Economic Co-operation and Development.

OECD (2009). *OECD health data 2009*. Paris, Organisation for Economic Co-operation and Development.

Schieber G, Maeda A (1997). A curmudgeon's guide to financing health care in developing countries. In: Schieber G, ed. *Innovations in health care financing: proceedings of a World Bank Conference, 10–11 March 1997*. Washington, DC, World Bank (Discussion paper No. 365).

WHO (2000). *The world health report 2000. Health systems: improving performance*. Geneva, World Health Organization.

WHO (2009a) [web site]. *National health accounts series. National health accounts country information*. Geneva, World Health Organization (http://www.who.int/nha/country/en/, accessed 1 December 2009).

WHO (2009b) [web site]. *Explanatory notes. National health accounts country information*. Geneva, World Health Organization (http://www.who.int/nha/country/Explanatory%20-%20annex%20notes.pdf, accessed 1 December 2009).

WHO, World Bank, USAID (2003). *Guide to producing national health accounts with special applications for low-income and middle-income countries*. Geneva, World Health Organization (http://whqlibdoc.who.int/publications/2003/9241546077.pdf, accessed 30 November 2009).

Part two:

Reforms in health financing functions

Chapter 4

Sources of funds and revenue collection: reforms and challenges

Igor Sheiman, Jack Langenbrunner, Jenni Kehler, Cheryl Cashin, Joseph Kutzin[39]

A. Introduction

This chapter attempts to describe, analyse and derive lessons from reforms to change the sources of funds or revenue collection arrangements for the health systems in the CE/EECCA region since 1990. The focus is on *reforms*, as a general description of the mechanisms used by countries to collect revenue for the health sector is provided in Chapter 3.

Conceptual differences between "collection" and "sources of funds" are often blurred. The reforms in "collection" addressed in this chapter in fact include attempts that have been made to change:

- initial funding sources[40]
- contribution mechanisms, and
- collection agencies (as summarized in Fig. 4.1).

Reforms in revenue collection in CE/EECCA countries were largely driven by the fiscal collapse of the early transition period, combined with a political desire in most CE countries to return to the methods of financing that existed prior to the Second World War, as well as the wish of some former Soviet countries to change the "budgetary system" inherited from the USSR. Within the region as a whole, the scope of reforms in the 1990s actually implemented in revenue

39 The authors are grateful to Tamas Evetovits for providing helpful comments on earlier drafts.

40 The "initial" sources convey the (obvious, but often neglected) reality that government is not really a source; it obtains revenue from somewhere. Apart from foreign sources, the real sources of funds are a country's people and other legal entities (that is, businesses).

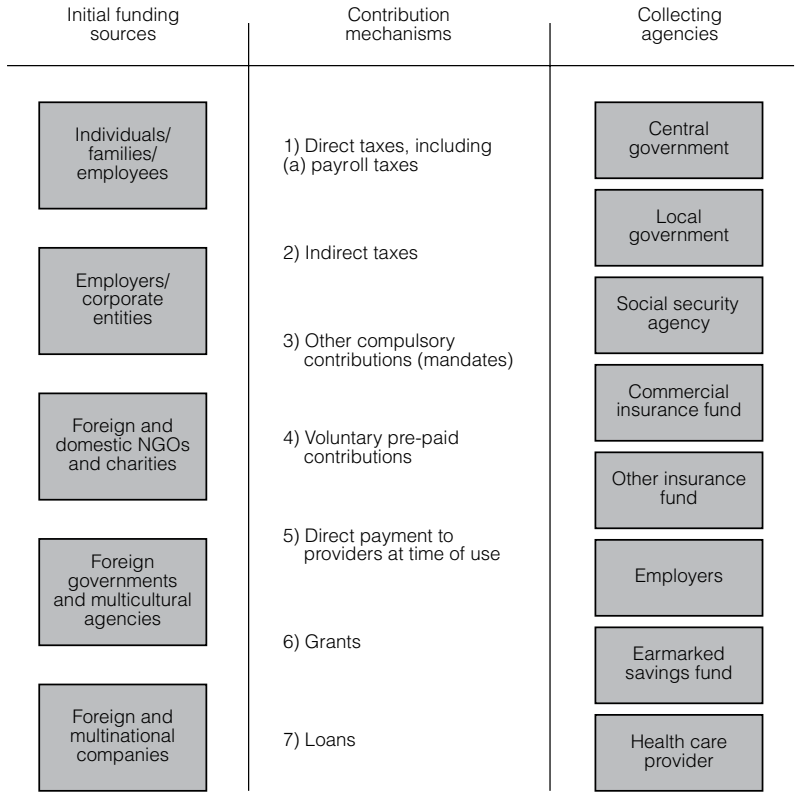


Fig. 4.1 *Unpacking "Collection"*

Source: Adapted from Kutzin 2001.

Note: NGO: Nongovernmental organization.

collection was rather narrow – mainly the introduction of payroll taxation for a new system of compulsory health insurance. The countries varied, however, in terms of the agency responsible for collecting the payroll tax, the contribution rate, how revenues were collected for the non-working population, and whether and how the level and/or flow of general budget allocations (henceforth "general revenues") for health were modified in conjunction with the new funding source.

The effectiveness of revenue collection reforms is influenced by a country's overall fiscal context, that is, its capacity to mobilize tax and other public revenues; this in turn, is affected by the structure of the economy and the labour force. Health policy can make a difference as well: particularly the capacity of health authorities to lobby and influence government to maintain or increase the share of public spending for the health sector, and to use revenue collection mechanisms to achieve other health financing policy objectives. The objectives that are potentially most directly affected by collection reforms are equity in

finance (via shifts in the distribution of sources and contribution mechanisms) and administrative efficiency (via changes in collection mechanisms). Of course, a more concrete objective of such reforms has been to increase or stabilize the level of public funding for the health sector. While increasing revenue is not a policy objective per se, relieving the budget constraint facing the sector in turn increases the scope for improving the attainment of all the health financing policy objectives.[41] In addition, changes in the sources of funds have been linked to reforms in pooling and purchasing, and may provide an important *implementation step* for health financing reforms even if they do not have an extensive impact on net revenues. Summarizing these issues, the revenue collection reforms in the region will be assessed according to the criteria set out here.[42]

- Did the overall level of public revenue for the health sector increase?
- What were the implications for equity in finance (for example, did policies lead to a more progressive distribution of the burden of funding the system)?
- Was universal coverage maintained if entitlement to benefits became linked to contribution)?
- What were the implications of changes in sources and collection arrangements for administrative efficiency?
- Were new revenue collection mechanisms used to facilitate other health financing reforms?

B. Overview of reforms to diversify revenue collection in CE/EECCA countries

The countries of the region experienced a dramatic decline in public revenues in the early years of transition. The decline was particularly sharp in the former Soviet countries, where general government revenues slipped to an (unweighted) average of 25% of GDP by 1995, from an estimated 41% in 1989 in the USSR. Patterns of change varied widely, however, with the most severe declines concentrated in the Caucasus and central Asia (for example, revenues declined from over 30% of GDP in 1991 to less than 10% in 1995 in Georgia and Turkmenistan, whereas there were minimal changes in the shares of GDP during this period in Belarus and Ukraine – although of course these were shares of a rapidly falling GDP). Among the main causes of collapsing public revenues were the emergence of a new but unregulated private sector, which made revenue collection more difficult; shrinking traditional tax bases, such as state industrial production, retail turnover, and wages; market-oriented

41 This means a reduction in the severity of the "sustainability trade-offs" described in Chapter 1.

42 From a wider public policy perspective, the impact of changes in funding sources on labour market outcomes (real wages, employment, informality, and so on) must also be considered by national decision-makers. Such analysis is beyond the scope of this chapter, but there is a preliminary econometric analysis for interested readers (see Wagstaff and Moreno-Serra 2007).

tax reforms that reduced tax rates; growth of the informal economy; pressure for tax reductions and exemptions; and civil unrest (Cheasty 1996).

With the economic downturn and dislocation in the late 1980s and early 1990s, all countries in the region were forced to cut real public spending for health during the first years of the transition period and they did so roughly in proportion with the GDP decline (Belli 2000). The majority of these countries responded to declining public revenues for health by attempting to establish a more diverse and stable revenue base for the health sector. This expanded revenue base typically included:

- dedicated, or "earmarked", taxes for health – usually an employer-based payroll tax;
- patient co-payments, especially for outpatient pharmaceuticals;
- other forms of formal paid services provided in public facilities; and
- in a few countries, stimulation of a private insurance sector.

Fig. 4.2 summarizes the mix of the main revenue sources in the CE/EECCA countries in 2004.[43] After a decade and a half of transition, countries can be categorized into three general categories.

- Predominantly dedicated taxes (mainly the new EU and ex-Yugoslav countries), either through payroll taxation or an earmarked share of income tax.
- Predominantly general revenues (many former Soviet countries).
- Severe contraction of public financing, causing a shift to predominant reliance on OOPS (countries of the Caucasus, some central Asian countries and Albania). This third category includes a small amount (less than 50% of total health spending) of public sector financing from general revenues, and mixed systems including small amounts from dedicated taxes as well as general revenues.

This categorization reflects two key contextual factors underlying reform in the region: (1) the historical legacy of organizational arrangements from the pre-transition and (for ex-CMEA countries) pre-communist periods; and (2) the early post-transition fiscal situation. Two countries are notable as exceptions

43 Apart from a broad separation into public and private sources, health expenditure data published by WHO and OECD to date provide no detail on the relative importance of different collection schemes as a financing source. The category "Financing agents measurement: social security funds" in WHO estimates indicates the amount controlled by a social security fund and not the means by which the funds have been collected. The latter follows the concept of accounting by financing agent, defined as "institutions or entities that channel the funds provided by financing sources" (WHO, World Bank and USAID 2003). The OECD publishes estimates on "health expenditure by sources of funds", but despite the name, these data similarly reflect expenditure by funding *agent*, with the aim of identifying the "institutional units that incur the expenditure and hence control and finance the amounts of such expenditure" (OECD 2000). Thus, given that social security funds as financing agents usually rely on a mix of financing sources (dedicated tax versus general revenue), these estimates are of limited value for the analysis of the way the funds are collected. In Fig. 4.2, therefore, we have relied on country-specific reports, as well as more detailed unpublished information available to WHO, in order to construct estimates of the shares of different public sources, attributing general budget transfers to compulsory insurance funds to "general revenues".

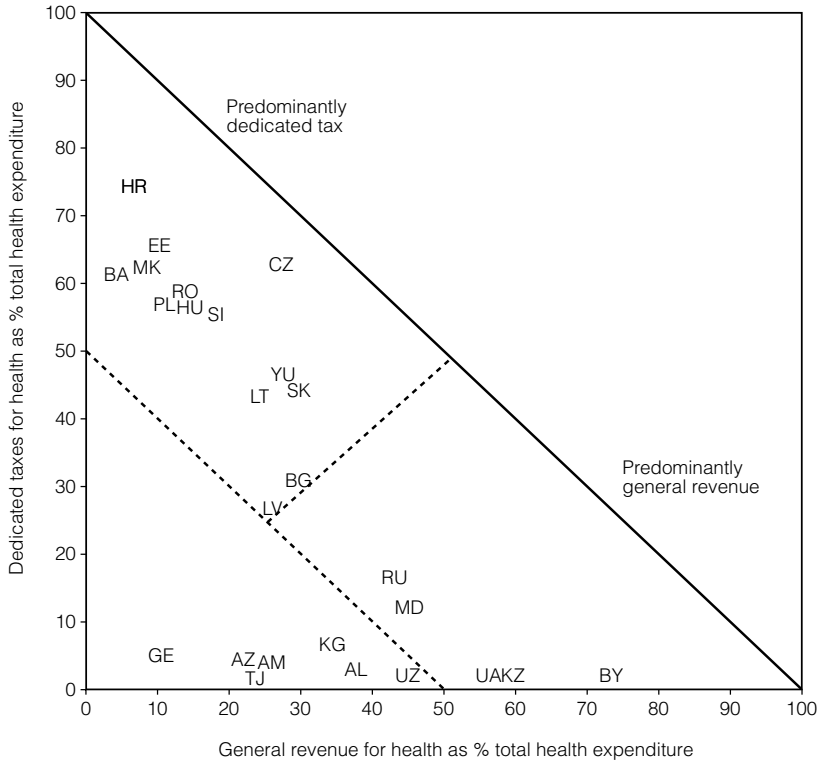


Fig. 4.2 *Sources of health financing by country, 2004*

Sources: Gaál 2004; Hlavačka, Wágner and Riesberg 2004; Health Compulsory Insurance State Agency Latvia 2005; Kuszewski and Gericke 2005; Meimanaliev et al. 2005; World Bank 2005; Gjorgjev et al. 2006; Voncina et al. 2006; Georgieva et al. 2007; Kulzhanov and Rechel 2007; Koppel et al. 2008; Shishkin, Kacevicius and Ciocanu 2008; Tragakes et al. 2008; Vlădescu, Scîntee and Olsavszky 2008; WHO 2008; Albreht et al. 2009; Bryndová et al. 2009.

Notes: AL: Albania; AM: Armenia; AZ: Azerbaijan; BA: Bosnia and Herzegovina; BG: Bulgaria; BY: Belarus; CZ: Czech Republic; EE: Estonia; GE: Georgia; HR: Croatia; HU: Hungary; KG: Kyrgyzstan; KZ: Kazakhstan; LT: Lithuania; LV: Latvia; MD: the Republic of Moldova; MK: TFYR Macedonia; PL: Poland; RO: Romania; RU: Russian Federation; SI: Slovenia; SK: Slovakia; TJ: Tajikistan; UA: Ukraine; UZ: Uzbekistan; YU: Serbia and Montenegro.

For Latvia, 2003 data were used to illustrate the collection mechanism in place until January 2004; "Dedicated tax" refers to both payroll taxes earmarked for health (mandated contributions by employers or employees, the self-employed, pensioners and the unemployed, and other vulnerable groups to social security, explicitly labelled as relating to health) and income tax revenues earmarked for health; "General revenue allocation" includes funding allocated through the general budget for programmes (such as public health programmes), as well as transfers from government to social security institutions or national health insurance schemes, which are labelled as relating to health, for example on behalf of vulnerable groups.

to this pattern. Latvia and Bulgaria show mixed funding systems that rely almost equally on dedicated taxes, general revenues and OOPS. This mixed arrangement for Latvia changed in 2004 when it shifted entirely away from a dedicated percentage of income tax (a fixed percentage of the income tax) to a non-dedicated allocation from general revenues (Tragakes et al. 2008). Conversely, in Bulgaria, the share of payroll taxes has been rising since their introduction in 1999, a trend which continued at least through 2005 (Georgieva et al. 2007).

i. Reforms in public sources: dedicated and general public revenues

Twenty-one countries of the region have introduced[44] dedicated taxes for the health sector. Of these, 20 introduced or modified payroll taxes, and in 12 of those countries the payroll tax is now the predominant revenue collection mechanism. In the remaining seven countries that introduced a payroll tax, this remains part of a mixed funding system in five, with the payroll tax providing a complementary source of revenue to general tax revenues and OOPS (see Table 4.1). In Latvia and Lithuania, the tax was set as a proportion of personal income tax. While earmarking was abolished in Latvia after 2003, Lithuania still relies on the dedicated share of income tax in addition to payroll tax. In Kazakhstan and Georgia, earmarked payroll taxes were levied and cancelled, and currently their health sectors are funded through transfers from general revenues, and a mix of general and unearmarked payroll tax revenues, respectively. Other types of earmarked tax – dedicating revenues from consumption taxes on specific products for health, for example – were established in Latvia (30% of tobacco tax revenue) and Romania (revenues from alcohol and tobacco taxes) (Legislative Council Library 2008).

The countries vary widely in their contribution rates for payroll tax. The contribution rate has tended to be higher in the CE countries that are now EU Member States, in the current CE countries and in the former Yugoslav states, ranging from 6% in Bulgaria to 17% in Bosnia and Herzegovina. In most of these countries, the payroll tax is the predominant collection mechanism for health revenues. In Albania and those former Soviet countries that introduced payroll taxes (but where general tax revenues remain the predominant public revenue source for health) the tax rate was typically set at the level of 2–4% of payroll (increased to 5% in the Republic of Moldova in 2007). In almost all countries, the contribution rate was not synchronized with a detailed actuarial analysis of expected costs and revenues for the insured population (Ensor and Thompson 1998). Instead, the rate-setting process typically reflected a combination of optimistic "eye-balling" of desired revenues and guesses about the political acceptability of adding to the already heavy tax burden on employers and employ

As summarized in Table 4.2, there is considerable variation in the region in terms of collection modalities, ranging from the general tax authorities (for example, in Estonia, Croatia and the Russian Federation); a national social fund that also collects other "social contributions", such as for pensions and unemployment insurance (in Bulgaria and Kyrgyzstan, for example); the National Health Insurance Fund (NHIF) or its decentralized units (as is the

44 For the former Yugoslav countries, this was not an "introduction" but rather an alteration of the dedicated taxes that were already in place prior to 1990 (see Chapter 2).

Table 4.1 *Adoption of new earmarked taxes for health: payroll tax and characteristics of health insurance contribution mechanisms*

Country	Year payroll tax was introduced	Payroll tax rate and other sources of revenue: contribution rates		
		Salaried (Employer:employee)	Self-employed	Non-active population
EU				
Bulgaria (Georgieva et al. 2007)	1999	6% payroll (5:1 to begin with phase-in to 3:3 by 2009)	6% of declared income	Matched by central budget and unemployment fund
Czech Republic (Bryndová et al. 2009)	1993	13.5% payroll (9:4.5)	13.5% of 50% of net pre-tax income	Central budget transfer, 13.5% of the "average wage" as determined annually by statutory order
Estonia (Koppel et al. 2008)	1992	13% payroll (13:0)	13% of declared income	Mostly unfunded mandate except for a small central budget transfer
Hungary (Gaál 2004)	1990	15% payroll (11:4 in 2004)	15% of declared income, but at least the minimum wage, plus hypothecated tax of US$ 170 per person Third group of people, such as farmers, pay only 11% of current minimum wage	Central budget Per capita amount of transfer is unspecified
Latvia (Tragakes et al. 2008)	1998	28.4% of personal income tax earmarking abolished after 2003	28.4% of personal income tax	General budget transfer

Table 4.1 *contd*

Country	Year payroll tax was introduced	Payroll tax rate and other sources of revenue: contribution rates		
		Salaried (Employer:employee)	Self-employed	Non-active population
EU				
Lithuania (Cerniauskas, Murauskiene and Tragakes 2000)	1997	3% payroll (3:0) plus 30% of personal income tax	30% of personal income tax For farmers, some percentage of declared income	Contributions for pensioners and unemployed are made by the Social Fund (1.5% of the average wage); farmers are subsidized out of land tax (2% in 1999) Budget contribution for state-insured was €77 in 2005
Poland (Kuszewski and Gericke 2005)	1999	9% payroll Rate has been increasing over time, moving from 7.5% in 1998 to 9% in 2007	9% of declared income	7.5% of gross benefits mixed with general revenues; farmers covered by special social insurance fund (FSIF)
Romania (Vlădescu, Scîntee and Olsavszky 2008)	1999	14% payroll (7:7)	7% of declared income for self-employed people and farmers	Pensioners and the unemployed pay a 7% contribution based on gross benefits
Slovakia (Hlavačka, Wágner and Riesberg 2004)	1994	14% payroll (10:4)	13.7% of declared income	Central budget Per capita amount of transfer specified as the contribution rate applied to 73% of the statutory minimum wage
Slovenia (Albreht et al. 2009)	1993	13.25% payroll	13.25% of declared income	Central budget

Non-EU CE countries				
Albania (Nuri and Tragakes 2002)	1995	3.4% payroll (1.7:1.7)	3–7% of statutory minimum wage, depending upon urbanicity	Central budget
Bosnia and Herzegovina (Cain et al. 2002) (FBiH, Federation of Bosnia and Herzegovina; RS, Republic Srpska)	FBiH: 1997 1999 in RS	FBiH: 17% payroll (4:13) RS: 15% (0:15)	FBiH: 17% of gross wage; farmers: KM 31/month RS 15% of net wage farmers: 15% of 50% of average net wage	Pension funds pay per pensioner: FBiH: KM 2.76/month; RS: 3.75% of net pension (min. KM 6/month) Unemployment funds pay per eligible unemployed: FBiH: KM 6/month, RS: 0.5% of net wage (min. KM 3/month) Government contributions on behalf of veterans, elderly and vulnerable: FBiH: KM 6/month, RS: 0.5% of net wage (min. KM 3/month)
Croatia (Voncina et al. 2006)	1993	15% payroll (15:0) plus 0.5% for occupational safety and worker's compensation (2003)	Self-employed: 15% of predetermined sums depending on occupation Farmers: 15% of predetermined sums depending on taxpayer status income if in VAT system or 7.5% income based on land ownership	Non-contributing insured (unemployed, retired, etc.) covered by state budget through a lump sum decided upon in the budget-making process
TFYR Macedonia (Gjorgjev et al. 2006)	1991	9.2% payroll plus 0.5% for occupational safety	9.2% of declared income	Central budget (but accounts for only 10% of revenue)

Table 4.1 *contd*

Country	Year payroll tax was introduced	Payroll tax rate and other sources of revenue: contribution rates		
		Salaried (Employer:Employee)	Self-employed	Non-active population
Non-EU CE countries *contd*				
Montenegro (World Bank 2005)	1993	15% payroll (7.5:7.5)	15% of 50% of the average wage	Pensioners: 19% of pension realized paid by the Pension Fund Unemployed: 7.5% of 50% of the minimum wage paid by the Republican Budget Recipients of social benefits: 7.5% of effected compensations paid by the Republican Budget
Serbia (World Bank 2005)	1992	12.3% payroll (6.15:6.15)	12.3% of declared income Farmers: 12.3% of 50% of the average national salary	Unemployed: 12.3% of minimum wage is paid by the central budget Pensioners: 12.3% of net pensions plus central budget subsidy
Caucasus and central Asia				
Georgia (Gamkrelidze et al. 2002)	1995	4% payroll (3:1) Dedicated payroll tax abolished in 2005	4% income tax	Central budget, but amount unspecified
Kazakhstan (Kulzhanov and Rechel 2007)	1996	3% payroll (3:0) Payroll tax abolished after 1998	3% of declared income	Per capita local budget contribution for non-working population

Caucasus and central Asia				
Kyrgyzstan (Meimanaliev et al. 2005)	1997	2% payroll (2:0)	Voluntary; 2% of declared income	Until 2004, contributions for pensioners and unemployed people were made by the Social Fund (1.5% of the average wage); since then the responsibility has been shifted to the Republican Budget Contributions from the Republican Budget to provide coverage for children began in 2000 Farmers are paid for out of land tax (6%)
Russian Federation and the westernmost former Soviet Republics				
The Republic of Moldova (Shishkin Kacevicius and Ciocanu 2008)	2003 (pilot) 2004 nationwide	5% payroll (2.5:2.5)	Self-employed people can voluntarily purchase health insurance coverage at the rate set annually at the estimated average per capita cost of the benefits package; approximately 7.5% of self-employed people do so	Central budget has fixed contributions for children, unemployed people, pensioners and students
Russian Federation (Tragakes and Lessof 2003)	1993	2.6% payroll (2.6:0) reduced from 3.6% in 2001	2.6% of declared income	Mixed with general revenues from the budget Per capita amount of transfer is unspecified

Sources: Authors' own compilation, based on the sources listed under each country in the table.

Notes: EU: European Union; CE: Central Europe.

Table 4.2 *Collection arrangements for dedicated tax payments*

Country	Fund collecting agents
Bosnia and Herzegovina (World Bank 2006)	Federation of Bosnia and Herzegovina: 10 cantonal Health Insurance Funds Republic Srpska: Central Health Insurance Fund Brčko District: Central Health Insurance Fund
Bulgaria (Georgieva et al. 2007)	National Social Security Institute
Croatia (Voncina et al. 2006)	State Treasury
Czech Republic (Bryndová et al. 2009)	General Health Insurance Fund + seven sector insurance agencies
Estonia (Koppel et al. 2008)	Taxation Agency
Hungary (Gaál 2004)	Tax and Financial Control Administration (Tax office)
Kyrgyzstan (Meimanaliev et al. 2005)	Social Fund
Latvia (Tragakes et al. 2008)	State Revenue Service
Lithuania (Murauskiene 2007)	State Tax Inspection and State Social Insurance Fund (SODRA)
The Republic of Moldova (Shishkin, Kacevicius and Ciocanu 2008)	The health insurance payroll tax is transferred directly to the account of the National Health Insurance Company, which is operated though the National Bank and State Treasury. The process is overseen by the State Tax Office
TFYR Montenegro (World Bank 2005)	Health Insurance Fund
Poland (Kuszewski and Gericke 2005)	National Health Fund
Romania (Vlădescu, Scîntee and Olsavszky 2008)	42 District Health Insurance Funds
Russian Federation (Shishkin 2006)	National Tax Authority collects Uniform Social Tax
Serbia (World Bank 2005)	29 branch offices (including Kosovo)
Slovakia (Hlavačka, Wágner and Riesberg 2004)	Five Insurance Funds – citizens are free to choose among these
Slovenia (Albreht et al. 2009)	Agency of Public Accounting and Tax Administration

case in Romania and Serbia); or one of several competing insurers (such as in the Czech Republic and Slovakia).

Because compulsory health insurance typically links entitlement to contributions explicitly, the ability of compulsory health insurance systems to attain and sustain universal coverage relies on the ability not only to collect the payroll tax effectively, but also to obtain contributions for the population entitled to coverage that is not formally employed. This is a particular challenge for countries – including many CE/EECCA countries – with a relatively large share of the workforce that are not formally employed and are hence difficult to levy tax against.

As shown in Table 4.1, the countries of the region have adopted different approaches to collecting revenues to fund compulsory health insurance coverage for the non-contributing population, which is typically defined as officially unemployed individuals, pensioners, children and students, agricultural workers and informal sector workers. In some countries, the eligible non-working population is covered through transfers from central or regional budgets, or from dedicated funds, such as employment funds (Slovakia) or pension and unemployment funds (Kyrgyzstan prior to 2004). In most countries, transfers from the central budget are used, although mechanisms vary as regards the basis for such transfers. Often, it is a matter of budgetary negotiations, with governments paying what they deem they can afford. In the Russian Federation, for example, these contributions were first made by regional and local governments, but in 2006 the responsibility was shifted entirely to regional governments. Similarly, in Serbia – despite contributions on behalf of vulnerable groups being specified based on the minimum wage – general revenue allocations have, in fact, been based on historic levels and are ad hoc in practice. In some cases, however, there is a specific liability on the budget that is enforced. In the Czech Republic, for example, there is a monthly central budget transfer for the economically inactive population set at 13.5% of the average wage, as defined by the Ministry of Finance (Rokosová et al. 2005). Another example is the Republic of Moldova, where the health insurance law specified that the per capita contributions from the budget on behalf of state-insured individuals must be equivalent to the estimated average per capita cost of the benefits package, leading to annual increases in these transfers (Shishkin, Kacevicius and Ciocanu 2008). Estonia is notable for its near-complete reliance on payroll taxation, with very minor transfers to the Estonian Health Insurance Fund (EHIF) for non-contributing individuals entitled to coverage, and in Croatia subsidies for the non-working population were made implicitly by retroactively covering shortfalls, rather than these being budgeted and paid prospectively (Voncina, Dzakula and Mastilica 2007).

Thus, and as reflected in Table 4.1 and Fig. 4.2, general revenues continue to play an important role in health system funding, even in many countries that rely on payroll tax as the predominant revenue collection mechanism. This may take the form – as described above – of explicit subsidies for the non-contributing population. In the Republic of Moldova, over 65% of the funds managed by the National Health Insurance Company (NHIC) took the form of transfers from the central budget to cover the premium of defined state-insured non-contributing individuals (Shishkin, Kacevicius and Ciocanu 2008). Alternatively, in Kyrgyzstan, the state budget transfers most of the funds for health from general revenues to the Mandatory Health Insurance Fund (MHIF) to provide a basic package on behalf of the entire population (that is, not for compulsory health insurance). In addition, payroll taxes exist and central budget transfers to the MHIF take place, in order to achieve a complementary contributory entitlement for the "insured population". Hence, public funding for both the Moldovan and Kyrgyz systems comes predominantly from general revenues, although each has something called a "health insurance fund". However, the mechanisms of transfer and the extent of the relationship between contribution and entitlement differ considerably.[45]

Despite the movement toward compulsory health insurance and dedicated payroll taxes in most countries, in some – such as Armenia, Belarus, Ukraine and Uzbekistan – no payroll tax for health insurance was ever introduced, and in Kazakhstan a health insurance payroll tax existed for only three years before being cancelled in 1998. In Armenia and Latvia, a separate pooling and purchasing agency was funded entirely from a transfer of general revenues, although in the latter case revenues were allocated through an earmarked percentage of income tax through 2003.

In all countries, general revenues also are used to directly fund population-based and public health-oriented programmes, such as those for tuberculosis (TB), psychiatric care, human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) and substance abuse. These often also include defined high-priority programmes, for example those for diabetes (Latvia, the former Yugoslav Republic of Macedonia) and organ transplants (Poland). In addition, capital investment funds flow from the central level (for example, Uzbekistan, Kazakhstan and the Russian Federation) and regional level (for example Poland and Estonia), or both central and regional levels (for example, the Czech Republic, Hungary and Slovenia). In most CE countries, local and municipal general revenues are relatively small, although there are exceptions, such as Bulgaria, where over 40% of funding flows from decentralized levels. Most

45 Despite the explicit link between contribution and entitlement in the Republic of Moldova, the fact that payroll tax and general budget revenues are pooled means that the link is less apparent when expenditures are made. In this way, the payroll tax could be viewed as a means to leverage budget revenues into the new NHIC purchasing system.

former Soviet countries have retained the decentralized budgetary structure, and most funding flows from the *oblast* and *rayon*/city levels. In the Russian Federation, for example, over 80% of all public funding flows from the regional level. In a few former Soviet countries, however, budgetary sources have largely been centralized (such as in Armenia, Kyrgyzstan and the Republic of Moldova).

ii. Private sources: VHI and out-of-pocket payments

The extent to which countries' health systems rely on private funding sources is reflected in Fig. 4.2 as the distance from the diagonal line to the origin (that is, the closer to the origin, the greater the reliance on private sources). The graph reflects the substantial variation in the "public–private" funding mix in the region, from a low of just over 21% of public funding in Tajikistan to a high of over 89% in the Czech Republic. The variation largely reflects the extent of economic and fiscal collapse and recovery among the countries, although the effects of specific policies had an impact in some countries. For example, although VHI plays only a minor role in the funding mix for most of the countries, Slovenia is a notable exception. It chose to use a combination of high cost-sharing obligations and complementary VHI in a manner similar to the role of *mutuelles* in France, and this explains the relatively high share (approximately 27%) of health spending that came from non-public sources in 2004 (Fig. 4.2). Reforms involving VHI are addressed in Chapter 11.

Most private spending in the region comprises OOPS at the time of service utilization, in the form of co-payments, "pure" private payments (that is, purchase of privately supplied health services and products such as outpatient medicines) or informal payments for health services. Most countries in the region have introduced co-payments for services considered to be discretionary or unnecessary, or which are sought without referrals from a lower level of care; dental services; medical appliances; outpatient drugs; and some rehabilitation and non-urgent ambulance services. The experience with policies on co-payment and efforts to address informal payments is addressed in Chapters 7 and 12.

C. Description and analysis of selected reform implementation experiences

As indicated above, the most common reform in public funding sources and collection mechanisms was the introduction of dedicated taxes – most commonly a payroll tax – as part of the introduction of new compulsory health insurance arrangements. Selected experiences with the introduction and modification of such mechanisms are reviewed here against the objectives

defined at the beginning of the chapter: impact on the level of public funding, impact on equity in finance and utilization, impact on administrative efficiency, and role in facilitating other health financing reforms.

i. Diversifying public sources

It is evident from Fig. 4.2 that transitional countries that rely predominantly on dedicated taxes tend to have a higher share of total health spending from public sources compared with those countries that rely mainly on general revenue allocations. It does not follow from this, however, that dedicated taxes are a more successful approach or should be recommended on the basis that they will raise more money. The underlying conditions that enable the effective collection of dedicated taxes – high formal sector employment, high economic growth, and so on – also enable the collection of general taxes, and particularly income taxes. Further, the pre-transition starting point of the countries, and their rationales for introducing dedicated taxes at the time(s) they did so, do not necessarily apply today to other countries considering changes in their funding mix. In particular, in the ex-USSR and ex-CMEA countries (see Chapter 2), health was explicitly a low priority in budget allocation, while in the former Yugoslavia health spending levels by the state were a function of the payroll tax and only implicitly a product of resource allocation priorities. The post-transition ex-Yugoslav countries maintained their dedicated taxes and relatively high rates of public spending on health, and the CMEA and Baltic countries introduced dedicated taxes in large part to return to the systems that were in place prior to 1948. These countries (including many of the CE countries that are now new EU Member States) have experienced greater economic growth and labour market formalization than the former Soviet countries, and hence they have a much stronger base for collecting both dedicated and general taxes.

A more policy-relevant question for countries with, or considering, dedicated taxes for compulsory health insurance is the extent to which they should mix sources by adding general revenue allocations. For most countries, at least 10% of health spending comes from general revenues, but this is not surprising since all countries have some expenditures relating to MoH administration, public health services, surveillance and so on. So the question, more precisely, relates to the extent to which general revenues should be used to fund personal health care services included in the benefits package. Some – such as the Czech Republic, Slovakia and Bulgaria – make use of substantial general budget subsidies to ensure universal coverage for the benefits package. Others, such as Estonia and many of the ex-Yugoslav countries, rely almost solely on dedicated payroll taxes for health insurance.

Estonia's experience illustrates some of the risks of not diversifying public sources. Since 2001, the dedicated "social tax" has provided 99% of the revenues managed by the EHIF. However, there are two categories of non-contributing insured individuals within the Estonian system: those covered by contributions from the state (approximately 3% of the covered population in 2005) and those entitled to coverage without contributing, of which children and pensioners form the largest groups (approximately 48% of covered individuals in 2005). The contributing employed insured population accounted for approximately 49% of EHIF coverage (EHIF 2006). Although the share of this latter group has been slightly but steadily increasing, the near absence of allocations from the central budget raises two important concerns. First, approximately 5% of the population "falls through the cracks", lacking coverage by the EHIF (Couffinhal and Habicht 2005). While the Estonian financing system has performed well in many respects, this lack of universal coverage is a notable shortcoming when compared with other countries, such as the Czech Republic and Lithuania, that rely on substantial transfers from general revenues to the insurer(s). Second, there is a concern about the longer term viability of a situation in which half the covered population essentially pays for all the insured individuals.

> In the situation where less than half of insured persons pay for about 97 percent of the health costs of all insured, it is ever more difficult to meet the expectations of the society in respect of health care services. Given aging of population, growing awareness of the insured, new and higher expectations and the development of medical technology, on the one hand, and the shortage of financial resources allocated to health care, on the other hand, it is probable that actual possibilities do not allow for meeting our expectations in the future (EHIF 2006, p. 22).

Another concern raised by Estonia's lack of diversification in public sources has been that contributions from payroll taxes have been growing in nominal and even real terms in line with rising employment and wages, yet their rate of increase has been less than that of GDP growth and total public expenditure growth. As a result, health as a share of total public spending fell from 14% in 1996 to 11.5% in 2005 (WHO 2008). Associated with this has been a rise in OOPS, growing frequency (although perhaps still slight in comparison with other countries) in catastrophic and impoverishing expenditures (Habicht et al. 2006) and a decrease in the overall progressivity of health financing from 2000 to 2005 (Võrk, Saluse and Habicht 2009). The Estonian experience suggests that the ability of payroll taxes to make a system less dependent on shifting political priorities is a double-edged sword: it can lead to decreases as well as increases in public spending on health.

ii. Payroll tax-funded compulsory health insurance in CE/EECCA countries

As described above, in the CE countries that are now new EU Member States and in the former Yugoslav countries, payroll tax is the predominant collection mechanism for health revenues, with tax rates of up to 17% of payroll. Conversely, the former Soviet countries that introduced payroll taxes put them at the level of 2–4%, and general tax revenues remain the predominant public revenue source for health. This section looks at reform implementation in former Soviet countries with the aim of deriving lessons for countries with a similar economic and demographic context that might be currently considering revenue collection reforms. Payroll tax and compulsory health insurance were introduced in 1993 in the Russian Federation, in 1996 in Kazakhstan, in 1997 in Kyrgyzstan and in 2004 in the Republic of Moldova. While superficially the same reform (compulsory health insurance), there were important differences in implementation processes between these countries. As a result, in only one of them (the Republic of Moldova) did the reform clearly lead to an increase in public revenues for the health system.

In the **Russian Federation**, a leading motivation for introducing compulsory health insurance was to increase public funding for health from outside the budget process and thereby counteract the legacy of low priority for the health sector inherited from the USSR (see Chapter 2). The sources of funds for compulsory health insurance were a payroll tax set at 3.6% of the wage bill and contributions by regional and local governments on behalf of the non-working population. Initially, however, no national norms for these budgetary contributions were adopted. This led to wide variation in practices and, by 1997, 27 out of the country's 88 regions were making no compulsory health insurance contributions from their budgets (Shishkin 2000).

Available data suggest that the creation of a new source of funds did not lead to an increase in public spending on health during the 1990s. State budget spending on health fell from 3.1% of GDP in 1993 to 2.0% in 1999, with this decline almost fully accounted for by the drop in regional/local government spending. Payroll tax funding rose slightly from 0.6% to 0.7% of GDP during this period. As a result, total public spending on health fell from 3.7% in the first year of compulsory health insurance implementation to 3.0% by 1999. In real terms, this was a drop of more than 60% – much more than the estimated 25% decline in GDP over the same period (Shishkin 2000; Davis 2001). While it is arguable as to whether compulsory health insurance was the cause of this decline (for example, by inducing local governments to cut their budget allocations to health) or whether it prevented the decline from becoming worse, it is clear that the reform did not achieve the objective of increasing public spending on health.

As an attempt to reverse this trend, the Russian Federation Government initiated a process in 1997 to develop a needs-based, *actuarial approach* to defining the need for budget funds for the health sector. The mechanism was the definition of an annual "programme of state guarantees in free care". The central government developed and approved utilization targets across types of care and groups of population (urban–rural, children–adults) and were based on expected and "desired" volumes of care. New financial "normatives" were also set (for example, unit cost rates per visit, bed-day, ambulance call, day care centre case, and so on), in part founded upon bottom-up estimates, based on new clinical technology standards. With these cost and volume targets as a basis, the cost of national package of benefits was calculated and approved by central government as the benchmark for regional programmes of state guarantees. The major objective was to pressure regions to change their budget priorities and contribute more to health.

Despite this extensive planning, the central government could only provide regions with benchmarks for funding based on the cost-and-volume model. The local authorities retained discretion, and the regional response to these federal recommendations varied: some regions balanced their benefits packages, but most proved reluctant to shift budget priorities, effectively ignoring the targets. Overall, the share of regional budgets allocated to health fell from 18% in 1998 to 14% in 2003. In 2004–2005, another attempt to influence regional priorities came in the form of draft legislation on health insurance requiring regions to produce cost estimates of benefits packages based on minimum unit cost rates. These rates were determined by the federal government, with regional adjustment for diagnosis-related groups (DRGs) on the basis of clinical standards. Regional governments were legally required to balance the cost of the benefits package with their contributions to compulsory health insurance for the non-working population. The Federal Compulsory Health Insurance Fund provided matching subsidies to regions, based on fiscal capacity,[46] provided that the federal guidelines for regional benefits package costing were followed (Slepnev et al. 2005). However, the development of a pure actuarial approach was not supported by the Ministry of Finance, in part due to legal constraints which set out regional rights. In 2007–2008, a new round of discussions was initiated on methods of establishing the commitments of the regional governments to health funding (Shevsky, Sheiman and Shishkin 2008).

In **Kazakhstan**, a new system of payroll tax for health insurance was introduced in 1996, along with the development of a new MHIF. The insurance system became operational and began financing health care services in mid-1996, but it was cancelled by the end of 1998 following poor performance in terms of

46 Fiscal capacity of regions was measured by general tax revenue per capita.

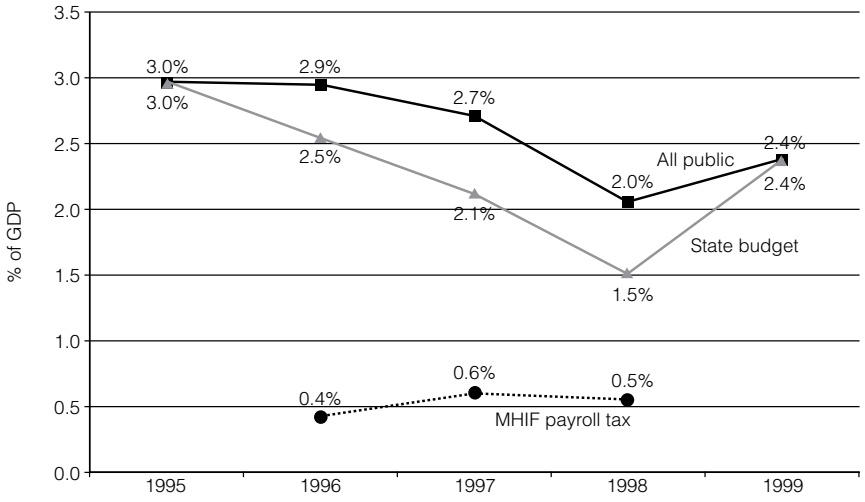


Fig. 4.3 *Public spending on health by source, Kazakhstan, 1995–1999*

Source: AHC 2000.

Notes: GDP: Gross domestic product; MHIF: Mandatory Health Insurance Fund.

meeting financial commitments to providers and amid widespread charges of corruption (Kutzin and Cashin 2002). The premium for the employed population was a 3% payroll tax paid to the MHIF by employers. Self-employed or non-registered unemployed individuals were required to purchase health insurance policies directly from the MHIF at a per capita rate specified by the local (*oblast*) branches of the MHIF. Premiums for pensioners, registered unemployed people, children and other non-contributing "protected" categories of citizens were to be paid by local budget transfers to the MHIF. The level of budget transfers was a per capita amount set by the Federal MHIF but subject to modification by local governments. The MHIF reported high collection rates (revenues collected as a percentage of projected revenues) for the payroll tax, but, as was the case in the Russian Federation, the collection rate from local budgets was a consistent problem (MHIF Kazakhstan 1999).

As shown in Fig. 4.3, the period of MHIF implementation was marked by a decline in the level of public spending on health. The 1% of GDP decline in spending was due largely to a dramatic fall in state budget spending on health, from approximately 13% of total public spending in 1996 to 7% in 1998. Such a precipitous drop was due to the lack of not only budget transfers for the nonworking population but also coordination between the introduction of health insurance and the local government authorities. The decline reflected, in many instances, a withdrawal from health system funding and a shift towards other priorities by the local governments in reaction to the loss of direct hierarchical control brought about by the creation of the MHIF. This, combined

with some recovery in state budget funding levels following the cancellation of the MHIF, suggests that the implementation of payroll tax-funded compulsory health insurance actually caused a substantial *decline* in total government health spending (Cashin and Simidjiyski 2000).

Although it was not successful in raising additional revenue for the health sector, there is evidence that Kazakhstan's compulsory health insurance system during its brief existence was beginning to effect some change in the roles and relationships among government, providers and patients in the health care system. Innovations in provider payment systems, contracting with providers and computerized information systems were driven by the MHIF rather than the MoH between 1996 and 1998. These new payment systems were made possible by the establishment of the MHIF as an off-budget agency operating outside the country's standard public financial management rules. Although these purchasing strategies were only at the early stages of development when the mandatory health insurance system was cancelled, many of the new provider payment systems remain codified in the national budget law (Government of the Republic of Kazakhstan 2000).

In **Kyrgyzstan**, financing reforms have undergone various phases since the introduction of a dedicated payroll tax for health insurance in 1997. The payroll tax was tied to the establishment of a new off-budget MHIF, and the MHIF became the driving force of a comprehensive health financing reform agenda that was implemented gradually using a step-by-step approach over the next 10 years. From 1997 to 2000, the MHIF provided additional funding to public providers that were also paid through the budgetary system inherited from the USSR. In 2001, the next phase of reforms began with the *Single Payer* system, under which *oblast* and *rayon* budget funding for health (the main source of public funds) was pooled at *oblast* level and managed by the *oblast* department of the MHIF. Later, in 2006, the source of budget funding was switched from local budgets to the central ("republican") budget. These reform phases correspond to different experiences with the level of public funding provided for the health system.

An off-budget Kyrgyz Social Fund already existed to collect payroll taxes for pension and unemployment benefits and to manage the pension fund. This fund also collected the 2% payroll health insurance contributions as part of its overall payroll tax responsibilities, and was to transfer this to the MHIF. Pensioners and registered unemployed individuals were covered by statute, and their premiums were meant to be paid by means of transfers from the pension and unemployment funds, respectively. As shown in Table 4.3, however, implementation of these transfers was carried out far less than legally required during the first six years of the MHIF's existence.

Table 4.3 *Collections and transfers for health insurance in Kyrgyzstan, 1997–2002*

(Million soms)	1997	1998	1999	2000	2001	2002
MHIF premiums collected by SF	41.0	82.8	117.1	138.3	166.6	186.3
Revenues transferred to MHIF for employees	9.2	30.9	73.1	89.4	80.5	102.1
Percentage of collections transferred	**22.4**	**37.3**	**62.4**	**64.6**	**48.3**	**54.8**
Planned revenues for pensioners	15.0	38.0	48.0	48.0	80.0	80.0
Revenues transferred for pensioners	0.0	9.8	14.5	12.5	7.8	0.0
Percentage of planned transferred revenues	**0.0**	**25.8**	**30.2**	**26.1**	**9.8**	**0.0**
Planned revenues for unemployed	0.0	8.5	9.0	9.0	9.0	9.0
Revenues transferred for unemployed	0.0	1.3	6.0	3.1	2.5	0.5
Percentage of planned transferred revenues	**0.0**	**15.3**	**66.7**	**34.4**	**27.8**	**5.9**
Total planned/collected revenues by SF	56.0	129.3	174.1	195.3	255.6	275.3
Revenues actually transferred by SF	9.2	42.0	93.6	105.0	90.8	102.6
Percentage of planned/collected revenues transferred by SF	**16.4**	**32.5**	**53.8**	**53.8**	**35.5**	**37.3**

Source: Kutzin 2003, based on MHIF data.

Notes: MHIF: Mandatory Health Insurance Fund; SF: Social Fund.

The decision to keep the collection function within an existing revenue collection agency was made to allow the MHIF to concentrate its efforts on the other health financing functions and to avoid adding to the administrative costs of the wider social system. Given the low level of the health payroll tax, it did not make sense to create a new collection agency. However, the lack of transparency in the transfers from the Social Fund to the MHIF undermined the ability of the MHIF to predict with confidence its level of funding and hence to plan and fulfill contracts for payment of providers. During 2002, the situation became so grave (with under-payment of providers and growing informal payments) that the MHIF – backed by international partners supporting the health reform process – pushed the government to amend an existing agreement with the IMF so that, beginning in October 2002, the Social Fund was required to remain current in its cash transfers to the MHIF (that is, no new arrears would be allowed). The IMF checked this condition quarterly, and as a result the transfers on behalf of employed individuals were stabilized (Kutzin 2003). Later, in 2004, responsibility for funding the coverage of pensioners was shifted from the pension fund to the republican budget (Jakab et al. 2005). Therefore, the assignment of the collection responsibility to the Social Fund was probably efficient in terms of overall administration but was marked by a lack of transparency in the flow of funds to the health system (perhaps arising from the lack of separation of functions for collection and pooling in the pension system). In the Kyrgyz context, it was only possible to overcome this problem by engaging powerful external agencies.

The impact of the reforms at the level of public funding for the health system is difficult to discern. In the aggregate, there was a steady decline in health spending as a share of total government spending from 13.5% in 1996 (the year before the payroll tax was introduced) to 9.0% in 2002 (Jakab et al. 2005). This suggests that there was some offsetting decline in budget funding. The motivations were different from those seen in Kazakhstan, however, because from 1997 to 2000 there were no obligations on local governments to fund non-contributors, and the MHIF was seen as providing additional funding for the system. The initiation of the Single Payer reform in 2001 changed the role of *rayon* and *oblast* governments from direct funders and *controllers* of health facilities to funding sources for the *oblast* MHIFs. In preparation for this, in the year 2000, the MoH and the MHIF negotiated with all the local government authorities in the two *oblasts* in which the Single Payer reform was to be implemented in 2001, and planned budgets for health were not set to decrease in that year. Execution of these budgets did not go as planned, however. One reason for this was the perceived loss of control of local authorities for their local health system, which led them to divert funds to be used in other fields. A second reason was the introduction of formal hospital co-payments in these regions as part of the reform. While on average the co-payments did not change the level of OOPS in hospitals, local authorities perceived these as new revenues because of their appearance in accounting systems for the first time. Hence, this gain in transparency (transformation of informal payments to formal co-payments) had the perverse effect of causing a decline in budget allocations for the health system (Kutzin 2003).

The reforms entered a third phase in 2006, a year after the Single Payer system was in place nationwide. In 2006, the role of local governments in funding the health system was largely eliminated, with responsibility shifted to the republican budget. As a result, the level of funding to be provided was shifted from being a set of decisions made by numerous local governments to (largely) a single national political decision. This – combined with the conditions attached to a new pooled donor funding agreement with the government – led to a substantial increase in the share of public funding allocated to the health sector (Ibraimova et al. 2007).

The payroll tax system did not make a substantial contribution to the level of public funding and, even with the most recent positive developments, the reforms as a whole have not led to a major increase in funding levels as yet. However, the new institutional structure created a platform for profound reforms in pooling and purchasing that led to demonstrable gains in equity and efficiency in the Kyrgyz health system. These are discussed in detail in Chapters 5 and 6.

The Republic of Moldova has been the only CE/EECCA country in which the introduction of payroll tax-funded compulsory health insurance led to an unambiguous increase in the level of public spending on health. As in the Russian Federation and Kazakhstan, the 2003 law that established the NHIC also stipulated budgetary contributions on behalf of defined non-contributing groups in the population. The nationwide introduction of compulsory health insurance in 2004 was accompanied by the centralization of budget funding for health from the *rayon* level to the national level, in addition to the introduction of the payroll tax. This facilitated implementation of the law's conditions requiring that the rate of payroll tax paid as a contribution for the working population and the level of per capita contributions for non-working populations paid from the state budget should be equivalent to each other and to the average per capita cost of the health care benefits package guaranteed by the NHIC to all insured individuals. This *principle of equivalency* stipulates a clear financial responsibility on the part of the government for the population insured by the state, and makes an allowance for yearly increases in the financial resources of the NHIC in line with the annual growth of the cost of the basic package. In turn, this mechanism was effective at balancing publicly guaranteed benefit entitlements with public funding levels and assuring stability of the latter. It also "forced" an increase in budget contributions according to the growth of payroll contributions, even though the rate of the latter did not change. For example, in 2004 the official average wage increased from 952 lei in January to 1496.9 lei in December. The government did not change the payroll rate but had to increase compulsory health insurance contributions for the non-working population in accordance with the growth of wage level (Shishkin, Kacevicius and Ciocanu 2008).

As in Kyrgyzstan, the introduction of the NHIC in the Republic of Moldova had salutary effects on equity and efficiency, particularly through the shift from *rayon*-level to national-level pooling and purchasing.

iii. Functional integration or separation of collection and pooling

As described in Table 4.2, countries in the CE/EECCA region have made different choices as to whether to make new purchasing agencies (typically compulsory insurance funds) responsible for the collection of dedicated taxes (integrated approach), or to have a separate body – typically either the general tax collection agency for the country or an agency with specific responsibility for collecting payroll "social taxes" – take on this function and then transfer the funds to be pooled by the purchasing agency (functional specialization approach). Both approaches have potential theoretical advantages and disadvantages. The integrated approach allows for greater control of the purchaser over its

revenue levels, but at the wider government level this means a duplication of agencies responsible for collecting taxes. The functional specialization approach may reduce administrative costs and could lead to higher revenues, as higher collection rates might be achieved by the expertise and streamlined systems of an agency concentrating on this core function. Moreover, by not taking on this responsibility, the purchasing agency(ies) may be able to focus more on improving contracting and provider payment methods. The downside may be – as with the experience of Kyrgyzstan described above – a loss of control and predictability with regard to revenue levels. While there appears to be a trend in the region of a movement toward greater integration of tax and social contribution collections based on these potential benefits (Barrand, Ross and Harrison 2004), there is no clear evidence from the region to support one collection model over the other.

In **Bulgaria** the decision was made to combine the compulsory health insurance premium collection with the National Social Security Institute, which collected pension and unemployment insurance premiums. The managers of both this institute and the NHIF found that the actual premium revenue for both institutions increased as a result – in fact exceeding projections – due to the additional enrollment data and administrative leverage of combining the agencies (Dulitzky, personal communication, 2006). This suggests that administrative efficiencies and increased collection performance were obtained by building on existing payroll tax collection arrangements.

In 2001 in the **Russian Federation**, payroll tax collection for compulsory health insurance was shifted from the Federal and Territorial Compulsory Health Insurance Funds (TFCHIs) to the general tax authority. The tax authority collects the "uniform social tax", which covers payroll contributions for health, pensions and other social security items. A specified portion of the uniform social tax is transferred to the compulsory health insurance funds. The rationale for this institutional change was to streamline the collection of all types of tax (including "off-budgetary" employer/employee contributions) within a general budgetary framework to promote transparency. Similarly in **Estonia**, following years of lobbying by the EHIF, responsibility for revenue collection was shifted from the EHIF to the central Tax Administration. The EHIF's rationale was that the switch in functional responsibility to the Tax Administration would allow it to focus on purchasing arrangements, or expenditure flows (Jesse, personal communication, 2006). In neither the Russian nor the Estonian case has the effects of this change been evaluated, but at least in the Estonian case the annual reports of the EHIF make clear that the transfer of funds has been transparent and consistent with the law (EHIF 2006). Hence, in effect, this change has brought about administrative streamlining with, at minimum, no

loss in collection performance. With functional specialization, therefore, gains in administrative efficiency – from streamlined government administration, collection performance and the level of revenues ultimately received by the purchasing agency – require the ability to define and enforce a strong regulatory framework. Otherwise, as reflected by the early experience of Kyrgyzstan, the system may suffer as a result of (1) lack of control that purchasing agencies have over enforcing the collection of dedicated taxes, and (2) little leverage to ensure that the full amount collected is actually transferred to them.

Countries have also experienced difficulties with the implementation of the integrated approach. In **Bosnia and Herzegovina**, for example, collection rates varied from 30% to 84% across health insurance funds (each of which was responsible for collecting its own payroll tax), due to such factors as different levels of unemployment, the extent of the informal sector and urbanization. Overall, the analysis found that only approximately 50% of what could be collected from formal sector workers was actually being obtained, and much of this was due to an unclear division of responsibilities – despite the apparent responsibility of the health insurance funds for revenue collection – for collection and enforcement between the health insurance funds and the general tax authority (Sanigest 2005).

In the middle-income countries with competing social insurance funds using the integrated approach, namely the **Czech Republic** and **Slovakia**, revenue collection performance appears to be high. By changing the basis for redistribution from 100% of collected premiums to 95% of prescribed premiums (that is, the amount that should have been collected), the 2004 Slovak reforms introduced a stronger incentive for insurers to increase their efforts to collect premiums (Pažitný 2004). Conversely, in the Czech Republic, a 2003 law made 100% of payroll health insurance contributions subject to redistribution, an increase from the former level of 60% (Hroboň 2004). In both cases, however, health insurance collections remained high, and the evidence does not clearly support the hypothesis that increasing the amount subject to redistribution results in a decrease in collections. Indeed, it may be that the incentive to enrol more people is sufficient to ensure high collection rates in a competitive system, and hence there may be no revenue loss from subjecting 100% of insurance revenues to redistribution (see Chapter 5 for more on the Czech reforms).

D. Lessons from implementation experience

The primary goal of revenue collection reforms in CE/EECCA countries was to increase public revenues for the health system, and the main reform introduced was a dedicated tax, typically in the form of a payroll tax accompanying the

introduction of compulsory health insurance. However, in most cases it is not possible to discern a separate effect of these reforms from the changes in the underlying fiscal context. Where economic growth was strong and much of the working-age population was engaged in the formal labour market, the conditions for tax collection – whether general or dedicated – were better, and hence countries were able to generate more public revenues for health. For countries that have had a more difficult economic transition, revenue collection reforms have (on the whole) not had much impact on the level of public revenues for health. Nevertheless, some lessons emerge.

The experience of the former Soviet countries that introduced a payroll tax suggest that, in lower to middle-income countries with limited formal labour force participation, the impact of this reform on the level of public revenues depends principally on changes that are induced (implicitly or explicitly) at the level of general revenue funding. An important lesson is that governments with decentralized fiscal contexts are less able to control the level of budget funding and, conversely, that centralization facilitates effective reform. The Republic of Moldova in particular centralized budget funding at the same time as introducing a payroll tax, and this seems to have facilitated the decision to maintain (or even increase) budget allocations. Similarly, the shift from decentralized to centralized budgeting in Kyrgyzstan has enabled government policy statements on health system funding to be more easily translated into practice. Conversely, the decentralized budgetary contexts of Kazakhstan and the Russian Federation were a major constraint on the enforcement of policies on funding insurance contributions from general budget revenues.

The more general lesson is that reforms involving the creation of a new source of funds must explicitly address changes needed in existing sources. The major challenge is to fix the government commitments to funding compulsory health insurance for non-contributors. This is critical for both centralized and decentralized systems of general budget allocations to health. A political unwillingness to fix such commitments explicitly may serve as a warning to countries that want to shift to contribution-based entitlement (the standard compulsory health insurance financing model). The Republic of Moldova's positive experience in linking government budgetary commitments for non-contributors to the estimated average benefits package cost suggests this may be a viable strategy for maintaining or increasing funding in countries that introduce compulsory health insurance in contexts of relatively high informality in the labour market and/or a large share of the population that is not part of the workforce. Even in more favourable macroeconomic and labour market contexts, such explicit linkage (as in the Czech Republic, for example) is useful for promoting predictability in the total level of funding that flows to the purchasing agency.

Evidence is also limited with regard to the effect of revenue collection reforms on equity in finance. Changes in the distribution of the burden of funding health systems – especially the shift towards a greater dependence on OOPS – inevitably have meant some loss of equity in finance. As with overall public revenues, this was driven largely by underlying contextual shifts, rather than reforms per se. One important change was the shift from universal entitlement to contribution-based entitlement in those countries that introduced compulsory health insurance. In principle, this was a shift away from universal coverage, unless countries developed mechanisms to fund the participation of non-contributors, which many did (for example, the Czech Republic). However, the experience of Estonia suggests that even in a relatively highly formalized economy near sole reliance on payroll taxes to fund health insurance coverage will result in coverage gaps. Further, the failure to diversify funding sources led to a fall in compulsory sources of financing as a share of total health funding and a consequent reduction in progressivity over time. The experience of these and other countries demonstrates that – in the absence of viable mechanisms of funding non-contributors – countries either have to accept less than universal coverage or give up the principle of contribution-based entitlement. In the latter context, the declaration of universal population-based entitlement does not guarantee that the system will be more equitable in practice. It depends very much on the level of budget revenues that is provided and – in relation to this – the extent to which systems are forced to rely on informal payments, as well as whether there is a de facto preference for contributors (or discrimination against non-contributors) at the level of service delivery.

The evidence on the relative merits of an integrated or functionally specialized approach to revenue collection is limited. Functional specialization, whereby a health agency does not collect dedicated taxes but leaves this to other tax collection agencies that exist in the country, offers the opportunity for greater administrative efficiency and collection performance. This was the experience in Estonia and Bulgaria, but the early problems faced by the Kyrgyz MHIF in obtaining revenues from the Social Fund suggest that such systems may also face problems of transparency. Conversely, the experience of some countries with integrated collection, as with the insurance funds in the Czech Republic and Slovakia that collect premiums directly, shows that this approach can work as well. There is no general solution arising from this experience, although the arguments for functional specialization are compelling, principally because such specialization enables the insurance fund to focus on its pooling and purchasing responsibilities. The case is strongest in countries where the payroll tax is (or will be) set at low levels – below 6%, for example. More generally, any arrangement involving inter-fund transfers requires both well-defined rules and administrative procedures to govern these in a transparent manner.

Possibly the most important lesson from the experience of the region is that changes in the sources of funds can and should be linked to, or even drive, reforms in other health financing functions. In particular, two important roles can be discerned. First, creation of a dedicated tax has been an important *implementation step* for changing health financing systems. In most cases, an important aspect of reform was the use of new provider payment mechanisms by new purchasing agencies, such as compulsory health insurance funds. In turn, most countries could not simply create such entities within their core public financial management systems, but instead linked them to the creation of a new source of funds. This practical reality, rather than a conceptual need,[47] has justified the establishment of new compulsory funding sources as part of the implementation of health financing reforms. In other words, the source of funds did indeed have implications for how flexibly the money can later be used. In particular, in many countries the treasury has the legal right to ensure that general (even dedicated) tax revenues are used according to public sector financial management rules. This often results in such tight controls (such as line-item budgets) that using strategic purchasing methods would not be possible. However, as the experience of the Republic of Moldova demonstrates, this is not a general "rule" but rather something that has to be assessed in each individual country context. As a step in initiating reforms, the creation of a new source of funds has often been necessary to enable the flexibility that allowed further system reforms, such as changes in purchasing arrangements, provider payment policy changes and organizational changes to improve efficiency. In addition, the new health insurance funds have an explicit or implied mandate[48] to move away from a "business as usual" approach and to modernize the relationship between the purchaser and providers of health care. As the Kyrgyz experience shows (see Chapters 5 and 6), there may be a reform sequence in which the initiation of changes with a new source of funds can later filter back to general budget revenues, leading to increases in the flexibility with which these revenues are used.

Once the new purchasing agencies are established, it is essential that they can predict with confidence the level of funding they can expect to obtain, so that they can contract and pay providers effectively. Hence, to sustain reforms, the

47 Conceptually, as the experience of the United Kingdom demonstrates, it is possible to introduce major changes in pooling and purchasing with general budget revenues and from within national public financial management processes.

48 In many countries, the legal nature of the compulsory funding source (general government revenues versus payroll tax revenues earmarked for health insurance) determines important aspects of the overall health financing arrangements. In Hungary, for example, the insurance contribution creates a contractual arrangement between the taxpayer and the government (and the health insurance fund acting on behalf of the government); therefore, services must be provided in return, and the government cannot radically reduce the benefits package. In 1995, for example, the Hungarian Government tried to remove some in-kind and many of the cash benefits that the health insurance system had provided as part of its attempt to balance the overall government budget. This was challenged at the Constitutional Court, resulting in a ruling that some of the benefits had to be reinstated in the package, based on (among others) the argument that such radical changes violate constitutional rights and in a contractual relationship there has to be a certain level of balance between contributions and benefits (Constitutional Court of Hungary 1995).

second key role for revenue collection mechanisms is to ensure a predictable and stable flow of funds to the purchasing agencies. As Kyrgyzstan's initially problematic experience with transfers from the Social Fund to the MHIF showed, such instability in revenue collection can undermine purchasing reforms. It is not surprising that countries with stronger economies and fiscal capacity have fared better in this regard. The experiences of some of the CE/EECCA countries with lower income reviewed here suggest, however, that gains in predictability and stability can be made in these contexts as well. Further, the simple existence of a dedicated tax does not ensure these gains, while greater attention is needed to bring increased predictability and stability to the flow of general budget revenues to health care purchasers.

Finally, health financing reform requires much more than simply changing revenue sources, although in many transitional countries, these changes set reforms into motion – even in those in which the revenue collection reforms alone were not especially successful in terms of mobilizing increased public funding. New possibilities were opened up for reforming pooling and purchasing arrangements, and these are addressed in the following chapters.

References

AHC (2000). *Health expenditure data*. Almaty, Agency for Health Care Republic of Kazakhstan.

Albreht T et al. (2009). Slovenia: health system review. *Health Systems in Transition*, 11(3):1–168.

Barrand P, Ross S, Harrison G (2004). *Integrating a unified revenue administration for tax and social contribution collections: experiences of central and eastern European countries*. Working Paper WP/04/237. Washington, DC, International Monetary Fund.

Belli P (2000). *Ten years of health reforms in the ECA region: lessons learned and options for the future* [Monograph, September]. Washington, DC, World Bank.

Bryndová L et al. (2009). Czech Republic: Health system review. *Health Systems in Transition,* 11(1):1–119.

Cain J et al. (2002). *Health care systems in transition: Bosnia and Herzegovina.* Copenhagen, European Observatory on Health Care Systems, 4(7).

Cashin C, Simidjiyski J (2000). *National health insurance systems: a review of selected international experience*. ZdravPlus Technical Report. Almaty, Abt Associates.

Cerniauskas G, Murauskiene L, Tragakes E (2000). *Health care systems in transition: Lithuania*. Copenhagen, European Observatory on Health Care Systems.

Cheasty A (1996). The revenue decline in the countries of the former Soviet Union. *Finance and Development*, 33:32–35.

Constitutional Court of Hungary (1995). 56/1995. (IX.15.) AB határozat. Budapest, Constitutional Court of Hungary (http://www.mkab.hu, accessed 25 April 2008).

Couffinhal A, Habicht T (2005). *Health system financing in Estonia: situation and challenges in 2005*. Copenhagen, WHO Regional Office for Europe, (http://www.euro.who.int/Document/HSF/CaseStudyfinalEstonia2005.pdf, accessed 19 July 2007).

Davis C (2001). Reforms and performance in medical systems in the transitional states of the former Soviet Union and eastern Europe. *International Social Security Review*, 54(2–3):7–56.

EHIF (2006). *Estonian Health Insurance Fund Annual Report 2005*. Tallinn, Estonian Health Insurance Fund.

Ensor T, Thompson R (1998). Health insurance as a catalyst to change in former Communist countries? *Health Policy*, 43:203–218.

Gaál P (2004). *Health care systems in transition: Hungary*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Gamkrelidze A et al. (2002). *Health care systems in transition: Georgia*. Copenhagen, European Observatory on Health Care Systems.

Georgieva L et al. (2007). Bulgaria: health system review. *Health Systems in Transition*, 9(1):1–156.

Gjorgjev D et al. (2006). The former Yugoslav Republic of Macedonia: health system review. *Health Systems in Transition*, 8(2):1–98.

Government of the Republic of Kazakhstan (2000). *Government order 806: on the approval of reimbursement rules for medical care*. Astana, Government of the Republic of Kazakhstan.

Habicht J et al. (2006). Detecting changes in financial protection: creating evidence for policy in Estonia. *Health Policy and Planning*, 21(6):421–431.

Health Compulsory Insurance State Agency Latvia (2005). *Health Compulsory Insurance State Agency News, Nr. 14*. Riga, Health Compulsory Insurance State Agency Latvia (http://www.voava.gov.lv/files/VOAVA%20vestis%20Nr14%20ENG.pdf, accessed 5 April 2008).

Hlavačka S, Wágner R, Riesberg A (2004). *Health care systems in transition: Slovakia.* Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Hroboň P (2004). Zdravotnictví potřebuje nový model [Health care needs a new model]. *Zdravotnické Noviny [Medical News]*, ZDN/05(29 January):22.

Ibraimova A et al. (2007). *Joint progress review: Manas Taalimi health reform programme, health financing component*. Bishek, Report to the Government and the Joint Financiers.

Jakab M et al. (2005). *Evaluating the Manas health sector reform (1996–2005): focus on health financing*. Manas Health Policy Analysis Project, Policy Research Paper 31. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/MyFiles/EvaluationofHealth%20financing_E_PRP31.pdf, accessed 23 February 2006).

Koppel A et al. (2008). Estonia: health system review. *Health Systems in Transition*, 10(1):1–230.

Kulzhanov M, Rechel B (2007). Kazakhstan: health system review. *Health Systems in Transition*, 9(7):1–158.

Kuszewski K, Gericke C (2005). *Health systems in transition: Poland*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Kutzin J (2001). A descriptive framework for country-level analysis of health care financing arrangements. *Health Policy*, 56:171–204.

Kutzin J (2003). *Health expenditures, reforms and policy priorities for the Kyrgyz Republic*. Manas Health Policy Analysis Project, Policy Research Paper 24. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/MyFiles/PER%20JK%20for%20PRP24.pdf, accessed 23 February 2006).

Kutzin J, Cashin C (2002). Health system funding. In: McKee M, Healy J, Falkingham J, eds. *Health care in central Asia*. Buckingham, Open University Press:92–107.

Legislative Council Library (2008). *Table 1. Earmarking*. Hong Kong, Hong Kong Special Administrative Region of the People's Republic of China Legislative Council (http://sc.legco.gov.hk/sc/library.legco.gov.hk/articles/1039343.29122/1.XLS, accessed 28 March 2008).

Meimanaliev A-S et al. (2005). *Health care systems in transition: Kyrgyzstan*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

MHIF Kazakhstan (1999). *Report to the government on implementation of mandatory health insurance in Kazakhstan*. Almaty, Kazakhstan Mandatory Health Insurance Fund.

Murauskienė L (2007). *Health care financing in Lithuania*. Unpublished document. Copenhagen, WHO Regional Office for Europe.

Nuri B, Tragakes E (2002). *Health care systems in transition: Albania*. Copenhagen, European Observatory on Health Care Systems.

OECD (2000). *A system of health accounts*. Paris, Organisation for Economic Co-operation and Development.

Pažitný P (2004). Competitive health insurance: the experience from Slovakia. In: *The 6th Regional Flagship Course on Health Sector Reform and Sustainable Financing*. Budapest, Semmelweis University Health Services Management Training Center.

Rokosová M et al. (2005). *Health care systems in transition: Czech Republic*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Sanigest (2005). *Administrative and institutional recommendations for improving revenue collection*. Technical report for the Social Insurance Technical Assistance Project, Federation of Bosnia and Herzegovina. Sanigest Internacional.

Shevsky V, Sheiman I, Shishkin S (2008). *Modernizatsia rosiyskogo zdravoohranenia: 2008–2020. Conceptia Gosudarstvennogo Universiteta–Vischaya Shkola Economici.* Moscow, High School of Economics Press.

Shishkin S (2000). *Reforma finansirovaniya Rossiiskogo zdravookhraneniya*. Moscow, TEIS.

Shishkin S, ed. (2006). *Health care financing and management systems in the regions of the Russian Federation*. Moscow, Pomatur [in Russian].

Shishkin S, Kacevicius G, Ciocanu M (2008). *Evaluation of Moldova's 2004 health financing reform.* Health Financing Policy Paper. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/document/HSF/healthfin_moldova.pdf, accessed 15 June 2006).

Slepnev A et al. (2005). Reforma zdravoohranenia: poisk resheni. *Manager Zdravoohranenia*, 11.

Tragakes E, Lessof S (2003). *Health care systems in transition: Russian Federation*. Copenhagen, European Observatory on Health Systems and Policies.

Tragakes E et al. (2008). Latvia: health system review. *Health Systems in Transition*, 10(2):1–251.

Vlădescu C, Scîntee G, Olsavszky V (2008). Romania: health system review. *Health Systems in Transition*, 10(3):1–172.

Voncina L et al. (2006). Croatia: health system review. *Health Systems in Transition*, 8(7):1–106.

Voncina L, Dzakula A, Mastilica M (2007). Health care funding reforms in Croatia: a case of mistaken priorities. *Health Policy*, 80:144–157.

Voncina L et al. (2007). *Study on the sources of inefficiencies and fiscal deficits in the Croatian health care system*. Draft health financing policy paper. Copenhagen, WHO Regional Office for Europe, Division of Country Health Systems.

Võrk A, Saluse J, Habicht J (2009). *Income-related inequality in health care financing and utilization in Estonia 2000–2007*. Health financing technical report. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/document/e92592.pdf, accessed 25 December 2008).

Wagstaff A, Moreno-Serra R (2007). *Europe and central Asia's great post-communist social health insurance experiment: impacts on health sector and labor market outcomes*. Policy Research Working Paper 4371. Washington, DC, World Bank Development Research Group.

World Bank (2005). *The Republic of Serbia: a policy agenda for a smaller and more efficient public sector*. Washington, DC, World Bank.

World Bank (2006). *Bosnia and Herzegovina: addressing fiscal challenges and enhancing growth prospects*. Report No. 36156-BiH. Washington, DC, World Bank Europe and Central Asia Region Poverty Reduction and Economic Management Unit.

WHO (2008) [web site]. *National health accounts, country information.* Geneva, World Health Organization (http://www.who.int/nha/country/en/, accessed 31 March 2008).

WHO, World Bank, USAID (2003). *Guide to producing national health accounts*. Geneva, World Health Organization.

Chapter 5

Reforms in the pooling of funds

Joseph Kutzin, Sergey Shishkin, Lucie Bryndová, Pia Schneider, Pavel Hroboň[49]

A. Introduction

Pooling is a common theme in health financing, as it is directly linked to one of the principal goals of health financing reform (and indeed, of health systems more generally): improving protection against the financial risk of using health care services. Experience with reforms in CE/EECCA countries suggests the need to distinguish two aspects in this regard: (1) pooling as a policy objective (that is, risk pooling), and (2) pooling as a policy instrument (that is, changes in the way that funds are accumulated in the health system). More specifically, the central position of pooling in the health financing system (Fig. 5.1) suggests that it is essential to understand the following:

- allocation mechanisms from collection
- interactions with purchasing
- relation to the population in terms of coverage and choice
- governance and regulatory arrangements for pooling agencies.

A critical issue is the *market structure* of pooling in a particular country. Dimensions of market structure concern the number of pools relative to the size of the population, whether pools are territorially distinct or overlap, whether there is competition between pools, as well as the nature of any mechanisms for inter-pool financial flows (for example, risk-adjusted allocations). More specifically, the nature and extent of fragmentation in pooling has implications for policy objectives.

In this chapter we describe and analyse how reforms in the way that CE/EECCA countries pool funds for health care have been implemented and

49 The authors are grateful to Sheila O'Dougherty and Jack Langenbrunner for providing helpful comments on earlier drafts.

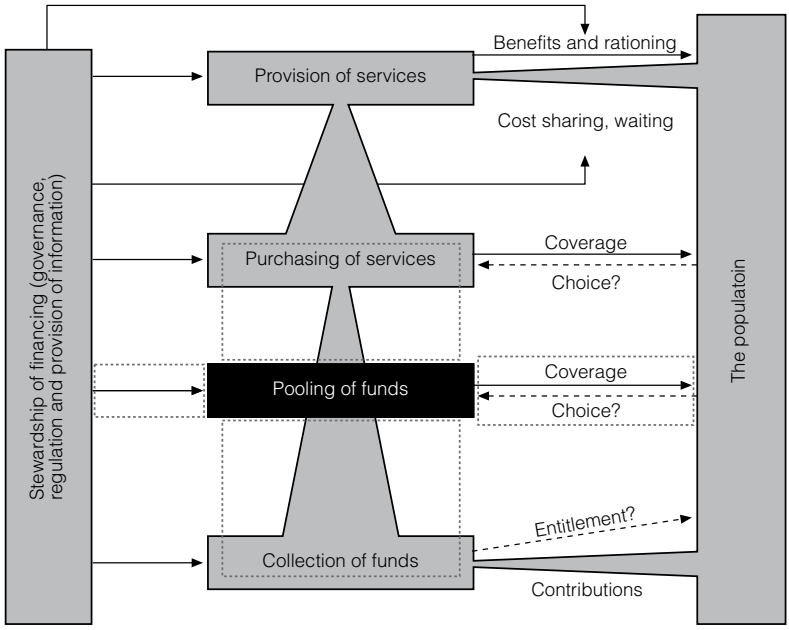


Fig. 5.1 *Pooling and key interactions in the health financing system*

Source: Adapted from Kutzin 2001.

the effects that these changes have had on health financing policy objectives via their impact on pool fragmentation. The principal objectives related to pooling are financial protection, equity in utilization and the distribution of health resources, as well as administrative efficiency. Effects on or associations with changes in efficiency in the organization of health care services are also considered here, although these are addressed in more depth in Chapter 6. The next section of this chapter provides a brief descriptive overview of reforms relating to pooling in CE/EECCA countries. This is followed by an in-depth analysis of the implementation and effects of reforms in several countries. We draw lessons from this implementation experience in our concluding section (D).

B. Overview of pooling reforms in CE/EECCA countries

Since 1990, most CE/EECCA countries have introduced reforms relating to how they pool funds for health care. Such reforms have involved both compulsory and voluntary pooling arrangements. Reforms in voluntary pooling (the introduction or expansion of VHI) are addressed in Chapter 11. Therefore, we limit the scope of this chapter to reforms in compulsory pooling.

Reforms to alter the market structure of compulsory pooling arrangements have been implemented in nearly all transitional countries. Because each case

has its own peculiarities, the reforms are difficult to categorize. For the purposes of this chapter, we identify two broad types of pool market structure reform: (1) creating a new pooling agency (or agencies), such as a compulsory health insurance fund(s); and (2) either centralizing formerly decentralized pools or introducing risk-adjusted competition between pools. An overview of such reforms in the region can be found in Table 5.1.

As reflected in the table, nearly every CE/EECCA country has introduced a reform of pooling arrangements since 1990. In every CE country and the new EU Member States shown in the table, reforms included the introduction of a compulsory health insurance fund (or funds) organized separate (though to varying degrees) from direct hierarchical control of the public sector budgetary and financial management system. However, the establishment of new pooling agencies was not always synonymous with the creation of contributory compulsory social health insurance. For example, the Armenian State Health Agency (SHA) and Latvian State Compulsory Health Insurance Agency (despite its name) manage general budget revenues only, and there is no link between contribution and entitlement. Similarly, while Georgia retains its payroll tax, there is no longer a percentage that is earmarked for health, and no link between contribution and entitlement. In most other cases, however, new agencies were introduced in the context of a shift from population- to contribution-based entitlement (that is, "true" social health insurance).

In the former Soviet countries that are not part of the EU, the reform picture is more mixed. While most of these 12 countries passed legislation in the early 1990s to establish compulsory health insurance, only five of them actually did so. The Russian Federation was first in 1993, followed by Georgia, Kazakhstan (though it only survived three years), Kyrgyzstan and the Republic of Moldova. Armenia also created a public agency, initially separate from the MoH, to pool all budget funds for health at national level. Minor changes in resource allocation mechanisms to territorial pools were introduced in Belarus and Ukraine, and a more significant change (*oblast*-level pooling) is under way in Uzbekistan.

To varying degrees in all countries, a critical aspect of pooling reforms has been the extent and nature of efforts to coordinate the pooling of general budget revenues with those collected from earmarked payroll taxes for health insurance. Related issues have included the extent and nature of "horizontal" fragmentation in pooling arrangements (such as single or multiple/decentralized funds, separate arrangements for insured and uninsured populations, and so on) and the "vertical" integration/separation of pooling arrangements with collection, purchasing and provision. Insurance fund competition has been discussed in many countries but only introduced in the Czech and Slovak Republics and the Russian Federation.

Table 5.1 *Reforms to compulsory pooling arrangements*

EU	
Bulgaria (NHIF 2007; Waters et al. 2006)	NHIF established as an independent public entity in 1999 under tripartite governance arrangement (employers, state, insured individuals); universal entitlement based on citizenship; outpatient care and part of inpatient costs covered through national pool with 28 regional branches. The MoH initially retained national pool (direct budgeting) for specialized facilities, university and regional hospitals, but NHIF has gradually increased its role in pooling for inpatient care as well. Municipal health budgets were centralized within the MoH in 2004, and for two years both the Ministry and the NHIF contracted inpatient care in a dual system. The 2006 reform expanded the responsibility of the NHIF to become single national pool of funds for hospital care.
Czech Republic (Hroboň 2003, 2004)	Compulsory health insurance was introduced in 1992, although unlike typical social health insurance, the right to entitlement was (and continues to be) based on permanent residence, not contribution. The insurance was initially managed by a single insurer (the General Health Insurance Company, VZP), but soon after competing non-profit insurers – with a legal status of independent public entities – were introduced. Each insurer collects premiums (set as a payroll tax) independently. In 1994, a national pooling arrangement was introduced through a simple risk-adjustment mechanism administered by the VZP. Approximately 70% of collected funds (60% of collected premiums and the whole payment from the state budget on behalf of non-working people) were subject to redistribution between insurers. The total number of insurers rose to 27 in 1995 and stabilized at 9 in 2000. From 2004 to mid-2006, a new risk-adjustment process was gradually implemented, with all collected funds subject to redistribution (for example, in one national pool), that combines a more refined ex ante formula and an ex post partial compensation of expensive cases.
Estonia (Jesse et al. 2004; Couffinhal and Habicht 2005)	Health insurance laws of 1991 and 1994 established one Central Sickness Fund and (initially 22 but, by 1994, 17) non-competing sickness funds organized at county/municipal level and accountable to this level of administration. In 2001, a law established the EHIF to replace the Central Sickness Fund and consolidate the regional sickness funds into 7 (and later 4) regional departments of the EHIF. The EHIF was given legal status as an independent public entity governed by a tripartite Supervisory Board. It manages the national compulsory insurance system (94% population coverage in 2003). A total of 2% of the pool is retained centrally for rare and expensive procedures. Allocation to regional branches is carried out by crude capitation for all services other than those provided by GPs (and the latter reflects GP payment methods).
Hungary (Gaál 2004)	A single national compulsory insurance pool was established in 1989, although entitlement is effectively based on residence rather than contribution. In 1992 the OEP was established as a single national pool. Reforms have focused principally on governance arrangements for the OEP. Initially, there was self-governance status with supervision by elected employer and employee representatives. This was abolished in 1998, and control of the OEP was vested in the Prime Minister's Office and then transferred to the Ministry of Finance in 1999 and to the MoH in 2001.

Table 5.1 *contd*

EU *contd*	
Latvia (Tragakes et al. 2008)	In 1994, the SSF was established with a decentralized structure of 35 "local account funds" that managed separate pools. These were consolidated to 8 sickness funds in 1997, which received age-adjusted capitation payments from the SSF. In 1998, the SSF was changed to the SCHIA. As before, however, the system provides universal, population-based entitlement that is not linked to contribution and is funded from general budget revenue (initially an earmarked percentage of personal income tax revenue). The system changed again in 2004, with the 8 sickness funds converted to 5 territorial branches of the SCHIA.
Lithuania (SPF 2007)	The SPF was introduced in 1992 as a single national fund under the MoH. The 1996 Law on Health Insurance put the SPF under government rule and established 10 TPFs as branches of the SPF organized at county level. In 2003, the SPF again became subordinate to the MoH, and the number of TPFs was reduced to 5.
Poland (Kuszewski and Gericke 2005)	In 1999, 16 regional sickness funds and 1 military/police fund were established. A 2003 law centralized pooling under a single National Health Fund.
Romania (Bara, van den Heuvel and Maarse 2002; authors' own compilation)	Compulsory health insurance was introduced in 1998, following a law passed in 1997 to shift from the budget-funded system inherited from the pre-transition period. The 1997 law required the 42 DHIFs to collect payroll contributions locally and then contract for services from public and private providers. The district funds administer the money, along with an NHIF, which sets the rules and can reallocate up to 25% of the collected funds to under-financed districts. This was found to be insufficient, and in 2004 pooling was centralized from district to national level. Remaining concerns include the lack of a clearly defined benefits package and gaps in the coverage of population groups (long-term unemployed, informal sector and rural workers, for example), leading to additional reforms in 2006, focusing on defining a reduced benefits package.
Slovenia (Albreht et al. 2002)	The 1992 Healthcare and Health Insurance Acts created the HIIS as a compulsory insurance fund and introduced co-payments for most health benefits. Insurance companies offered complementary coverage to cover the co-payments charged by social health insurance, and within a few years, approximately 96% of the population had complementary insurance.
Slovakia (authors' own compilation)	A compulsory health insurance system was introduced in 1992, administered initially by a single insurer. Soon after, competing non-profit insurers were allowed. Each insurer collects premiums (set as a payroll tax) independently. The number of insurers increased to 12 and later stabilized at 5. A 2004 reform transformed insurers (formerly public institutions) into joint stock companies, with some owned by the government and others by private entities. All are subject to the same rules (including bankruptcy) and oversight by a specialized regulator. The percentage of premiums subject to redistribution changed several times, ranging from approximately 70% to 100%. The 2004 reform left responsibility for the collection of premiums with the insurers but transferred pooling to the hands of the regulator. At the time of writing, approximately 90% of collected funds are redistributed, although this redistribution is based on prescribed (100% of what the insurers

Table 5.1 *contd*

EU *contd*	
Slovakia (*contd*)	should have collected according to the estimated earnings of the covered population), not collected premiums, thus also creating competition between insurers in terms of premium collection. The redistribution formula is based on age and sex, with no ex post compensation for expensive cases.
Non-EU CE countries	
Albania (Nuri and Tragakes 2002)	The HII was established in 1995 as an autonomous social health insurance fund. Its service coverage responsibilities are limited to only PHC physician services and some outpatient pharmaceuticals. In 2000, budget-funded pools in the Tirana Region were restructured, integrating finance and delivery.
Bosnia and Herzegovina (World Bank 2006a)	Decentralized pooling exists in 13 compulsory insurance funds: 1 in RS, 12 in FBiH organized at cantonal and district (Brcko) levels, as well as the FSF. The FSF was established in 2002 and functions as an entity-level pool in the FBiH for "high-cost" diseases, expensive pharmaceuticals and immunization.
Croatia (World Bank 2004)	Croatia's Health Insurance Institute (HZZO) was established by law in 1993, managing a single national pool. The 2002 Health Insurance Law reduced benefits and increased co-payments, as well as establishing complementary voluntary health insurance to cover these.
TFYR Macedonia (Gjorgjev et al. 2006)	The compulsory HIF established in 1991 by the Law on Health Care as an agency within the MoH with a director appointed by the government. A 2000 law transformed the fund into an independent public agency managed by a Board, with representatives of the HIF, the MoH, the Ministry of Finance, and service users. The HIF has 30 branch offices established at municipal level.
Serbia and Montenegro (World Bank 2005)	Beginning in 1992, the Federal Republic of Yugoslavia adopted Health Care Acts in the Montenegrin and Serbian Republics, centralizing social insurance pooling at the republic level from the previous community SIZs (see Chapter 2), and establishing republic-level HIFs to contract with local providers. The HIFs are separate entities from the MoH, with branch offices at municipality level in charge of member services.[50]
Russian Federation and western-most former Soviet Republics	
Belarus (authors' own compilation)	Some changes away from the inherited system have taken place, to allow territorial pools, but these have been minor.
The Republic of Moldova (Shishkin, Kacevicius and Ciocanu 2008)	Compulsory health insurance was introduced in 2004, managed by the NHIC as a single national pool funded two thirds from central budget transfers and one third from payroll tax. Concurrently, the former role of *rayons*/cities in pooling health budgets was eliminated.
Russian Federation (Shishkin 1999; Mathivet 2007)	CHIs were established at federal and territorial levels in 1993, but with substantial variation in how the system was implemented across the country. Three broad models can be discerned: (1) regions that rely exclusively on redistribution from a TFCHI to competing private insurers; (2) direct allocation from the TFCHI to providers or

50 This describes the situation prior to the separation into separate countries of Serbia and of Montenegro.

Table 5.1 *contd*

Russian Federation and western-most former Soviet Republics *contd*	
Russian Federation (*contd*)	to its decentralized administrative branches organized in specific subregions of the territory; and (3) a mixed system of private insurers and affiliates. The result was a degree of centralization of formerly decentralized budget-funded pools, but because both regional and local governments continue to budget "their" health facilities directly, these now overlap with the CHI pools. Inter-regional risk adjustment takes place, carried out by the Federal CHI to the TFCHI, along with intra-regional risk adjustment to private insurers by the TFCHI.
Ukraine (Lekhan, Rudiy and Shishkin 2007)	An inherited structure of administratively decentralized and territorially overlapping budget-funded pools remains, but in 2001 a change to intergovernmental financial arrangements changed the basis for health allocations to regions from old input norms to age- and sex-adjusted capitation.
Caucasus and central Asia	
Armenia (World Bank 2006b)	In 1997, the SHA was created as a semi-independent structure outside the MoH, managing a national pool of budget funds linked to the Basic Benefits Package mandated by the state. In 2002, the SHA was incorporated as a department of the MoH.
Azerbaijan (authors' own compilation)	No changes have been introduced, apart from some limited district-level pooling experiments implemented in the context of donor projects. In early 2008, the government approved a decree to introduce compulsory health insurance under a new State Agency for Mandatory Health Insurance.
Georgia (authors' own compilation)	Compulsory health insurance was introduced in 1995 (SMIC, and later SUSIF), although without a link between entitlement and contribution. There have since been many changes in coverage entitlements and organizational arrangements. Local budget revenues for health services were gradually centralized into the SMIC/SUSIF pool. Although payroll tax was cancelled in 2005, local and national budget funds are still pooled within SUSIF, which has become a department of the MoH.
Kazakhstan (Cashin and Simidjiyski 2000; Government of Kazakhstan 2004; authors' own compilation)	Compulsory health insurance, with funds pooled at the oblast level, was introduced in 1996, but uncoordinated with the pooling (and purchasing) arrangements of the MoH, whose budget funding was also pooled at the oblast level. The MHIF was cancelled in 1998. A single pool/purchaser system was introduced in pilot sites, including Zhezkazgan, Semipalatinsk and Karaganda *oblasts*, with donor support. From 1999 to 2004, health budgets were decentralized to *rayon* level. In 2005, a legal basis was approved for budget consolidation or pooling of all health budget funds at the *oblast* level, with the *oblast* health departments serving as single payers responsible for purchasing health services. National implementation proceeded in the period 2006–2007.
Kyrgyzstan (Kutzin et al. 2002; Jakab et al. 2005; authors' own compilation)	A compulsory insurance fund (the MHIF) was introduced in 1997 as a national pool, and coordinated with local government (*oblast* and *rayon*) pools until 2000 under a "joint systems" approach. In 2001, implementation of the "Single Payer" reform began, with pooling of *rayon* and *oblast* budget revenues in *oblast* branches of the MHIF (which were already administering the nationally pooled health

Table 5.1 *contd*

Caucasus and central Asia *contd*	
Kyrgyzstan (*contd*)	insurance payroll and other revenues allocated from central to oblast level). Nationwide implementation was completed by 2005, resulting in one budget-funded pool for the entire population of each oblast and one contributory national pool for insured individuals, providing a complementary benefit; both pools were managed by the national MHIF and its *oblast* branches. In 2006, budget-funded pools were merged and centralized to national level.
Tajikistan (authors' own compilation)	No major reforms have been implemented to the inherited system, although the national health financing strategy approved by the President envisions *oblast*-level pooling with *oblast* health departments as the single pooling and purchasing entities. Pilots to pool funds for primary care at *rayon* level and to purchase services using a per capita payment system are being expanded at the time of writing.
Turkmenistan (Ensor and Thompson 1998; Ibraimova and Shishkin 2003)	No major health financing reforms have been implemented within the inherited system and budget funds remain pooled at the country administrative levels of republican, *velayet* and *etrop*. A government-run "Voluntary Health Insurance" scheme was introduced in 1996 that in the local context is difficult to distinguish from compulsory health insurance, particularly for formal-sector workers and civil servants. It provides discounts for covered services and products, including pharmaceuticals. Voluntary Health Insurance is a national system with a national pool and is uncoordinated with the pooling (and purchasing) arrangements for budget funds.
Uzbekistan (Routh 2007; World Bank 2009)	A step-by-step health reform process linking changes in health financing and service delivery is under implementation. The first phase dealt with rural PHC, first piloted and then rolled out nationally. Funds from *rayon* budgets for rural PHC are pooled at the *oblast* level with the *oblast* health departments as single pooling and purchasing entities. The second phase is concerned with urban PHC and non-tertiary hospitals, and began with budget funds for urban PHC pooled at the *oblast* level. However, a change in the hospital payment system has not yet been implemented and hospital funds remain separated by the country administrative levels of *oblast*, city and *rayon*.

Notes: NHIF: National Health Insurance Fund (Bulgaria); MoH: Ministry of Health; VZP: General Health Insurance Company (Czech Republic); EHIF: Estonian Health Insurance Fund; GP: General practitioner; OEP: National Health Insurance Fund Administration (Hungary); SSF: State Sickness Fund (Latvia); SCHIA: State Compulsory Health Insurance Agency (Latvia); SPF: State Patient Fund (Lithuania); TPF: Territorial Patient Fund (Lithuania); DHIF: District Health Insurance Fund (Romania); HIIS: Health Insurance Institute of Slovenia; HII: Health Insurance Institute (Albania); PHC: Primary health care; RS: Republika Srpska; FBiH: Federation of Bosnia and Herzegovina; FSF: Federal Solidarity Fund (Bosnia and Herzegovina); HZZO: Health Insurance Institute (Croatia); HIF: The compulsory Health Insurance Fund (TFYR Macedonia); HIF: Health Insurance Fund; SIZ: Communal Insurance Association (Serbia and Montenegro); NHIC: National Health Insurance Company (the Republic of Moldova); CHI: Compulsory Health Insurance Fund (Russian Federation); TFCHI: Territorial CHI Fund (Russian Federation); SHA: State Health Agency (Armenia); SUSIF: State United Social Insurance Fund (Georgia); SMIC: State Medical Insurance Corporation (Georgia); MHIF: Mandatory Health Insurance Fund (Kazakhstan, Kyrgyzstan).

C. Implementation of selected pooling reforms: description and analysis

In this section, we provide an in-depth description and analysis of pooling reforms in selected CE/EECCA countries that provide important lessons. The examples are organized according to the two broad categories of pool market structure reforms identified above. The analysis aims to show how the reforms were implemented (including interactions with other relevant aspects of the system, as shown in Fig. 5.1), and the effects of the reforms on health financing policy objectives, principally via their impact on pool fragmentation.

i. Addressing fragmentation through the introduction of new pooling agencies

Early health reformers in the transitional countries identified a number of gains that were expected to arise from the introduction of compulsory health insurance. These included higher funding levels, improved accountability, greater efficiency and higher quality, through new payment incentives and the separation of purchaser from provider. Underlying many of these hopes was an expectation that the introduction of compulsory insurance would be an instrument for addressing underlying efficiency and equity problems arising from the fragmented health financing system inherited from the past (see Chapter 2). Experience with the introduction of compulsory health insurance in low- and middle-income countries elsewhere in the world suggests, however, that such reforms tend to worsen inequities and duplication by setting into motion the establishment of separate, segmented health financing (and often delivery) systems for the insured and uninsured populations (Kutzin 1997; Londoño and Frenk 1997; Lloyd-Sherlock 2006; Kutzin 2007; Savedoff 2004). In a context of relatively low levels of formal employment, the usual approach of "starting insurance" with the formal sector can exacerbate existing inequalities because formal sector workers tend to earn higher incomes and hence are already relatively advantaged in terms of their ability to access health services. Rather than gradually expanding to the rest of the population (as occurred over long periods of time in Germany and Japan, for example), the initially covered group is able to use its position and influence to obtain expanded service coverage and greater public subsidies. The result has been the creation of parallel health systems, inducing both more inequity (because the social health insurance systems tend to be much better funded than the "MoH" systems) and structural inefficiencies, because both the social health insurance and MoH systems have to maintain not only their own health financing administrations but also in some cases a separate service delivery infrastructure.

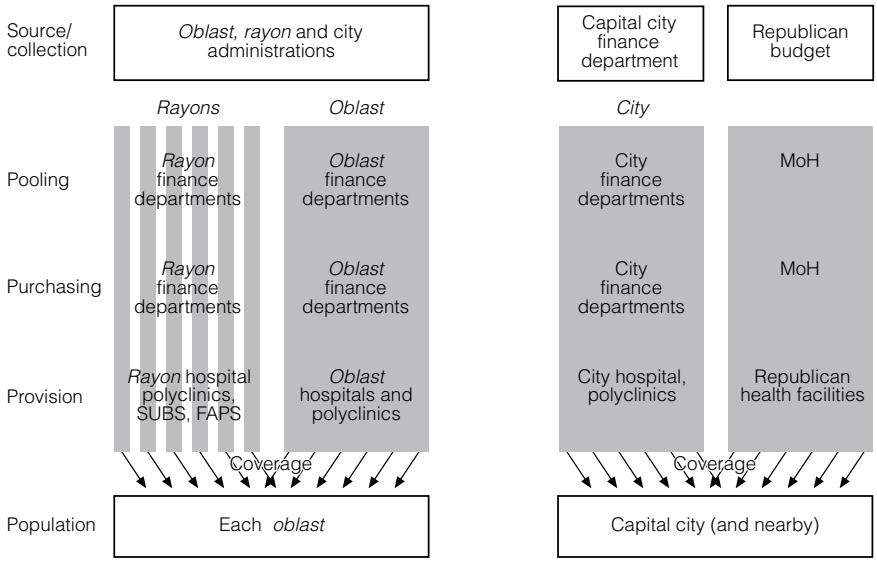


Fig. 5.2 *Health financing functions and coverage arrangements in the USSR*

Source: Adapted from Kutzin et al. 2002.

Notes: MoH: Ministry of Health; FAP: Rural physician assistant and midwife post; SUB: Rural hospital.

While an understanding of this experience was not explicitly a part of their planning process, a notable difference from the approach taken in the rest of the world was that most transitional countries made specific plans, from the beginning, to incorporate non-contributing populations into the same pool as the workers. However, the extent to which such plans were realized in practice – as well as the overall extent of coordination of general budget and payroll tax revenues – differed considerably across countries.

The Russian Federation's initial attempt to transform Semashko. As described in Chapter 2 and summarized in a simplified way in Fig. 5.2, the health financing system of the USSR was characterized by fragmented, vertically integrated financing and delivery systems based on administrative levels of government. Because administrative levels overlapped (for example, *rayons*/ cities exist within *oblasts*), financial and service delivery coverage overlapped as well. This contributed to duplication in service delivery infrastructure and limited the potential for risk pooling from a given level of public funding because it was not possible to cross-subsidize across administrative boundaries. The Russian health insurance reform introduced in 1993 was meant to create a territorial (that is, *oblast*- or region-level) pool of funds from payroll taxes and transfers from local governments on behalf of the non-working population. However, implementation was decentralized, and as a result wide variation existed in the extent to which different regional and local governments actually

provided transfers to their TFCHIs. In 2004, for example, the ratio of funds accumulated by TFCHIs to budget funds allocated by regional and local authorities directly to health care facilities varied from 16:84 in Komi-Permiazky autonomous territory to 95:5 in Samara *oblast* (Shishkin 2006). Because most regional and local governments maintained their direct allocations to the health facilities under their subordination, the new compulsory health insurance did not replace the inherited system of pooling but rather existed parallel to it, and often with no attempt to coordinate financial flows (Shishkin 1999). As described in Chapter 4, Kazakhstan's short-lived compulsory health insurance reform experienced similar problems of coordination between the territorial funds and local government authorities (Cashin and Simidjiyski 2000).

Kyrgyzstan: compulsory health insurance as a change agent for the system. Pooling reforms in Kyrgyzstan can be categorized into three distinct periods: (1) introduction of the Kyrgyz MHIF in 1997; (2) initiation and nationwide extension of the *oblast*-level "Single Payer" system for budget funds managed by the MHIF from 2001 to 2005; and (3) national pooling of general budget funds by the MHIF, beginning in 2006. The step-by-step implementation of these reforms addressed many of the fundamental problems of the inherited health financing system.

From 1997 to 2000, the MHIF functioned as a somewhat "traditional" compulsory health insurance fund in that it pooled compulsory contributions on behalf of employed people as well as transfers on behalf of specifically defined non-contributors (from the pension and unemployment funds for these individuals, and beginning in 2000 from the central budget on behalf of all children under 16 years old). However, certain decisions made prior to implementation distinguished the Kyrgyz reforms from those in other low- and middle-income countries. One was to not have the MHIF purchase an entirely separate benefits package for insured people, but rather to use its very limited resources[51] to pay additional amounts to budget-funded hospitals and primary health care (PHC) practices for the insured individuals that they served. Another was the planning and implementation of an explicit approach to reduce conflict and duplication between (1) the MHIF and its territorial departments (TDMHIFs); and (2) the MoH and *oblast* health departments. One aspect of this "joint systems approach" was the implementation of a single, unified hospital information system for all patients regardless of their insurance status. These features – combined with the initial planned incorporation of specific non-contributing groups in the system – enabled Kyrgyzstan to avoid the development of parallel health financing systems when they introduced

51 Although the addition of children in the year 2000 raised MHIF coverage from approximately 30% of the population (in 1999) to over 70%, the MHIF managed only approximately 10% of pooled health spending in 2000. A total of 90% remained under the old system, managed by local governments and central ministries (Kutzin et al. 2002).

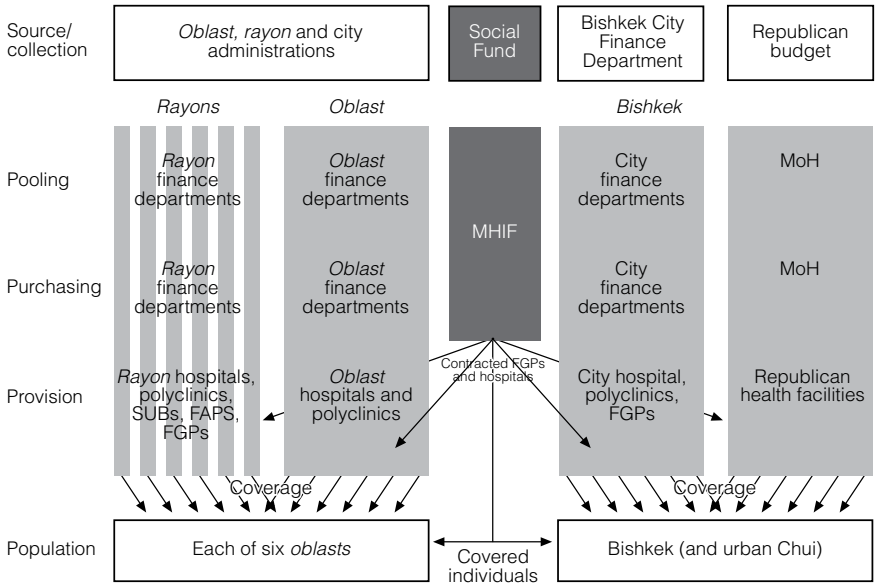


Fig. 5.3 *Kyrgyz health financing and delivery arrangements, 1997–2000*

Source: Adapted from Kutzin et al. 2002.

Notes: MoH: Ministry of Health; FAP: Rural physician assistant and midwife post; SUB: Rural hospital; FGP: Family group practice; MHIF: Mandatory Health Insurance Fund.

compulsory health insurance. However, as summarized in Fig. 5.3, no changes were made to the existing decentralized budgetary system, and hence this first period of reform did not address the underlying fragmentation and duplication problems of the inherited system (Kutzin et al. 2002).

A more fundamental reform of the system began in two *oblasts* in 2001. The principal features were the accumulation of all local government (that is, *rayon*, city and *oblast*) health budgets within the TDMHIF and the end of vertical integration between the purchaser and providers. This meant that the MHIF (through its TDs) managed a territorial pool of funds sourced from local budget revenues in each *oblast*, as well as continuing to manage the national pool for the insured population. This reform was initiated by the MoH following a government decision to eliminate the *oblast* level of many ministries, and hence reflected close coordination of planning and implementation by the MoH and the MHIF. Although it managed an *oblast*-level pool of local government budget funds (for the entire population of each *oblast*) and a national pool of "insurance money" for insured people, the MHIF used the same purchasing methods for both pools, and hence appeared to providers as a *Single Payer*. As shown in Fig. 5.4, the Single Payer reform completely eliminated the previous duplication in financing, delivery and coverage arrangements that

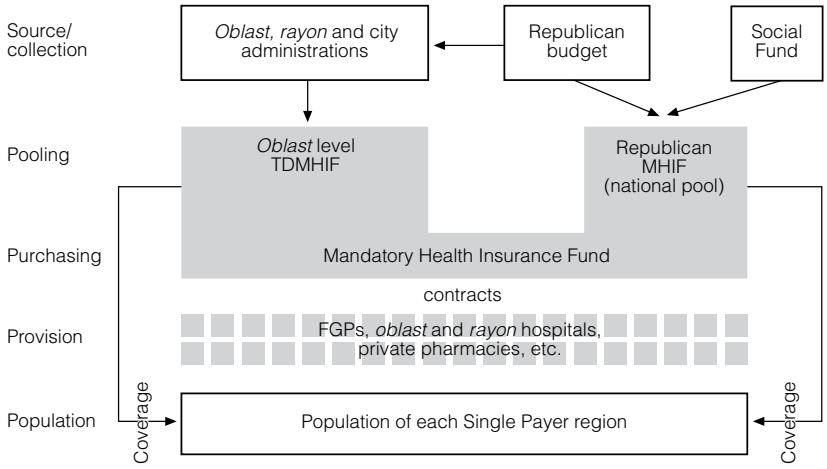


Fig. 5.4 *Financing and delivery arrangements at* oblast *level in the Single Payer reform, 2001–2005*

Source: Adapted from Kutzin et al. 2002.

Notes: MHIF: Mandatory Health Insurance Fund; FGP: Family group practice; TDMHIF: Territorial Departments of the MHIF.

existed within *oblasts*. The reform was extended to two additional *oblasts* in 2002 and nationwide coverage was reached by the end of 2004 (Jakab et al. 2005).

A law on fiscal decentralization passed in late 2004 eliminated *oblasts* and *rayons* as administrative budgetary units and left Kyrgyzstan with the choice to either centralize all budget funds for health at republican level or radically decentralize to locally elected village councils and municipalities by the start of 2006 (Kutzin, O'Dougherty and Jakab 2005). Following internal debate (and a political revolution in March 2005), the decision was made to centralize health budgets at republican level.

The Single Payer reform has resulted in substantial progress on key policy objectives, such as efficiency in service delivery and administration, transparency, equity of access and the distribution of health spending (Jakab et al. 2005). The transformation of pooling arrangements has been central to this success, but because of the nature of these reforms, it is neither possible nor sensible to attribute gains to the pooling reforms alone. Reform of pooling was a necessary condition for stimulating the delivery system downsizing and reduction in fixed costs that occurred through purchasing reforms (see Chapter 6). The reduction in duplication of functional responsibilities for pooling and purchasing that occurred with the establishment of the Single Payer system also led directly to greater administrative efficiency in the financing system (reduction in administrative cost per person for which the MHIF managed resources – see Kutzin and Murzalieva 2001). Furthermore, the centralization of pooling in

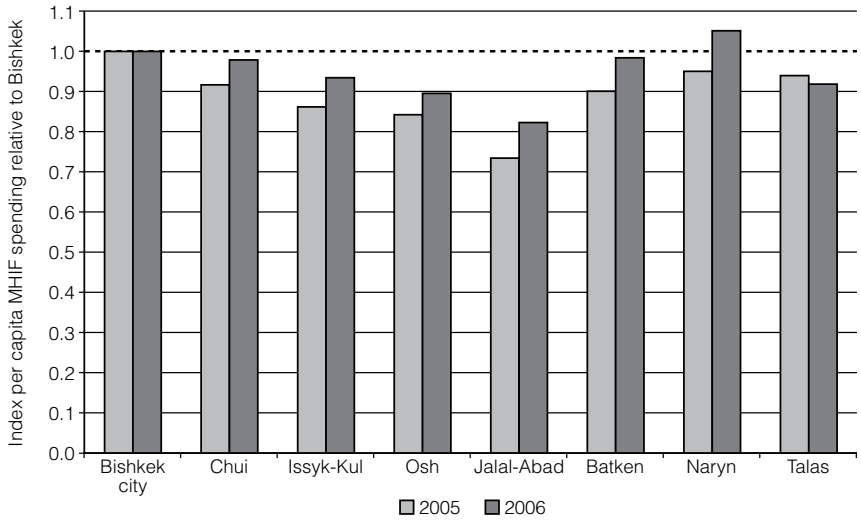


Fig. 5.5 *Equalizing effect of centralized pooling of budget funds on per capita government health spending by region, Kyrgyzstan 2005–2006*

Sources: Government of Kyrgyzstan 2006, 2007.
Note: MHIF: Mandatory Health Insurance Fund.

2006 – combined with the previous output-based provider payment methods – enabled greater geographic equity in per capita public spending on health (Fig. 5.5).

The Republic of Moldova: big bang transformation. Following a 6-month pilot in one region, the Repbulic of Moldova introduced a national compulsory health insurance system in 2004. Central to the implementation process was a transformation of the role of budget funding in the system, as formerly local government health budgets were centralized and redirected to the NHIC for defined groups of the population and pooled with the revenues from the new 4% payroll tax for health insurance. Perhaps unique in a system in which entitlement is linked solely to contribution, roughly two thirds of NHIC revenues came from budget transfers in 2004, with only about one third coming from payroll tax. By centralizing all public funding for health care and creating a purchaser–provider split, this reform completely eliminated the fragmentation of the previous budgetary system. Similar to Kyrgyzstan's 2006 experience, the centralization of pooling, combined with a shift away from input-based purchasing methods, led to greater geographic equity in government health spending per capita, as shown in Fig. 5.6. The ratio of maximum to minimum per capita spending by *rayon* fell from 4.6 to 3.5 times overall from 2003 to 2004, or (as shown in the chart) from 2.9 to 2.4 times if the two largest and most well-funded cities are excluded from the calculation (Shishkin, Kacevicius and Ciocanu 2008).

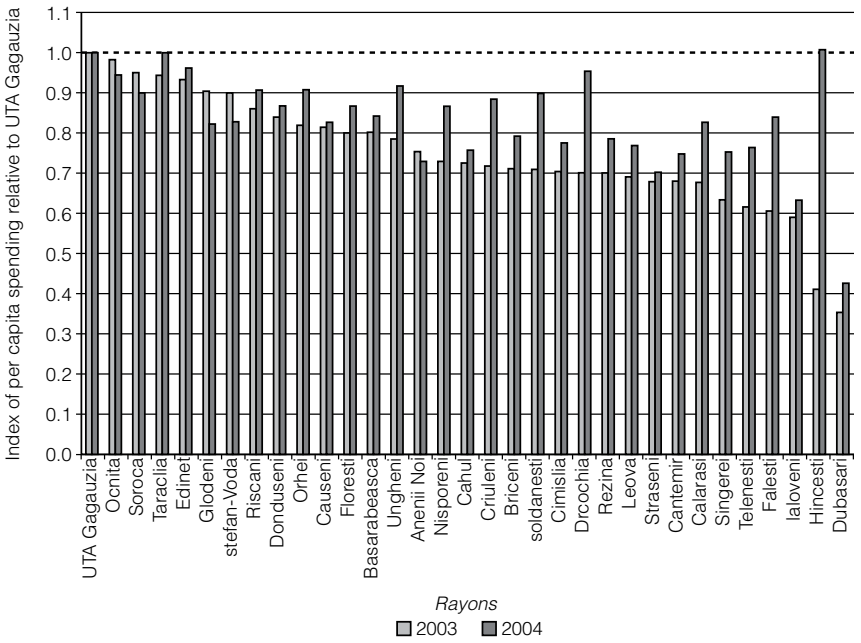


Fig. 5.6 *Equalizing effect of centralization of pooling in the Republic of Moldova, 2004*

Source: Shishkin, Kacevicius and Ciocanu 2008.

The main shortcoming of the Republic of Moldova's insurance reform – and hence the main challenge it faces – is that the fundamental shift in the nature of entitlement (from residence/citizenship to contribution) created an explicitly uninsured population. This group comprises principally self-employed individuals in agriculture, services and small commerce, along with the informal sector. It is estimated that only approximately 7.5% of people in these groups paid their contributions and that approximately 26% of Moldovans permanently living in the country were uninsured in 2005. The financing system does make some provision for the uninsured, with the NHIC managing a separate pool on their behalf that is co-financed from the national budget and cross-subsidized from the NHIC's pool for the insured (Shishkin, Kacevicius and Ciocanu 2008). However, the reform itself did induce a new form of fragmentation in the system.

By international standards, implementation of this reform occurred rapidly. This was enabled by a high level of consensus and concordance of actions, with very strong political leadership provided by the Minister of Health (which was remarkable, as the aim was for the MoH to move away from direct hierarchical financial control), backed by technical and political support from external assistance agencies, particularly during the early phases of reform. This "big bang" approach to reform was greatly facilitated by the joint implementation of

the new NHIC, the new payroll tax for health insurance and the centralization of budget allocations for health from the *rayons* to the republican level of government (Shishkin, Kacevicius and Ciocanu 2008).

Bosnia and Herzegovina: limited steps towards pooling catastrophic risk in a politically decentralized context. Political decentralization resulted in a fragmented health system with 13 health insurance funds for a population of 3.9 million people, including the central health insurance fund in the Republic Srpska, the insurance fund in District Brcko, 10 cantonal health insurance funds and the Federal Solidarity Fund (FSF) in the Federation of Bosnia and Herzegovina (FBiH). Insurance membership is defined by place of residence. As a result, the number of members in 13 health insurance funds ranged from 35 000 in the smallest cantonal pool to more than 400 000 members in Sarajevo Canton health insurance fund, and 1.1 million members in the Republic Srpska health insurance fund in 2004. Indeed, four of the cantonal health insurance funds had fewer than 100 000 members. This stands in contrast to the single MHIF for Kyrgyzstan's population of 5.3 million and the single NHIC for Moldova's 4.2 million people.

The presence of multiple small pools, differences in contribution rates[52] and socioeconomic situations across entities and cantons – along with the absence of a system for re-allocating funds between these territorial pools – had combined and separate harmful effects. The large number of small pools resulted in very high ratios of staff per covered person, indicating the presence of administrative inefficiency when considered at the level of the entire system. The inability to redistribute funds across pools meant the relative size of each pool reflected the contribution capacity of the territory it served, rather than the underlying health care needs of the covered population. This was further exacerbated by budgetary transfers to the health insurance funds that reflected the financial situations of entity and cantonal governments, rather than compensating for socioeconomic differences between them. The result was geographic inequity in resource allocation (Fig. 5.7) that in turn contributed to what were – in effect – unequal benefits packages for insurees. Some cantonal funds offer only a limited range of secondary care and no tertiary care, causing patients to pay out of pocket for services, and hence poorer cantons charged higher co-payments to patients to raise additional funds for health, thereby increasing the financial barriers in access to care. The consequences of this are geographical (and probably related socioeconomic) inequities in access to and financing of care, as well as in the distribution of financial protection (World Bank 2003). The small pools also threatened the financial balance of the cantonal health insurance funds, each of which was in deficit in 2003 (World Bank 2006a).

52 Such as for farmers (who pay either 10% of the minimum wage or a flat amount in some cantons), pensioners, unemployed individuals, disabled war victims and voluntary insured people.

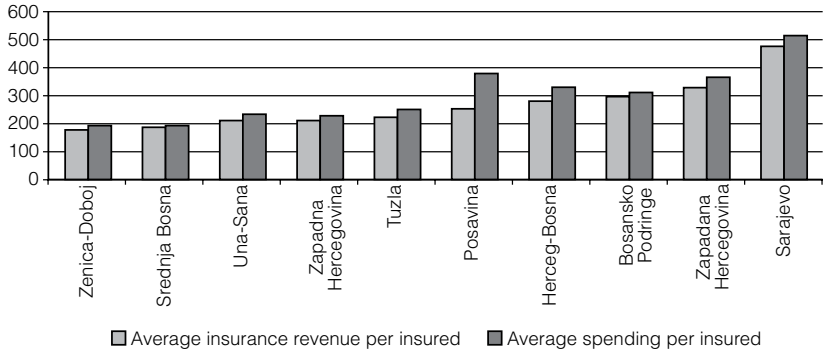


Fig. 5.7 *Revenue and expenditure per member per year, across Health Insurance Funds, in KM, 2003*

Source: Federal Solidarity Fund BiH 2004.

Overall, fragmentation in pooling is one reason why the country was an outlier in terms of its high share of OOPS in total health expenditures relative to its high level of government health spending as a share of GDP (see Chapter 3).

Despite the political constraints on cross-cantonal pooling, the FSF was introduced in the FBiH in 2002. It receives 8% of total payroll contributions, whereas the 10 cantonal health insurance funds receive the remaining 92%. The FSF pays for high-cost treatment of specific diseases and procures high-cost drugs. Since 2004, there has been a steady increase in the number of patients with access to FSF-insured high-cost treatment, according to FSF data. This improved access reflects the utilization gains acquired as a result of creating a central pool for high-cost treatments, as well as centrally contracting these treatments through the FSF with hospitals. While this reflects improved access to care through centralized pooling, the gains to date have been limited. In order to attain significant gains, the current 8% share paid to the FSF would need to be increased substantially, for example to include coverage for all hospital care (World Bank 2006a).

Albania: incoherence in pooling, unclear accountability for performance. In 1995, Albania established the Health Insurance Institute (HII) as an autonomous public agency with the aims of securing additional funding for the health system and of promoting greater equity and efficiency in the system through effective use of its purchasing power. Despite the intent to make the HII a single payer at the time it was created, pooling arrangements in the Albanian system remain fragmented. The introduction and subsequent evolution of the HII was not coordinated in a coherent manner with other arrangements for pooling public funds and purchasing health care services. The fragmentation of the system is portrayed in Fig. 5.8. Several agencies pool, including the

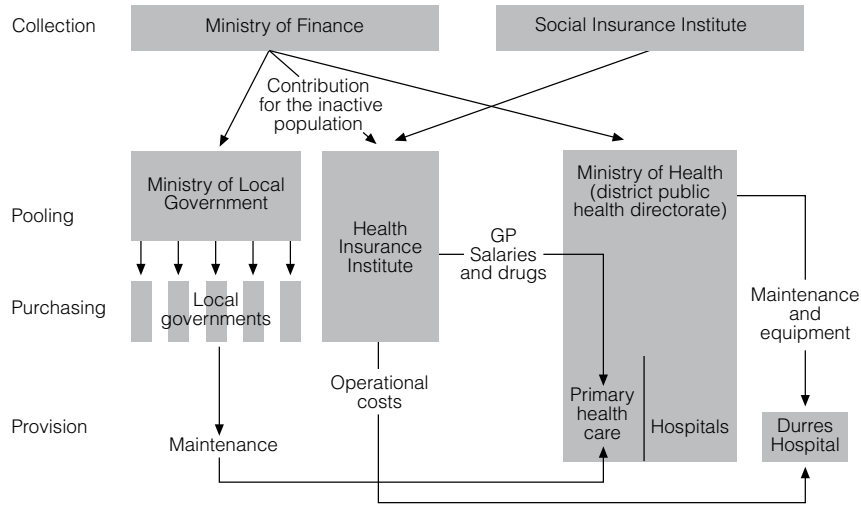


Fig. 5.8 *Fragmentation in Albania's health financing system, 2004*

Source: Adapted from Couffinhal and Evetovits 2004.

Note: GP: General practitioner.

HII for physician salaries and pharmaceuticals in primary care;[53] the MoH for other personnel and operating costs in PHC, and for most hospitals; and local governments for equipment and facility maintenance in primary care. Hence, there is fragmentation of pooling for primary care and – because this is integrated with purchasing – the system lacks a coherent financing mechanism to promote efficiency and quality. Fragmentation of pooling (and purchasing) across levels of care also inhibits effective coordination of service delivery (Nuri and Tragakes 2002; Couffinhal and Evetovits 2004). This fragmentation exists despite the fact that the HII and the MoH pool funds nationally. Although national-level pooling should at least facilitate equity in the distribution of health resources, there remains substantial variation in allocations per capita across regions. Indeed, 2004 data indicate that the lower the regional poverty rate the higher the per capita allocations from all public sources. This illustrates that national pooling alone is not sufficient for equity improvement and suggests that the combination of pooling and purchasing arrangements in Albania contributes to poor performance in terms of equity and financial protection (World Bank 2006c).

ii. Reforms in pool market structure: centralization, consolidation and competition

For countries that introduced independent (to varying degrees) agencies to pool funds or changed the role of existing agencies, a key reform theme has been to alter the market and/or administrative structure of these agencies.

53 The HII also pools for hospital services in one pilot region (Durres).

This has taken several directions, including the consolidation of formerly separate agencies into a smaller number, or even a single, fund; changing the roles of various existing agencies; or putting a formerly centralized single fund into competition with other insurance funds for enrollees.

Centralization and transformation from separate regionally based pools to administrative branches. In the early 1990s, most CE countries introduced new agencies to pool funds and purchase services on behalf of the population under the rubric of introducing "health insurance".[54] In many cases, multiple agencies/funds were introduced initially. Sometimes this involved a single pooling agency with territorial administrative branches, whereas in other cases pooling itself was decentralized to territorial funds (that is, not only the administration of funds, but the actual bearing of financial risk was also decentralized). Most countries that began with multiple branches or funds have progressively centralized them, and in countries where pooling was decentralized, territorial sickness funds have been transformed into territorial branches of the national fund. The Baltic countries have each gone through this process.

Estonia's Health Insurance Act of 1991 – along with a related 1994 law on the organization of health services – established a contributory compulsory health insurance system based on multiple sickness funds organized as independent public agencies at the level of counties and large cities. Problems with the small scale of such funds (such as the ability to find sufficient qualified staff to run a large number of small funds, insufficient revenue base in poorer counties, and so on) led to the establishment of the Central Sickness Fund in 1994, with responsibility for coordinating the 22 county-based funds. In 2001 the EHIF replaced the Central Sickness Fund, and the territorial funds were transformed into four EHIF regional departments. The EHIF manages a single pool but devolves budgets for its branches to administer. This centralized pooling creates conditions for both more effective purchasing and risk pooling for the country's 1.3 million people.[55] While it is difficult to attribute causality precisely, available evidence suggests that the EHIF has been effective at redistributing its limited resources to protect the population against financial risk. EHIF data from 2003 (reported in Couffinhal and Habicht 2005) show that 1% of the covered population accounted for 29% of the cost of services paid for by the EHIF, and 5% of the population accounted for 54% of the cost. This pattern is consistent

54 In some cases (such as that of Latvia, Lithuania, Poland and Romania), these are not really "social health insurance" funds in the sense that the population served by each of these agencies is entitled to coverage on the basis of residence or citizenship, rather than being contingent on a contribution made by (or on behalf of) the covered individuals.

55 As a result of the close links between pooling structure and the capacity to purchase, it is difficult (and from an implementation perspective, not necessarily even sensible) to separate these issues in practice. While it is evident that a pooling structure that consolidates revenues in a single agency would create greater potential purchasing power than if this took place in multiple pools (especially for countries with small populations as the Baltics), it is not clear whether this centralization of pooling can be accurately characterized as a "necessary condition" for stronger purchasing (it is obviously not a sufficient condition).

with the assumption that those with greater need receive a greater value of EHIF resources. Further, given the relatively low share of OOPS in total health expenditures and low measured incidence of catastrophic and impoverishing spending, the centralized EHIF seems to offer effective financial protection to the population.[56]

It is perhaps remarkable that centralization was even an issue at all in small countries such as the three Baltic states (in **Latvia** and **Lithuania** as well, there were initially small decentralized pools that were gradually consolidated and transformed into departments of national pooling agencies), as the need for consolidation of pooling and administrative functions would seem obvious. But the initial context of transition included an emphasis on local control of resources, and the health sector was not immune to this. It was only with time and experience that consolidations took place even in these small countries. Some larger countries have also witnessed centralization of pooling. **Poland** established 16 regional sickness funds in 1999 but merged these into a single National Health Fund in 2003. Among many shortcomings, the 16 funds were characterized by variation in their level of funding, with those based in richer regions able to offer greater funding than those based in regions suffering from lower incomes and higher unemployment. Despite a formula that enabled some re-allocation across funds, the gap in per capita expenditures between the "richest" and "poorest" sickness funds grew, reaching more than 25% by 2002 (Kuzewski and Gericke 2005). Hence, the redistribution mechanism was not sufficient to prevent decentralized pooling from being a source of inequity.

Restructuring within the public financial management system. Kazakhstan and Uzbekistan took a different path to centralize and alter the market or administrative structure of agencies involved in pooling and purchasing. Rather than creating new agencies and then consolidating them over time, they changed the roles and relationships of existing health sector agencies. During the Soviet era, pooling and purchasing existed at the MoH, *oblast* health departments, city health departments, and *rayon* health departments. Kazakhstan and Uzbekistan have each established budget consolidation and pooling at the *oblast* level with the *oblast* health department as the single payer managing this *oblast*-level pool of funds.[57] The city and *rayon* health departments retain policy and service delivery responsibilities but no longer have pooling or purchasing responsibilities. These changes have increased equity in health spending per capita within *oblasts* and have also established the conditions for health delivery system restructuring

56 Unfortunately, the evidence also shows that while the Estonian system offers good financial protection compared with most other countries of similar income and government health spending levels, the extent of this protection has been gradually decreasing since 1996, parallel to a consistent decrease in total government health spending as a share of GDP and an increase in the share of OOPS in total health spending (Habicht et al. 2006).

57 In Uzbekistan, this applies to funds for primary care only. In Kazakhstan, this occurred after the cancellation of their compulsory health insurance system, which was in place from 1996 to 1998.

and increased efficiency, by enabling reductions in duplicative health system capacity across country administrative levels (Katsaga and Zues 2006; Routh 2007).

Competition and risk adjustment in the Czech Republic. The Czech Republic returned to its pre-Second World War Bismarckian roots and reintroduced a social health insurance system shortly after the 1989 "Velvet revolution". The main reasons put forward for this change were to increase flow of funds into health care and to make financing independent of the state budget but pegged to economic growth (Massaro, Nemec and Kalman 1994). The General Health Insurance Company (VZP) was established in 1992 and was responsible for collection and pooling of premiums, as well as purchasing health care services for the entire population. Following the establishment of the VZP, the Czech Parliament approved a law enabling the foundation of competing non-profit-making insurers established as public institutions. The first of these started operating in 1993. They were primarily organized around large employers or by industry sectors, and were thus called *branch* or employers' health insurers. Their number reached 27 in 1995 and then decreased rapidly as many of them experienced financial problems. By the year 2000, the number of insurers stabilized at nine, and 60% of the population remained insured by the VZP.

Because the branch insurers were organized mainly to serve particular industries or firms, they attracted primarily employed citizens. Retired people stayed with the VZP. This caused a rapid deterioration of the financial situation of the VZP, both because of the difference between the average premium paid by employed citizens and the contribution for economically non-active citizens paid to insurers by government,[58] and because of the difference in the average expected health care needs of the relatively younger and healthier branch insurers' clients versus the older population served by the VZP. Because the majority of the population was served by the VZP, its financial deterioration effectively meant that the maintenance of isolated pools soon became both a financial and a political problem for the system as a whole.

The Czech Government responded by introducing some features of risk adjustment in 1994 to enable pooling of funds across insurers. While collection of premiums remained in the hands of individual insurers, the VZP administered a centralized database of all insured people and a pool redistribution system. The revenues subject to the risk-adjustment mechanism included the entire state contribution on behalf of economically inactive people ("state insurees") and 60% of the premiums collected from the economically active population.

58 The state contribution was set several times lower than the average collected premium. While the exact ratio between the two payments varied from one year to another, the difference remained huge. Ministry of Finance data, for example, indicate that the average collected monthly premium amounted to CZK 1393, while the state contribution only to CZK 392 per person in the first half of 2001.

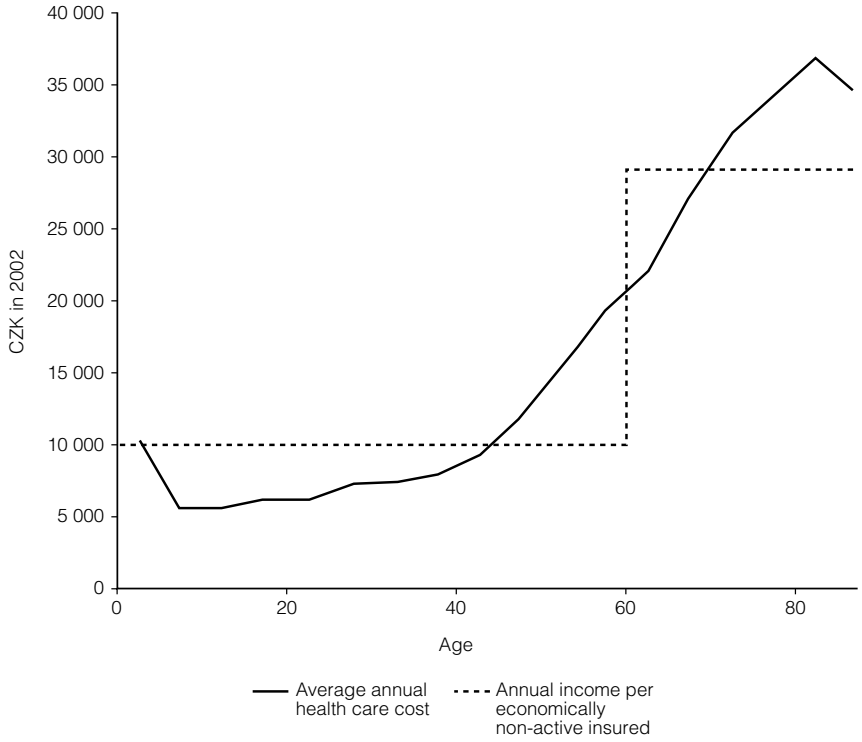


Fig. 5.9 *Opportunities for cream-skimming in the Czech system before introduction of the new risk-adjustment mechanism*

Source: VZP 2003 and annual reports of other Czech insurance companies for 2002.
Note: CZK: Czech koruna.

The funds were redistributed between insurers according to the number of state insurees enrolled with each of the insurers, with a rough adjustment for age. Within the state insurees, two age categories were recognized – below and above 60 years of age. State insurees above 60 years old were counted in the risk-adjustment formula with triple weight.

This arrangement enabled a more equitable division of available resources between the VZP and other health insurers, but it did not eliminate incentives for cream-skimming. Insurers were not allowed to reject any client, but they engaged in various other tactics to select profitable clients based on their income, age or health status. It was particularly easy to target specific profitable age groups (especially those under 40 years). The branch insurers had a comparative advantage as a result of their better access to information on the employed people within their industry of activity. For example, they offered extra marginal benefits suited for specific groups of people, such as partial reimbursement of contraceptives that were not covered by the social

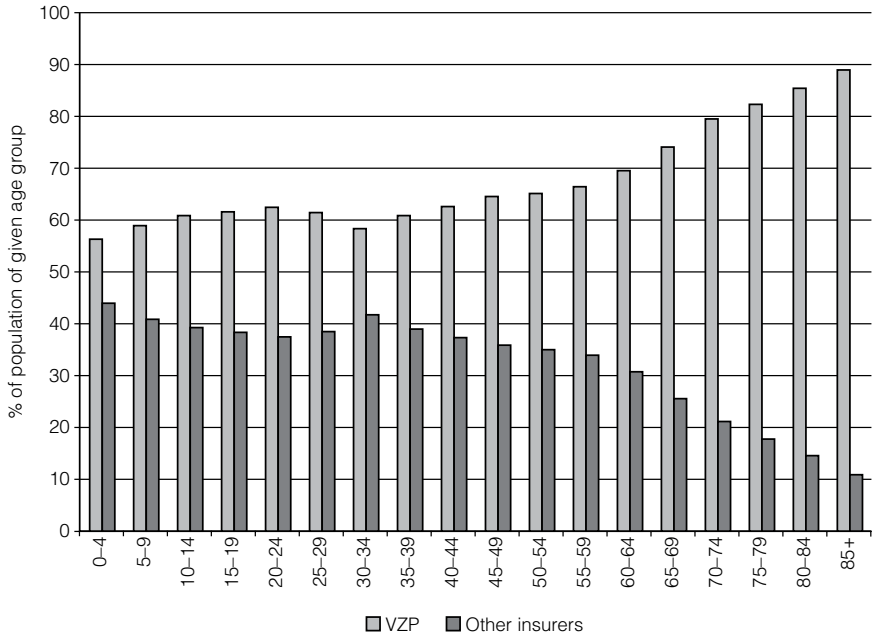


Fig. 5.10 *Uneven distribution of age groups between insurers in the Czech Republic as of 2004*

Source: VZP 2005.

Note: VZP: General Health Insurance Company (Czech Republic).

health insurance, as well as vitamins, and so on.[59] Enormous differences (up to 50%) existed in average premiums collected from the economically active population, thus presenting an important handicap for insurers with higher shares of lower-income policy-holders. Regarding the economically non-active insured population, the average gain per client aged from 1 to 40 years was several thousand Czech korunas per year, while an average client aged between 50 and 60 years or older than 70 years implied similar or higher loss (Fig. 5.9). This situation further supported uneven distribution of age groups between insurers (Fig. 5.10).

The age structure of the VZP's clients, combined with the low level of state premium payments received on their behalf, contributed to its repeated deficits. Conversely, after their consolidation, the other insurers reported mostly positive or at least neutral results. The VZP, therefore, repeatedly tried to change the risk-adjustment formula. The efforts and discussions focused on two issues: (1) scope of pooling (what percentage of collected premiums should be subject to redistribution); and (2) method of risk adjustment (how many age categories should be used and whether the mechanism should include compensation for expensive cases). Several efforts to change the risk-adjustment system failed in

59 However, such tactics are limited by available resources of an insurer for preventive care (set as a fixed percentage of its collected premiums) and the scope to which such benefits can fit within this category.

Box 5.1 *Risk adjustment in the Czech Republic after 2003*

The 2003 law introduced complete pooling of the state payment and all collected premiums, which are redistributed between insurers on a capitation basis (see Fig. 5.11), adjusted for age and sex (altogether 36 age/sex categories). Each insurer reports on a monthly basis the total amount of its collected premiums, as well as the number and age structure of its insured individuals. State payments for economically non-active citizens flow directly to a special account operated by the General Health Insurance Company (VZP) under the supervision of other insurers and the Ministries of Health and Finance. The account's manager then calculates the total amount of income (collected premiums + state payment) per "standardized" insured individual for the whole system and the income of each insurer based on its actual number of insured individuals and their age/sex structure. Differences between collected premiums and the income of a particular insurer after redistribution are cleared within days by one-off payments between insurers and the manager of the special account. Data provided by an individual insurer may be checked by a specialized task force consisting of representatives of all insurers or by the ministries. Also, the data on redistribution results are available to all insurers so that they can follow their competitors' reports on a continuous basis.

In addition, the system includes an ex-post partial compensation of expensive cases (a standardized methodology of accounting costs to each individual insured person was issued together with the 2003 law). If the annual costs of a client reach the limit of 25 times the average annual costs per client in the whole system, the insurer is compensated with 80% of the over-the-limit costs. Advances to cover expensive cases are divided between insurers based on historical numbers. Differences between these advances and the actual cost of expensive cases are compensated once a year when the prior year's financial results are published. In 2005, the compensation of expensive cases included 0.2% of the total population and the redistribution of 5% of total funds between insurers (Hroboň, Machecek and Julinek 2005).

the Parliament, mainly due to the resistance of other health insurers. Finally, a new law was adopted in 2003 that completely changed the redistribution system to include pooling of all revenues for health insurance and a more sophisticated risk-adjustment formula. Implementation of the new formula was phased in over three years to allow all health insurers to adjust to their new income levels (see Box 5.1). After full implementation, the new system was supposed to increase the VZP's income by 3% while lowering the income of all other insurers, ranging from a marginal impact to a 14% reduction (Hroboň 2003). The phased-in implementation proved to be the crucial factor for political acceptance of the reform.

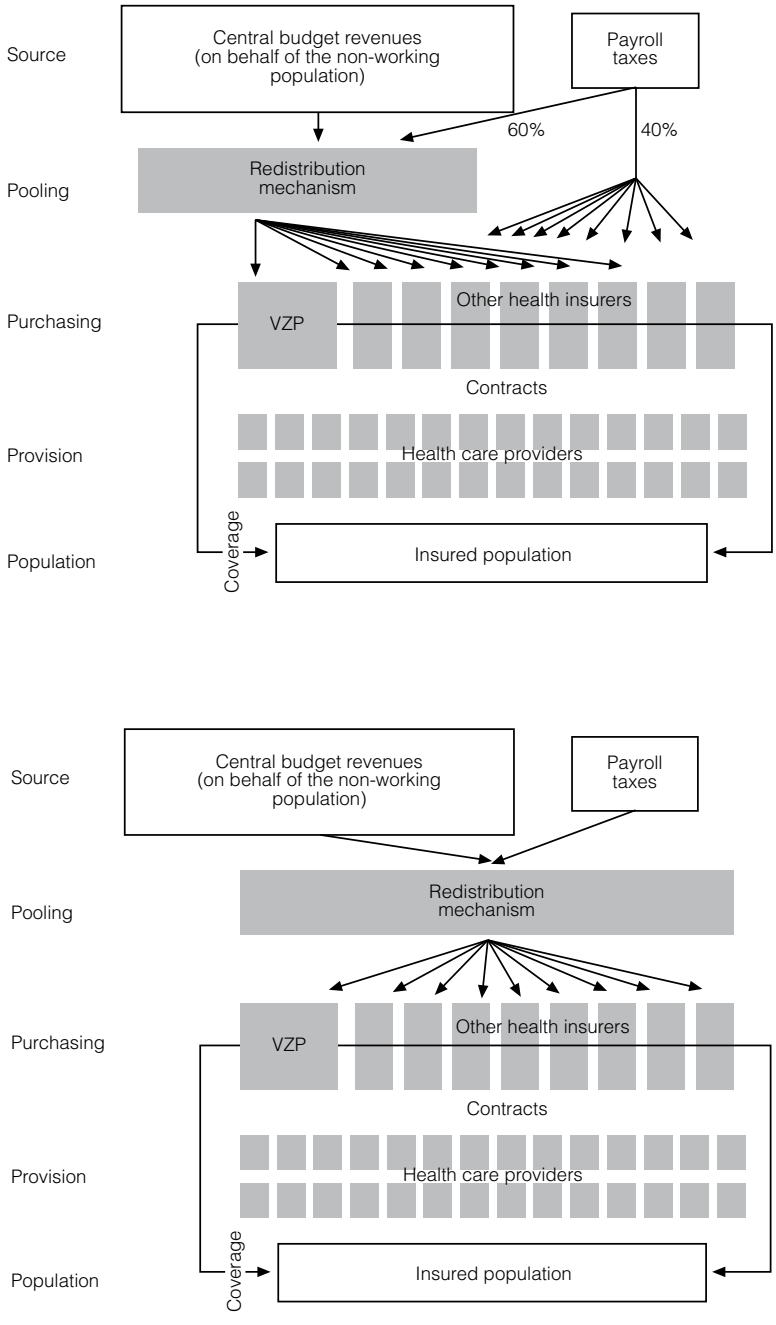


Fig. 5.11 *Pooling arrangements in the Czech Republic before (top) and after (bottom) the 2003 reform*

Note: VZP: General Health Insurance Company (Czech Republic).

The purpose of the new law was twofold. First, to strengthen financial protection and equity through improvement of the VZP's financial balance relative to its competitors. While all insurance companies protected their clients against financial risk, the worsening financial balance of the VZP led in some cases to impaired access or at least less-favourable treatment of its clients by providers in comparison with clients of other insurers. The second purpose was to improve the efficiency of the health system by changing the focus of insurers' efforts from competing on pooling (by investing in efforts to attract people with the highest probability of a positive margin between revenue and expenditure) to competing on improving health services purchasing. While a positive financial result (important even in a non-profit-making institution) formerly used to be reached by the selection of rich, young or healthy clients, the new approach to pooling and risk adjustment reduced the potential benefit of engaging in the selection of clients according to preferred age or income categories. Because the reformed system results in a better match between each insurer's income and its policy-holders' risk structure, insurers have much stronger incentives to compete on the basis of improved cost management and overall quality of their services. Although improved purchasing practices have not yet materialized,[60] a sufficient level of risk compensation is a necessary condition to minimize "strategic pooling" behaviour by insurers. Because such efforts at cream-skimming do not contribute to any sectoral objective, reforms that reduce the private benefits from such behaviour are by nature efficiency enhancing.

Imperfect competition and fragmentation in the Russian Federation. As described above, the Russian Federation introduced compulsory health insurance in 1993. This reform replaced the decentralized and overlapping pooling structure with a single pool of funds at the level of each *oblast*, managed by a TFCHI. There were two reasons why this did not eliminate fragmentation, however. First – and contrary to reform plans – local governments rarely redirected all of their health revenues to the TFCHIs, but instead continued to finance their health care facilities directly. Second – and from the beginning of the reforms – the intention to introduce a competitive model with private insurers was declared and implemented.[61] Having created the potential for reducing fragmentation by initiating a single pool at *oblast* level with the TFCHI, the introduction of competing insurers without an effective risk-compensation mechanism in place allowed the pool to be fragmented again, although along different dimensions.

60 One reason for this lack of progress has been a failure to maintain an appropriate regulatory environment to promote efficiency on the provider side. For example, hospital reimbursement rates have been set by a series of governmental decrees that were clearly aimed at ensuring the survival of all hospitals within their historical structures. This has led to a situation in which funds are allocated to insurers according to the number and relative risk of their clients, but each insurer's internal allocation of funds to clients in different regions is based on historical patterns of payment to providers in order to comply with these regulations (Hroboň, Machacek and Julinek 2005).

61 However, the extent to which this was implemented varies considerably across the country.

In fact the Russian compulsory health insurance system has two types of entity that perform the role of insurers: (1) health insurance organizations (usually private profit-making entities); and (2) TFCHIs and their branches. By 2004, the Russian Federation had 348 health insurance organizations, 10 regional compulsory health insurance funds, and 378 branches of compulsory health insurance funds operating as insurers. In 47 regions of the Russian Federation, health insurance organizations were the only compulsory health insurance insurers; in 19 regions this role rested entirely with compulsory health insurance funds and their branches; and in 23 regions both types of insurer coexisted.

Risk adjustment is carried out by the Federal Compulsory Health Insurance Fund, among TFCHIs and by these Funds among insurers. A diversity of risk-adjustment methods is used. By 2004, in 51 of the 70 regions in which private insurers operated, TFCHIs allocated funds among them by capitation. Of these, age and sex adjustment was employed in 35 regions, and by one of these factors (but not both) in five regions (Independent Institute for Social Policy 2007). In four regions more sophisticated methods of risk adjustment were employed, and in seven regions completely unadjusted capitation was used. In the other 19 regions with private insurers, as well as the 19 regions with only public insurers, funds were distributed simply according to actual expenditures in the previous year. However, it is likely that these different risk-adjustment practices have had limited impact on insurers' behaviour towards different categories of insurees, because the amount of money transferred to the insurance companies will be less than that needed to meet the costs of funding the benefits package for insured people. In this condition of public under-funding of free health care guarantees, insurers have the possibility to transfer risks and expenditures to providers, who in turn shift them on to patients by demanding informal payments. Therefore, in this context, risk adjustment exists but is not especially relevant because the rest of the system is not in financial balance: the insurers just want to obtain the revenues and thus earn more money as a fixed percentage of the sum received from the TFCHIs (Shishkin 2006).

In the Russian Federation, the transition from the old to the new system of health financing was incomplete. The sequence and pace of transition were never established by Russian legislation, and implementation of compulsory health insurance has been poorly controlled by federal authorities and depended mostly on the attitudes of regional authorities (Sheiman 1997; Shishkin 1999). Competition among insurers exists but only to a limited extent and in forms that do not create strong incentives for improving the accessibility and quality of services. After 15 years of reform implementation, the Russian health financing system combines old and new forms of pool fragmentation and overlap. In addition, the deficiencies in regulatory arrangements for insurers do

not provide sufficient safeguards against corruption. Insurers compete fiercely for contracts with territorial authorities for insurance of the non-working (subsidized) population and with employers for insurance of their employees, but inadequate regulation and lack of transparency in the awarding of such contracts shift the focus of competition to the amount of shadow payments made by insurers to government officials and firms (Shishkin 2006).[62]

D. Lessons from implementation experience

Fragmented pooling arrangements pose a threat to policy objectives and a challenge to the design and implementation of financing reforms. The examples presented in this chapter include cases in which reforms have successfully reduced fragmentation, along with others in which new forms of fragmentation have been the product of ill-conceived or poorly implemented reforms. As illustrated by the examples explored here, fragmentation can take many forms:

- decentralized pooling by local government health agencies with overlapping population coverage (the USSR and unreformed successor countries such as Ukraine and Belarus);
- decentralized pooling by territorially distinct but small (district/cantonal/county) health insurance agencies (the former Yugoslavia and continuing in Bosnia and Herzegovina; Estonia and the other Baltic countries prior to consolidation);
- overlapping, uncoordinated population or service mandates between local government health agencies and compulsory health insurance funds (Albania, Russian Federation);
- fragmentation of responsibility for different line items of expenditure between different pooling agencies (Albania);
- fragmentation between competing compulsory health insurance funds and local government health agencies (Russian Federation); and
- fragmentation between competing compulsory health insurance funds (Czech Republic, Russian Federation).

The main problem arising from these various forms of fragmentation is systemic inefficiency and inequity: for a given level of revenues, systems can redistribute less than they could if funds were managed in larger pools. As a result, they can obtain less financial protection and less equity in health spending than would be possible within the scope of their overall resource envelope. Depending on the size of the covered population, the existence of multiple pools can also

62 In late 2006, the top managers of the Federal Compulsory Health Insurance Fund and some regional health insurance funds were arrested on corruption charges.

induce higher administrative expenses than would be needed with fewer pools or a single pool.[63]

The experience of transitional countries with pooling reforms illustrates some important lessons. One such lesson is that reform of fragmented pooling arrangements is a necessary but not sufficient condition for progress in terms of policy objectives. Reforms that reduced fragmentation in pooling, as in the Kyrgyz or Moldovan examples, only established the enabling conditions for redistribution. Actual redistribution occurs when the money is spent: that is, via the purchasing function.[64] If purchasing methods remain input based (see Chapter 6), historically inequitable patterns of resource allocation can remain, even with a national pool. Nevertheless, pool fragmentation must be addressed if gains are to be achieved. Improving purchasing methods will have little impact where pooling is either extremely decentralized (Bosnia and Herzegovina) or suffers from reform-induced fragmentation (Albania, Russian Federation).

Countries have adopted several successful strategies to reduce fragmentation in pooling or mitigate its consequences. The most frequently selected direction has been through reforms to create single, territorially distinct pools of funds covering increasingly larger numbers of people. For countries that began their compulsory health insurance systems with multiple territorial funds, inter-regional fragmentation was reduced by progressively reducing the number of funds (that is, increasing the size of the territory and population covered per fund pool) and also by transforming the territorial funds into administrative branches of the national fund (such as in Latvia, Estonia, Lithuania and Poland). These steps increased the size of the pool and hence the scope for redistribution, while also enabling potential efficiency gains in the administration of the system. The Estonian experience suggests that when these measures are combined with effective purchasing methods, gains in financial protection and efficiency can indeed be realized.

For (particularly former Soviet) countries that still have to face the challenge of decentralized pooling, the strategies implemented by Kyrgyzstan and the Republic of Moldova suggest a clear path: eliminate *rayons*/districts as pooling entities and move towards either *oblast*- or national-level pooling. Perhaps the most critical question facing countries in this context is whether to introduce compulsory health insurance. Certainly, the Kyrgyz and Moldovan experiences included the establishment of a compulsory health insurance fund that was supported, at least in part, by a new payroll tax. While it was conceptually

63 While there are economies of scale in administration, the size of the covered population at the point at which there are no longer reductions in unit administrative costs per person is unknown and is likely to vary with the specific types of administrative function that are performed.

64 Where inter-pool re-allocations exist to compensate for variations in the relative risk of the covered population (such as in the Czech example cited above), redistribution also occurs via the pooling function.

possible to move towards broader territorial-based or national pooling within the budgetary system, this proved to be impossible to implement in practice in these two countries, and in each case, success at reducing fragmentation was achieved by going outside the public financial management system and replacing it with the compulsory health insurance pool. *Oblast*-level pooling within the budgetary system has occurred in Kazakhstan, although this may be a legacy of its failed experience with compulsory health insurance. Uzbekistan has also initiated *oblast*-level pooling, using the step-by-step approach of gradually incorporating different types of service into the pool. In the Kazakh and Uzbek cases, however, it remains to be seen whether gains parallel to those achieved in Kyrgyzstan and the Republic of Moldova will be attained as a consequence of these efforts.

The failure to completely replace the former system with the new fund structure, as in the Russian Federation and Albania, indicates clearly that introducing compulsory health insurance is not sufficient for the success of pooling reforms. The critical lesson – especially for countries in contexts in which employment-related payroll taxes will not be a dominant source of public funds – is that to maintain a universal system and address existing fragmentation, the introduction of compulsory health insurance must be paired with a strategy to simultaneously reform the flows and pooling arrangements for general budget revenues. This would involve either pooling the budget revenues with the payroll tax revenues in a single national pool (the Republic of Moldova) or explicitly coordinating the budget-funded pool with the payroll tax-funded pool (Kyrgyzstan). Simply introducing compulsory health insurance without corresponding changes in the budget-funded system – as in Albania and many low- and middle-income countries elsewhere – can actually worsen the problem of fragmentation in the entire system.

Another option to address fragmentation in the context of multiple pools is to create, in effect, a *virtual single pool* among them through redistribution. This can be achieved through risk-adjusted allocations to territorially distinct pools or to competing insurers. The consequences of fragmentation are more severe in the case of competing insurers because, without risk adjustment, cream-skimming behaviour by insurers will also mean either higher premiums for those with the greatest health care needs or financial shortfalls for the funds serving these populations, with consequent deterioration of their ability to provide access and risk protection. Hence, the experience of the Czech system is instructive for countries in this context. While no risk-adjustment formula is perfect, of critical importance is whether the mechanism used is good enough to reduce or eliminate risk-selection behaviour by competing insurers. The 2003 Czech reforms appear to have achieved success by subjecting the entire insurance pool

to redistribution (thereby maximizing the scope for risk protection) and at the same time lowering the benefits from risk selection for the competing insurers.

There is no "right" or "best" arrangement for the pooling of funds. As with all reforms, the essential starting point for decision-makers is an understanding of existing arrangements. Both theory and evidence suggest, however, that from this starting point reforms should aim to reduce fragmentation of pooling. Options for doing this vary considerably across countries. For example, even with the constraints of politico-administrative decentralization in Bosnia and Herzegovina, limited steps towards reducing fragmentation have been possible through cantonal pooling of catastrophic risk in the FSF. The Kyrgyz and Moldovan reforms are particularly instructive for other former Soviet countries, as well as for low- and middle-income countries elsewhere that face tight revenue constraints and are interested in introducing new revenue sources. The Estonian experience is more straightforward: reduce fragmentation by progressively centralizing previously decentralized pooling arrangements. The Czech experience of progressively improving risk adjustment between insurers provides a positive example of how to reduce the consequences of fragmentation in competitive insurance contexts. These diverse experiences suggest that countries need to identify the manner in which their existing pooling arrangements are fragmented and implement strategies focused on resolving this. While the evidence reviewed here offers useful lessons, reforms cannot be exported directly from one country to another. The key is to identify the steps that need to be taken in a particular context to address the challenge of pool fragmentation.

References

Albreht T et al. (2002). *Health care systems in transition: Slovenia*. Copenhagen, European Observatory on Health Care Systems.

Bara A-C, van den Heuvel WJA, Maarse JAM (2002). Reforms of health care system in Romania. *Croatian Medical Journal*, 43(4):446–452.

Cashin C, Simidjiyski J (2000). *National health insurance systems: a review of selected international experience*. ZdravPlus Technical Report. Almaty, Abt Associates.

Couffinhal A, Evetovits T (2004). *Comments on health financing draft laws: report of a WHO mission to Albania*. Copenhagen, WHO Regional Office for Europe.

Couffinhal A, Habicht T (2005). *Health system financing in Estonia: situation and challenges in 2005*. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/Document/HSF/CaseStudyfinalEstonia2005.pdf, accessed 18 September 2008).

Ensor T, Thompson R (1998). Health insurance as a catalyst to change in former communist countries? *Health Policy*, 43:203–218.

Federal Solidarity Fund BiH (2004). *Annual report 2003*. Sarajevo, Federal Solidarity Fund BiH.

Gaál P (2004). *Health care systems in transition: Hungary*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Gjorgjev D et al. (2006). The former Yugoslav Republic of Macedonia: health system review. *Health Systems in Transition*, 8(2):1–98.

Government of Kazakhstan (2004). *National Program of Health Sector Reform and Development in the Republic of Kazakhstan for 2005–2010*. Presidential Edict No. 1438, approved 13 September. Astana, Government of Kazakhstan.

Government of Kyrgyzstan (2006). *Financial management report on cash execution for the State Guaranteed Benefits Package. Annual report for 2005*. Bishkek: Government of Kyrgyzstan.

Government of Kyrgyzstan (2007). *Financial management report on cash execution for the state guaranteed benefits package. Annual report for 2006*. Bishkek, Government of Kyrgyzstan.

Habicht J et al. (2006). Detecting changes in financial protection: creating evidence for policy in Estonia. *Health Policy and Planning*, 21(6):421–431.

Hroboň P (2003). *Návrh funkční kompenzace rizika ve veřejném zdravotním pojištění v ČR [Proposal for a functional compensation of risks in public health care insurance in the Czech Republic]*. Seminář z ekonomiky zdravotnictví, Národohospodářský ústav AV ČR [Lectures in economics of healthcare, Economic Institute of the Czech Academy of Sciences], 22 January. Prague, Czech Academy of Sciences.

Hroboň P (2004). Zdravotnictví potřebuje nový model [Health care needs a new model]. *Zdravotnické noviny [Medical News]*, 29 January.

Hroboň P, Machacek T, Julinek T (2005). *Health care reform for the Czech Republic in the 21st century Europe*. Prague, Health Reform.cz.

Ibraimova A, Shishkin S (2003). *WHO Euro Internal Report on Expert Mission to Turkmenistan. 28 June to 2 July 2003*. Copenhagen, WHO Regional Office for Europe.

Independent Institute for Social Policy (2007). *Database on mechanisms of health care financing and management in Russian regions* [online database]. Moscow, Independent Institute for Social Policy (http://www.socpol.ru/baza/baza/about_baza.shtml, accessed 15 July 2007).

Jakab M et al. (2005). Evaluating the Manas health sector reform (1996–2005): focus on health financing. Manas Health Policy Analysis Project, Policy Research Paper 31. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/MyFiles/EvaluationofHealth%20financing_E_PRP31.pdf, accessed 20 May 2009).

Jesse M et al. (2004). *Health care systems in transition: Estonia*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Katsaga A, Zues O (2006). *Stewardship template, Republic of Kazakhstan*. Copenhagen, WHO Regional Office for Europe.

Kuszewski K, Gericke C (2005). *Health Systems in Transition: Poland*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Kutzin J (2001). A descriptive framework for country-level analysis of health care financing arrangements. *Health Policy* 56:171–204.

Kutzin J (1997). Health insurance for the formal sector in Africa: 'yes, but...'. *Current Concerns* series, ARA Paper No. 14. Geneva, World Health Organization, Division of Analysis, Research and Assessment (WHO/ARA/CC/97.4).

Kutzin J (2007). Myths, instruments and objectives in health financing and insurance. In: Holst J, Brandrup-Lukanow A, eds. *Extending social protection in health. Developing countries' experiences, lessons learnt, and recommendations.* Eschborn, GTZ, International Labour Organization and World Health Organization.

Kutzin J, Murzalieva G (2001). *A note on administrative costs and functions of the mandatory health insurance fund*. Manas Health Policy Analysis Project, Policy Research Paper 9. Bishkek, World Health Organization and Ministry of Health.

Kutzin J et al. (2002). *Innovations in resource allocation, pooling and purchasing in the Kyrgyz health system*. Manas Health Policy Analysis Project, Policy Research Paper 21. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/images/pdf/RAPPRP21.E.pdf, accessed 6 June 2006).

Kutzin J, O'Dougherty S, Jakab M (2005). *Fiscal decentralization and options for the Kyrgyz health financing system: reflections on three options*. Manas Health Policy Analysis Project, Policy Research Paper 32. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/MyFiles/EvaluationofHealth%20financing_E_PRP31.pdf, accessed 17 June 2009).

Lekhan V, Rudiy V, Shishkin S (2007). *Health financing in Ukraine*. Health financing policy paper. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/document/E90754.pdf, accessed 17 June 2009).

Lloyd-Sherlock P (2006). When social health insurance goes wrong: lessons from Argentina and Mexico. *Social Policy and Administration*, 40(4):353–368.

Londoño J-L, Frenk J (1997). Structured pluralism: towards an innovative model for health system reform in Latin America. *Health Policy*, 41(1):1–36.

Massaro TA, Nemec J, Kalman I (1994). Health system reform in the Czech Republic. Policy lessons from the initial experience of the general health insurance company. *JAMA,* 271(23):1870–1874.

Mathivet B (2007). *Health financing template, Russian Federation*. Copenhagen, WHO Regional Office for Europe.

NHIF (2007) [web site]. *History of foundation*. Sofia, National Health Insurance Fund Bulgaria (http://www.nhif.bg/eng/default.phtml, accessed 17 June 2009).

Nuri B, Tragakes E (2002). *Health care systems in transition: Albania*. Copenhagen, European Observatory on Health Care Systems.

Routh S (2007). *An update on the finance and management reforms of the primary health care sector in Uzbekistan*. ZdravPlus Technical Report. Almaty, Abt Associates.

Savedoff WD (2004). Is there a case for social insurance? *Health Policy and Planning*, 19(3):183–184.

Sheiman I (1997). From Beveridge to Bismarck: health financing in the Russian Federation. In: Schieber G, ed. *Innovations in health care financing*. World Bank Discussion Paper No. 365. Washington, DC, World Bank:65–76.

Shishkin S (1999). Problems of transition from tax-based system of health care finance to mandatory health insurance model in Russia. *Croatian Medical Journal*, 40(2):195–201.

Shishkin S, ed. (2006). *Health care financing and management systems in the regions of the Russian Federation*. Moscow, Pomatur [in Russian].

Shishkin S, Kacevicius G, Ciocanu M (2008). *Evaluation of Moldova's 2004 health financing reform.* Health Financing Policy Paper. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/document/HSF/healthfin_moldova.pdf, accessed 20 May 2009).

SPF (2007) [web site]. *History of the health insurance in Lithuania*. Vilnius, State Patient Fund under the Ministry of Health (http://www.vlk.lt/vlk/en/?l=history, accessed 15 January 2008).

Tragakes E et al. (2008). Latvia: health system review. *Health Systems in Transition*, 10(2):1–251.

VZP (2003). *Annual report of the General Health Insurance Company 2002*. Prague, VZP (General Health Insurance Company).

VZP (2005). *Annual report of the General Health Insurance Company 2004*. Prague, VZP (General Health Insurance Company).

Waters H et al. (2006). *Health care modernization in central and eastern Europe*. Washington, DC, Johns Hopkins University and the Center for Strategic and International Studies.

World Bank (2003). *Poverty assessment, Bosnia and Herzegovina.* Vol. 1. Report No. 25343-BIH. Washington, DC, World Bank.

World Bank (2004). *Croatia health finance study*. Report No. 27151-HR. Washington, DC, World Bank.

World Bank (2005). *The Republic of Serbia: a policy agenda for a smaller and more efficient public sector*. Washington, DC, World Bank.

World Bank (2006a). *Bosnia and Herzegovina: addressing fiscal challenges and enhancing growth prospects*. Report No. 36156-BiH. Washington, DC, World Bank.

World Bank (2006b). *Armenia public expenditure review*. Washington, DC, World Bank.

World Bank (2006c). *Albania health sector note*. Report No. 32612-AL. Washington, DC, World Bank.

World Bank (2009). *Republic of Uzbekistan: assessment of the primary health care reform: transparency, accountability, and efficiency*. Report No. 44530-UZ. Washington, DC, World Bank.

Chapter 6

Purchasing of health care services

Hernan L. Fuenzalida-Puelma, Sheila O'Dougherty, Tamas Evetovits, Cheryl Cashin, Gintaras Kacevicius, Mark McEuen

A. Introduction

Purchasing in health systems refers to the allocation of financial resources (pooled from various collection mechanisms) to providers to obtain the provision of health care services in the benefits package for the covered population. Health care purchasing can be a powerful instrument to further health financing policy goals. For example, active purchasing strategies can improve equity by compensating providers adequately for treating higher cost patients; drive better quality of care by financially rewarding best practices and improved outcomes; and create incentives for providers to be more efficient or more responsive to consumers (Kutzin 2001). Purchasing reforms can contribute to improving the transparency of resource allocation in the health sector and are also the vehicle for health financing policy reforms to translate into operational change in the health sector.

Experience from the region suggests that health care purchasing reforms are critical to addressing the inherent structural inefficiencies in the health system legacy, as well as for driving modernization of clinical practices and motivating a labour force that historically was not rewarded for performance. Problems in the historical resource allocation (or health care purchasing) system in former Soviet, as well as some CE countries, are shown in Fig. 6.1. First, there was a duplicative health care delivery system across geographic areas, as each administrative level owned and operated its own health delivery system. The black circles in Fig. 6.1 represent the duplication across country administrative levels and geographic areas. The fragmented pooling of health care funds contributed to this geographic duplication, as well as to the duplication

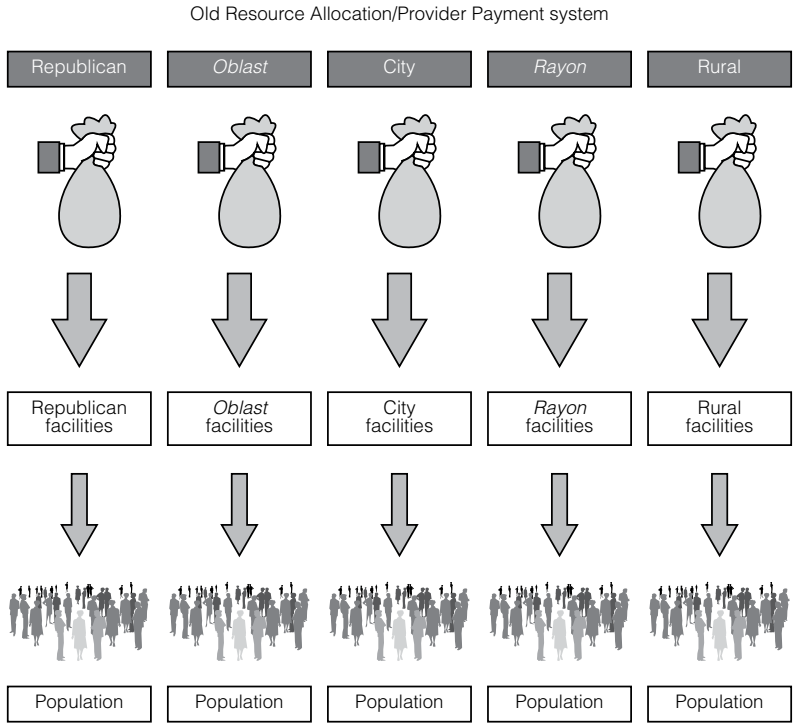


Fig. 6.1 *Resource allocation and provider payment in the pre-transition system*

caused by vertical systems and overspecialization. Second, the nature of the provider payment systems worsened the problem of excess capacity. Providers were paid based on inputs, such as the number of beds, which predictably led to excess capacity. As shown in Fig. 6.1, the flow of funds – represented by the arrows from the money bags to the facilities – was largely absorbed by the excess infrastructure (the arrows are much larger than the arrows flowing to direct patient care for the population).

Changes in health care purchasing presented a real opportunity to address the problems in the inherited system by providing incentives and mechanisms to rationalize health care delivery and shift resources to PHC, while retaining savings from reductions in excess capacity or increases in efficiency within the health sector. In addition, shifting from funding inputs into infrastructure to funding outputs or health services geared towards people helps to drive increased responsiveness to clients. This chapter discusses the implementation of health care purchasing reforms in CE/EECCA countries. It focuses on individual or personal health services, excluding public health services.

B. Overview of purchasing reforms in CE/EECCA countries

The health care purchasing function includes two main elements: *institutional structure* and *provider payment systems*. The institutional structure refers to the assignment of the purchasing function to an institution, and the set of rules governing how that institution relates to other health policy institutions and regulators, as well as health providers. Provider payment systems are the basis on which funds are transferred from the purchaser of health care services to the providers, combined with all supporting systems, such as management information systems and accountability mechanisms that accompany the payment method (Cashin et al. 2009). Provider payment systems can be operationalized through *contracts*, which are the purchaser's enforceable legal mechanism for allocating resources to qualified parties in order to obtain the delivery of specific health care goods and services to a population.

The health care purchasing reforms in the region have focused on changing the institutional structure of health purchasing by separating the purchasing and provision of health care services (purchaser–provider split) and implementing output-oriented provider payment systems. An overview of health purchasing reforms in the region is provided in Table 6.1.

i. Establishing a new institutional structure for the purchasing function

Health care purchasing requires a purchaser. The existence of a purchaser is a precondition for the design, development and implementation of changes in health care purchasing strategies. Health care purchasing requires operating systems, policies and procedures to realize purchasing policy decisions. Before transition, although the MoH was the official purchaser as well as the provider of health care services, the Ministry of Finance was the de facto health care purchaser in most countries of the region. The Ministry of Finance used rigid line-item budgeting rules for both budget formation and provider payment. The MoH could not match resource allocation to health policy priorities, because resource allocation was largely outside of its control and was formulated to fund physical infrastructure and not health care programmes. Early in the transition period, health reforms recognized the need to allocate more health purchasing authority to the health sector to enable the matching of health priorities and health resource allocation.

Health purchasing institutions in the CE/EECCA countries can be grouped into three categories: (1) MoH without a new purchasing structure (Azerbaijan, Belarus, Kazakhstan, Tajikistan, Ukraine and Uzbekistan); (2) MoH with a new purchasing structure but without dedicated tax flows to it (Armenia, Georgia and Latvia); (3) new health insurance funds created to administer

Table 6.1 *Reforms in health care purchasing*

Region/country	Institutional structure reforms	Provider payment reforms
EU		
Bulgaria (Georgieva et al. 2007)	The NHIF was established as the single health purchaser in 1999 as an independent public entity under a tripartite (employers, state, insured persons) governance arrangement.	PHC providers are paid a per capita payment by the NHIF, with remote region supplement. Outpatient specialty care and laboratories are paid on a fee-for-service basis. Hospitals are paid through a case-based payment system.
Czech Republic (Szende and Mogyorosy 2004; Rokosová et al. 2005)	Since 1992, nine statutory insurance funds are the health purchasers. Each fund is managed by a director accountable to a supervisory board and a board of directors (with representatives of insured individuals and employers). The national insurance fund is governed by the Assembly of Representatives and a board of directors and supervisory board, with representatives of the ministries of finance, health and social affairs, the insured and employers.	PHC was first paid for according to salaries, then on a fee-for-service basis, and now is paid for by means of capitation. A bonus is paid in addition to the capitation rate if cost-containment targets are met. Hospitals were paid according to a point-based fee-for-service system, which was changed in 1997 to a budget system to control costs, with a movement toward case-based payment.
Estonia (Jesse et al. 2004; Szende and Mogyorosy 2004; authors' own compilation)	The EHIF was established in 2001 as a public independent legal body (replacing the Central Sickness Fund and 17 regional sickness funds) and is now a single purchaser. The EHIF is governed by a supervisory board with representatives of the state, employers and the insured.	PHC providers are paid by means of a combination of capitation, fee-for-service payments for preventive and other priority services, and a basic monthly allowance. Hospital payment was initially based on cost and volume contracts with the EHIF, based on a fee-for-service maximum price list, with a move toward case-based payment. As of 2008, hospitals receive 50% of their payment based on DRGs and 50% based on the fee-for-service calculation.
Hungary (Gaál 2004; authors' own compilation)	In 1989 the Social Insurance Fund took over financing of pension and health insurance from the general government budget. In 1992 health insurance was separated out, the OEP was established as the single purchaser. The OEP was first established as a self-governing parastatal organization responsible to the Parliament, but since 1998 it is under the	PHC providers are paid by a combination of capitation and a basic monthly allowance, with fee-for-service payments for preventive and other priority services. The rate is higher for family physicians with higher qualifications and those serving multiple rural settlements. There is a point-based fee-for-service system for outpatient specialty services. Hospitals are

Hungary (*contd*)	supervision of the national government (under the MoH at the time of writing).	paid according to a case-based payment system using DRGs for acute patients and per diem payments for chronic care. Both outpatient and inpatient care have capped budgets, with volume control at the individual provider level.
Latvia (Szende and Mogyorosy 2004; Tragakes et al. 2008).	In 1994 the SSF was established with a decentralized structure of 35 "local account funds" that acted as multiple purchasers. These funds were consolidated into 8 sickness funds in 1997. In 1998 the name of the SSF was changed to the SCHIA, under the MoH. The system changed again in 2004, with the 8 sickness funds converted to 5 territorial branches of the SCHIA.	PHC providers are paid by means of capitation, with supplements for family physicians with higher qualifications. Hospitals are paid on a per-case basis, combined with bed-day payments. Hospital budgets are capped at the regional level, and a point system is in place to determine when individual hospitals exceed their expected volume and how to reimburse excess services.
Lithuania (Szende and Mogyorosy 2004; authors' own compilation)	The SPF was introduced in 1992 as a single purchaser under the MOH in order to finance large hospitals (piloting). In 1996, the insurance system was expanded to involve all health care institutions. The SPF was allocated as government responsibility, and 10 TPFs were established. In 2003, the SPF again became subordinate to the MOH and the number of TPFs was reduced to 5, covering two counties each.	PHC providers are paid by a combination of capitation and fee-for-service payments for preventive and other priority services. Some elements of bonus payments for productivity and preventive indicators are being introduced (2008). Hospitals are paid through a case-based payment system (national case-mix), with ceilings on the volume of services. In 2008, the decision was made to shift to a DRG-based system in the next 2 to 3 years. Long-term cases (tuberculosis, psychiatry, nursing) are paid on a per diem basis.
Poland (Szende and Mogyorosy 2004; Kuszewski and Gericke 2005).	In 1999 there were 16 regional sickness funds that purchased services for the insured population, and a separate purchaser for uniformed public employees. In 2003 the funds were merged into a single purchaser, the NHF, accountable to the government.	PHC providers are paid by means of capitation, with age adjustments. With fragmented hospital payment systems previously in use, the NHF introduced a unified case-based payment system for hospitals that is based on department, length of stay and hospital level, rather than diagnosis.

Table 6.1 *contd*

Region/country	Institutional structure reforms	Provider payment reforms
EU *contd*		
Romania (Vladescu, Radulescu and Oslavsky 2000; Bara, van den Heuvel and Maarse 2002; Radu and Haraga 2008)	42 DHIFs were established in 1998 to purchase health care services. In 2004, purchasing was centralized from district to national level. The NHIF is governed by a Council of Administration that includes representatives of the government (Ministries of Health, Labor and Social Protection, and Finance), trade unions and employers' associations.	PHC providers are paid through a mix of capitation (70%) and fee-for-service payments (30%) for preventive and health promotion services. The DHIFs initially paid hospitals according to historical budgets, then global budgets and then introduced a per diem system. In 2002, the DHIFs began piloting a case-based payment system with national roll-out beginning in 2004.
Slovenia (Albreht et al. 2002)	The HIIS was established as a health purchaser in 1992. The HIIS is a public non-profit entity supervised by the state and governed by an assembly made up of representatives of employers and the insured. Insurance companies offered complementary coverage to cover the co-payments charged by social health insurance, so these additional purchasers do not compete with HIIS for purchasing the basic benefits package.	PHC providers are paid a combination of capitation and fee-for-service payments. PHC providers only receive their full fee-for-service reimbursement if their prevention programme has been fully implemented and they do not exceed referral targets. Hospitals were initially paid by the HIIS budgets, based on negotiated volume targets for inpatient days by clinical department. In 2000, the basis of the budget was changed to the projected number of treated cases.
Slovakia (Hlavačka, Wágner and Riesberg 2004; authors' own compilation).	A health insurance fund was established as the single purchaser in 1992. In 1995, competing non-profit insurers were allowed. The number of insurance funds reached 13 in 1996 but declined to 5 in 2004. Since 2005, all health insurance companies operate as for-profit joint-stock corporations under private commercial law and are regulated by the Health Care Surveillance Authority. In 2008, 2 of the 7 companies were in public ownership.	Providers were initially paid fee-for-service payments, but due to cost escalation, new payment methods were introduced. Beginning in 1998, PHC providers are paid a combination of capitation and fee-for-service payments for preventive care. In 1994, hospitals were paid on a per diem basis. In 1999 a budget system was introduced, which was replaced by a case-based payment system in 2001.

Non-EU CE countries		
Albania (Nuri and Tragakes 2002; Schneider 2007)	The HII was established in 1995 as a single purchaser for PHC and outpatient specialty services. The HII is a national statutory fund accountable to the Parliament.	PHC providers are paid a base salary plus a capitation supplement based on location and the number of registered patients.
Bosnia and Herzogovina (World Bank 2006; authors' own compilation)	10 regional (cantonal) health insurance funds and a federal health insurance fund (for tertiary care services) are the purchasers in the FBiH. In the RS, there is a centralized single health insurance fund under the MoH. For the District of Brcko there is a separate district health insurance fund.	No changes yet introduced.
Croatia (Voncina et al. 2006)	The HZZO was established in 1993 as the single health care purchaser. The HZZO is overseen by a governing council, which includes representatives of the insured, the MoH, the Ministry of Finance, health institutions and private providers.	PHC is paid by means of capitation, with additional payments for preventive services. Hospital services are paid a combination of point-based fee-for-service and case-based payments, with a global budget cap. Costs related to investment and information technology are funded by decentralized state funds.
TFYR Macedonia (Gjorgjev et al. 2006)	The HIF was established as the single health purchaser in 1991. The HIF was initially established under the MoH with a director appointed by the government. In 2000, the HIF was made an independent institution governed by a Management Board, whose members include the MoH, the Ministry of Finance and representatives of the insured population.	The HIF initially paid providers according to a fee-for-service system, but switched to fixed budgets due to rising costs. In 2001, a per capita payment system with demographic adjustors was introduced for private PHC providers. 70% of the per capita budget is paid monthly, and the remaining 30% is paid quarterly, based on performance. There is a rural supplement to the capitation rate. A case-based hospital payment system was piloted, beginning in 2005, but full-scale implementation continues to be delayed.
Montenegro (World Bank 2005; World Bank 2009a; Authors' own compilation)	Beginning in 1992, purchasing was centralized in republic-level health insurance funds from the previous local community-level institutions that existed in Yugoslavia (see Chapter 2), establishing a single republic-level purchaser in Montenegro.	Provider payment reforms are under development at the time of writing, including a mixed system of per capita and fee-for-service payment for PHC and a case-based payment system for hospitals.

Table 6.1 *contd*

Region/country	Institutional structure reforms	Provider payment reforms
Non-EU CE countries		
Serbia (World Bank 2005; World Bank 2009b; authors' own compilation)	Beginning in 1992, purchasing was centralized in republic-level health insurance funds from the previous local community-level institutions that existed in Yugoslavia (see Chapter 2), establishing a single republic-level purchaser in Serbia.	Provider payment reforms are under development at the time of writing, including a capitation payment system for PHC and a case-based payment system for hospitals.
Russian Federation and westernmost former Soviet Republics		
Belarus (World Bank 2002)	No changes yet introduced.	No changes yet introduced.
Republic of Moldova (Shishkin, Kacevicius and Ciocanu 2008)	Compulsory health insurance was introduced in 2004, managed by the NHIC as a single national pool/purchaser.	In 2004, independent primary health care providers were reintegrated into hospitals. The contracts between the NHIC and the hospitals specify per capita payment for PHC, but the hospitals make the resource allocation decisions. Hospital services are paid per case.
Russian Federation (Tragakes and Lessof 2003; Marquez 2008)	CHI Funds were established at federal and territorial levels in 1993. Three models are found across the regions for the structure of purchasing: (1) TFCHIs act as the single purchaser; (2) TFCHIs contract with competing private insurers to serve as health purchasers; (3) a mixed system of private insurers and TFCHIs as multiple purchasers. Insurance companies provide little or no strategic purchasing, however, and serve mainly to process bills.	TFCHIs and insurance companies in different regions use different payment systems. Hospitals are paid per case, per diem, and according to line-item budgets. Per capita payment for PHC has been piloted in some regions.
Ukraine (Lekhan, Rudiy and Shishkin 2007)	No changes yet introduced.	No changes yet introduced.

Caucasus and central Asia *contd*		
Armenia (Hakobyan et al. 2006)	The SHA was established in 1998 as a single health purchaser. The SHA was initially established as a semi-autonomous institution under the Prime Minister's office but was transferred to the MoH in 2002. The SHA has limited authority to develop effective purchasing and contracting.	PHC is paid by means of capitation, with higher rates paid to physicians trained in family medicine. Outpatient specialty services are paid on a fee-for-service basis, and payment according to completed cases has been piloted. Hospitals are paid from a global budget based on the expected number of cases in each of a set of DRGs.
Azerbaijan (authors' own compilation)	No changes yet introduced.	No changes yet introduced.
Georgia (authors' own compilation)	The SUSIF was the single health purchaser until mid-2007, when it was transformed into the HeSPA. The HeSPA administers budget funds for PHC and public health services, and purchases an additional package of services or provides vouchers for private insurance for households that qualify for means-tested poverty benefits. After being piloted in two regions, the new approach was due to be rolled out nationally in 2008. In some regions, the HesPA is the only purchaser for health services, and in other regions private insurance companies are the purchasers.	PHC providers are paid by the HeSPA through a capitated payment system. Services beyond government-funded benefits are paid by private insurance on a fee-for-service basis. Outpatient specialty services are not part of the government-subsidized package and are paid on a fee-for-service basis by patients or private insurance companies. Hospitals receive case-based payment (from the HeSPA and/or private insurance companies), which was introduced in 1996.
Kazakhstan (Kulzhanov and Rechel 2007; authors' own compilation)	An MHIF was established in 1995 under the government and was a parallel purchaser to the MoH. The MHIF purchased a package of services for the insured population, and the MoH purchased a separate package for specific disease categories, diagnoses and non-insured population groups. There was lack of clarity between the responsibilities of the two purchasers. The MHIF was abolished in 1999. From 2001 to 2004, pooling was decentralized to the *rayon* level, along with a health purchasing structure. The current model of a	Changes to provider payment systems were established with legal basis early in the health reform process. PHC is paid by capitation. Outpatient specialty care is paid on a fee-for-service basis. Hospitals are paid by means of a case-based payment system, with the exception of vertical systems for infectious diseases and other priority programmes, which are paid according to line-item budgets. From 1995 to 1999, the new provider payment systems were initiated under the MHIF. After a period of shifting policies on pooling of funds

Table 6.1 *contd*

Region/country	Institutional structure reforms	Provider payment reforms
Non-EU CE countries		
Kazakhstan (Kulzhanov and Rechel 2007; authors' own compilation) (*contd*)	regional-level single-payer system with the regional (*oblast*) health department as the single payer was established in 2005.	and institutional structure for health purchasing, the provider payment system reform progressed again, starting in 2005 under the regional-level single-payer system, although rigid public finance policies and systems (including the Treasury System) continue to hamper provider payment reforms.
Kyrgyzstan (authors' own compilation)	An MHIF was established in 1997 under the government. In 2000, the MHIF was merged with the MoH and established as the single payer for both budget and payroll tax funding. From 2000 to 2005, pooling of funds and the single-payer structure remained at the oblast level. In 2006, changes in the country's public finance structure led to national pooling of funds and the MHIF began to function as a national single payer with territorial MHIFs retaining operating functions.	From 1997 to 2000, budget funds administered by the Ministry of Finance and the MoH were paid to providers using input-based line-item budgets, while the MHIF used pooled payroll tax funds to initiate provider payment reform, including capitation for PHC, capitation for outpatient specialty services, case-based payment for hospitals, and a reimbursement system for the new outpatient drug benefits. After the MHIF was merged with the MoH in 2000, budget and payroll funds were combined, the budget formation process changed and the provider payment systems were unified.
Tajikistan (authors' own compilation)	No major changes.	In 2007, capitation payment for PHC was piloted.
Turkmenistan (Mamedkuliev, Shevkun and Hajioff 2000; authors' own compilation)	The Ministry of Finance and the MoH are the health purchasers for budget funds, and a government-run voluntary insurance scheme was established in 1996 with a fund serving as health purchaser. The voluntary insurance revenues are incorporated into the health sector budget.	No changes have as yet been introduced to the Ministry of Finance/MoH systems for budget funds. Changes to provider payment systems were introduced under voluntary health insurance.

Uzbekistan (Ahmedov et al. 2007; authors' own compilation)	In 1999, the regional (*oblast*) health department was established as the health purchaser.	In 1999, capitation for rural PHC was piloted. Following evaluation, a step-by-step roll-out process was implemented such that this provider payment system for rural PHC was national by 2007. In 2007, piloting began for capitation in urban PHC.

Notes: EU: European Union; NHIF: National Health Insurance Fund (Bulgaria); PHC: Primary health care; EHIF: Estonian Health Insurance Fund; DRG: Diagnosis-related group; OEP: National Health Insurance Fund Association (Hungary); MoH: Ministry of Health; SSF: State Sickness Fund (Latvia); SCHIA: State Compulsory Health Insurance Agency (Latvia); SPF: State Patient Fund (Lithuania); TPF: Territorial Patient Fund (Lithuania); NHF: National Health Fund (Poland); DHIF: District Health Insurance Fund (Romania); HIIS: Health Insurance Institute of Slovenia; CE: Central Europe; HII: Health Insurance Institute (Albania); FBiH: Federation of Bosnia and Herzegovina; RS: Republika Srpska; HZZO: Health insurance institute (Croatia); HIF: Health Insurance Fund (TFYR Macedonia); NHIC: National Health Insurance Company (the Republic of Moldova); CHI: Compulsory Health Insurance Fund (Russian Federation); TFCHI: Territorial CHI Fund (Russian Federation); SHA: State Health Agency (Armenia); SUSIF: State Unified Social Insurance Fund (Georgia); HeSPA: Health and Social Programs Agency (Georgia); MHIF: Mandatory Health Insurance Fund (Kazakhstan, Kyrgyzstan).

new dedicated taxes for the health sector under revenue collection reforms (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kyrgyzstan, Lithuania, The former Yugoslav Republic of Macedonia, the Republic of Moldova, Poland, Romania, the Russian Federation, Serbia and Montenegro, Slovakia and Slovenia).

Choices made on the pooling function determine the options available for the institutional structure of the purchaser. The institutional structure of the pooling and corresponding purchaser can be: (1) with no separation, (2) with vertical separation, or (3) with horizontal separation. The Single Payer system comprises ***no separation*** (one pool of funds with one corresponding purchaser), which is by far the most common choice in the CE/EECCA region, with 25 of the countries adopting this purchasing structure. ***Vertical separation*** entails the decentralization of the pooling/purchasing of health funds to lower levels of government or administrative units (Bosnia and Herzegovina, Kazakhstan, Uzbekistan).

Horizontal separation involves more than one pool of funds, split horizontally (often from more than one source), usually with more than one corresponding purchaser, or a multi-payer system. The multiple purchasers can be competitive (Czech Republic, Slovakia) or non-competitive (Turkmenistan), or a mixture of the two by region (Georgia, Russian Federation). Some countries have started with multiple purchasers, only to eventually move to a Single Payer model (Estonia, Kazakhstan, Kyrgyzstan, Latvia, Poland). Other countries have multiple purchasers, but attempt to encourage them to compete on price and quality rather than risk- selection, by adjusting allocations to the multiple purchasers for age, sex and other factors that may affect expected health expenditures (Czech Republic, Slovakia).

Governance and accountability. The governance and accountability structure of the purchaser is a critical issue, particularly when the purchaser is established as a new, independent institution. In most countries of the region, the purchaser is not a ministerial dependency, but a legal entity directly accountable to government, although working closely with the MoH, the Ministry of Finance, the Treasury, Parliament and other public and private stakeholders. Most of those countries have established a governing body for the insurance fund that includes representatives of government, employers and the insured population (such as in Bulgaria, Croatia, Czech Republic, Georgia, Estonia, The former Yugoslav Republic of Macedonia, and Romania). By 2005 Slovakia had established the Health Care Surveillance Authority to supervise and regulate all public and private health insurance companies *and* all providers (both public and private). Ministries of health are often de facto supervisors and regulators when the purchaser is a ministerial dependency, however autonomous it may be.

Establishing the right balance between an appropriate governance and accountability structure with independence and autonomy for the new purchaser has been a challenge in most of the countries of the region. Hungary went through (and is still involved in) a challenging process of finding the appropriate accountability structure for overseeing the purchasing function. While the country implemented provider payment reforms with documented success (Orosz 2001; Gaál et al. 2004), it has failed to create a governance structure that enables it to exploit the full potential of a parastatal purchasing institution and to ensure financial sustainability. Hungary created a self-governing Health Insurance Fund with its own supervisory board that included representatives of employers, unions and government. This autonomous institution managed a significant share of the public expenditure without taking full accountability for financial management. The government had to step in to cover deficits of the Health Insurance Fund, and the political response was to return overall fiscal control first to the Ministry of Finance, then to the MoH. The Hungarian Health Insurance Fund continued to be the purchaser of health services, but operating under tougher budget constraints. However, this arrangement did not prove to be more successful in terms of cost control up until 2007, when the government introduced measures (in all sectors, including health) to balance the budget in order to eventually meet the EU criteria for joining the eurozone.

An additional challenge has been to define new roles and allocate responsibilities between the purchaser and the MoH. Kazakhstan introduced health insurance in 1996, and established an MHIF. The MoH continued to purchase health services using budget funds. Both the MoH and the MHIF reported directly to the government. The two purchasers were assigned different populations to cover, with different benefits packages accordingly. Conflicts emerged due to the lack of clarity in the roles and relationships, as well as the divergent benefits and provider payment systems. These conflicts and inconsistent policies – together with broader political events – led to the cancellation of health insurance in 1998. In Albania, 10 years after the creation of the HII, the MoH still retained full control over the hospital budget, and the HII was only responsible for purchasing PHC (mostly doctors' salaries) and prescription drugs.[65] In Georgia the MoH also continues to try to exert power as the supervisor and regulator of an independent purchaser.

Kyrgyzstan introduced health insurance in 1997 and has worked carefully over time to clarify the allocation of roles and responsibilities between the new purchaser and the MoH. The MHIF was responsible for transfers of a payroll tax

65 After this chapter was completed, a new Mandatory Health Care Insurance Law was adopted in Albania, which transferred the purchasing function from the MoH to the HII (to be renamed the Health Insurance Fund) by pooling payroll tax revenues and general budget transfers. Collection remains with the General Tax Directorate. The HII is now the single purchaser for all primary care and hospital services.

from the Social Insurance Fund, pooling funds flowing through the insurance system, and purchasing health care services. The MoH continued to purchase health services using budget funds. Both the MoH and the MHIF reported directly to the government. Partly as a result of lessons from Kazakhstan and the Russian Federation, rather than completely separating population groups or benefits, a basic benefits package for the entire population was purchased by the Ministry of Finance/MoH, and an additional benefits package (reduction of co-payments and an additional outpatient drug benefit allowance) was purchased by the MHIF. To reconcile both systems, the MoH and the MHIF agreed to share provider payment, accounting, health information, quality assurance and benefits/coverage systems (jointly used systems). The jointly used systems built inter-programme linkages and reduced the level of institutional conflict. The MHIF played the role of change agent and moved forward with health purchasing reforms. Over time, the MHIF merged under the MoH, budget and payroll tax funding was pooled, and a Single Payer system was established.

Vertical roles/relationships between health purchasers and health providers. Vertical roles and relationships are concerned with the centre/periphery structure of health care purchasing. The key element involved is the level of decision-making autonomy at the health provider level. Prior to the transition, vertical roles in CE/EECCA countries were almost absolute, as the MoH was both purchaser and provider of health care services. All health care providers were state owned and operated and they reported to the MoH. The introduction of a new health purchaser and a purchaser–provider split has made it necessary for providers to gain autonomy to manage their internal resources. New purchasing arrangements require health facility managers to have more authority over management decisions and to be accountable to the purchaser to provide high-quality health care in exchange for the money they receive. Some countries have changed the legal status of health providers to create opportunities for them to gain control over management decisions, such as staffing and managing expenditures. Health facilities in the region are increasingly being given the status of legal public sector entity (the Republic of Moldova), trust or joint-stock company (Armenia, Estonia, Georgia), which can enter into contracts and generate sources of funding not related to the budget. There are also some examples of privatizing health facilities as non-profit-making or profit-making institutions (Bulgaria, Czech Republic, Hungary, some regions of Kazakhstan).

In transition countries, the roles of the Ministry of Finance and ongoing public financing management reforms have a strong effect on the role and operation of the purchaser. In central Asia, for example, the introduction of a "Treasury System" enabling the better matching of revenues and expenses as well as the improvement of cash management has clashed with health care purchasing

reforms related to the implementation of new provider payment systems and increased provider autonomy. The Treasury System usually functions by setting a fixed line-item budget for each health care provider and then allocating funds according to this fixed line-item budget as the country's available cash allows. The new provider payment systems generally do not allow the prospective determination of a budget for each health care provider, especially hospitals. A health provider's final budget for the year depends on how many cases they are able to attract and satisfactorily treat: patient choice and competition that stimulates efficiency increases and there are improvements in system responsiveness. In addition, health provider autonomy requires flexibility to allocate resources across budget line items, which is often inconsistent with Treasury System operations and has hampered the development of provider autonomy.

ii. Provider payment reforms

The core element in health purchasing reform in CE/EECCA countries has been the introduction of new provider payment systems, such as a per capita rate allocated to PHC practices for each person they enroll, and global budgets or case-based hospital payment systems that pay hospitals for each case they treat. These payment systems, which in many cases have been made possible by the establishment of a separate health purchaser, break the link between the historical budget formation process and provider payment.

Provider payment reforms in the region have been linked with the fundamental need to improve the sustainability and responsiveness of systems burdened with the sluggishness and excess capacity created by decades of inappropriate incentives. In the mid-1990s, the limited resources available for health care and the health status crisis made the strengthening of PHC the most sensible option for health system improvement. In many cases, the restructuring of PHC was followed by the introduction of per capita PHC payment. Per capita payment is the payment of a fixed amount each month or year to PHC providers for each enrolled individual, regardless of input use or utilization. Per capita payment has been introduced in the region to address the inequities of historical budgeting patterns; facilitate the shift of resources from the hospital sector to PHC; and set in motion an ongoing cycle of strengthening PHC, reducing unnecessary hospital services, and thus freeing up additional resources to continue to strengthen PHC (Cashin et al. 2009).

The countries of the region typically have implemented a simple per capita payment system, adjusted based on the age and sex composition of the enrolled population and geographic differences (Bulgaria, Kazakhstan, Kyrgyzstan, Latvia, the former Yugoslav Republic of Macedonia, Poland, Uzbekistan), or

some hybrid of the per capita payment for primary care. For example, in Bosnia and Herzegovina PHC providers are paid a mix of capitation and salary, and in Albania the Health Insurance Fund pays a base salary to GPs with a per capita supplement based on location and the number of registered patients (Schneider 2007).

A number of countries have modified the per capita payment system to reduce the potential incentive for under-provision of services. In the CE countries, for example, PHC providers typically are paid by capitation, with fee-for-service payments for preventive and other priority services (Croatia, Estonia, Hungary, Lithuania, Romania, Slovenia, Slovakia). Some countries have included monitoring systems (such as Kazakhstan and The former Yugoslav Republic of Macedonia) or performance-related payments along with the per capita system in order to improve the efficiency incentives of the payment system. In the Czech Republic and Slovenia, a portion of the (capitation) rate is paid in the form of a bonus if cost-containment or health promotion targets are met (Szende and Mogyorosy 2004).

Innovations are still relatively uncommon in payment for outpatient specialty services. Most countries have used a fee-for-service payment system. Several countries (such as Hungary) have adapted the German point-based fee-for-service payment system, but this fuelled cost escalation unless overall volume control measures were in place. In Hungary, an outpatient specialist provider-based fundholding experiment appears to have improved quality, efficiency and care coordination during its seven years of implementation (Gaál, Evetovits and Sinkó 2006). This Hungarian experiment with fundholding included a modality in which a free-standing outpatient specialist polyclinic was the fundholder of the total health care budget, which was calculated by a capitation formula for the population covered. The group of specialists (fundholder) contracted with GPs, paid them a capitation fee for PHC provision, and also covered the cost of hospital services through the case-based payment system used countrywide, based on DRGs. Outpatient specialist care was (mostly) provided by the fundholder, which had the financial incentive to reduce hospitalization as well as to ration specialist outpatient care, while ensuring care coordination across the vertical spectrum of primary, secondary and even tertiary care.

To address the excess capacity in the hospital sector, a number of countries have implemented global budgets or case-based payment for hospital services. A global budget is the payment of a fixed sum in advance to cover aggregate expenditures of the hospital over a given period (Langenbrunner et al. 2005). Unlike the former line-item budget system, the hospitals have the authority to make internal resource allocations within the global budget. The global budget may be based on expected or historical output (Romania, Slovenia).

Most countries of the region have implemented, or are moving toward, case-based hospital payment systems. Case-based hospital payment systems pay hospitals a fixed amount per case, with the amount varying by the DRG in each case. There are a number of reasons for which countries of the CE/EECCA region might want to adopt case-based hospital payment. Some objectives include reorienting hospitals toward providing services to patients rather than creating or maintaining infrastructure (buildings); creating the conditions and incentives for restructuring the health delivery system by re-profiling or closing inefficient hospitals and departments; creating incentives for hospitals to supply higher quality services using fewer or lower cost inputs; introducing competition for providers and choice for patients in order to increase the responsiveness of the health system to patients' needs and the population as a whole; and allowing payment by government health purchasers to private hospitals (O'Dougherty et al. 2009).

The need to reduce excess capacity and increase efficiency in the hospital sector was a major rationale for the introduction of a case-based hospital payment system in Kazakhstan and Kyrgyzstan (O'Dougherty et al. 2009), as well as in the Republic of Moldova (Shishkin, Kacevicius and Ciocanu 2008). In addition, the new case-based hospital payment system served as a mechanism to stimulate competition, which in some circumstances – such as large urban areas – was considered as a necessary step for increasing efficiency and consumer responsiveness. Hungary moved from an input-based line-item budgeting approach to a case-based hospital payment system in order to address the large variations in resources available to hospitals that evolved from the historical budgeting process (Boncz et al. 2004).

C. Implementation of selected purchasing reforms: description and analysis

In this section we provide an in-depth description and analysis of health purchasing reforms in selected CE/EECCA countries that demonstrate the important role that new provider payment systems have played in driving health system goals, such as increasing efficiency and facilitating rationalization of the health delivery system. In addition, these country examples show the importance of health purchasing reforms in translating health financing policy into operational steps to implement change.

i. Implementation and sequencing of purchasing reforms in Kyrgyzstan

The Kyrgyzstan experience demonstrates the importance of carefully planning and sequencing the implementation of health purchasing reforms to achieve health financing goals. Kyrgyzstan used a step-by-step implementation approach and built practical operational capacity directly throughout the sequencing of purchasing reforms. The ***first step*** was the implementation by the MHIF of new provider payment systems: a case-based system for hospitals (all 66 general hospitals) and a per capita payment system for PHC (all 740 new Family Group Practices nationwide). For hospitals, the MHIF selected a case-based payment system as an initial mechanism aiming towards the restructuring and rationalization of excess capacity, and tying payments to services delivered to the population. This approach introduced some competition, enabled provider autonomy and facilitated the strengthening of health information systems.

The MHIF was the purchasing change agent, using tools that enable any new business entity to flourish, such as freedom to innovate, flexibility, timing and leveraging the initial investment. The MHIF managed approximately 5–10% of state health care funding and incrementally financed the existing guaranteed benefits package. With this low level of funding responsibility, the MHIF had no immediate concern regarding its own financial sustainability and was, therefore, able to focus on developing new provider payment systems, establishing new flow mechanisms for funding and implementing new health information and financial management systems.

The new case-based hospital payment system was innovative to the extent that it reimbursed hospitals for variable costs directly related to patient care, while the government budget continued to pay for fixed costs. With the incremental financing from the MHIF, hospitals could finance drugs, supplies and food, as well as giving staff bonuses. This led to strong population (especially pensioners') support for health insurance, as co-payments for drugs and supplies could be reduced. Limited competition and patient choice emerged, as patients assessed and selected hospitals at which drugs, supplies and food were more readily available. With prudent use of its assets, the MHIF gave itself (as purchaser) and health providers time to adapt and develop systems and processes in response to the new incentives. Time was also an asset for MHIF in terms of being able to develop plans, staff and management systems and processes without the pressure of purchasing all health services for a defined population from day one.

Very early in the implementation process, the MHIF also addressed the question of which hospitals to initially include in the health insurance programme. The decision was made to focus on general and rural hospitals in order to start

rationalizing the hospital sector by reducing excess capacity in the multitude of specialty hospitals. The decision would also contribute to poverty reduction by enhancing access for poor rural citizens.

Thirteen hospitals were selected countrywide and brought into the system in 1997. Their eligibility to participate in the health insurance system and new provider payment system was linked to health facility accreditation. This criterion for hospitals to enter the system also helped to stagger implementation and avoid overwhelming the young and fragile MHIF. Attention was given to three areas: (1) hospital payment and funds flow, (2) information systems, and (3) quality and pharmaceutical management. The Soviet mentality was still prevalent, which made the hospitals reluctant at first to assume new responsibilities – particularly autonomy in the allocation of funds – for fear of later retribution. After six months this changed, however, and the hospitals were more enthusiastic about their new autonomy and responsibilities. The system was expanded to 36 hospitals, which took on the responsibility for the allocation of funds with less hesitation.

The natural evolution of the process resulted in health care providers beginning to demand more refined provider payment systems. The simple case groups were refined from 108 groups to 139 groups to improve the fairness of the payment system, which was demanded by the hospitals and made possible by the collection of better data, through operation of the system. The information system was refined by adding an integrated financial management module. In addition, based on requests from health care providers, changes in labour laws and regulations allowed contracting with health care workers and performance-based payment. Steps that were perceived as difficult at the onset soon became the demands of health care providers, as the process acquired its own momentum.

Step two came about in reaction to the conflicts between the new payment systems rewarding productivity and the former budgeting process with incentives to expand rather than rationalize facility capacity. The incentives of the budget system were winning, as they were still driving provider decisions. To solve this problem, the MHIF was incorporated under the MoH as an independent entity. The MHIF was assigned responsibility for purchasing services with both budget funds and payroll tax funds using the new provider payment systems. This approach was piloted in two *oblasts* in 2001 and rolled out (step-by-step) to be nationally implemented in 2005, and the MHIF evolved into a "strategic" health care purchaser by shifting the savings from rationalizing the hospital sector to PHC, increasing its funding by more than 30%. An outpatient drug benefit was also introduced.

Step three involved adding a new package of guaranteed benefits and formal co-payments to a health financing system that could now match payments for services to benefits, with the population more involved in their own health care decisions.

In summary, a step-by-step approach reacting to and refining each operational step led to increased sustainability of the system, aligning institutional structures, roles and relationships and building capacity and ownership among all stakeholders. Progressive policies and the operational implementation helped to establish the institutional identity of the MHIF, build capacity within the organization, inject new business procedures into the health sector and make investments to provide returns through increased efficiency and equity. Over 10 years, the MHIF moved from implementing one new provider payment system to serving as the Single Payer for all government-funded health services. Health care providers moved from facing new incentives for a small amount of their funding to receiving almost all their funding through output-based payments, with greater autonomy and new management systems in place. Finally, integrating MHIF payroll tax and health budget funding solved the problem of conflicting incentives in the provider payment systems and allowed rationalization of the delivery system. The integration of funding sources did, however, exacerbate the greatest remaining problem: the relationship between health financing reforms and the Treasury System. Addressing this problem is one of the priorities for ***step four*** of the Kyrgyz health care financing reform.

ii. The role of the institutional structure for pooling and purchasing in rationalizing the health care delivery system in central Asia

In central Asia, the premise that rationalizing and de-fragmenting the health delivery system also required unfragmented pool of funds and strategic purchasing mechanisms was accepted by some countries and not by others (Borowitz et al. 1999). Choices relating to health care purchasing institutional structure were an important factor in the different country experiences. When comparing the experiences with health insurance of Kazakhstan, Kyrgyzstan and Uzbekistan (including pooling, health care purchaser institutional structure, and purchasing arrangements), their ability to rationalize the health care delivery system is illustrative. Only Kyrgyzstan established a new health purchaser in a way that maintained clear roles and relationships with the MoH and evolved into a Single Payer system. Significant rationalization of the health delivery system has only been observed in Kyrgyzstan.

Uzbekistan decided not to introduce health insurance, but there have been health care financing reforms at the regional (*oblast*) level. Reforms have focused on pooling health care funds at the *oblast* level, with the *oblast* health

departments as the single health care purchasers implementing a new provider payment system for PHC. The results are not yet clear regarding rationalizing the health delivery system, as the reform is being implemented on a step-by-step basis, starting with rural PHC and moving to urban PHC and secondary hospitals.

Kazakhstan implemented health insurance in 1996 with a fragmented pooling structure and multiple overlapping purchasers (the MoH and an MHIF). The two purchasers funded separate but overlapping benefits packages and used different provider payment systems. As expected, the fragmented pooling design and fragmented purchasing were not effective in facilitating broad rationalization of the health care delivery system. Kazakhstan cancelled health insurance in 1999. As in Uzbekistan, the Kazakh reforms have moved to pooling budget funds at the *oblast* level with the *oblast* health departments as health purchasers and new provider payment systems.

Kyrgyzstan introduced health insurance in 1997 with a legal base resembling that of Kazakhstan. The implementation, however, was significantly different. Initially, the health care purchaser institutional structure consisted of two institutions (multi-payer system). In 2001, the MHIF was incorporated as an independent entity under the MoH (Single Payer system), precluding further fragmentation and allowing unified provider payment systems with consistent financial incentives, thus enabling the rationalization of the health care system.

Significant changes in the structure of the health system have been facilitated by purchasing reforms in Kyrgyzstan. From 2001 to 2004, the total number of buildings decreased by 47%, floor space decreased by 40%, and the savings were re-allocated to the salaries of health professionals (which increased by 73%) and direct patient care (such as drugs), which increased by 105% (authors' own calculation). In addition, between 2004 and 2007, the share of total government health expenditure allocated to PHC increased from 26.4% to 37.9% (Ministry of Health of the Kyrgyz Republic 2008).

After taking very different paths, at this point the three central Asian countries of Kazakhstan, Kyrgyzstan and Uzbekistan have similar pooling and institutional structure arrangements for purchasing, which allows them to improve equity and address inefficiencies in the health system structure inherited from the historical system. Kazakhstan and Kyrgyzstan also face the same major barrier to health financing reform, which is the inherent conflict between the Treasury System and health purchasing reforms related to implementation of new provider payment systems and increased provider autonomy or delegation of management functions.

iii. Relating purchasing reforms to health system restructuring in Lithuania

The experience of Lithuania shows that achievements can be made to improve the efficiency of the health delivery system when the new health purchaser is closely involved in the direct restructuring of the delivery system, and purchasing strategies and new provider payment systems are designed to support restructuring goals. After the introduction of the compulsory health insurance system in 1997, the State Patient Fund (SPF) was established as the single health purchaser under the MoH. The SPF became involved not only in contracting and provider payment but also as central to the planning of a major restructuring of the health delivery system.

Following the introduction of a personalized information system in 2000, the SPF started implementing purchasing reforms to encourage both health care providers and the MoH to increase efficiency, and to restructure health care services and facilities. After years of debate, in 2003 the government approved the Strategy for Restructuring Health Care Institutions, which was produced jointly by the MoH and the SPF. According to the Strategy and its supporting documents, the purchaser was required to play a crucial role in the restructuring of health care institutions. A Restructuring Fund was established as a special programme within the Health Insurance Fund.

The SPF and its five territorial branches (Territorial Patient Funds (TPFs)) became involved in preparing 10 county regional restructuring plans to be submitted to the respective county administrations for approval by the end of 2003. The MoH approved the restructuring plans of the two major counties, Vilnius (capital city) and Kaunas. The SPF and the TPFs also became responsible for restructuring plans prepared by individual hospitals in accordance with regional plans. Individual plans had to be submitted to a special MoH commission for evaluation and approval. Once approved, the plans received financing from the Restructuring Fund. The SPF and TPFs were responsible for financing (from the Restructuring Fund), monitoring and evaluation of individual hospital restructuring plans.

Together with the administrative restructuring plans, the case-based hospital payment system was modified in order to create financial incentives that would also drive the restructuring of hospitals. Payments were adjusted to the strategic goals to create strong incentives: for instance, by increasing payment rates for day surgery and creating a negative list of inpatient services to be excluded from reimbursement. Targets for hospitals to decrease excess capacity and the number of hospitalizations, as well as for the development of day and outpatient services, were incorporated into contracts between the TPFs and hospitals.

The results of such direct involvement of the purchaser in financing hospital restructuring have been considered moderately positive. For example, the number of day surgery cases increased almost fivefold, the number of outpatient services increased by 8%, and the hospitalization rate decreased from 23.7 to 20.2 per 100 inhabitants. There were a number of closures of inefficient hospital departments, as well as mergers of some hospitals located in the capital city. Some positive trends in hospital sector indicators have been observed, such as a slight decrease in the average length of stay, an increase in hospital bed turnover and a decrease in the number of hospital beds.

Despite the positive trends, however, the capacity level remains far above the EU average. For example, the number of hospital beds per 100 000 inhabitants was approximately 35% higher than the EU average in 2005. Nevertheless, a shift in the mentality of health care managers is under way, and the foundation for further restructuring through purchasing – including the introduction of selective contracting – has been created.

iv. Negotiating with health care providers: Bulgaria's National Framework Contract

The experience of Bulgaria shows the difficulty of achieving health purchasing reforms when the purchaser is responsible for meeting commitments in the benefits package but is not given sufficient flexibility to allocate resources and influence the terms of provider payment. In Bulgaria, the budget for the NHIF is determined through the government budgeting process. Parliament approves the Budget Framework Act, in which the NHIF is allocated a budget ceiling for contracting with health care providers for primary, secondary and tertiary services (hospitals have been financed by the NHIF since 2006) and pharmaceuticals, based on a negotiated National Framework Contract (NFC). The NHIF prepares a draft budget act and draft NFC for allocating resources between expenditure items in accordance with the budgetary limits and begins a "negotiation" process with the Bulgarian Medical and Dental Associations.

There are several inherent problems in this design: (1) the NHIF is not given a "pot" of resources to allocate and manage, but rather it receives the resources already fixed according to budgetary items, leaving limited room to negotiate and re-allocate (and furthermore, the MoH (not the NHIF) determines the packages of services to be financed by the NHIF, which is not aligned with the resources available); (2) the law requires the NHIF to contract with every licensed health care provider for every licensed service (and the granting of licences does not follow strict criteria); and (3) prices and volumes of services and administrative requirements (information, controls and sanctions) are open to negotiation. Up to this point, the policies are not so uncommon. However,

before 2006, the Bulgarian Medical Association was willing to negotiate prices and volumes, and the most recent NFC dates back to 2006. With the addition of hospital financing, the amount of resources became significantly larger; the Bulgarian Medical Association, therefore, wanted a larger share of the resources to go to its member physicians, leaving less available to finance hospitals, and there is no representation of the hospitals in the negotiating process. The consequence has been that there was no NFC for 2007 and 2008. In the 2007 and 2008 Budget Acts of the NHIF, the government took the position that the NHIF can set the prices (and volume targets) should agreement on the NFC not be reached by the end of the calendar year. The result is an unsustainable situation. The lack of clear rules for negotiating (as in the Republic of Moldova), the absence of participation by the hospitals and the role of the Bulgarian Medical Association in the health insurance law have created obstacles to improving health purchasing.

v. Technical sophistication of provider payment reform, but overall weak governance of the purchasing function: mixed results from Hungary

Hungary has implemented several sophisticated payment reforms since the early 1990s. For example, it was the first country of the CE/EECCA region to introduce a case-based payment system for acute hospital care. The main objectives were to improve efficiency of the hospital sector and equity in resource allocation by moving away from the politically influenced input-based line-item budgets towards a payment system that pays hospitals based on their actual output. In a case-based payment system, the money follows the patients and not the existing infrastructure. As a result, the efficiency of hospital service delivery increased substantially and the payment reform also served as a means to reduce regional differences in resource allocation (Evetovits 2007).

There were many factors contributing to the success of the hospital payment reform in Hungary. First, there was political consensus on the objective to improve efficiency, and even on the means to achieve this (Gaál 2005). This consensus prevailed over election cycles between 1991 and 2006, and survived several heated debates regarding how to improve other aspects of the purchasing function in Hungary. Second, there was a shared understanding of the international experience, to the effect that successful implementation takes time and consistency in the reform process. Preparations started several years before full-scale implementation; technical capacity was carefully developed both on the purchaser side and at individual hospitals; and there was a 4-year transition period to allow hospitals to adjust their production function and prepare for coping with the difference in revenues generated through the DRG payment system as compared with the previous line-item budgets. Third, continuous refinement of

the system ensured stakeholder support, smooth operation and sustained focus on maximizing the efficiency gains that can be achieved using this instrument.

While Hungary managed to utilize most of what a case-based hospital payment system can offer to improve efficiency of service delivery in hospitals, the new payment system alone has not been able to drive greater efficiency across the vertical spectrum of care, and over-hospitalization has remained a weakness of the system for many years. Although hospitals are now more efficient in producing their services, some of these services could be delivered at lower levels of care provision, and further efficiency gains could be realized if the incentives were aligned across PHC, secondary outpatient specialists and hospital inpatient care. Furthermore, the government retained decision-making authority in terms of the restructuring of the hospital sector and delayed addressing the over-capacity problem for 10 years until 2007. As a result, the capacity reduction (25% reduction of acute hospital beds, which is illustrated in Fig. 6.2) and volume control measures (no payment above 95% of the baseline volume of 2003)[66] introduced by the government in 2007 generated a significant disturbance in the system and proved to be more painful than if carefully managed over time parallel to the payment reforms. The lesson from Hungary is that the introduction of the case-based payment – using DRGs with a capped budget for overall hospital expenditure at the national level – did not lead to a reduction of excess bed capacity, or even any significant restructuring of the hospital sector, but it certainly assisted the government in developing its hospital restructuring plan and implementation. The hospital restructuring achieved in Hungary was only possible with strong political will to reduce excess capacity, which was supported by a hospital payment system that generated the information (and to a limited extent the incentives) to move the hospital infrastructure in the right direction.

Another weakness of the purchasing function in Hungary is illustrated by the persisting deficits of the Fund, which has mostly resulted from over-expenditure on prescription drugs. The capped overall budget for health care services assisted in cost-containment, but there was no cap on pharmaceutical expenditure, which in Hungary accounts for the same share of total health expenditure as the hospital sector itself. This soft budget constraint on pharmaceutical subsidies was a result of an unclear accountability arrangement between the MoH and the Health Insurance Fund, as well as government reluctance to resist the pressure by the pharmaceutical industry and the medical profession. In 2007 the government finally decided to take corrective action facing the unsustainable growth of pharmaceutical expenditure (Fig. 6.3) and balanced the budget through a complex set of demand- and supply-side measures.

66 Between 2003 and 2007 there was a diminishing price scale for volume over 95% of the 2003 baseline, up to 110%. Any volume over that level was not covered at all.

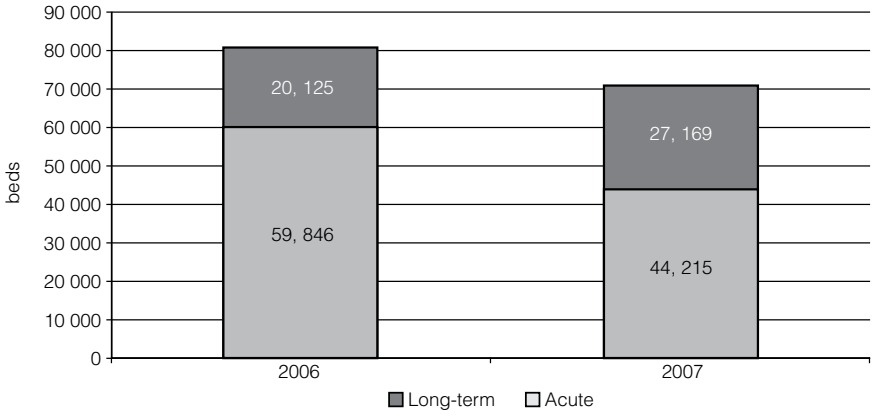


Fig. 6.2 *Restructuring and reducing the number of hospital beds in Hungary, (April 2007)*

Source: Authors' own compilation, based on data provided by the Hungarian Ministry of Health.

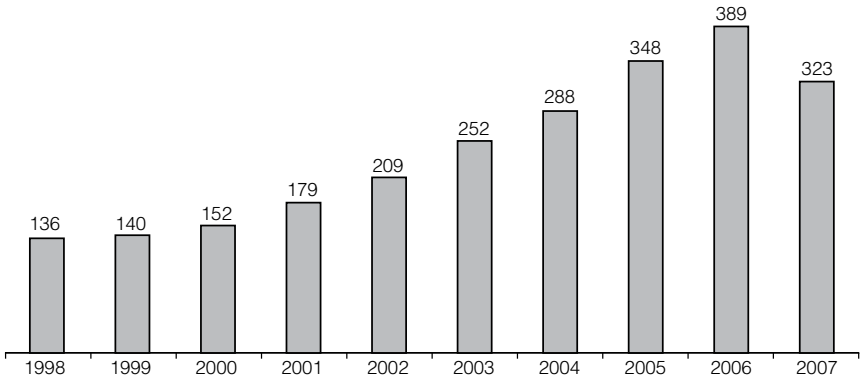


Fig. 6.3 *Public expenditure on prescription drugs in Hungary, in billion HUF, 1998–2007*

Source: Authors' own compilation, based on data from the Health Insurance Fund Administration, Hungary.
Note: HUF: Hungarian forint.

For the first time in its history the Health Insurance Fund closed the fiscal year of 2007 with a surplus. The political process of implementing the drastic and certainly unpopular measures consumed two short-lived Ministers of Health, but the lesson has been that the sustainability of the system is not a question of finding the right politician to manage crisis but of creating a governance structure that prevents the emergence of deficits and enables the purchaser in the health system to achieve policy objectives within the constraints posed by the financial sustainability requirement.

D. Lessons from implementation experience

i. Institutional structure

The best institutional structure for the purchaser depends on the country context and goals of purchasing reforms. Establishing a new purchasing institution has been associated with driving forward health financing reforms in the CE/EECCA region. Conceptually, creating an independent purchasing institution should not be required to achieve the critical elements of reform: purchaser–provider split and de-linking resource allocation between and within providers from historical line-item budget constraints. In practice, however, the countries that have retained the purchasing function within the MoH structure – even when a new purchasing entity has been established under the Ministry – have found it difficult, on the one hand, to remove the constraints of the Treasury System that dictate the structure of budgeting for public entities. On the other hand, the countries that have established the purchasing structure under the MoH have had more success with leveraging purchasing reforms to drive restructuring of the delivery system (such as Kyrgyzstan, Lithuania and, more recently, Hungary). With the exception of Kazakhstan, and to a lesser extent Uzbekistan, the countries that have not established a new purchasing entity – either within or outside the MoH – have achieved no provider payment or other purchasing reforms. Most countries of the region have opted for a Single Payer system, either with or without a separate purchasing structure.

Accountability and governance structures need more attention. Experience from the region shows that new purchasing institutions often began to function before clear accountability and governance structures were put in place. This has led to inadequate accountability and control in some instances (Kazakhstan) and excessive control and limited autonomy for the purchaser in others (Albania, Georgia, Hungary). Although there are many characteristics differentiating transition countries from non-transition countries, certainly less institutional maturity is one of them. While the regional experience with governance structures does not provide clear lessons about the best approach, measures to increase transparency – such as having a separate supervisor and regulator, including representation of a range of public and private stakeholders on governing boards and strengthening internal controls and auditing – may be beneficial.

ii. Provider payment systems

New provider payment systems have fundamentally changed the relationships between purchasers, providers and the population in many countries of the region. New provider payment systems have motivated providers to focus

on the quantity and – to a lesser extent – quality of services provided rather than funding infrastructure and staff. The result in a number of countries has been a more transparent and responsive system that allocates a greater share of expenditures to patient care (medicines and higher salaries for staff). The provider payment systems are still somewhat basic in many cases, however, due to lack of capacity, inadequate information systems or other system rigidities.

Health care provider management autonomy is necessary for purchasing reforms to succeed. Provider payment systems, contracting mechanisms or management information systems will not result in health system reform or development if the providers are not able to respond to the payment incentives or do not use the management information to improve decision-making. Health care provider autonomy can – but does not necessarily have to – mean private providers as public providers can be delegated more autonomy to allocate resources with largely the same effect. Another lesson is that health care provider management autonomy needs time to develop. The MHIF in Kyrgyzstan met this need both by giving the providers time and by issuing guidelines for the allocation of resources to support health care providers using autonomy to make good decisions.

Provider payment reforms are not one-off changes, but rather an ongoing process of reform, provider response, refinement and so on. Hungary, for example, has revised its case-based payment system numerous times across two decades, including shifting from a cap on overall expenditure on hospital care to a volume-control mechanism at the individual hospital level in 2003. In addition, there are other operational aspects of provider payment reforms that provide additional policy levers as the payment systems are refined. For example, the way that budgets are formed may create specific pools for different types of service, which is an additional mechanism that can be used to shift resources to more cost-effective care. By establishing specific pools from which to pay primary care, outpatient specialty services and inpatient services, the purchasers in some countries have been able to use new provider payment systems to actively shift resources to more cost-effective services (in Kyrgyzstan and the Republic of Moldova, for example). In contrast, separation of the budget into inpatient, outpatient and primary care pools created a barrier to realizing further efficiency gains across the vertical spectrum of care levels in Hungary. This contrasting experience highlights the importance of the context in which the very same tool is applied.

iii. Implementation

New purchasing reforms are important tools for facilitating, or even driving, restructuring of the health delivery system and streamlining excess capacity. Experience from the region shows that when purchasing reforms are part of a comprehensive health financing reform agenda – and, in particular, are implemented together with pooling reforms that reduce fragmentation – they can provide the incentives and the mechanisms for shifting care to more cost-effective services, leading to restructuring of excess capacity.

Step-by-step implementation allows time for new purchasing institutions to mature and for all players to adapt to new responsibilities. A step-by-step approach developing and refining each operational stage has been most successful in creating sustainability of new purchasing systems; aligning institutional structures, roles and relationships; and building capacity and ownership among all stakeholders. Progressive policies and operational implementation in Kyrgyzstan, for example, helped to establish the institutional identity of the MHIF, build capacity within the organization, inject a new business procedures into the health care sector, and make investments to provide returns through increased efficiency and equity. Time is required to develop health care institutions, including health care purchasers and health care providers, and to build on the sense of ownership and pride that will encourage trust among the population.

Purchasing can be the implementation tool to translate health financing reforms into operational change in the health sector, but political will is necessary to create an enabling environment. Health care purchasing reforms can create the technical mechanisms to motivate providers to restructure, allocate resources more efficiently, create and reinvest savings, and so on. Purchasing reforms also have created rapid and visible movement in the health sector, even when reforms in other health financing functions were only marginal. Without the political will to maintain the overall level of the health budget and remove resource allocation constraints, however, the technical mechanisms alone are not effective.

References

Ahmedov M et al. (2007). Uzbekistan: health system review. *Health Systems in Transition*, 9(3):1–206.

Albreht T et al. (2002). *Health care systems in transition: Slovenia.* Copenhagen European Observatory on Health Care Systems.

Bara A-C, van den Heuvel WJA, Maarse JAM (2002). Reforms of health care system in Romania. *Croatian Medical Journal*, 43(4):446–452.

Boncz I et al. (2004). Financing of health care services in Hungary. *European Journal of Health Economics*, 5:252–258.

Borowitz M et al. (1999). *Conceptual foundation for central Asian republics health reform model*. Almaty, ZdravReform Program.

Cashin C et al. (2009). Primary health care per capita payment systems. In: Langenbrunner J, Cashin C, O'Dougherty S, eds. *Designing and implementing health care provider payment systems: how-to manuals*. Washington, DC, World Bank:27–123.

Evetovits T (2007). The experience with DRGs in Hungary. In: *World Bank Workshop on Health Financing and Purchasing, Ljubljana, 21 May 2007*. WHO Regional Office for Europe and Semmelweis University.

Gaál P (2004). *Health care systems in transition: Hungary*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Gaál P (2005). Benefits and entitlement in the Hungarian health care system. *European Journal of Health Economics*, 6(Suppl. 1):37–45.

Gaál P et al. (2004). Informal payments for health care: definitions, distinctions, and dilemmas. *Journal of Health Politics, Policy and Law*, 31(2):251–293.

Gaál P, Evetovits T, Sinkó E (2006). Innovations in health policy: the care managing pilot and the functional deconstructive model of health care systems. In: *Annual EHMA Conference, Budapest, 28–30 June 2006.*

Georgieva L et al. (2007). Bulgaria: health system review. *Health Systems in Transition*, 9(1):1–156.

Gjorgjev D et al. (2006). The former Yugoslav Republic of Macedonia: health system review. *Health Systems in Transition*, 8(2):1–98.

Hakobyan T et al. (2006). Armenia: health system review. *Health Systems in Transition*, 8(6):1–180.

Hlavačka S, Wágner R, Riesberg A (2004). *Health care systems in transition: Slovakia*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Jesse M et al. (2004). *Health care systems in transition: Estonia*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Kulzhanov M, Rechel B (2007). Kazakhstan: health system review. *Health Systems in Transition*, 9(7):1–158.

Kuszewski K, Gericke C (2005). *Health systems in transition: Poland.* Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Kutzin J (2001). A descriptive framework for country-level analysis of health care financing arrangements. *Health Policy*, 56:171–204.

Langenbrunner J et al. (2005). Purchasing and paying providers. In: Figueras J et al., eds. *Purchasing to improve health systems performance*. Maidenhead, Open University Press:236–264.

Lekhan V, Rudiy V, Shishkin S (2007). *The Ukrainian health financing system and options for reform*. Health Financing Policy Paper. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/document/E90754.pdf, accessed 20 November 2008).

Mamedkuliev C, Shevkun E, Hajioff S (2000). *Health care systems in transition: Turkmenistan*. Copenhagen, European Observatory on Health Care Systems.

Marquez P (2008). *Better outcomes through health reforms in the Russian federation: the challenge in 2008 and beyond*. Washington, DC, World Bank.

Ministry of Health of the Kyrgyz Republic (2008). *Mid-term review report: Manas Taalimi Health Sector Strategy*. Bishkek, Ministry of Health of the Kyrgyz Republic.

Nuri B, Tragakes E (2002). *Health care systems in transition: Albania*. Copenhagen, European Observatory on health Care Systems.

O'Dougherty S et al. (2009). Case-based hospital payment systems. In: Langenbrunner J, Cashin C, O'Dougherty S, eds. *Designing and implementing health care provider payment systems: how-to manuals*. Washington, DC, World Bank:125–213.

Orosz E (2001). *On halfway or wrong way? The near past of our health care system and the options for health policy*. Budapest: Egeszaseges Magyarorszagert Egyesulet [in Hungarian].

Radu C-P, Haraga S (2008). Romanian model of hospital financing reform. *Journal of Public Health*, 16:229–234.

Rokosová M et al. (2005). *Health care systems in transition: Czech Republic*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Schneider P (2007). *Provider payment reforms: lessons from Europe and America for south eastern Europe. Policy note*. World Bank Health, Nutrition and Population Discussion Paper. Washington, DC, World Bank.

Shishkin S, Kacevicius G, Ciocanu M (2008). *Evaluation of Moldova's 2004 health financing reform*. Health Financing Policy Paper. Copenhagen, WHO

Regional Office for Europe (http://www.euro.who.int/document/HSF/healthfin_moldova.pdf, accessed 20 November 2008).

Szende A, Mogyorosy Z (2004). Health care provider payment mechanisms in the new EU members of central Europe and the Baltic states: current reforms, incentives, and challenges. *European Journal of Health Economics*, 5(3):259–262.

Tragakes E, Lessof S (2003). *Health care systems in transition: Russian Federation*. Copenhagen, European Observatory on Health Systems and Policies.

Tragakes E et al. (2008). Latvia: health system review. *Health Systems in Transition*, 10(2):1–251.

Vladescu C, Radulescu S, Oslavsky V (2000). *Health care systems in transition: Romania*. Copenhagen, European Observatory on Health Care Systems.

Voncina L et al. (2006). Croatia: health system review. *Health Systems in Transition*, 8(7):1–106.

World Bank (2002). *Improving health and health care in Belarus: Belarus health policy note*. Report No. 24203 BY. Washington, DC, World Bank Europe and Central Asia Human Development Sector Unit.

World Bank (2005). *The Republic of Serbia: a policy agenda for a smaller and more efficient public sector*. Washington, DC, World Bank.

World Bank (2006). *Bosnia and Herzegovina: addressing fiscal challenges and enhancing growth prospects*. Report No. 36156-BiH. Washington, DC, World Bank Europe and Central Asia Region Poverty Reduction and Economic Management Unit.

World Bank (2009a). *Project paper on a proposed additional financing in the amount of euro 5.10 million to Montenegro for the Health System Improvement Project*. (Report No. 50435-ME). Human Development Sector Unit, Europe and Central Asia Region. Washington, DC, World Bank.

World Bank (2009b). *Project paper on a proposed additional financing loan in the amount of euro 10.5 million to the Republic of Serbia for the Health Project*. (Report No. 43156-YF). Human Development Sector Unit, Europe and Central Asia Region. Washington, DC, World Bank.

Chapter 7

Coverage decisions: benefit entitlements and patient cost sharing

George Gotsadze, Peter Gaál [67]

A. Introduction

Policy relating to coverage and benefit entitlements is the intersection point between the financial resources in the health system and the services that individuals receive. Decisions about coverage and benefits, therefore, provide critical opportunities to balance the different and sometimes competing goals of health financing policy. The countries of CE/EECCA have taken some steps to define a publicly funded benefits package in response to the decline in health care resources that has accompanied the economic transition. Explicit benefits packages also have been required as part of the process of defining new contractual relationships between purchasers and providers. Rationing benefit entitlements is a politically difficult process, particularly in this region, in which such decisions historically were not made explicitly. The experience from the countries reviewed also demonstrates that the constraints on resources available for health services force coverage decisions to be made, even if these choices are implicit. There are some examples, however, of countries that have implemented coverage and benefit entitlement policy within the framework of broader health reform objectives and strategies and used this powerful tool for furthering health financing policy objectives.

Coverage policy includes three dimensions: (1) who is covered, or the definition and share of the population entitled to receive benefits ("***breadth***"

67 Tamas Evetovits and Melitta Jakab also provided helpful comments on earlier drafts.

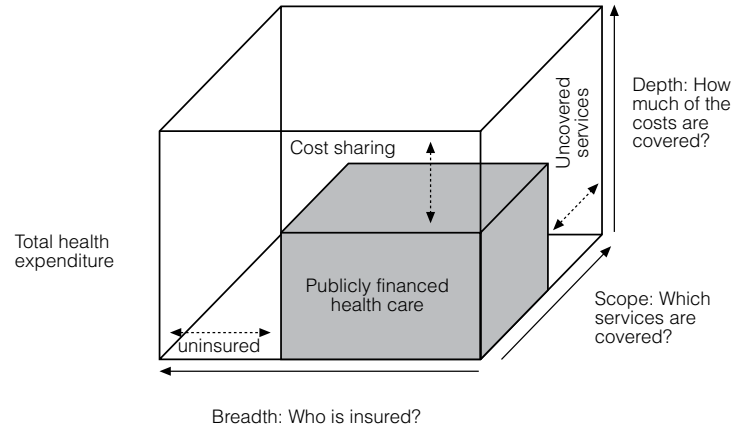


Fig. 7.1 *Three main dimensions of the benefits package*

Source: Adapted from Busse, Schreyögg and Gericke, 2007.

of coverage); (2) what services are covered, or the range of services within the benefits package ("***scope***"); and (3) to what extent services are covered, or the share of the cost of each service that is covered and, conversely, the level of patient cost sharing required to obtain each service ("***depth***").[68] These three dimensions[69] of coverage and benefit entitlement policy (shown in Fig. 7.1) are embodied in the benefits package. For the purposes of this chapter, the benefits package denotes the set of services that is defined and regulated by the government and/or paid from the pooled funds either by the government or by another health care purchaser on behalf of covered individuals.

Within the depth dimension, types of cost sharing are differentiated further by full payment, co-payment, co-insurance, reference pricing and deductible. These categories are described in Fig. 7.2.

Coverage and benefit entitlement policy touches all of the goals of health financing policy, as it consists of the manner (explicitly or implicitly) used to ration services in the context of a budget constraint. The breadth, depth and scope of coverage that are realized in a system are the main determinants of the extent of protection against financial risk for the population. The breadth of coverage and the placement of cost sharing or exemptions strongly influence equity, both in terms of the burden of funding the system and the access to services. Coverage and benefit entitlement decisions are also critical in creating

68 We use slightly different terminology than Busse and colleagues, although the concept is identical to their three-dimensional approach. The use of "scope" to refer to the services that are either included or excluded from a benefits package derives from Foubister and colleagues (2006), and the use of *breadth*, *depth* and *scope* – as we employ them in this chapter – reflects the use of these terms in the same way in Thomson and colleagues (2009).

69 Mathematically, the three dimensions can be collapsed into two, as services with *zero depth* are equivalent to excluded services, i.e. those with *zero scope*. This was the approach initially taken by Kutzin (1999); however, separation into three dimensions is a more useful way to approach decision-making. Further, it is possible that there could be publicly regulated services that nonetheless have no financial coverage.

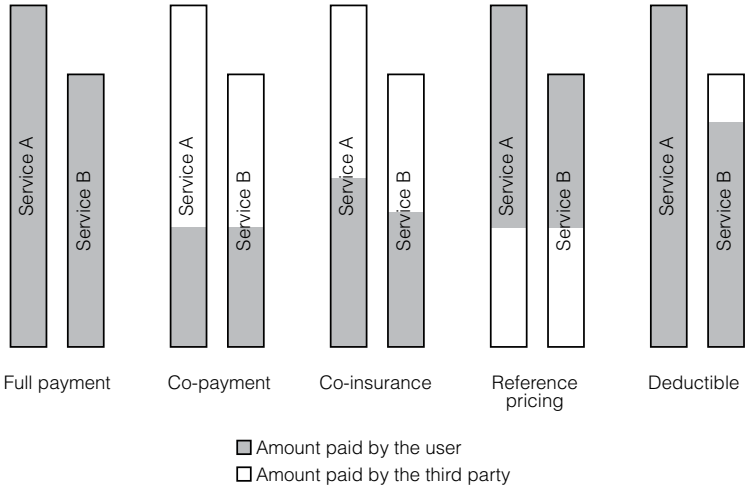


Fig. 7.2 *Cost-sharing terminology*

Source: Authors' own compilation.

a transparent system, in which entitlements, obligations and the link between the two are clear for all of the actors of the health care system. The role of an explicit coverage policy in improving transparency is particularly important in the systems of CE/EECCA countries, in which informal payments have posed a severe barrier to improving health system performance. Coverage and benefit entitlement policy is also a tool to promote efficiency in service delivery, as services are explicitly prioritized to be funded through the public pool, along with efficiency in administration, as reimbursement obligations are established clearly in advance, reducing ad hoc decisions about reimbursement of services at the time of billing by providers.

In this chapter, we first provide a brief discussion of the erosion of benefit entitlement and coverage in the region in the early transition period, followed by a descriptive survey of the region's benefit entitlement and coverage reforms. We provide a more in-depth analysis of the implementation experiences in several countries, representing a range of approaches and experiences, and finally, we synthesize and discuss the emerging lessons highlighting the critical issues of benefit and coverage reforms and their links to other health financing functions and the system as a whole.

B. Overview of benefit entitlement reforms in CE/EECCA countries

i. Fiscal transition and the erosion of real coverage

Benefit entitlement reforms in the CE/EECCA region were driven by the drastic gap between government commitments for free health care and the available revenues that emerged during the financial crisis of the early transition period. Although pre-transition health systems varied in the region (see Chapter 2), from the perspective of coverage they shared the same feature: universal access to comprehensive care that is free at the point of service. Out-of-pocket payments (OOPS) were required for outpatient medicines only, although in many countries, informal payments were widespread, while not especially high. Hence, the legacy of pre-transition health systems can be summarized as involving wide and deep coverage leading to high levels of financial protection and service utilization for the population.

These high levels of coverage eroded during the 1990s, although the magnitude of erosion varied greatly according to differences in the fiscal consequences of the transition across the region. The decline in the ability of governments to spend on health created a shortfall relative to existing structures, previous activity levels and the promise of universal access to free care. As described in Chapter 3, the impact of transition on coverage was most visible in countries in which the economic shock was most severe (such as the Caucasus, parts of central Asia, and Albania), leading to financial barriers to access and particularly high levels of OOPS. Coverage erosion was more subtle in countries with a smaller economic contraction and stronger recovery (such as most of central Europe) but still manifested itself in rising cash payments and service dilution.

The erosion of coverage in the early transition period was thus largely implicit, rather than the result of explicit policy decisions. It was a by-product of the population trying to cope with increasing costs of seeking health care and providers trying to cope with the declining funds. This situation was the *fiscal trigger* for the explicit benefit and coverage policy reforms in the region and had the dual objectives of closing the growing gap between formal government commitments and available resources, while at the same time explicitly addressing the implicit erosion of coverage that was leading to sharp declines in health care utilization and increasing dissatisfaction among the population.

ii. Legal transition and the politics of benefits package reforms

The unbounded commitment to free health care in the CE/EECCA countries during the Soviet period was codified in their constitutions or health protection laws. When the economic impact of the transition on health care resources

became clear, most of the countries were unable to take steps to realign the commitment with available resources until the constitutional or legal provisions were amended. Major departures from the universally free and comprehensive health entitlements occurred during the period 1989–1998, when 24 out of 27 CE/EECCA countries adopted new constitutions with special clauses on rights and entitlements to health and/or health care. In some countries, the amended constitutions retained universal health care entitlements but opened up opportunities for scope and depth reductions, creating a legal trigger for benefit coverage and entitlement reforms. In other countries, however, constitutional changes constrained policy-makers and obstructed reforms. A typology of the constitutional changes in the region related to the right to health care is presented in Table 7.1. In many countries, the definition of the benefits package has been a political battlefield, with benefits package reductions motivated by fiscal pressures, while benefits package expansions have been motivated by the benefits of electoral popularity.

iii. Elements of benefits package reforms and main strategies

Most countries have used a mix of strategies for defining a benefits package that reduces entitlements to be more in line with available resources, but the countries of the region typically chose a dominant direction of coverage and benefit entitlement reform in line with one of the main dimensions of the benefits package. Although some countries have limited breadth of coverage by linking benefits to entitlement through new health insurance systems, no country chose substantial breadth reduction as its main strategy. The implementation experiences show that the mix of strategies for benefits package reforms can be broadly grouped around three approaches, which are summarized in Table 7.2, with more detailed descriptions of the reforms in each country presented in Table 7.3.[70]

In general the richer countries retained or expanded universal and comprehensive coverage but introduced cost-sharing arrangements (decreased depth). The objectives for cost sharing differed among the countries: the motivation for the introduction of cost sharing in Poland, Estonia, Croatia and Latvia was primarily to achieve fiscal balance. Slovakia introduced fixed co-payments for outpatient visits and prescription drugs as measures to rationalize utilization patterns (Pažitný 2006). Scope reduction as the main (implicit or explicit) direction of benefits package reforms is observed in countries where the constitution guarantees free access to publicly funded health care services (Belarus, Kazakhstan, Russian Federation, Ukraine, Uzbekistan). In countries with the most severe economic decline and with no such legal obstacles (Georgia

70 A few countries did not introduce explicit rationing measures and are not reflected in the table.

Table 7.1 *Types of constitutional provision in CE/EECCA countries*

Typology of constitutional provision	Countries
Universal right to health	Hungary: *"People living within the territory of the Republic of Hungary have the right to the highest possible level of physical and mental health... The Republic of Hungary implements this right through arrangements for labor safety, with health institutions and medical care, through ensuring the possibility for regular physical training, and through the protection of the man-made and natural environment"*
Universal right to "free-of-charge" health care, but the scope and depth of the entitlement are to be defined by the law	Albania, Armenia, Bulgaria, Croatia, Estonia, Georgia, Kazakhstan, Poland, Romania, Slovakia, Slovenia, Lithuania, the Republic of Moldova, Tajikistan
Universal right to "free-of-charge" health care provided *in state-owned and financed facilities*	Belarus, Kyrgyzstan, Russian Federation, Ukraine, Turkmenistan
Universal right to health care without a clearly defined means to deliver these rights by the Constitution	Azerbaijan: *"(I) Everyone has the right to health protection and medical aid. (II) The State, acting on the basis of various forms of property, implements necessary measures to promote the development of all aspects of health services, ensures the sanitary–epidemiological well being, creates various forms of medical insurance."*
	Latvia: *"The State shall protect human health and guarantee a basic level of medical assistance for everyone."*
	Uzbekistan: *"Everyone shall have the right to receive skilled medical care."*
	The former Yugoslav Republic of Macedonia: *"Every citizen is guaranteed the right to health care. Citizens have the right and duty to protect and promote their own health and the health of others."*

Source: Authors' own compilation.

Notes: The Czech Republic does not have specific provision on health, but reference to international treaty; for other countries not listed in the table, either health care provision was not found in the Constitution or text of the Constitution in English or Russian language was not available. CE/EECCA: Central Europe, eastern Europe, the Caucasus and central Asia.

and Armenia), a combination of breadth, depth and scope reductions were implemented as the main approach to benefits package reform.

Although most benefits and coverage reforms have focused on entitlement reduction, benefits have been added in some cases. For example, limited coverage of some prescription drugs was added to the benefits package in Albania, Armenia, Estonia, Georgia, Hungary and Kyrgyzstan.

Mainly depth reduction with limited scope reduction. Nearly all countries made at least minor changes to the scope of coverage by, for example, creating a negative list for services that are not considered medically necessary, such as spa

Table 7.2 *Summary of main benefits package reform strategies in CE/EECCA countries*

Major direction of benefits package reforms	Description	Countries
Mainly depth reduction with limited scope reduction	Retaining or expanding universal comprehensive entitlement but introducing cost sharing and eliminating coverage for low priority services	Most new EU countries (with limited cost sharing); Kyrgyzstan (with substantial cost sharing).
Mainly scope reduction	Retaining universal coverage without cost sharing, while gradually decreasing the range of services provided for free by public providers	Belarus, Kazakhstan, Russian Federation, Ukraine, Uzbekistan
Decreasing breadth (in addition to scope and depth)	Limiting the covered population by (a) linking benefits to contributions; or (b) in the context of extreme fiscal contraction, attempting to target public spending narrowly to the poor and/or other defined groups	(a) Estonia, Moldova (b) Armenia, Georgia

Source: Authors' own compilation.

Notes: EU: European Union; CE/EECCA: Central Europe, eastern Europe, the Caucasus and central Asia (as designated in Chapter 1).

treatment or cosmetic surgery (Czech Republic, Estonia, Latvia), or a positive list of services covered (Bulgaria). Some countries substituted low-priority services (such as spa services, therapeutic abortion, acupuncture and so on) with services that have become new priorities. In these countries the major focus of the reforms was to maintain universal coverage for a near-comprehensive package of services through improved efficiency in resource utilization. For example, long-term and rehabilitative care was added in Estonia, and Poland and Lithuania decreased the spa[71] benefit by adding higher co-payments and lowered public spending on these services (Waters et al. 2006), which made funds available to finance other services in the benefits package (although these types of change in scope – increases in the services in the package – were only minor).

Almost all countries introduced co-payments or co-insurance in response to the gap that emerged between service costs and available public revenues. A related objective for new cost-sharing arrangements was to reduce or formalize informal payments. Other objectives were to target coverage for vulnerable groups and to rationalize service utilization by penalizing self-referral (Hungary, Kyrgyzstan). Many of the CE countries that are now new EU countries also established an upper limit for co-payments to be paid by the patients during a calendar year (Latvia) or per hospitalization (Bulgaria, Latvia). Cost sharing

71 Spa benefits are still provided by number of countries and are financed partially from pooled resources and/or public funds (Russian Federation, Ukraine).

is also applied in the financing of pharmaceuticals in virtually all countries. Instead of cost sharing, the Republic of Moldova relies on waiting lists to ration access to non-emergency inpatient care.

Mainly scope reduction. The countries that have relied on scope reduction as the main approach to benefits package reform are typically characterized by a constitutional mandate to deliver free comprehensive and universal entitlements from public and community institutions. Cost-sharing arrangements for services covered under the benefits package are illegal, so the only choice for benefits reduction was to limit the range of free services (reduce scope), with services outside of the benefits package being subject to full user fees. There are some important differences among the countries in the wording of the constitutional clauses, which creates flexibility in some cases. For example, the Russian Federation's constitution allows different funding sources to be used for covered services[72] (such as budget, insurance funds and other sources), while Ukraine has been severely limited in exploring various approaches.

Decreasing breadth through entitlement-based coverage. In a number of countries, universal coverage was replaced by the entitlement-based coverage of social insurance systems. This created a basis for excluding those individuals who did not pay a contribution (or have a contribution paid on their behalf), and in several cases (Estonia and the Republic of Moldova, for example) this meant that coverage became less than universal. In some countries, however, the contribution-based entitlement principle was not enforced (such as in Hungary). Only in the most fiscally constrained countries (Armenia and Georgia, for example) were explicit attempts made to reduce the population entitled to most services in the benefits package.

Exemptions. Several countries have included exemptions as part of their benefits and coverage policy reform approaches. Certain categorical groups of the population are identified for entitlement to expanded coverage on the basis of "social" (income, age, being a military veteran) or "disease/service" (TB, cancer) characteristics. Social exemptions can be considered as an extension of greater breadth of coverage, whereas disease/service exemptions reflect greater scope.[73] The aim of social exemptions is usually to promote equity and financial protection for disadvantaged groups or to reward "privileged" groups of the population, while that of service exemptions is to promote treatment of diseases with public health significance (for example, services with important externalities such as TB treatment) or that are implicitly or explicitly considered

72 Constitution of Russian Federation, Article 41 (1) states that medical services shall be made available by state and municipal health care institutions to citizens free of charge, with the money from the relevant budget, insurance payments and other revenues.

73 The boundaries between the three dimensions can be hard to specify, as any extension of breadth must reflect an increased number of people entitled to more services (scope), and depth refers to whether or not they are fully or partially exempt from cost sharing for these additional services.

Table 7.3 *Benefits package changes in CE/EECCA countries*

Country	Breadth (covered population)	Scope (and categorical groups with additional benefits)	Depth (cost-sharing arrangements within the benefits package)
EU			
Bulgaria (Georgieva et al. 2007)	Approximately 87% of citizens had National Health Insurance Fund coverage in 2006.	Broad package of services for the insured population, including chronic diseases; outpatient medical/dental prevention, promotion, diagnostics, and treatment; emergency care; hospital diagnostics and treatment; maternal and infant health care; medical rehabilitation; care for the elderly; palliative health care; surveillance, home visits and consultations; limited list of outpatient drugs; and transportation to services for medically eligible patients.	Cost sharing introduced in the 1998 Health Insurance Act for visits to physicians, dentists and inpatient days. Rates are fixed as a percentage of the minimum monthly salary, and the total that can be paid per hospitalization is capped. A range of social and service exemptions exist.
Czech Republic (Rokosová et al. 2005)	100%	Comprehensive, with negative list.	Cost sharing is required mainly for selected drugs, dental services and some medical aids.
Estonia (Jesse et al. 2004)	94%	Comprehensive, with negative list (for example, occupational health services).	Clearly defined cost sharing for PHC and specialty consultations, hospital care, drugs, dental care (except tooth-preserving services), free choice of institution and doctor, and support services (for example, night duty, transportation); exemption policies exist for certain groups.
Hungary (Gaál and Riesberg 2004; National Election Office 2008)	100%	Comprehensive, with negative list.	Significant co-payments introduced for drugs, medical aids and prostheses, chronic long-term care, hotel services and self referral; visit fee in outpatient care, per diem for inpatient care, and co-payment for free choice of doctor and institution introduced in 2007, but visit fees and per diem fees for hospital stays were abolished in 2008.

Table 7.3 *contd*

Country	Breadth (covered population)	Scope (and categorical groups with additional benefits)	Depth (cost-sharing arrangements within the benefits package)
EU *contd*			
Latvia (Karaskevica and Tragakes 2001)	100%	Comprehensive, with negative list and limited drugs package.	Fixed co-payments ("patient fees") for PHC, specialty consultation and hospital care, capped per hospital stay and in total per year per person.
Lithuania (SPF 2005)	Approximately 99%	Comprehensive, with negative list (for example, most dentistry).	Different rates of co-insurance for different medicines.
Poland (Kuszewski and Gericke 2005)	Approximately 99%	Comprehensive, with negative list and some categories of benefits positively enlisted (dental procedures, drugs, school medicine and others).	Cost sharing for drugs and medical materials, and sanatorium therapies only. Other areas of care in theory are free of charge.
Romania (Vlădescu et al. 2008)	100%	Comprehensive, with negative list.	Different rates of co-insurance for different medicines plus patients also pay the difference between the actual price and the reference price used to reimburse pharmacies. Cost sharing is allowed for services, but not used apart from spa facilities.
Slovakia (Hlavačka, Wágner and Riesberg 2004)	100%	Comprehensive, with negative list.	Clearly defined cost sharing for PHC, specialty consultation, prescriptions and prescription drugs, and for hospital stays. Visit fee in outpatient care was abolished by the new government in 2006.
Slovenia (Markota et al. 1999)	100%	Comprehensive, with negative list.	Full coverage for service/disease exemptions (such as child health, family planning, infectious diseases, occupational injuries). For other services, HIIS determines co-insurance rate ranging from 15% to 95% of the reimbursement rate.

Non-EU CE countries			
Albania (World Bank 2006)	National insurance system, approximately 40–45%	Limited. PHC outside polyclinic system, specialty consultations and high-end diagnostic services and limited drugs only for the insured population.	A cost-sharing system is in place for essential drugs. Insurance contributions in theory cover approximately 50% of service costs.
Bosnia and Herzegovina (authors' own compilation)	100%	Limited	Clearly defined cost sharing for PHC and specialty consultations, as well as hospital care. Exemption policies exist for certain groups.
Croatia (Voncina, Dzakula and Mastilica 2007)	96.8%	Comprehensive, with negative list (only few services are totally excluded).	Goods and services are categorized into 6 groups with 0%, 15%, 25%, 30%, 50%, 75% co-payment.
TFYR Macedonia (Gjorgjev et al. 2006)	Approximately 93%	Comprehensive, with negative list.	Clearly defined cost sharing for PHC and specialty consultations, as well as hospital care and drugs. Exemption policies exist for certain groups.
Russian Federation and westernmost former Soviet Republics			
The Republic of Moldova (MacLehose 2002; Shishkin and Kacevicius 2007)	74% of population legally insured in 2005 following 2004 reform that shifted entitlement to contributory basis.	Primary and urgent secondary care for covered individuals, as well as non-urgent specialized services on referral and on the basis of waiting lists, and only from contracted providers. Uninsured individuals have fewer benefits but are entitled to some services funded from the state budget.	For covered specialized services, rationing by referral and waiting lists. No cost sharing, except in the case of heart surgery.

Table 7.3 *contd*

Country	Breadth (covered population)	Scope (and categorical groups with additional benefits)	Depth (cost-sharing arrangements within the benefits package)
Russian Federation and westernmost former Soviet Republics			
Russian Federation (Tragakes and Lessof 2003; Shishkin 2003)	100%	Moderately limited. Special categorical groups are entitled to more benefits.	Wide variation in cost sharing practices across the country's 88 regions
Ukraine (Lekhan and Rudiy 2005)	100%	Moderately limited. Special categorical groups are entitled to more benefits.	No
Caucasus and central Asia			
Armenia (Republic of Armenia 2003a; World Bank 2005)	100%	Limited. Continuously changing groups of the population and recipients of family poverty assistance.	No
Azerbaijan (Holley, Akhundov and Nolte 2004; World Bank 2005b)	100%	Limited. Special categorical groups.	No
Georgia (Gamkreliuze et al. 2002; Gotsadze et al. 2005;)	100%	Limited. The population eligible for poverty assistance is eligible for comprehensive hospital and outpatient benefits.	Cost sharing at the hospital level; the population eligible for poverty assistance is exempted from co-payments.; outpatient drugs are not covered under the state financed benefits; only very limited drugs for some conditions (such as diabetes, TB, HIV/AIDS, diabetes mellitus) are provided by the state without any charges.

Kazakhstan (Kukzhanov 1999; Kulzhanov and Rechel 2007)	100%	During existence of compulsory health insurance (1996–1998), two overlapping packages existed a "guaranteed package" for the entire population, and a "basic benefits package" for the insured population. A 2005 decree established a package included emergency care, outpatient care and inpatient care. Free outpatient drugs for children, adolescents and women of reproductive age were also introduced.	Under the 2005 decree, a dichotomous arrangement was put into place with services included in the package free of charge, and those outside the package charged in full, although practices governing outpatient medicine coverage vary across *oblasts*.
Kyrgyzstan (World Bank 2005a; Government of the Kyrgyz Republic 2006)	100%	Universal for basic package, reduced co-payments for the insured population (about 80% of population), and free for socially exempt groups.	Different cost-sharing arrangements for various groups of the population and various services within the benefits package.
Tajikistan (Jakab et al. 2007)	100%	Limited	Benefits package implementation with formal cost sharing was initiated in 2005 and suspended in 2006 due to political reasons. The government revised the implementation approach in early 2007 and in April 2007 issued a government resolution for benefits package implementation.
Turkmenistan (Mamedkuliev, Shevkun and Hajioff 2000)	National–Universal State VHI – 90%	Comprehensive, with negative list	Cost-sharing arrangements are under the state VHI scheme. Special categorical groups are exempted from cost sharing.

Table 7.3 *contd*

Country	Breadth (covered population)	Scope (and categorical groups with additional benefits)	Depth (cost-sharing arrangements within the benefits package)
Caucasus and central Asia *contd*			
Uzbekistan (Ilkhamov and Jakubowski 2001; Ahmedov et al. 2007)	100%	The 1996 Law on Health Protection defines broad service entitlement, including a basic package to be funded by the state and a complementary package to be funded from other sources. In effect, however, items not in the basic package, such as outpatient medicines, are not covered and must be paid entirely by patients. However, 13 population groups are entitled to financial support for outpatient drugs, and tertiary care from specialized centres is available free of charge for 9 population groups.	Officially dichotomous package with full depth for covered services and no depth for those that are not covered.

Notes: EU: European Union; CE: Central Europe; PHC: Primary health care; n/a: not available; HIIS: Health Insurance Institute of Slovenia; TB: Tuberculosis; HIV/AIDS: Human immunodeficiency virus/acquired immunodeficiency syndrome; VHI: Voluntary health insurance.

to be important for other reasons (such as cancer care). All countries use service exemptions.

To promote equity through social exemptions, some countries introduced means testing and offered more extensive health care coverage to qualifying households (Armenia and Georgia, for example). Making such measures effective has posed some challenges. In particular, there must be (1) an effective and administratively feasible targeting process to identify the poor with reasonable accuracy; and (2) a financing mechanism to transform the promise of the exemption into reality at the point of service. Developing means-tested targeting mechanisms can be technically and politically difficult, and if there is no mechanism to "purchase" these exemptions at the point of service, the additional benefit for vulnerable groups runs the risk of becoming an unfunded mandate. In Georgia, Kyrgyzstan and many of the CE countries that are now part of the EU, defined socially vulnerable groups are exempted from co-payments and the purchasing agency reimburses providers when services are provided to eligible individuals (see Section C). Thus, incentives have been created for providers to offer services to people in exempt groups.

C. Implementation of selected benefits package reforms: description and analysis

In this section we focus on a more detailed analysis of a limited set of country-specific experiences of benefits package reforms. We examine the processes of reform to better understand what was changed, why it was changed and how it was changed. Looking at the outcomes and associating these changes with the reforms in pooling, purchasing arrangements and with other changes in the health sector helps us to understand the underlying reasons behind relative successes and failures.

i. Hungary: legal and political challenges to meaningful reform

Hungary inherited the obligation to cover a virtually comprehensive benefits package, with health services being free of charge except for very small co-payments for medicines, medical aids and prostheses. During the first years of health care reforms, including the re-establishment of social health insurance, the government developed a list of covered services that was deep enough to cover nearly all services, with the exception of a moderate negative list (Government of Hungary 1992a). Co-payments for prescribed medicines, medical aids, spa treatments, treatments for aesthetic and recreational purposes were raised significantly (Government of Hungary 1992b). Despite this, the benefits package was not aligned with available resources, and the tension

between increased demand for health care, commitments for free care and the limited available resources required further reform. However, the imbalances were not addressed explicitly, and instead implicit rationing occurred through queuing, service dilution and informal payments.

By 1995 the Health Insurance Fund faced a persistent deficit, which eventually became a trigger to decrease the scope and further decrease the depth of the benefits package. At the same time, the government passed a package of laws on economic stabilization, part of which curtailed in-kind and cash benefits (Government of Hungary 1995). These efforts led the opposition parties to challenge the benefits package reforms as unconstitutional. This was not successful, however, as the Constitutional Court ruled that the right to health must be interpreted within the confines of the country's economic performance and does not mean that all health services have to be made available free of charge within the framework of social health insurance. Following this, a 1997 law and related decrees established the basis by which the benefits package is now defined. They specify which health services are free of charge, covered with co-payment or excluded from social health insurance coverage. However, as with earlier efforts, these changes have not proven adequate in the sense that informal payments persisted (Gaál 2004).

More recently, Hungary has faced renewed pressure to address the imbalance between the commitments in the benefits package and available resources, prompted by a state budget deficit that reached almost 10% of GDP in 2006. The main direction of the 2006–2007 benefits package reforms is the aim to reduce the depth of coverage by introducing more extensive cost sharing. These measures are being driven largely by the fiscal crisis, but the MoH expects that increased formal cost sharing will also serve to reduce informal payments. The new benefits package reforms introduced a "visit fee" (small fixed co-payment) for each patient–doctor encounter and a fixed charge for each day of a hospital stay. If individuals choose to go to a hospital or doctor other than the one to which they were referred, they must pay a co-insurance of 30% of the reimbursement of the service provided. Co-insurance for the most common pharmaceuticals was increased from 50% to 75%. Again, these measures were controversial and challenged by opposition parties. A referendum was initiated on the newly introduced visit fee and inpatient co-payment, drawing over 80% support to overturn these charges (National Election Office 2008).

In Hungary, the right to health is not interpreted as an unconditional right, and the government does have discretion to implement benefits package reduction reforms in order to match commitments with available resources. Nonetheless, significant, explicit benefits package reductions have been difficult to achieve. While fiscal pressures have forced the government to consider benefits package

reforms aimed at balancing liabilities with resources, constitutional, legal and above all political obstacles impeded reform implementation – a situation that is not limited to Hungary. Explicitly curtailing the benefits package has proven to be unpopular, so it is not surprising that benefit reductions and the introduction of cost sharing have so far been marginal, with the exception of pharmaceuticals and medical aids.

ii. Slovenia: combining instruments and managing sustainability trade-offs

Slovenia introduced cost sharing into the state social insurance benefits package in 1992, mainly in the form of co-insurance (in the range of 15–95% of the costs). The benefits package offers full coverage (exemption from co-insurance) to specific social groups, such as children and adolescents (if they are in full-time education), and the socially indigent, and for certain primary, secondary and tertiary care services, as well as nursing care (including home care and care in social institutions). In addition, a few services, such as plastic surgery and certain medicines, are explicitly excluded from the benefits package (Albreht et al. 2002).

The introduction of cost sharing was coupled with complementary private health insurance to mitigate the potential negative impact of higher OOPS.[74] Private VHI covered approximately 94% of those required to pay the co-insurance in the public system in 2004[75] (Tajnikar and Došenovič 2005) and provided approximately 13% of total health expenditures, while direct OOPS made up only approximately 10% (WHO 2008). A total of 98% of expenditures from private health insurers covered co-insurance as payments within the public system. Hence, because complementary VHI coverage is so widespread, this combination of measures appears to have been successful at attaining a high degree of financial protection within a constrained public expenditure envelope.

While different options for coverage and benefit entitlement policy emerged in Slovenia, it appears that the government adhered to the original conceptual design of the reforms and made the necessary adjustments demanded by the changing fiscal and political context. As a result, coverage in Slovenia is universal (100% breadth) and includes a comprehensive package of services, but with significant cost sharing for pharmaceuticals as well as most outpatient and inpatient services (Markota et al. 1999). Slovenia initiated reforms quite early in the transition process, and from the very beginning explicitly followed a strategy of significant depth reduction, coupled with policies to support a

74 Slovenia's overall experience with complementary VHI reforms is reviewed in terms of scope in Chapter 11; here, we focus specifically on the interaction with cost sharing.

75 This amounted to 76% of the whole population.

voluntary private insurance market in order to provide financial protection against the cost sharing in the public system.

The design and approach to implementation of benefits package reforms in Slovenia proved successful in reducing the depth of social health insurance coverage with what appears to be only a minor impact on access to care and financial protection. To the extent that the reforms signified a shift from payroll taxation to flat-rate complementary insurance premiums, there have probably been negative consequences for equity in financing, but this appears to have been a politically acceptable trade-off, given the positive effects of the reforms in terms of equity of access and financial protection, while concurrently limiting growth in public spending on health. While these reforms in Slovenia have been politically challenged on several occasions, the concessions were minor and the government has not retreated from the original design.

iii. Ukraine: constitutionally driven and declarative reform

Ukraine initially retained the Soviet tax-based system, promising free universal coverage with comprehensive services provided in state-owned health facilities, which is guaranteed by the Constitution of 1996 (Article 49): "*in state and community health facilities care is provided free of charge*". The post-independence economic crisis, however, led to a mismatch between available resources and the constitutionally imposed commitments for free care (UNICEF 2003). This forced the government to find ways to reduce the benefits package. In 1996, therefore, the Cabinet of Ministers introduced official user charges for a number of services provided by state and community health facilities, but the regulations were not explicit. The right to charge for services was used opportunistically by providers, reducing transparency and exacerbating financial access barriers to care (Lekhan, Rudiy and Nolte 2004).

Limited accessibility and lack of clear boundaries between services that were meant to be free and those for which fees could be charged gave raise to widespread resentment among the population. The result was a Constitutional Court ruling in 1998, which declared the 1996 government resolution unconstitutional and demanded the establishment of "state guarantees" (that is, a benefits package) that is provided free of charge by state-owned health facilities. The government was further constrained in 2001 when the Parliament passed the *Budget Code*, recognizing health care facilities as "budgetary institutions", which made local and regional self-governing bodies responsible for funding the network of public health care establishments within their jurisdictions through line-item budgets.[76]

76 A similar legal problem was encountered in Kyrgyzstan (see Subsection iv on Kyrgyzstan's benefits package), which was solved by a law redefining the legal status of most health providers in such a way that did not limit options for financing and provider payment.

In a continued attempt to realign entitlement commitments in the benefits package with budget and constitutional constraints, the government separated all health care services into two lists, creating a *dichotomous* benefits package. One list specifies those services that are paid for by the state and guaranteed to be provided free of charge in public sector health facilities (Government of Ukraine 2002). The second list specifies all services that cannot be financed from the budget (either federal or municipal) and should be paid for either by the patient or by a third-party payer. The government defined categorical groups of the population that were exempt from the charges. This was not accompanied by budget funds, however, and thus created an unfunded mandate, shifting the financial responsibility for these services to providers. In effect, these measures were an attempt to offer universal breadth for a package of limited scope, but 100% depth for these covered services and 100% depth for the services on the "second list" for the exempt groups.

On paper, the government reduced the level of commitment of free services to the population, but the boundaries between covered services and those that are not covered remain blurred and not well understood by consumers. Delivering on the promised entitlements is a problem because public sector health care providers are funded through input-based budgets, but entitlements are defined in terms of services, so there is no financial link between the provider payment mechanism and the benefits package. Transparency suffers because, as before, determining which services require payment is essentially left to the discretion of providers. The ultimate result is that services provided by government and community facilities are de facto no longer free to the user (Lekhan, Rudiy and Nolte 2004). The lack of clear linkages between the free or subsidized entitlements and line-item provider payment methods renders entitlements declarative without the effective means to deliver them to the population.

The Ukraine experience shows that, as in Hungary, legal and political constraints have severely limited the government's ability to balance the benefits package with available resources. Further, the lack of reforms in the overall health care financing and provider payment systems in Ukraine have led to entitlements that are not transparent, along with the possibility for providers to charge fees opportunistically. The result has been that the cost of the imbalance between the benefits package and available resources is borne by patients, who face OOPS for services that are not covered and informal payments for services that they are unaware are covered.

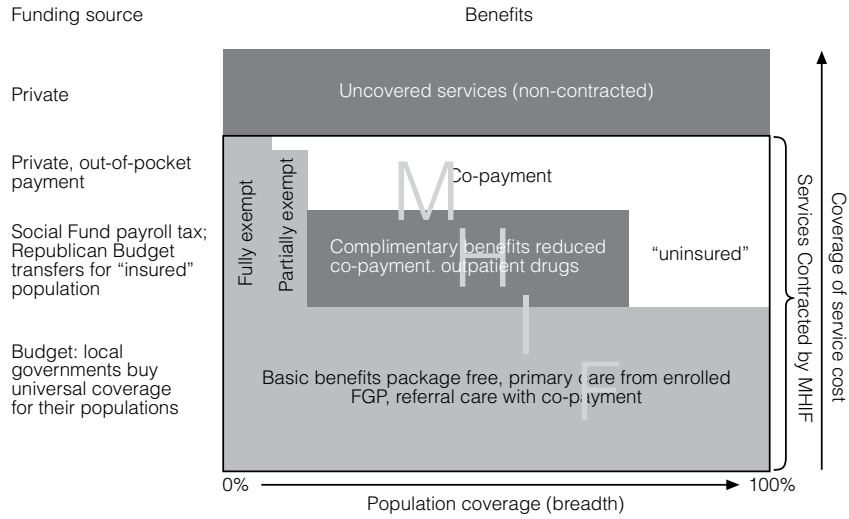


Fig. 7.3 *Funding sources for the benefits package in the Kyrgyz Single Payer system*

Source: Kutzin et al. 2002.

Notes: FGP: Family group practice; MHIF: Mandatory Health Insurance Fund.

iv. Kyrgyzstan: benefits package as part of a comprehensive reform programme

As described in previous chapters, Kyrgyzstan embarked on health sector reforms in 1997 in response to a significant economic decline, falling public spending and rapid growth of informal OOPS. In 2001, the comprehensive "Single Payer" reform was initiated in two *oblasts* (extended to the entire country by 2005) including: (1) pooling of all budget funds at *oblast* level by the TDMHIF; (2) a full purchaser–provider split and contracting with providers, which triggered the need to define the benefits package; (3) extending to state budget revenues the output-based provider payment methods used by the MHIF to replace line-item budgeting and to provide a package for the entire population; and (4) coordinating purchasing arrangements with entitlements within the "State-Guaranteed Benefits Package" to improve transparency of the system (Ibraimova 2005). Hence, rather than an isolated instrument, the benefits package was developed in the context of the Single Payer system to ensure that entitlements were transparent and linked to funding sources and provider payment methods, as shown in Fig. 7.3 (Kutzin et al. 2002).

A key aim of the reform package was to improve transparency by balancing available resources with expected costs. For the benefits package, the main mechanism for this was the introduction of cost-sharing arrangements via a fixed co-payment for inpatient and specialist referral care (depth reduction).

The social and service exemption categories that had previously existed were maintained, but under the Single Payer system these enhanced entitlements were linked to a specific purchasing strategy – higher case-based payments to hospitals for patients in an exempt category.

Although Kyrgyzstan faced similar legal challenges to benefits package reforms as those experienced in Ukraine, the Kyrgyz Government was able to circumvent these constraints by changing the legal status of health care providers from "budgetary institutions" to "health care organizations", which do not receive a guaranteed budget. Health care organizations are financed through contracts with the public health care purchasers, which allows output-based payment methods and co-payments. These changes allowed the MHIF to contract providers for the provision of the services covered by the benefits package, and hence made it possible to link funding directly to the services within it. The reimbursement rates for these services are set and regulated by the government, as is the level of co-payment for different groups of the population. The level of co-payment is lower if the patient is in an insured group, and further reduced or eliminated if the patient is in an exempt group. Conversely, the case payment rate paid by the MHIF to hospitals is increased if the patient is insured or exempt (Jakab et al. 2005).

An important achievement of the Kyrgyz benefits package reforms has been an improvement in transparency and population knowledge, as well as understanding of entitlements. Prior to the reforms, the lack of clarity about entitlements – coupled with great pressure on providers to replace declining public funding with private payments – led to the widespread use of informal payments, particularly for hospital care. After the first year of implementation of the benefits package (with an explicit co-payment policy), however, there was evidence that the formal co-payments had substituted for much of the informal payments, with patients paying about as much out of pocket for services under the new cost-sharing arrangement as previously. There was also evidence that patients had greater understanding of what their financial obligation would be prior to their hospitalization, and that the previously ineffective exemptions became effective after they were linked to the purchasing methods of the Single Payer system: average OOPS for exempt patients dropped substantially in the two Single Payer regions while they remained unaffected elsewhere (Kutzin 2003).

The main lesson from the Kyrgyz experience is that *aligning* benefits package policy with other health financing and service delivery measures – rather

than treating the benefits package as an isolated instrument – is essential for success. More specifically, reform coherence in Kyrgyzstan is reflected in (1) the explicit link between purchasing arrangements and the services covered in the benefits package; (2) transparency and simplicity[77] in benefits, entitlements and co-payment policies; and (3) wide-ranging incentives for providers aimed at promoting efficiency, quality and equity (Ibraimova 2005).

Whether the reforms in Kyrgyzstan will be able to sustain their achievements remains uncertain. At times, political pressures have emerged – as in many other countries – to extend the commitments in the benefits package beyond available resources. In 2006, additions of unfunded mandates to the benefits package, driven by populist political promises, raised concerns among Kyrgyz health care policy-makers and external donors regarding the sustainability of the system's performance. However, these well-articulated concerns led the government, together with donor partners under a SWAp budget support arrangement, to increase public funding for the State-Guaranteed Benefits Package. Analysis of utilization and expenditure data for 2006 showed that while there was a substantial increase in utilization by the newly exempt groups (children aged 1–5 years, registered pregnant women and individuals aged 75 years or over), the increase in public funding more than compensated for the loss of co-payment revenues. There remains a gap, however, and whether the increases in the level of public spending on health will be sustained remains an open question (Manjieva et al. 2007).

v. Armenia: contraction of benefits under extreme fiscal constraints

Armenia faced a severe economic crisis following independence from the Soviet Union, resulting in a dramatic decline in the level of public resources devoted to health. The severity of this contraction forced the government to take steps to balance its commitments for financing services with available resources. Compared with other countries of the region, a constitutional amendment and a new law on health care allowing alternative sources and mechanisms for financing health services were enacted relatively quickly. The historical system of health care financing was abolished, and alternative financing mechanisms were established. This included, in 1997, the introduction of a publicly funded benefits package and the legalization of OOPS in public facilities for health care services outside of the benefits package. The range of services included in the benefits package was rather narrow (significant scope reduction), including a limited set of primary and secondary care services that was considered to be

77 Co-payment levels are set as fixed amounts per admission, varying only by a patient's insurance and exemption status and whether the case is medical, surgical or maternity related. This made it relatively easy for the population to understand their obligations under the package, compared with an alternative involving co-insurance or a large number of different fee categories linked to detailed diagnoses or interventions (Kutzin 2002).

highly cost-effective for the whole population (Republic of Armenia 2003). Breadth reduction also occurred in the sense that only a means-tested vulnerable population group was targeted to receive additional services.

The need to define a publicly funded benefits package was also triggered by a reorganization of the system of public providers, as well as separation of the health purchasing and service delivery functions, which created the need for a benefits package as a basis for purchasing services. All health care facilities were converted to autonomous enterprises, and in 1998 a public purchaser – the SHA – was established. The SHA pooled funds from health budgets of local and central governments, and purchased services included in the benefits package from primary and secondary care providers. The MoH retained its right to purchase services directly from tertiary care providers (Hovhannisyan et al. 2001; World Bank 2004).

Decisions were made relatively quickly with regard to the development of the benefits package in Armenia, but the process reflected a lack of clear vision regarding priorities for covered services and populations, with no clear principles for expanding coverage as available financing increases or for managing shortfalls when budgets contract. There was a process in place to define, review and amend the benefits package, but this process has been subject to political pressures that reduced the transparency and effectiveness of the policy. During the early days of reform, the government established a national working group responsible for the benefits package, and the group initially reviewed international experience, carried out limited burden of disease and cost–effectiveness analysis and annually developed a list of covered programmes that guided budget allocations.[78] During 1997–2001, the working group elaborated a benefits package that was approved by the government and Parliament on an annual basis. Since 2001 the Parliament only approves budgets for broadly defined programme areas, with responsibility for developing the detailed programme content delegated to the MoH (Hakobyan et al. 2006).

Leaving the responsibility for defining covered services with the MoH did not prevent the process from being affected by significant pressures from various interest groups. Consequently, between 1997 and 2003, the type of beneficiaries and the scope of services covered under the benefits package have been unstable from year to year. For example, the benefits package covered free health care for children aged 0–7 years in 1997. In 1998, this group was expanded to cover children up to 15 years old, but it was reduced to children 0–3 years old in 2001. Similarly, haemodialysis was covered under the basic benefits package during 1997–1999, was removed during 2000–2002 and brought back again

78 Programmes define the set of services offered to the population and each programme has a specified budget based on the cost of service provision. Collectively, the set of programmes define the content of the benefits package.

in 2003. In general, services were dropped in an ad hoc manner when budgetary resources became scarce (2000, 2001) and added again when possible (2003). Such frequent changes created uncertainties for patients and opportunistic behaviour on the part of providers (Hakobyan et al. 2006).

The Armenian benefits package significantly reduced the scope of coverage, while offering universal free access to a limited set of curative and preventive services. The benefits package was initially dichotomous, with 100% coverage (no cost sharing) for included services.[79] Vulnerable groups and those eligible for family poverty benefits were entitled to more free services, but all services beyond the benefits package – services other than primary care, sanitary and epidemiological services, a limited range of rehabilitation and intensive care services, and disease prevention – for the rest of the population were subject to full user charges at the point of use.

The effectiveness of benefits package implementation in Armenia has been affected by low funding levels and poor planning. Due to the poor fiscal situation, the SHA received on average only up to half of its approved budget. The MoH responded to this by setting reimbursement rates below the level needed to enable providers to recover the costs of rendered services (Hovhannisyan et al. 2001), rather than, for example, reducing the scope of the package still further. The low reimbursement rates for services covered by the benefits package discouraged providers from serving the poor and vulnerable groups entitled to a wider range of free services. The situation promoted implicit rationing and informal payments, both of which negatively affected equity in the finance and care utilization, as well as financial protection (World Bank 2004).

The Armenian financing reforms have some similarities with those of Kyrgyzstan, such as separating the purchasing and service provision functions, by establishing the SHA and granting independent legal status to providers, pooling the funds, and moving away from input-based towards output-based provider payment. In contrast to the Kyrgyz reforms, however, benefits package reforms in Armenia were not closely linked to the other changes introduced in health care financing. Focusing the benefits package on a narrow list of services (rather than on a level of care), and frequently changing its content and entitled groups, rendered the package difficult for the population to understand. Providers have used the lack of clarity opportunistically, to charge for covered services, and consumers are not informed enough to demand their rights effectively.

79 In 2001, the government tested cost sharing for maternity services, but the policy was abandoned in 2002 due to strong opposition from providers and Parliament. In a second, more successful attempt, cost sharing for the hospital services in the benefits package for the population not considered to be socially vulnerable was introduced on a pilot basis in the capital city of Yerevan in 2004, with the objective of subsequent broader introduction countrywide (Hakobyan et al. 2006).

D. Lessons from implementation experience

The severity of economic and fiscal transition largely determined the extent of benefits package reductions as countries moved to narrow the gap between what had been promised and what could be delivered. Most of the CE countries that now belong to the EU maintained universal coverage for a comprehensive set of services, focusing primarily on reducing depth through the introduction of cost-sharing arrangements for a limited set of services and medicines. Depending on their ability to navigate constitutional and political obstacles, the less fiscally constrained former Soviet countries focused on either shrinking scope or both scope and depth. The more constrained former Soviet countries had to make more substantial reductions in scope, depth and sometimes breadth of coverage.

Benefits package reform seems to be an unavoidable and continuous process of aligning commitments with resources, which is demanded by factors both internal and external to the health sector. This is a challenge for policy-makers in richer and poorer countries alike. Changing demography, technological progress, followed by medical inflation, economic transition and fiscal pressures, are all factors that put pressure on health care financing systems and "demand" a proactive (rather than reactive) approach to benefits package reforms. Benefits reductions were unpopular but necessary political decisions, and it was often difficult to establish a value consensus regarding the equity impact of such reductions. That said, some countries have had more success than others, and the differences suggest some lessons from experience.

Benefits package reforms are politically challenging and attract significant attention from politicians and the general public – undoubtedly because such reforms involve making explicit rationing decisions. Apparently rational (from an accounting perspective) proposals for benefits package reductions have been challenged in the courts (in Ukraine and Hungary, for example) or through other political processes and retracted. Yet, even in a challenging political and legal context some countries managed better than others. Therefore, models of political economy and stakeholder analysis may offer a formal and structured method of considering some of the wide range of influences on benefits package design that can help to define and communicate reform objectives within a given political context. Even when priority-setting decisions are finally made, there is often a further gap between what the decision-makers wish to happen and what is implemented in practice. The stage of policy implementation also may be subject to distorting political and social influences (seen in all the countries reviewed here in depth). Thus, approaches to benefits package design and implementation must be custom tailored to a given political context, and implementation arrangements must be well defined and adequately managed.

Transparency and communication of benefits are crucial for the population to be able to access entitlements and enforce their rights. The experiences from Ukraine, Hungary and Armenia cited here show that rapidly changing entitlements in the benefits package confuse people and shift power to providers to determine entitlements and benefits. Consequently, providers have used their dominant market position to extract payments from patients, either legally or subversively. Thus, developing a transparent process for establishing entitlements through the benefits package, stability in the benefits and clear communication to the public are key factors in the success of benefits package reforms.

Benefits package reforms are essential, but success requires that they be appropriately sequenced and embedded within a comprehensive health financing reform strategy. In the short run, it is always easier to declare that people are entitled to something than to withdraw already established entitlements, but declarations can only be implemented if they are realistic. Unrealistic promises result in an informal benefits package, where entitlements are rationed by patients and providers outside the control of the government, with a negative impact on equity, access to necessary care, efficiency and the transparency and credibility of the health system. The governments that have recognized the need for explicit benefits and coverage policy, embarked on the reforms in a timely manner, conceptualized the steps in a technically sound and politically feasible way, and managed a step-by-step implementation of the reforms seem to have achieved better outcomes (such as Slovenia). The contrasting experience of Armenia and Kyrgyzstan further suggests that – even in a fiscal crisis – it will be counter-productive to reduce entitlements as the first step of the reform. Despite the dramatic reduction in public funds for the health sector in Armenia, targeting funds narrowly to a limited package by excluding most services for much of the population was not very effective. With a similar (although not quite as dramatic) fiscal shock, the Kyrgyz approach taken was to focus first on establishing the institutions and incentives needed (particularly the purchasing capability of the MHIF) in order to address the underlying inefficiencies in the system, and to only formalize the benefits package when there was an ability to purchase these benefits explicitly. Moving first to reduce the benefits package and increase formal cost sharing before such mechanisms are in place is likely to result in an inability to deliver the promise of the revised benefits package.

Successful benefits package reforms were not stand-alone exercises but rather were conceptually linked and sequenced with comprehensive reforms in health care financing, including purchaser–provider split, provider payment reform, private insurance market development, changing the status of providers to

overcome legal obstacles, and so on. The cases from Ukraine, Armenia and Hungary show that attempts to rationalize benefits packages without closely linking with other reform initiatives in health care financing have not rendered positive results. In Kyrgyzstan and Slovenia, by comparison, the benefits package reforms were closely integrated with broader health care financing system changes, and consequently produced better outcomes.

References

Ahmedov M et al. (2007). Uzbekistan: health system review. *Health Systems in Transition*, 9(3):1–206.

Albreht T et al. (2002). *Health care systems in transition: Slovenia*. Copenhagen, European Observatory on Health Care Systems.

Busse R, Schreyögg J, Gericke C (2007). *Analyzing changes in health financing arrangements in high-income countries: a comprehensive framework approach*. HNP Discussion Paper. Washington, DC, World Bank.

Foubister T et al. (2006). *Private medical insurance in the United Kingdom*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Gaál P (2004). *Informal payments for health care in Hungary* [dissertation]. London, London School of Hygiene & Tropical Medicine, University of London.

Gaál P, Riesberg A (2004). *Health care systems in transition: Hungary*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Gamkrelidze A et al. (2002). *Health care systems in transition: Georgia*. Copenhagen, European Observatory on Health Care Systems.

Georgieva L et al. (2007). Bulgaria: health system review. *Health Systems in Transition*, 9(1):1–156.

Gjorgjev D et al. (2006). The former Yugoslav Republic of Macedonia: health system review. *Health Systems in Transition*, 8(2):1–98.

Gotsadze G et al. (2005). *Descriptive background to health care financing reform strategy development in Georgia*. Health Care Financing Discussion Paper No. 1). Tbilisi, CoReform Project.

Government of Hungary (1992a). *Act IX of 1992 on the amendment and complement of Act II of 1975 on social insurance*, Articles 4, 5 (15, 16/A) (promulgated: 09/03/1992). Budapest, Government of Hungary.

Government of Hungary (1992b). *Government Decree No. 107/1992. (VI. 26) Korm. on health services which can be utilized with co-payments only and on the method of payment*; Articles 2, 3. Budapest, Government of Hungary.

Government of Hungary (1995). *Government Decree No. 89/1995. (VII. 14) Korm. on occupational health services*. Budapest, Government of Hungary.

Government of the Kyrgyz Republic (2006). *Program of the state guarantees on providing Kyrgyz Republic citizens with the health care for the year of 2006*. Government resolution of Kyrgyz Republic. Bishkek, Government of the Kyrgyz Republic.

Government of Ukraine (2002). *Resolution of the Cabinet of Ministers of Ukraine as of July 11, 2002 #955 about endorsement of a program about providing to the citizens of guaranteed by the state free of charge medical health care*. Kiev, Government of Ukraine.

Hakobyan T et al. (2006). Armenia: health system review. *Health Systems in Transition*, 8(6):1–180.

Hlavačka S, Wágner R, Riesberg A (2004). *Health care systems in transition: Slovakia*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Holley J, Akhundov O, Nolte E (2004). *Health care systems in transition: Azerbaijan*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Hovhannisyan S et al. (2001). *Health care systems in transition: Armenia*. Copenhagen, European Observatory on Health Care Systems.

Ibraimova A (2005). Health financing reform in the Kyrgyz Republic: addressing equity, access, efficiency. In: *International Conference on Social Health Insurance in Developing Countries, Berlin, 21–23 November 2005* (http://www.shi-conference.de/downl/Session%207_Abstract_Dr%20Ibraimova.pdf, accessed 4 September 2006).

Ilkhamov FA, Jakubowski E (2001). *Health care systems in transition: Uzbekistan*. Copenhagen, European Observatory on Health Care Systems.

Jakab M et al. (2005). *Evaluating the Manas health sector reform (1996–2005): focus on health financing*. Manas Health Policy Analysis Project, Policy Research Paper 31. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/images/pdf/EvaluationofHealthfinancing_E_PRP31.pdf, accessed 6 June 2006).

Jakab M et al. (2007). *The basic benefit package and patient financial burden at the hospital level: an intermediate investigation*. Technical report. Dushanbe, Republic of Tajikistan Ministry of Health and WHO Regional Office for Europe.

Jesse M et al. (2004). *Health care systems in transition: Estonia*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Karaskevica J, Tragakes E (2001). *Health care systems in transition: Latvia*. Copenhagen, European Observatory on Health Care Systems.

Kulzhanov M (1999). *Health care systems in transition: Kazakhstan*. Copenhagen, European Observatory on Health Care Systems.

Kulzhanov M, Rechel B (2007). Kazakhstan: health system review. *Health Systems in Transition*, 9(7):1–158.

Kuszewski K, Gericke C (2005). *Health Systems in Transition: Poland.* Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Kutzin J (1999). Enhancing the insurance function of health systems: a proposed conceptual framework. In: Nitayarumphong S, Mills A, eds. *Achieving universal coverage of health care*. Nontaburi, Ministry of Public Health Office of Health Care Reform:27–101.

Kutzin J (2002). *Note on patient awareness of co-payment levels*. Manas Health Policy Analysis Project, Policy Research Paper 17. Bishkek, World Health Organization and Ministry of Health.

Kutzin J (2003). *Health expenditures, reforms and policy priorities for the Kyrgyz Republic*. Manas Health Policy Analysis Project, Policy Research Paper 24. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/images/pdf/PERJKforPRP24.pdf, accessed 6 June 2006).

Kutzin J et al. (2002). *Innovations in resource allocation, pooling and purchasing in the Kyrgyz health system*. Manas Health Policy Analysis Project, Policy Research Paper 21. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/images/pdf/RAPPRP21.E.pdf, accessed 6 June 2006).

Lekhan V, Rudiy V (2005). *Key strategies of health care sector further development in Ukraine*. Kiev, Rajevskiy.

Lekhan V, Rudiy V, Nolte E (2004). *Health care systems in transition: Ukraine*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

MacLehose L (2002). *Health care systems in transition: Republic of Moldova*. Copenhagen, European Observatory on Health Care Systems.

Mamedkuliev C, Shevkun E, Hajioff S (2000). *Health care systems in transition: Turkmenistan*. Copenhagen, European Observatory on Health Care Systems.

Manjieva E et al. (2007). *Analysis of the medium-term financial sustainability of the state guaranteed benefits package*. Manas Health Policy Analysis Project,

Policy Research Paper 43. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/images/pdf/PRP43.E.pdf, accessed 3 April 2008).

Markota M et al. (1999). Slovenian experience on health care reform. *Croatian Medical Journal*, 40(2):190–194.

National Election Office (2008). *Referendum 2008*. Budapest, National Election Office (http://www.valasztas.hu/main_en.html, accessed 18 March 2008).

Pažitný P (2006). *Health system reforms significantly contributed to stabilizing public finance*. Bratislava, Health Policy Institute (http://www.hpi.sk/attachments/profit.pdf, accessed 6 June 2006).

Republic of Armenia (2003). *Government Decree Number 246: State-guaranteed free medical care and services for various population groups*. Yerevan, Republic of Armenia.

Rokosová M et al. (2005). *Health care systems in transition: Czech Republic*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Shishkin S (2003). *Formal and informal payment rules for medical services*. Moscow, Institute of Transition Economies (www.iet.ru, accessed 1 June 2006) [in Russian].

Shishkin S, Kacevicius G (2007). Health finance reform in Moldova: a step backwards, two steps forward. In: *iHEA 2007 6th World Congress: Explorations in Health Economics* Paper (http://ssrn.com/abstract=992315, accessed 18 January 2010).

SPF (2005). *State patient fund of Lithuania*. Vilnius, State Patient Fund under the Ministry of Health.

Tajnikar M, Došenovič P (2005). *The development of voluntary health insurance in Slovenia and its role in funding health care*. Ljubljana, University of Ljubljana Faculty of Economics.

Thomson S et al. (2009). *Addressing financial sustainability in health systems*. Consultation draft background document produced for the Czech Presidency of the European Union conference on the financial sustainability of health systems in Europe. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Tragakes E, Lessof S (2003). *Health care systems in transition: Russian Federation*. Copenhagen, European Observatory on Health Systems and Policies.

UNICEF (2003). *Social monitor 2003*. Florence, United Nations Children's Fund Innocenti Research Centre.

Vlădescu C, Radulescu S, Cace S (2006). *The Romanian health care system: between Bismark and Semashko in decentralization in health care*: *analyses*

and experiences in central and eastern Europe in the 1990s. Budapest, Local Government and Public Service Reform Initiative/Open Society Institute (http://lgi.osi.hu/publications/2005/274/9Health_Romania.pdf, accessed 5 October 2006).

Vlădescu C et al. (2008). Romania: Health system review. *Health systems in transition*, 10(3):1–172.

Voncina L, Dzakula A, Mastilica M (2007). Health care funding reforms in Croatia: a case of mistaken priorities. *Health Policy*, 80:144–157.

Waters H et al. (2006). *Health care modernization in central and eastern Europe*. Washington, DC, Johns Hopkins University and the Center for Strategic and International Studies.

WHO (2008). *National health accounts country information: Slovenia*. Geneva, World Health Organization (http://www.who.int/nha/country/SVN.xls, accessed 7 April 2008).

World Bank (2004). *The World Bank implementation completion report for a health financing and primary care development project*. Report No. 29233-AM. Washington, DC, World Bank.

World Bank (2005a). *Review of experience of family medicine in Europe and central Asia*. Volume I: *Executive summary*. Report No. 32354-ECA. Washington, DC, World Bank. Human Development Sector Unit Europe and Central Asia Region.

World Bank (2005b). *Azerbaijan health sector review note*. Volume II: *Background papers.* Report No. 31468-AZ. Washington, DC, World Bank.

World Bank (2006). *Albania health sector note*. Report No. 32612-AL. Washington, DC, World Bank.

Part three:

Improving the performance of health financing systems

Chapter 8

Financing capital costs and reducing the fixed costs of health systems

Dominic S. Haazen, Alexander S. Hayer

A. Introduction

The conceptual framework for health system financing is typically applied to analyse financing of the recurrent costs associated with individual health services. Capital costs are addressed in the wider health systems framework (WHO 2000) as part of "resource generation" or "investment". However, capital costs have to be financed, and the variety of ways in which countries do this has not been thoroughly analysed. The issue demands attention because, as noted in Chapter 2, the health systems in the region inherited a particularly extensive infrastructure and – with the post-transition declines in public revenues, combined with the reduction in (often substantial) subsidies for energy costs that followed – many countries were faced with a deterioration of this capital stock (for example, hospitals in disrepair, outdated medical devices, and so on). This situation has negative implications for important performance aspects of health financing systems, particularly efficiency and quality of service delivery. As a result of the high fixed costs for utilities, the large and deteriorated infrastructure also had indirect negative effects on equity and financial protection, as higher shares of recurrent spending went towards paying for heat and electricity, leaving less public money available for pharmaceuticals and medical supplies. Hence, an important motivation for this chapter is the reform experience aimed at reducing the capital infrastructure (and fixed costs) of health systems.

This chapter begins with a framework for the consideration of both capital costs and the associated fixed costs, followed by an overview of the available

data regarding these costs, both in the transition countries of CE/EECCA and in some western European countries. The associated expenditures related to utilities are then reviewed, since these are of considerable importance in the overall picture of health care expenditures in many transition countries and tied directly to the over-dimensioned nature of health infrastructure. Next, a number of examples are presented of plans and programmes to address excessive health infrastructure, and from these examples, estimates of the total capital expenditure needs are extrapolated relevant to the CE/EECCA region as a whole. There is then a discussion of current and possible future funding mechanisms for capital costs, followed by some conclusions at the end of the chapter.

B. Differentiating capital and fixed costs

i. Framework for defining capital and fixed costs

Figure 8.1 explodes the "Provision of services" box of the overall health financing framework (see Chapter 1, Fig. 1.5) to look at the financial flows and interactions that take place within the context of service provision. Four key inputs are shown: human resources, drugs and other supplies, utilities, and facilities and equipment. Human resources and utilities are essentially passed over into health care services, since these cannot be stored. Drugs and supplies can be kept in inventory, so the amount purchased is not always the same as the amount used in the health care delivery process.

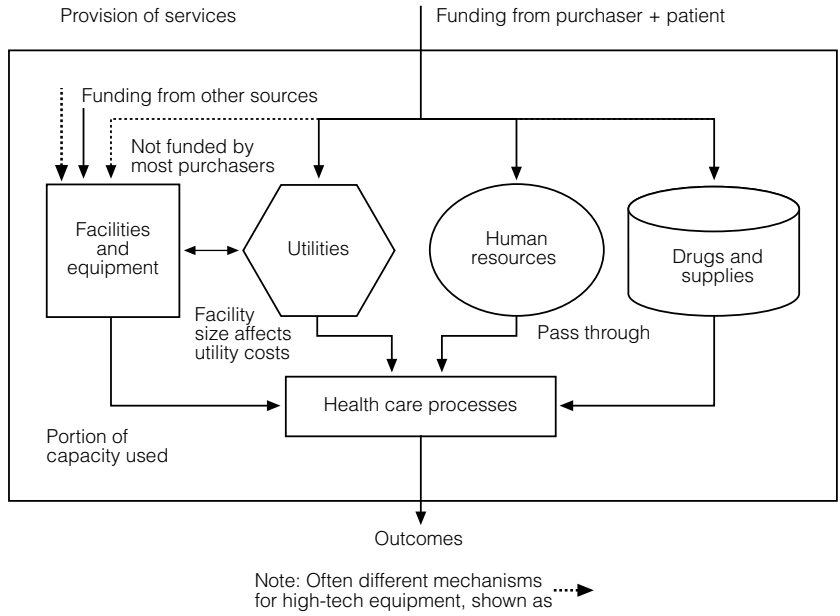


Fig. 8.1 *Framework for analysing inputs needed to provide health services*

Source: Authors' own compilation.

Finally, capital assets (such as facilities and equipment) are only partially used each year in the provision of services, and can be used over various periods of time depending on the nature of the asset. The funding of different types of input also tends to be different, with the largest difference usually seen in the capital asset category.

Within the context of this chapter, ***fixed costs*** are defined as costs that do not vary with the volume of activity undertaken by a health care provider over a specified period of time (usually a year). Typical examples of fixed costs include utilities and full-time staffing (for example, wards need to be heated and provided with light irrespective of the occupancy rate).

Capital costs are defined as costs relating to the purchase, installation and periodic rehabilitation of physical infrastructure, vehicles and equipment (collectively: capital assets) which have a useful life of more than one year. The ongoing maintenance of capital assets is not considered as a capital cost.

There are often trade-offs between capital and fixed costs. For example, an outdated ward configuration can require higher staffing levels and excessive heating costs, while spending money on improving the capital infrastructure can be worthwhile in terms of lower staffing and utility costs. Conversely, some equipment manufacturers may offer medical equipment at low prices (or no cost at all), but these may be associated with higher recurrent costs for supplies, maintenance and spare parts. These arrangements not only result in shifting costs from capital to recurrent expenditure but may also lock a provider into being dependent on a particular manufacturer.

Most health care purchasing agencies do not explicitly finance capital assets or include a provision for capital reimbursement in their financing formula. The funding for such investments is provided instead directly by ministries of health, and/or by local governments, donations and other sources. There are also often different financing mechanisms for facilities and expensive (high-tech) medical equipment, which may serve to limit the proliferation of expensive equipment with high operating costs. With severely limited health budgets in many countries, and a legacy of outdated facilities and equipment, this area of health financing is amongst the most problematic.

ii. Share of health expenditure on capital costs

The capital financing needed to address this state of affairs is immense, yet most countries are barely able to keep up with maintaining the existing inventory, let alone making the investments needed to fundamentally improve the overall situation. Moreover, the available data are both sparse and inconsistent between various sources, so the full magnitude of the problem is not completely clear.

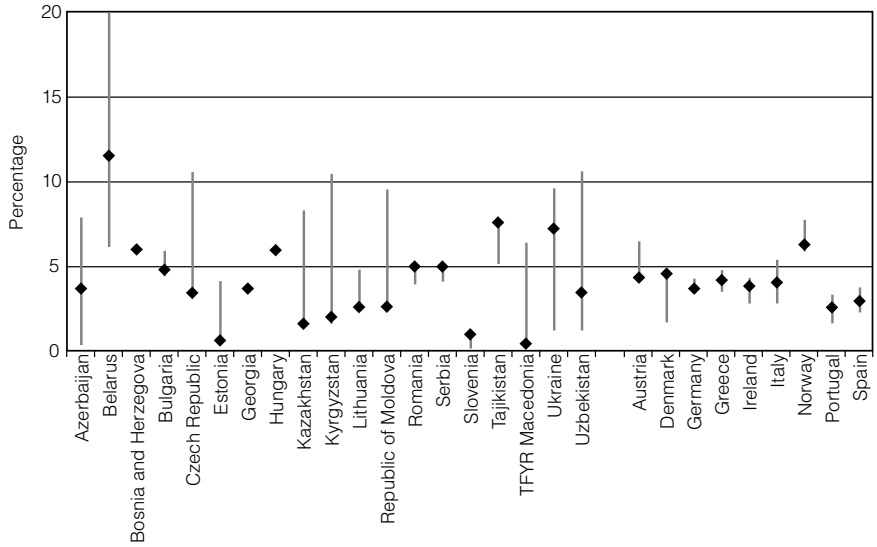


Fig. 8.2 *Capital as a percentage of total health expenditure, 1990–2006*

Source: WHO Regional Office for Europe 2008.

Notes: TFYR Macedonia: The former Yugoslav Republic of Macedonia.

Definitional problems are also rampant. These caveats should be borne in mind when assessing the data shown in Fig. 8.2, summarizing information from the WHO Regional Office for Europe *Health for All* database. The chart shows considerable variation in the 2006 (or more recent year for which data are available, marked by the diamond on each line within the figure) share of total health spending.[80] This is spending that countries devote to capital (as defined by the OECD[81]), ranging from a low of 0.39% in The former Yugoslav Republic of Macedonia to a high of 11.6% in Belarus. Over the 17 years of data collection (between 1990 and 2006), there has also been a wide range of expenditure levels in some countries (shown by each vertical line in Fig. 8.2). For example, Azerbaijan spent a low of 0.4% of their total health expenditures on capital assets, and a high of 7.9%, while Belarus ranged from 6.2% to 19.9%, and Uzbekistan from 1.2% to 10.6%. This high level of variation may imply a lack of long-term stability in the planning and implementation of capital spending, or simply inconsistencies in the reporting and classification of these expenditures over time.

80 The estimates of total health spending from which the percentages are derived are those reported by individual countries, rather than the WHO estimates. For some countries, particularly the poorer ones in the region (such as Kazakhstan, Kyrgyzstan and Uzbekistan), these official estimates do not incorporate survey-based estimates of private spending, and hence may substantially understate total health spending. As a result, the estimates of capital spending as a *percentage* of total health expenditure are probably overstated in these countries relative to the others.

81 The OECD defines capital expenditure as including the cost of construction and renovation of medical facilities and the purchase of medical equipment and vehicles.

In addition to the WHO Regional Office for Europe *Health for All* database, other sources were reviewed in order to obtain available data, including the *Health Systems in Transition* series and World Bank studies – most notably *Public Expenditure Reviews* and *Health Sector Notes*. These reviews suggest that capital has absorbed a relatively low level of total *government* health spending (typically under 5%) for the countries of the region, including some of the richer transitional countries.

As shown in Fig. 8.2, even many western European countries do not report data on capital spending. Still, for the nine countries shown here, both the range of expenditures and the variation over time appears to be much lower than in the transition group. Of course, a big difference between the western European and transition countries is that the actual monetary amount reflected by the lower percentages attributed to the former is much higher. This is particularly important with respect to medical and other equipment, which must be purchased at world prices, even in transition countries. Still, the lower percentage and greater stability of funding in the western European countries does suggest certain possibilities. In particular, the need for capital investment is almost certainly greater in the transitional countries, given the legacy of transition. The greater year-to-year variance in capital spending shown in Fig. 8.2 for the transition countries may also indicate that their capital funding mechanisms are more ad hoc, and hence less stable, than in the western European countries.

iii. Associated fixed costs for utilities

A significant source of fixed costs is attributable to utilities. Because the health care facilities in many transitional countries are old, because there are so many of them (and so many buildings associated with each facility), and because capital investment to renew or replace this infrastructure has been limited, they impose high fixed costs, most notably in the form of utilities (such as heating and electricity). Such costs can be remarkably high; in the Republic of Moldova in the year 2000, for example, it is estimated that over 25% of total government health spending was apportioned to utility costs (Cercone 2003).

In many countries, health care institutions do not pay their utility bills, resulting in accumulated arrears and an understatement of actual utility costs. While this is a form of implicit subsidy, explicit state utility subsidies are still widespread. In many countries, however, these are slowly being eliminated. As these subsidies are reduced, the pressure on already stretched health care budgets will become even more intense. In Kyrgyzstan, for example, the share of utilities increased from 13.7% of government health spending in 1997 to 21.3% in 2000 (Kutzin

Table 8.1 *Implicit electricity subsidies (percentage of gross domestic product)*

	2000	2003	Change to consumer (%)
Albania	10.49	4.16	252
Azerbaijan	11.40	6.42	178
Bulgaria	9.45	3.80	249
Croatia	2.07	0.91	227
Georgia	12.21	5.97	205
Hungary	1.86	0.15	1240
Kyrgyzstan	18.64	9.16	203
Republic of Moldova	10.84	2.71	400
Romania	3.80	1.33	286
Russian Federation	5.36	1.01	531
Serbia	22.45	8.70	258

Sources: Krishnaswamy 2006 (p. 41); authors' own calculations.

2003). Table 8.1 demonstrates the impact of these subsidy reductions over just three years in a number of transition countries, with the subsidy reductions potentially leading to a doubling of consumer charges in most countries and a significantly greater impact in Hungary, the Republic of Moldova and the Russian Federation (Krishnaswamy 2006). With the combination of even higher energy prices over the past several years, and further reductions in implicit subsidies to health facilities, increases in utility costs akin to those seen in Kyrgyzstan may become widespread throughout the region, leaving a smaller share of government health spending for other inputs, especially patient treatment items such as drugs and medical supplies. Hence, reforms that reduce the need for energy usage in the health sector would seem to be an essential ingredient for countries seeking to reduce the vulnerability of their systems to such external shocks.

Another legacy of the pre-transition health system that remains an important cost driver was the practice of building hospitals on large sites with multiple buildings. For example, the Clinical Center of Serbia in Belgrade consisted of 76 buildings sited on over 38 hectares, with a total area of 391 000 m^2. The energy infrastructure dated from between 1954 and 1992, and annual energy costs were estimated at €4.2 million in 2003, representing approximately 5% of the overall CCS budget. A feasibility study (Energoproject–Entel 2003) indicated that costs for energy could be reduced by 43%, and the €6.4 million capital cost of the recommended alternative could be repaid in less than five

years. Beyond the financial savings, it was estimated that such an investment would result in:

- a 97% reduction in sulphur dioxide emissions
- a 59% reduction in nitrous oxides
- a 44% reduction in carbon dioxide.

Hence, the infrastructure of this facility was associated with a substantial level of fixed budgetary costs (the energy bill), as well as environmental costs. Given the design of the Clinical Centre, there was considerable scope for investments to reduce these costs without harming the quality or accessibility of services. Such costs, as well as the opportunities for reducing these are – from an economic perspective – at the core of the restructuring agenda for the health systems of the transition countries. To address these high fixed costs, a process is needed to close or merge hospitals (or some buildings on existing hospital sites, as in the case of the Clinical Centre of Serbia), and re-allocate to other functions the resources that are released in this way. While many countries have made extensive plans for such "rationalization" of the service delivery infrastructure, only a limited number of countries have in fact addressed this issue. The next section provides some examples of several such planning efforts. Some of these form the basis for an estimate of the overall capital requirements needed for the health systems of the CE/EECCA region.

C. Health infrastructure "master plans": some examples

A common approach to dealing with excess physical infrastructure has been the development of health care master plans at national or regional levels (or both), which specify what changes are required in terms of the overall health care infrastructure in order to ensure adequate coverage while reducing fixed costs. Some plans may cover just the hospital system, while some also address the complementary and/or replacement services, including PHC, emergency medical services, home care, long-term care and various types of social service, for example. This section examines some examples of such plans that were implemented (or are currently being implemented) to varying degrees.

i. Armenia

While "optimization plans" were developed for each of the *marzes* (regions) in Armenia, the most challenging plan was that for the capital city of Yerevan (Both 2002). It included proposals for concentrating all specialist care in hospitals; reducing the capacity of inpatient and specialist outpatient facilities by means of reorganization, changes of profiles, mergers and, if necessary,

closing of facilities; privatizing hospitals as non-profit-making organizations; and redistributing health human resources to match health needs.

The plan defined tertiary care as care that needs very expensive equipment, highly skilled specialists and/or complex infrastructure. It recommended that these functions be concentrated into one to three multi-profile hospitals in Yerevan instead of dividing them over a large number of mono-profile tertiary care hospitals. Secondary care in Yerevan was to be organized into general multi-profile hospitals with a capacity of 250–750 beds, based on the belief that hospitals smaller than this are in general less efficient, while hospitals with more than 750 beds are difficult to manage. From a technical perspective, therefore, it was estimated that only six or seven hospitals would be needed for Yerevan (compared with the existing 38).

However, the working group on restructuring felt that such an enormous reduction was not realistic. It, therefore, proposed that secondary and tertiary care in Yerevan city would be provided by (1) mono-profile tertiary care hospitals; (2) multi-profile hospital organizations (600–700 beds) providing secondary and tertiary care and serving also as teaching hospitals for the Medical University; and (3) multi-profile secondary care hospital organizations with lower bed capacities (250 beds). No costs were provided for this proposal, although the allocation of departments, beds and staff were included in the plan. This example reflects a common occurrence: the need to adjust technical plans to local political reality. Some progress has been made in implementing these recommendations, however. In November 2003 the Armenian Government approved a decree that effectively merged 37 public hospitals and polyclinics in Yerevan into 10 hospital networks, providing both outpatient and inpatient specialist care, as well as facilities for family doctor teams (World Bank 2004a). Further support for the implementation of this restructuring was incorporated into a World Bank-financed reform project. The expectation was that the new networks would "eliminate excess capacity, improve utilization and management and reduce maintenance expenses" (Hakobyan et al. 2006). However, the experience to date has been that while some administrative operational costs have been reduced, the improvements in coordination and quality seem to have been less than expected.

ii. Estonia

Atun and colleagues (2005) noted that Estonia has been very successful in reducing excess hospital capacity. In line with a hospital master plan, the total number of hospitals declined from 115 to 67 between 1993 and 2001, the number of beds fell from 14 400 to 9200 and the average length of hospital stay (ALOS) diminished from 15.4 to 8.7 days.

Figure 8.3 shows that the number of both hospitals and beds continued to decline in 2002 before levelling out to less than 40 acute hospitals and 445 acute beds per capita, actually falling below the 2005 average for the 15 countries belonging to the EU in May 2004. As in other transitional countries, Estonia inherited a large hospital network with excess bed capacity. Unlike many of its neighbours, however, it has successfully reduced the number of hospitals and beds in line with its Hospital Network Development Plan. Beyond just having the plan, it implemented structural reforms that enabled the incorporation of hospitals as foundations (trusts) or joint-stock companies under private law, created incentives for efficient resource use and encouraged orderly rationalization through hospital mergers. This combination of measures supported the implementation of the rationalization plans (Atun et al. 2005).

iii. Kyrgyzstan

The MoH has recognized that the hospital sector had excess capacity and addressed this issue actively, including the adoption of explicit hospital rationalization plans in 2001. Throughout the country, the number of hospital beds has been drastically reduced, as shown in Table 8.2.

More importantly from the perspective of cost, from the start of the "Manas" reform plan in 1996 through to 2005 (and especially after the start of major financing reforms in 2001), the square footage of the hospital sector was reduced by approximately 40% and the number of buildings by over 45%, with a resultant savings in utilities costs. Many rural district facilities were transformed into family group practices or structural subdivisions of territorial hospitals. In several cases, donors supported the introduction of energy-efficient heating and water systems. In other cases, increased autonomy enabled innovative hospital managers to make their own efforts to reduce these costs (Purvis et al. 2005). As a result of these efforts, between 2004 and 2007 the share of total hospital revenues devoted to patient care (pharmaceuticals, supplies) as opposed to fixed costs rose from 20% to nearly 33% (Ministry of Health of the Kyrgyz Republic 2008). Similar to the experience of Estonia, the downsizing achieved in Kyrgyzstan was enabled by supporting hospital restructuring plans with organizational reforms and financial incentives that rewarded the implementation of the plans (Purvis et al. 2005).

Although the rationalization of buildings did indeed entail significant economic reward through lower expenditures on utilities, the Kyrgyz experience also illustrates the nature of the "uphill battle" that is being fought in the wider context of deregulation of public utilities. As noted above and shown in Table 8.1, many governments in the region – including that of Kyrgyzstan – withdrew subsidies to public utilities. The rising heating and electricity tariffs

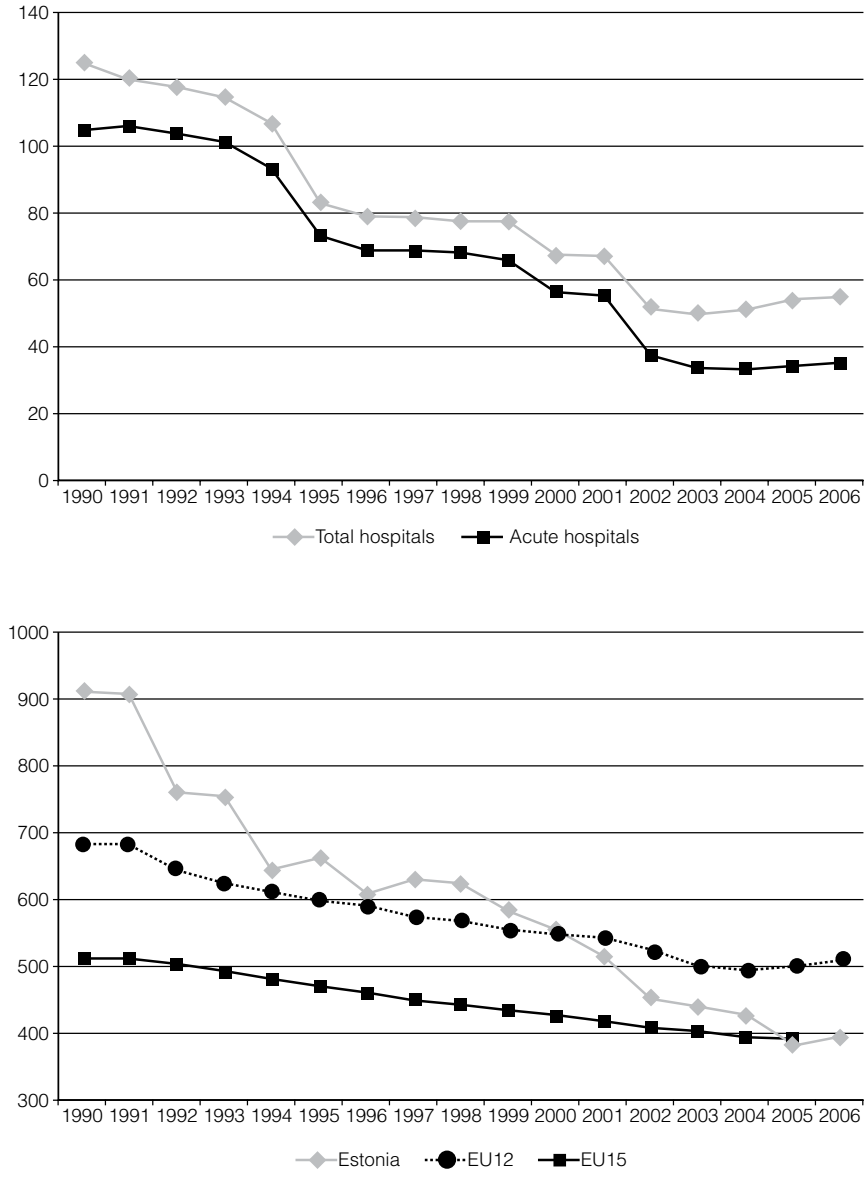


Fig. 8.3 *Number of hospitals and acute beds per 100 000 population in Estonia, 1990–2006*

Source: WHO Regional Office for Europe 2008.

Notes: EU15: Countries belonging to the EU (European Union) prior to May 2004; EU12: EU Member States that acceded to the EU between 1990 and 2006.

that resulted eroded the savings from restructuring. A study of utility savings that focused on eight Kyrgyz hospitals found that before restructuring in the year 2000 there were 140 buildings, but several years after the initiation of restructuring plans approved in 2001 there were only 85. As shown in Fig. 8.4 (under "utility costs with restructuring"), this led to a reduction in the absolute

Table 8.2 *Number of hospital beds and average length of hospital stay in Kyrgyzstan, 1990–2003*

	1990	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006
Hospital beds	52 245	38 703	37 441	36 108	34 412	30 313	27 447	26 594	26 040	26 171	26 261
Beds per 10000	119.8	86.4	80.2	74.7	70.4	61.5	55.3	53.1	52.9	51.2	50.9
ALOS	14.9	14.7	14.7	14.1	13.7	13.3	13.0	12.5	12.5	12.1	11.5

Source: WHO Regional Office for Europe 2008.

Note: ALOS: Average length of hospital stay.

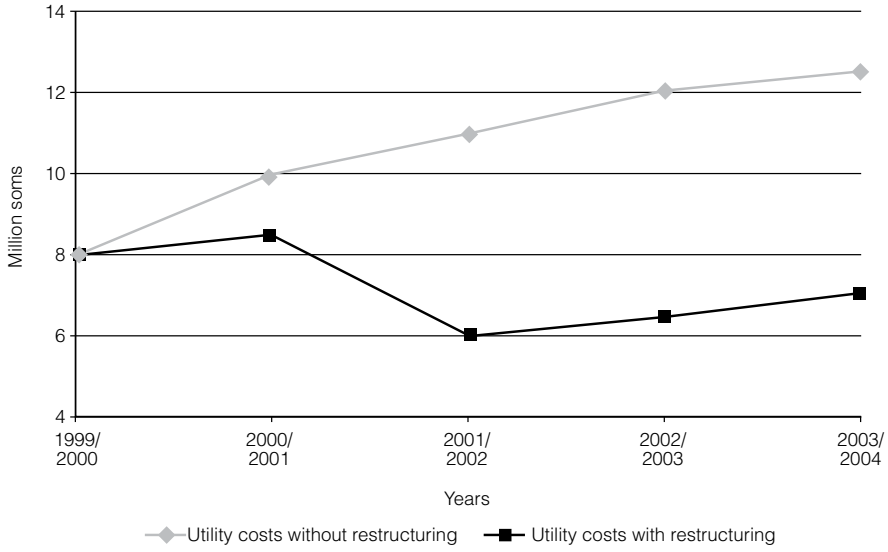


Fig. 8.4 *Comparison of utility costs, with and without restructuring, in eight Kyrgyz hospitals, 1990–2004*

Source: Checheibaev 2004.

level of utility expenditures as compared to the base year. However, Fig. 8.4 also shows that, while there was a substantial reduction in these costs by 2001/2002, costs began to rise after this and by 2003/2004 had nearly reached the base year level (only 10% below it). The reason for this was that utility tariffs rose steadily over this period. For example, actual electricity consumption fell by 23% during this period, but electricity expenditures increased by 34% as a result of the tariff increasing by 87%. To get a true picture of the economic effect of restructuring, the line "utility costs with restructuring" within Fig. 8.4 was constructed by applying the 1999/2000 level of physical consumption of heat and electricity in the aforementioned eight hospitals to the new tariffs. In other words, if there was no restructuring, the cost of utilities would have risen to over 12 million soms compared with the base value of 8 million soms. The difference between this 12+ million and the actual 7 million soms paid illustrates the real reductions in utility costs for 2003/2004 as a result of the hospital restructuring (Checheibaev 2004).

iv. Latvia

The Latvian Health Care Master Plan was developed in 2001 to provide the basis for future development of the health system (SIA BKG Business Consultants'

Group 2001). Although this plan had many similarities to the Yerevan master plan in terms of its vision – including multi-profile general and tertiary hospitals – this Plan went further in specifying other services and types of care that would be needed to make this reform vision a reality, including effective pre-hospital emergency services, rehabilitation services and long-stay hospitals, PHC centres, nursing homes, and health or social care service centres. The Plan also included a rough estimate of the cost of renovations and new construction for hospital facilities. Latvia used EU Structural Funds to finance part of the costs of implementing this Master Plan (Government of Latvia 2006).

v. Romania

The Romanian national strategy for the rationalization of hospital services started in 2002 with the following objectives: (1) implement programmes of care (acute and chronic, aged care and social care) and focus hospital care on acute and chronic services; (2) reduce dependency on inpatient hospital services by reducing ALOS and hospital admissions and increasing occupancy rates and hospital throughput; (3) close, convert or restructure surplus or underutilized hospital facilities and recover the savings for application to new health services; (4) expand PHC and functionally integrate primary and family care, ambulatory services and hospital services; (5) implement more effective and higher performing hospital services (new service modes) to deliver increased hospital output; and (6) guide the operational and financial management activities deemed necessary to sustain the strategy (Blight 2003).

The strategy produced a series of national targets that were then to be taken as key input into the development of plans at the *judet* (regional) level: (1) a reduction in ALOS by treating at least 25% of acute hospital patients on a same-day basis and a 10% reduction in the length of stay for multi-day patients; (2) a reduction of 10% in hospital admission rates for acute and chronic care; (3) occupancy rate targets of at least 85%; and (4) the transfer of 10% of bed-days from hospitals to non-acute care environments (aged care and social care).

Over the following year, plans were developed with external assistance in all the *judets* in Romania, although these varied in degrees of detail and quality. However, neither additional funding nor a high level of political commitment was given to this process, and implementation progress has been minimal. The exception has been the maternity and neonatal system, in which a project has been initiated with external funding and assistance for rationalization and improvement (World Bank, 2004b).

D. Projection of "capital needs" for all transition countries

Although only Estonia and Latvia included a comprehensive costing of capital needs, the Estonian Ministry of Social Affairs estimated that the renovation of active treatment hospitals alone would cost €275 million in 2004, or approximately €180 per capita (Estonian Ministry of Social Affairs 2004). In Latvia, the estimate reached €285 million for the new investments (approximately 88% of the total) and renovations (12%) needed for the hospital sector in 2001. This was equivalent to €119 per capita in that year (Government of Latvia 2006). The estimated costs are remarkably similar, representing 3.2% and 3.3% of per capita GDP, respectively. The closeness of these estimates – together with the high degree of commonality in the infrastructure of the inherited health systems of the former Soviet Union and CE countries – suggests that these figures could be used as the basis for estimating overall capital requirements for the region.

Two estimates are shown in Table 8.3. One is based only on the average per capita cost estimate in Estonia and Latvia, while the other is adjusted for differences in PPP, as a proxy for different construction costs in each country. These results were multiplied by the population to arrive at the amounts for each country. The minimum and maximum figures are shown in Table 8.3.

Overall, this approach suggests capital requirements for the region of between €27.5 billion and €35.0 billion, representing between a quarter and one third of 1% of GDP annually, assuming a 10-year development horizon. Of course, these figures are a very rough estimate; to provide a basis for action in any specific country, a much more detailed analysis would be required, incorporating, for example, amounts already spent on refurbishment and the restructuring that has already taken place. Still, the estimates given here are useful in providing a global sense of the amount of money that is needed.

The figures represent total capital requirements, which in most countries would have to be addressed over a minimum of 10 years. Additionally, there will be an ongoing need not only for recurrent funding for maintenance and repair to prevent deterioration, but also for capital replacement once these facilities and equipment wear out, which could be in as little as five years for some medical equipment.

Capital flows will need to be planned on a consistent and continuous basis to facilitate long-term planning and promote the development of coherent, sustainable financing strategies. The total requirements identified above also include both major and minor capital requirements, ranging from the replacement of entire hospitals or hospital buildings to minor renovations or upgrading and the replacement of equipment.

Table 8.3 *Estimates of capital requirements, 2006 (million euros)*

	Minimum	Maximum
Albania	146.0	172.7
Armenia	43.2	83.9
Azerbaijan	101.9	204.3
Belarus	341.5	550.2
Bosnia	119.0	208.7
Bulgaria	391.1	558.5
Croatia	792.8	917.1
Czech Republic	2 441.0	2 446.0
Estonia	249.9	262.5
Georgia	92.6	125.3
Hungary	2 213.9	2 371.1
Kazakhstan	579.5	882.9
Kyrgyzstan	23.2	53.3
Latvia	322.4	337.8
Lithuania	472.0	516.1
TFYR Macedonia	95.9	128.6
Moldova	59.3	79.5
Poland	5 904.9	6 095.3
Romania	1 206.8	1 679.8
Russian Federation	9 089.1	12 799.6
Serbia	426.2	571.4
Slovakia	825.8	912.7
Slovenia	771.9	1 106.6
Tajikistan	23.0	47.1
Ukraine	639.7	1 577.1
Uzbekistan	151.0	308.7
Total	27 523.5	34 996.7

Source: Authors' own compilation.

Note: TFYR Macedonia: The former Yugoslav Republic of Macedonia.

There are a variety of other issues that need to be considered for the interpretation of these estimates. For example, there are evolving views regarding the relationship between the scale of hospital facilities and efficiency:

(1) economies of scale, such as they are, are exhausted at relatively low levels of scale; (2) the relationship between volume and quality of clinical outcome is exaggerated, complex and should be evaluated on a specialty-by-specialty basis (Maynard 1999).

Furthermore, the following health care trends could affect capital expenditure priorities and approaches: decline of inpatient care and increased emphasis on ambulatory care services; hospice and home health programmes; hospital midwifery programmes; nursing triage hotlines; sub-acute care; increased use of minimally invasive surgery; emergence of integrated delivery systems to offer patients a full continuum of care; and physical redesign of health care facilities to improve flow of patient and overall functionality (Beijeirs 1999).

These trends are especially important in transition countries where the existing infrastructure was built using quite different design and care delivery principles. Unless these considerations are reflected in capital redevelopment efforts, and concomitant changes are made in health care delivery processes, both the quality and the efficiency of care are likely to suffer, and expected reductions in fixed costs are not likely to materialize.

E. Financing mechanisms for capital costs

i. Available information on transition countries

Financing for capital costs in the Soviet era was provided from state budgets. However, the tight fiscal constraints of the early transition period led to severe decreases in the amount of capital financing in most countries. While many countries introduced new health financing sources and intermediaries (for example, payroll taxes and compulsory insurance funds), responsibility for funding capital costs was largely retained in the state budget at central (usually MoH) and local government levels. In Albania, for example, payroll tax-funded compulsory insurance was introduced in 1995. However, capital financing comes mainly from the MoH, although local governments are responsible for operations and maintenance and minor capital costs. The HII covers the costs of physicians and some other recurrent expenses at primary care level (Huppi et al. 2006).

The same is true for many other transition countries that split the cost of health care between a MoH and one or more health insurers or purchasing agencies, including the richer countries in which the health insurers are dominant. For example, in the Czech Republic approximately 80% of total health expenditures come from health insurance funds and approximately 10% from state budgets. Still, it is the latter that is mainly responsible for investment expenditures

(Rokosová et al. 2005). Similarly in Slovenia, secondary and tertiary health care facilities' capital investments are funded directly by government (Albreht et al. 2002).

An exception to this pattern is Estonia, which has probably gone the furthest of the transition countries in terms of building capital reimbursement directly into the health care financing system managed by its compulsory insurance agency. In this system, providers are responsible for capital investment, and capital costs are incorporated in the reimbursement prices of the insurance fund (Jesse et al. 2004).

ii. Mechanisms used by western European countries

While some western European countries provide most health system funding from general public revenues, others mostly from earmarked payroll taxes for health insurance, and still others from a mix, most tend to manage capital investment at central or local government levels. Still, there are some important differences from the transitional countries. The major capital financing methods are summarized in Table 8.4.

One important area of difference from the transition countries is the role and scope that private investment plays in western European countries (Netherlands Board for Healthcare Institutions 2001). The Netherlands, for example, relies almost exclusively on private sector capital financing for its hospitals (all of which are under private non-profit-making ownership), with approximately 80–90% of funds for a typical project coming in the form of money loaned to directly to the hospital. The remaining 10–20% is made up from the hospitals' accumulated savings or from other private sources, such as philanthropists, institutional investors and commercial health care agencies. In the United Kingdom, capital costs are increasingly being financed through public–private partnerships (discussed below), whereby the corporate world assumes much of the risk, and the public sector pays a premium for their reduced risk.

In most countries, however, capital planning and allocation remains in government hands. More specifically, it has been decentralized to the regional or district level. In France, for example, regional hospital agencies are responsible for hospital planning (for both public and private hospitals), as well as financial allocation to public hospitals and adjustment of tariffs for private profit-making hospitals (within the framework of national agreements). Neither public nor private hospitals can increase bed numbers or equipment without prior authorization (Sandier, Paris and Polton 2004). While most capital funding is raised through this mechanism, the national health insurance agency also provides a small amount for capital purposes (Thompson and McKee 2004).

Table 8.4 *Summary of main capital financing methods in western European countries*

Financing method	Countries
Central government grants	Italy, Spain, United Kingdom, Austria, Finland, Ireland, Portugal, Greece, France
Regional government grants	Italy, Spain, Sweden, Austria, Finland, Greece, Germany, Denmark, Belgium (part)
Accumulated hospital savings (pre-investment)	France
Surcharge on hospital services	The Netherlands, Belgium (part)
Private loans	France, Italy, Sweden, Finland, the Netherlands, Germany, Belgium
Using or considering public–private partnership models	United Kingdom, Italy, Spain, Ireland, Portugal, Greece
Other	United Kingdom (land sales), Portugal, Greece (EU Cohesion Funds)

Source: Thompson and McKee 2004, p. 285.

Note: EU: European Union.

In Germany, with a mixture of public and private health care facilities, any facility seeking capital for investments necessary to provide services according to the states' (*länder*) hospital plans may apply for tax-funded grants. In Belgium, if an investment plan has been approved, then the community pays a proportion (30–60%) of the cost. The remaining funds are taken from the budgets provided by the federal government and the sickness funds, which include an element for depreciation. In Sweden, health care responsibilities are almost fully devolved to its 21 county councils, and regional funds – raised through local taxes – are the sole public source of capital financing, although a regional redistribution system exists (Thompson and McKee 2004).

iii. Synthesis of key issues and options

Improved efficiency in the infrastructure and organization of the health care delivery system can enable resources to be re-allocated from fixed costs to other expenditures in the health system, and also generate savings that can be used for other capital needs. A prerequisite for this is to enable health care facilities the right to retain some or all of their efficiency savings for reinvestment purposes.[82] In addition, some "seed funds" are likely to be needed since most hospitals are severely under-capitalized and have little or no access to external financing. Several externally financed projects have tested these approaches with good results. Since so many health institutions in transition countries are not energy

82 In many transition countries, creating such an enabling environment would require a change in the "budget formation process" within the public sector financial management system. See Chapter 10 on aligning public expenditure and financial management systems with health financing reforms (Chakraborty and colleagues).

efficient and spend a disproportionately high amount on utilities, this may be a potentially important source of capital. For example, the MSW hospital in Poland cut 38% from its energy bill as a result of repairs carried out to the facility (Loksha 2003). Hence, capital efficiency improvements can result in decreased fixed costs, thereby reinforcing the "virtuous cycle".

While the restructuring of capital infrastructure in the health sector, especially hospitals, represents a major policy challenge, the establishment of an appropriate system for allocating capital is another significant challenge. This includes the development of priority-setting mechanisms for different types of capital – buildings, major (high-tech) equipment and other equipment – and ensuring sufficient review, oversight and ongoing funding to facilitate wise investment choices.

The selection of specific investment projects, as opposed to the overall planning for health infrastructure, involves another set of considerations. The Consolidated Health Investment Program approach in Latvia provides one example of a process that has been developed to provide a systematic method for project selection and planning. This programme sought to develop the planning and management processes for health care investments policy by improving priority-setting systems, capital planning capacity, project evaluation capability, investment decision-making, and monitoring systems for project implementation. It also established a unified capital financing policy by identifying investment sources and developing mechanisms for attracting these sources. Finally, it improved the legal base for health care service providers (property status, governance), and started the evaluation and implementation of evidence-based medical technology assessment (Haazen and Karaskevics 2003).

F. Possible future funding mechanisms for transitional countries

The development of coherent approaches to capital financing is essential for transitional countries, perhaps more so than elsewhere because of the specific nature of the inherited health system. The experience reviewed above suggests that there is a limited evidence base from which to draw lessons, and that policy-makers may need to rely on both theoretical possibilities and experiences of methods tried in other parts of the world. Some options are described in the subsections that follow.

i. Public–private partnerships

Capital expenditure projects/investments can use either public or private financing, or both (namely, the public–private partnership). Unfortunately, there is very little evidence on public–private partnerships globally, and even less from the transitional context. Some options are reviewed here as an exploration of their possible application in a transitional context.

A public–private partnership can take many forms and play varying roles in the financing of capital expenditures, ranging from a *Design and Construct* model to a *Build Own Operate Transfer* (BOOT) model. In a Design and Construct approach, the government specifies a set of requirements and the successful bidding company completes the set of requirements, such as building a hospital. This asset is then transferred to the government at the predetermined price. The advantage of this approach is that the company assumes all the risks of the project during the building phase. At the opposite end of the scale to the public–private partnership, there is the BOOT, whereby the company builds and operates the facility at the agreed price, relinquishing control of the facility to the government at the end of the lease.

These approaches may be extremely valuable to countries that do not already have operating facilities, because they allow the country/government to acquire a capital resource with very little risk. However, this does not fit the context of most transition countries, in which excess capacity of hospitals and facilities is the norm. Thus, the public–private partnership model would have to be adapted in order for it to be useful. For example, a government could use a *Lease Own Operate* or *Operate and Maintain* model. In the former, that government would lease out the property to the company, the company would maintain, expand and repair the facility as needed and operate it at an agreed to price. Conversely, in the Operate and Maintain model, the company maintains the asset to some predetermined level and manages it effectively for the government.

A comparative study of public–private partnership by Dowdeswell and Heasman (2004) indicates that Australian state governments have implemented over 15 BOOT projects, "against the background of economic rationalism transcending 'ownership' of public services". They were usually 150- to 250-bed new or replacement hospitals, built on greenfield sites. The results were mixed, and the Australian Senate concluded that there was no compelling evidence that public–private partnerships had provided better value; in some cases, the outcome was worse for both government and the public.

The report listed both positive and negative outcomes in these Australian projects. Projects have generally been delivered on time, capital costs have been below budget and hospital designs have displayed better "operational efficiency"

than comparable public schemes. In some projects, in which there has been an integrated hospital and community service model (or where the State Health Department has developed a demand management philosophy), cost-efficiency has been better than in comparable public hospitals. However, on the negative side: (1) there have been difficulties with the accuracy of population health and patient activity data in planning the operational parameters of the contract; (2) companies proved to have been over-optimistic in terms of actually realizing the proposed efficiency savings agreed in the contracts; (3) almost all companies have found it difficult to balance patient activity and cost within contract specification – this has created problems in maintaining the principle of universal access for public patients, sustaining quality, and containing costs (Dowdeswell and Heasman 2004). A review of the United Kingdom Private Finance Initiative reached similar conclusions. While the theoretical justification is widely accepted, problems arose in implementation. Facilities are more likely to be on time and budget but are generally more expensive, and quality is often compromised (McKee, Edwards and Atun 2006).

One form of public–private partnership that has been used in the region took the form of energy performance contracting; an arrangement whereby responsibility for a facility's energy performance and equipment upgrades is contracted to an energy services company. The company upgrades equipment such as heating boilers, building controls and lighting, and pays for the upgrading through energy and operating savings over the life of the contract. The savings in energy bills from the more efficient equipment are shared between the facility owner and the company under the terms of the agreement. As an example, the Bulovka Teaching Hospital in Prague needed a significant upgrade of the central heating system but lacked funding. A project implemented by an energy services company provided financing for modernizing the central heating system at a cost of approximately $ 2.7 million. The modernization produced annual energy savings of approximately $ 700 000, corresponding to a 4-year payback period (IEA 2001).

ii. Capital charges as part of price

Capital financing may flow from government, international lending organizations or the private sector. The application of capital charging (that is, building the "price" of capital into health care provider payment systems) for publicly owned health care providers can be a practical measure that is purported to have the potential benefits of (1) making managers aware of the costs of capital so that they do not treat it as a "free good"; (2) improving the efficiency of capital use to ensure an appropriate mix of capital and labour; (3) allowing comparisons of costs across different health care providers, improving

benchmarking and performance management; and (4) setting a basis for fair competition between public and private sector providers (Sussex 2004). To attain these objectives, the author recommends the following approach:

- apply capital charges to existing assets, as well as new investment;
- aim for real – rather than notional – capital charges, but allow a transitional period for training and experience to be gained and adjustments in the asset base to take effect;
- use a constant annuity (or rental) rather than a declining time profile of capital charges over an asset's life; and
- use a depreciated replacement cost basis for valuing assets, other than those which become surplus to requirements, with annual revaluations.

While the theoretical basis for capital charges is well argued, there exist limited examples of countries in which this has in fact been implemented. In the Netherlands, major renovations and the construction of new hospitals are fully covered by a mark-up in the per diem rate (the daily charge for the hospital that is calculated from each hospital's budget) that is guaranteed for 50 years. These *location costs* include building and equipment, depreciation and interest, and are included in the payment rate. In addition, hospitals receive a normative budget for small investments (den Exter et al. 2004). The United Kingdom introduced capital charges for National Health Service Trusts in 1991, requiring the Trusts to "make an annual surplus of income over expenditure equal to 6% of the value of their assets and to make a charge for depreciation" (Gaffney et al. 1999, p. 49). Finally, in 2003, Estonia's EHIF notionally transferred the responsibility for capital investment to providers by stipulating that the price list was to include the costs of capital investment. The allocations for specialist care were increased by 8–9% overall to accommodate this change. However, a capital charge that was designed to balance the providers' different starting positions was not implemented, due to a change in government (Jesse et al. 2004).

G. Conclusions

It is clear that the issues surrounding capital financing in the CE region are significant because of both the poor state of much health infrastructure and the attendant fixed costs that result from over-dimensioned, poorly maintained and inefficient facilities and equipment. As countries move towards market-based pricing for public utilities, the budgetary consequences for health facilities will grow increasingly severe, adding greater urgency to the need for action. The limited evidence available from the region suggests that a "master plan" is a necessary – but not sufficient – condition for implementing the required

downsizing, merging and re-profiling of facilities. Plans need to be supported by organizational reforms (for example, giving providers greater autonomy over their internal resource allocation decisions), financing reforms (for example, removing disincentives to reduce the number of buildings or beds within the provider payment system, as well as the budget formation process in the wider public sector financial management system) and, most of all, political commitment to follow through on the plans.

The nature of the problem has been described in this chapter, in both qualitative and quantitative terms, and the sums required to address the issue are quite significant. However, if such investments are planned properly over an appropriate period of time, the financial burden should not be excessive for most countries (between a third and one quarter percentage point of GDP annually). The most important issues will likely be obtaining sufficient priority for these investments within national investment programmes, and preparing a coherent overall strategy that guides this development. Without this, there is a high probability that money will be wasted in redeveloping facilities that are not really required in the first place. It is interesting to note that several countries are using EU Structural Funds to help to meet these investment needs. It is vital that the rationale for obtaining these and other forms of external funding – as well internal funding – include a rigorous analysis of the recurrent cost implications of the new investments, and in particular that full advantage is taken of the opportunity that exists to use new investments to actually reduce the need for recurrent spending on fixed inputs such as heating and electricity. While a suitable approach needs to be tailored to specific country circumstances, planning should ensure that the dual problems of over-capacity and under-investment are addressed.

Just as there are multiple approaches to strategy development, there are also many different ways of financing capital currently in use. In certain cases, the efficiencies and reductions in fixed costs resulting from specific types of capital investment can be used to repay the necessary investment funds over a fairly short time frame. Of course, the appropriate organizational forms are needed to allow health facilities both to borrow such funds and to keep at least a portion of any savings that are realized.

Regarding funding mechanisms and sources of funds, including public–private partnerships, capital charges, direct financing and other approaches, it is clear that there is no panacea or "magic bullet" to address capital needs, but an appropriate mix of several approaches is probably the most useful course of action. Given the nature of the problem, it is likely that all available sources will need to be tapped in most countries in order to ensure that health facilities meet modern health care delivery requirements and that unnecessary fixed costs are avoided.

References

Albreht T et al. (2002). *Health care systems in transition: Slovenia*. Copenhagen, European Observatory on Health Care Systems.

Atun RA et al. (2005). *Estonian health system: analysis of the strengths, weaknesses, opportunities and threats*. Copenhagen, WHO Regional Office for Europe.

Beijirs, RJW (1999). Patterns and strategies of health care: the hospital of the future. In: Garcia-Barbero M ed. *Appraisal of investments in health infrastructure.* Proceedings of the f113 and WHO Conference of the Appraisal of Investments in Health, Luxembourg, 17–18 June 1999. Copenhagen, WHO Regional Office for Europe, 179–202.

Blight R (2003). *Romanian Ministry of Health and Family Services: national hospital rationalization strategy*. Bucharest, Ministry of Health and Family.

Both J (2002). *Master plan for health care provision in the city of Yerevan*. TNO Report PG/VGZ, August. Leiden, TNO Prevention and Health.

Cercone J (2003). *Moldova health policy note: the health sector in transition*. Washington, DC, World Bank Europe and Central Asia Region.

Checheibaev E (2004). *Did restructuring of health facilities reduce utility costs?* Manas Health Policy Analysis Project, Policy Brief No. 6. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/MyFiles/Policy%20brief6%20Restructuring.E.pdf, accessed 7 June 2006).

den Exter A et al. (2004). *Health care systems in transition: Netherlands*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Dowdeswell B, Heasman H (2004). *Public–private partnerships in health: a comparative study.* Durham, University of Durham.

Energoprojekt–Entel (2003). *Feasibility study on conversion and improvements of energy supply system in the clinical centre of Serbia, final report*. Unpublished document. Belgrade, Energoprojekt–Entel.

Estonian Ministry of Social Affairs (2004). *Estonian hospitals today and tomorrow.* Tallinn, Sotsiaal Ministeerium.

Gaffney D et al. (1999). NHS capital expenditure and the private finance initiative: expansion or contraction? *BMJ,* 319:48–51.

Government of Latvia (2006). *Program complement, objective 1 program 2004–2006*. Riga, Government of Latvia.

Haazen DS, Karaskevics I (2003). Health technology assessment in Latvia. *Paper prepared for International Society of Health Technology Assessment Conference, Calgary, 21–24 July 2003*.

Hakobyan T et al. (2006). Armenia: health system review. *Health Systems in Transition*, 8(6):1–180.

Huppi M et al. (2006). *Albania health sector note.* Washington, DC, World Bank.

IEA (2001). *Energy policies of IEA countries, Czech Republic 2001 review*. Paris, International Energy Agency.

Jesse M et al. (2004). *Health care systems in transition: Estonia*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Krishnaswamy V (2006). *Infrastructure in Europe and central Asia region approaches to sustainable services.* Washington, DC, World Bank.

Kutzin J (2003). *Health expenditures, reforms and policy priorities for the Kyrgyz Republic*. Manas Health Policy Analysis Project, Policy Research Paper 24. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/MyFiles/PER%20JK%20for%20PRP24.pdf, accessed 7 June 2006).

Loksha VB (2003). *LITHUANIA-Vilnius heat demand management project.* Project Information Document. Washington, DC, World Bank.

McKee M, Edwards N, Atun R (2006). Public–private partnerships for hospitals. *Bulletin of the World Health Organization*, 84:890–896.

Maynard A (1999). Efficiency in theory and practice. In: Garcia-Barbero M ed. *Appraisal of investments in health infrastructure*. Proceedings of the EIB and WHO Conference on the Appraisal of Investments in Health, Luxembourg, 17–18 June 1999. Copenhagen, WHO Regional Office for Europe, 107–117.

Ministry of Health of the Kyrgyz Republic (2008). *Mid-term review report, Manas. Taalimi health sector strategy*. Bishkek, Ministry of Health of the Kyrgyz Republic.

Netherlands Board for Healthcare Institutions (2001). *Instruments to control and finance the building of healthcare infrastructure in other countries of the European Union.* Utrecht, Netherlands Board for Healthcare Institutions.

Purvis GP et al. (2005). Evaluating Manas health sector reforms (1996–2005): focus on restructuring. Manas Health Policy Analysis Project, Policy Research Paper 30. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/MyFiles/Evaluation%20of%20restructuring-Final_E_PRP30.pdf, accessed 7 June 2006).

Rokosová M et al. (2005). *Health care systems in transition: Czech Republic*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Sandier S, Paris V, Polton D (2004). *Health care systems in transition: France*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

SIA BKG Business Consultants' Group (2001). *National health care development plan (master plan),* March 15. Riga, SIA BKG Business Consultants' Group.

Sussex J (2004). *Principles of capital financing and capital charging in health care systems.* Washington, DC, World Bank.

Thompson CR, McKee M (2004). Financing and planning of public and private not-for-profit hospitals in the European Union. *Health Policy*, 67:281–291.

WHO (2000). *World health report 2000. Health systems: improving performance.* Geneva, World Health Organization.

WHO Regional Office for Europe (2008). *European Health for All database* (HFA-DB) [online database]. Copenhagen, WHO Regional Office for Europe, July 2008 update (http://www.euro.who.int/hfadb/, accessed 14 February 2008).

World Bank (2004a). *Project appraisal document, first phase of the health sector reform program, Armenia*. Report No. 27708-AM, 13 May. Washington, DC, World Bank.

World Bank (2004b). *Project appraisal document, second phase of the health sector reform program, Romania*. Report No. 28395-RO, 17 November. Washington, DC, World Bank.

Chapter 9

Financing of public health services and programmes: time to look into the black box

Antonio Duran, Joseph Kutzin

A. Introduction

One of the most remarkable sets of health statistics in the WHO European Region is the one comparing TB incidence, prevalence and specific death rates from 1990 until present times between eastern and western Europe (WHO 2009). Two features become immediately apparent: there is not only a considerable difference in the "size" of the problem between the two groups of countries but, most importantly, there is also a trend moving in opposite directions. While western European countries witnessed a decreasing trend in TB, eastern European countries had a re-emergence of such diseases in the early 1990s that in some countries is only now beginning to recede. Worse still, CE/EECCA countries have high rates of resistant strains of *Mycobacterium tuberculosis* (multidrug-resistant and extensively drug-resistant), including, in fact, the top 13 countries in terms of prevalence of multidrug-resistant TB in the world (WHO 2007). Many of them also have amongst the world's highest growth rates in HIV prevalence.

So why is this happening? The painful comparison above is made here only to illustrate under-performance in terms of effective disease control in the countries concerned. It is known from studies of epidemiology and social medicine that those health problems reflect societal aspects such as income, housing, living conditions and other "social determinants of health" (Marmot and Shipley 1996). At the same time, they reflect "health systems failure" – the

poor articulation of the appropriate control strategies with the organization of health service delivery and the financing of that delivery system (McKee and Nolte 2004).

Work on health financing has predominantly focused on the financing of personal health care services, as has the rest of this book. While some examples exist (see, for example Bayarsaikhan and Muiser 2007; Honoré et al. 2007; Levi, Juliano and Richardson 2007; Sensenig 2007), much less attention has been paid to population-based services and public health programmes. Measured by the importance of these services in terms of health results obtained (Preston 1980), this can only be assessed as a mistake.

In this chapter, we look at the financing of public health services and programmes through the lens of the health financing framework described in Chapter 1. It is argued that problems in the organization of the financing functions and their alignment with the way service delivery is organized have contributed greatly to health system under-performance in terms of effective disease control. In particular, it is noted that the two main problems identified with the rest of the health financing system – fragmentation and misalignment of instruments – are also major contributors to the problems with public health services.

Unlike the other chapters of the book, this one does not review particular "reforms" in much depth, as there have not been any significant reforms to the financing of public health services. Instead, we analyse how the existing arrangements for the financing of these services contributes to the performance problems identified today, and by so doing make the case for substantially more attention to be paid to addressing the "financing systems" for these services in the future.

B. Definitions and scope of the chapter

Earlier chapters of this book have presented and applied the health financing policy framework, including the financing sub-functions – collection, pooling and purchasing – and policy on benefit entitlements. Attention has been focused on how these are *aligned* with each other, with service delivery arrangements and with policy objectives. To apply these concepts in this chapter, we must first define the nature of the services being addressed.

The words "public health services" and "public health programmes" have been used with multiple and often equivocal meanings; for example, (1) equating "public" with governmental action; (2) including also the participation of the organized community; (3) referring to services targeted at the environment (such as sanitation) or the community (such as mass health education); (4)

designating preventive services for vulnerable groups (for example, maternal and child care programmes); or (5) simply referring to particularly frequently occurring or dangerous diseases (Frenk 1999).

However, in this chapter the words "public health services" specifically follow the service classification first presented in *The world health report 2000* (WHO 2000, with additional detailed explication of the issues in Duran et al., forthcoming), according to which the name *public health services* designates interventions delivered to groups or the whole population.[83] This is distinguished from *personal health services* – that is, interventions delivered to individual clients. Importantly, personal services include not only curative services but also some that are preventive, promotive and so on. A smoking cessation session with the GP is as much a personal service as an appendicitis operation or the care provided to a patient affected by Alzheimer's disease. A television campaign advising anti-mosquito nets in the fight against malaria, and water chlorination services – to name but two – would, in turn, be population-based preventive health services. In fact, most disease control efforts require more than one category of intervention. For example, some health promotion services are personal (such as anti-tobacco advice during the medical consultation), while others with the same goal are non-personal (such as educational campaigns, warning labels on cigarette billboards, and so on). Immunization usually involves both a personal and a population service – that is, administering the dose and producing an education leaflet, respectively.

Population-based services, by definition, cannot be delivered in the same way as personal services; hence, their financing arrangements are likely also to differ. To guide policy with regard to pooling and purchasing arrangements for any services, what matters is not how important a particular service is, or whether it is preventive or curative, but rather how the relevant interventions are to be organized and delivered. If, for example, primary care practices are to play an important role in directly observing TB treatment, then the financing system (and in particular, the primary care provider payment mechanism) needs to be aligned with that strategy.[84] To align financing with service delivery, it is essential to establish whether certain interventions would need to be delivered jointly with another service, in a given sequence, to the same individual(s).

83 Equivalent terms for this definition of public health services would be "population-based", "collective", "community", or "non-personal" services.

84 Indeed, service delivery in a PHC setting often includes items sometimes labelled as "public health". While not the focus of this chapter, it is worth noting that the use of the label PHC (primary health care) to simultaneously designate very different things (namely, a mix of services, values, levels of care, policies, strategies and methodological approaches) creates problems for those responsible for making policy on the financing of PHC. What is needed – whether under the label of public health, PHC, or other terms – is to know what the services are and how they are organized, so that financing arrangements can be aligned.

Therefore, understanding the intervention strategy and the organization of service delivery are necessary steps in the development of a systematic approach to health financing policy.

The classification by service delivery modality (that is, whether the services are delivered to an individual or a group) is related to – but distinct from – the classification of goods and services according to how the benefits of service consumption are distributed. *Public goods* are those services whereby – once purchased and provided – their consumption by one person does not diminish consumption by another (for example, it is not possible or is prohibitively costly to exclude "free riders", such as treatment of polluted air or an educational campaign poster against drunk driving). ***Quasi-public goods*** are those whose consumption has benefits (or costs) that extend beyond the person consuming them (*positive externality* – for example, immunization or the treatment of a communicable disease; or *negative externality*, in the case of antimicrobial resistance) (Liu and O'Dougherty 2004; Carande-Kulis, Getzen and Thacker 2007). ***Private goods*** are those whose consumption benefits only (or predominantly) the person receiving them. Hence, these two dimensions of services relate to (1) whether the service is delivered to an individual or a group, and (2) whether the consumption of the service has implications beyond those who receive it.

From a welfare economics perspective, public goods such as the cleaning of air pollution must be budgeted and paid for from the public purse (if they are to be provided at all). The diagnosis and treatment of a case of TB or sexually transmitted infection (STI) benefits the person receiving it and also contributes to a reduction in the possibility of the infection becoming more widespread, especially in a close environment. Something similar would occur with a needle-exchange programme in the fight against HIV/AIDS, which also reflects the characteristics of quasi-public goods. Because these externalities would not be "valued" in an individual's demand for services, the *social* value of their consumption is greater than their private value. Hence, unregulated private market interactions would lead to *allocative inefficiency*: a sub-optimal level of consumption of these services for the population as a whole. The general policy recommendation is, therefore, that their consumption should be "facilitated", typically by partially or fully subsidizing them (Atun et al. 2008). As such, the relevant considerations from the financing policy perspective relate to the depth of the benefits package.

As shown in Table 9.1, three broad combinations of service type/benefits characteristics are possible: personal services that are private goods, personal services with quasi-public goods characteristics, and population-based services with public goods characteristics. In all cases (consistent with the main

Table 9.1 *Types of health service and implications for financing policy*

	Characteristic of benefits		
type of service	**Private**	**Quasi-public**	**Public**
Personal	Align finance and organization with desired service delivery strategy. Other considerations (such as equity) drive decisions on depth of coverage.	Align finance and organization with desired delivery strategy. Extent of externality is an important factor in decision-making on depth of coverage.	
Population based			Align finance and organization with desired service delivery strategy. If cost-effective, fully subsidize.

Source: Authors' own compilation.

messages of previous chapters of this volume), good policy requires ensuring that financing policy is aligned with the organization and strategy for service delivery. At this conceptual level, there is no difference in this regard between personal and population-based services: alignment is important for both (although of course, how to do this in practice may vary). The characteristics of the benefits, however, have direct and different implications for policy on the benefits package (for personal services) or simply – from an efficiency perspective – what government should or should not subsidize, and the magnitude of the subsidy.

This method of classifying services contrasts with other classifications guided by clinical medicine, by management aspects or by pure descriptive purposes. Services, for example, could be classified according to the place of the concerned service in *the cycle of the disease* (health-promoting, preventive, therapeutic, rehabilitative services, and so on); according to *the specific professional involved* in its delivery (medical services, nursing services, and so on); according to the *severity/immediacy of the expected response* (regular/emergency care services); according to the *intensity of the process* of care (ordinary, intensive care services); according to the *main target group* of the service, defined within a framework of epidemiological variables such as sex, age (for example, gynaecological services, paediatric or geriatric services, and so on); according to the *technology* involved (such as surgical, internal medicine, laboratory, imaging services, and so on); or according to *the concentration of technology determining location/service delivery "level"* (primary, secondary and tertiary – or, for others, primary and specialized care). Such classifications have their uses but are not as helpful as the approach

summarized in Table 9.1 for policy development with regard to the financing and organization of services.

Historically, one means by which public authorities have facilitated the uptake of services deemed to be *important* – at first, particularly for certain communicable diseases such as TB but later also for noncommunicable diseases such as hypertension – has been to fund, organize and deliver them in what have been called "public health programmes". Typically, these programmes focus on a specific disease, or set of diseases, and include a mix of interventions – both personal services (with externalities) and population-based services. Because the financing and delivery of these programmes tends to be vertically integrated and separate from the financing and delivery arrangements of the rest of the health system, they are often called "vertical programmes".

Indeed, CE/EECCA countries had these fragmented and vertically integrated arrangements prior to 1990 for a large number of "programmes", and many have updated them since. In the Russian Federation,

> Responsibility for health promotion, health education and prevention largely belonged to the Ministry of Health until 1991. After that the Ministry has retained only some health education functions and the san-epid[85] system has taken on responsibility for implementing federal, regional and local regulations for health promotion and disease prevention. ... Responsibilities of the san-epid system currently include the following: communicable disease prevention and control; immunization; hygiene of children and teenagers, health and nutrition in kindergartens and schools; food safety; radiation safety; occupational disease prevention; environmental health; epidemiological control and analysis; control of working conditions; health education and promotion of healthy lifestyles.
>
> *Source*: Tragakes and Lessof 2003, pp. 127–128

Many CE/EECCA countries have retained those old arrangements and structures, or sometimes reproduced them under new names. In Kazakhstan, for example,

> The National Center for Healthy Lifestyles was established in December 1997 with its own vertical structure. ... In 2006, the following programmes were being implemented at national and regional levels: prevention of alcohol and tobacco consumption; prevention of drug abuse; prevention of STIs and HIV/AIDS; protection of reproductive health; prevention of TB; prevention of communicable diseases; healthy nutrition; physical activity; prevention of behavioral risk factors associated with major diseases; prevention of chronic diseases, accidents and poisonings. ... The Healthy Lifestyle Service also collaborates with a number of international organizations, including WHO,

85 "Sanitary-Epidemiological Service", hereafter referred to as the SES or San-Epid system.

> UNICEF, UNDP, USAID, the Know-How Fund, CDC, UNFPA, GFATM, Open Society Institute and the International Anticancer Union.
>
> *Source*: Kulzhanov and Rechel 2007, pp. 86–91

Those old (and new) institutions (United Nations Development Programme (UNDP), United Nations Population Fund (UNFPA), United States Agency for International Development (USAID), United States Centers for Disease Control and Prevention (CDC), Global Fund to fight AIDS, TB, and Malaria (GFATM)) were often reinforced by funding from international donors (in several cases, different public health entities within the same country were each "sponsored" by one particular donor).

The parallel structures are presented as *public health* services and programmes, although – again – many of the preventive and curative interventions supported by these programmes are services that are personal in nature. In Belarus, for example,

> United Nations agencies such as WHO, UNDP, United Nations Population Fund (UNFPA) and UNICEF have been very active in working with state structures on specific health-related projects, such as the control and prevention of TB. ... Particularly significant public health issues, including TB and HIV/AIDS, are … managed and funded directly from the central Ministry of Health rather than local government and have contributed to significant fragmentation and duplication of care. In order to promote integrated prevention and care services for these public health priorities, there have been moves for aspects of the vertical programmes to be integrated into primary care, but there are significant barriers to integration.
>
> *Source*: Richardson et al. 2008, pp. 18, 77

Some of the concerned parallel schemes are rather sophisticated, have been retained for decades and deal with noncommunicable diseases. In Croatia, for example, "[T]he National Centre for Addiction Prevention works under the [Croatian National Institute of Public Health] and runs the National Register of Treated Psychoactive Drug Addicts, founded in 1978. From 2003, county Centres for Addiction Prevention form a part of county institutes of public health" (Voncina et al. 2006, p. 44).

Hence, the definition of "public health programmes" is based on what we observe to exist in countries, rather than on a conceptually precise definition. The financing of both public health services and public health programmes (as defined above) constitute the combined focus of this chapter.

C. Analysis: how do the financing arrangements for these services in CE/EECCA countries create problems?

Based on epidemiological analyses (that is, social repercussions related to key diseases, the complexity of their determinants and the intersectoral collaboration needed to tackle them), public health services should be a clear priority in virtually all countries, and in CE/EECCA countries in particular. Often, however, political reasons (the work by "curative services" lobbies) or the market failures that lead to under-investment (such as a lack of effective information to policy-makers) underlie the fact that public health services consume a small fraction of health system resources. Over-provision of less-cost-effective personal services – especially in secondary and tertiary hospitals – usually coexists with under-provision of more cost-effective public health interventions (McGinnis, Williams-Russo and Knickman 2002).

In OECD countries – irrespective of the different definitions of "public health" from country to country and the methodological difficulties in comparing expenditures – the figure for public health expenses as a fraction of total health expenses is approximately 2% (OECD 2008). In middle- and low-income countries, funding for public health services suffers even more from the competing demands of personal health services in the face of tighter fiscal constraints. Perhaps this is one reason for why there is little detailed information on the financing of traditional public health services, such as epidemiological surveillance, population-based health promotion, and so on.

Very few CE/EECCA countries have formally reformed their public health services and programmes in much depth, and this could be an additional reason for having only limited systematized information on their public health expenditures and related financing arrangements. A colleague in the Republic of Moldova candidly explained to the authors in the context of this study that "it simply happened that neither in the reformers' nor in the international agencies' minds there has been any space to address public health issues in addition to reforming PHC and health financing so far" (Ursu personal communication, 2009). This statement reflects the reality that there has been not only a funding deficit with regard to public health services and programmes, but perhaps also an attention deficit. While the level of funding for these services is certainly a concern, the focus of the analysis here is on the alignment of the *financing arrangements* for public health services and programmes with the desired service delivery strategies for the diseases they are meant to control or the behaviours they are meant to promote.

From the existing evidence, reform-related discussions in the field of public health have mostly revolved around responding to resource scarcity, with

many public health institutes and inheritors of the previous SES structures concentrating on raising revenue in the context of post-transition public spending reductions. Some countries have managed to diversify their sources of public health money, with no evident harm done. In the Czech Republic, for example,

> Direct funding from the Ministry of Health covers part of the cost of… running specific specialized health programmes. These programmes include AIDS prevention, drug control, the operating costs of long-term care institutes, and research and postgraduate education. ... Screening programmes for adult diseases (for example, cervical cancer, breast cancer or colorectal cancer) have been reimbursed from public insurance since 2000. ... The global child-immunization programme covers tuberculosis, diphtheria, tetanus, pertussis, poliomyelitis, measles, mumps and rubella. Immunization against hepatitis A and B, tickborne encephalitis, Haemophilus influenzae B and meningococcal disease is available upon request and requires full payment. ... Some public health facilities, especially various auxiliary laboratories, are being privatized.
>
> *Source*: Rokosová et al. 2005, pp. 34–35, 46

Similarly in Slovenia,

> ... the regional institutes of public health found their own methods of developing their services further, by attracting private funding. These include primarily laboratory services supporting the screening and diagnostics of regular check-ups of certain professionals, along with the screening of drinking and bathing water, as well as foodstuff.
>
> *Source*: Albreht et al. 2009, p. 104

Following the large reductions in public spending during the early transition period, charges for public health inspections or, more generally, the inspection services provided by the SES became an important source of funds across a range of countries, including Albania, Bosnia and Herzegovina, Croatia, Kyrgyzstan, The former Yugoslav Republic of Macedonia, Serbia and many others.

i. Misalignments in the financing of public health services

While the introduction of fee collection by some of the public health entities of the Czech Republic and Slovenia appears to have done no harm to the level, distribution or appropriateness of services, there is a risk that if services become too dependent on income from fees the effects could be distortionary. In fact, following the (sometimes dramatic) decline in public funding that occurred in many countries in the early 1990s, the right of public health institutes to bill citizens and private industries (especially bars, restaurants and food shops) on behalf of "disease prevention" was expanded. This enabled public health staff

to supplement their salaries, with the result that the services became much more dependent on fees and the incentive environment was distorted. In some cases, the consequence was an increase in the number of inspections to such an extent that they were perceived to be extortionary and a hindrance to economic development (particularly for small businesses). For example, the Governments of Kyrgyzstan and Armenia each issued decrees[86] to limit or otherwise restrict the number of inspections, in order to prevent practices believed to be harmful and abusive.

Ideally, health systems should not merely act to prevent interventions from being delivered in a harmful way, but should create an environment to promote the efficient delivery of high-quality and appropriate services. In the field of food safety, for example, such *good practice* would mean an effective and rational way of preventing problems from harvest to consumption, "developed by each food establishment and tailored to its individual product, processing and distribution conditions". It should "include education and training of employees. Benefits, in addition to enhanced assurance of food safety, are better use of resources and timely response to problems ... The use of microbiological testing is seldom an effective means of monitoring because of the time required to obtain results" (US National Advisory Committee On Microbiological Criteria For Foods 1997). A methodology of this type, such as the Hazard Analysis and Critical Control Points, minimizes the importance of ex ante inspections in favour of the "self-responsibility" of facility managers and workers, as documented by traceable registers.

Abuse of inspections, on the contrary, works against building together with the industry the necessary trust for food poisoning prevention, against the necessary reliance on workers' education and business process development and even against concentrating resources on updating the laboratory tests.

The Chinese experience – that is, the transformation of its health system to market principles in the context of wider economic changes that were introduced in the country during the 1980s – holds particularly important lessons for the CE/EECCA countries. As part of China's reform, most government funding of public health inspection agencies (dealing with environment and food hygiene, industrial work sites and schools) was withdrawn, and these agencies had to generate most of their own income through service charges. This led to several harmful practices (Lui and Mills 2002), including:

- over-provision of inspections (the more an enterprise was inspected, the more revenue could be collected), which also included duplicate

86 These were Presidential Decree 21 of 16 February 2000 entitled "About measures to decrease the number of unnecessary inspections of the entrepreneurs in the Kyrgyz Republic" and Decree number 594-A, adopted by the Government of Armenia on 29 May 2009 "About organizing and conducting supervisory/inspection activities".

inspections by agencies attached to different levels of government (city and province, for example) in the same geographic area or by different departments of the same agency (such as food hygiene and working conditions), magnifying the problem of over-provision by the fragmentation in the administrative structure; and

- the tendency to inspect more frequently profitable rather than unprofitable enterprises (whereas the less profitable enterprises typically suffered from poorer public health conditions that should have merited more rather than fewer inspections).

China's experience represents a cautionary tale regarding the risks inherent in the funding of this public health service being largely dependent on inspection fees. It is a clear example of how the misalignment of financing arrangements with service delivery objectives drove the system away from good practices in terms of food safety and occupational health. Indeed, the authors of that study concluded that the Chinese experience "reinforces the standard recommendation that public health services should be given top priority for government funds" (Liu and Mills 2002, p. 1697).

In addition to these forms of petty (or massive, as the case may be) corruption represented by inspection abuse, an additional problem arises from the organization of public health services as entirely separate (fragmented) from the rest of the system; namely, they may face serious difficulties in providing the right kind of services. For example, the lack of connection between clinical practice and public health services would make it unlikely that food poisoning would be promptly reported by clinicians to investigation staff, thus wiping out any potential public health gain obtained by over-inspecting facilities.

An alternative, more efficient use of resources would aim at facilitating alliances with health, educational and civic institutions in order to ensure clinical collaboration in the surveillance system, to improve the educational level of workers and to upgrade the quality of activity registers. Yet, the emphasis on raising revenue precludes a shift to a more modern and effective method of prevention in many fields. In summary, organizational arrangements should reflect how the population interacts with the services, and the financing system for these interventions should incorporate incentives for their efficient delivery.

ii. Misalignments in the financing of public health programmes

Figure 9.1 (Alban and Kutzin 2006) shows the application of the health financing framework to the flow of funds and organizational arrangements for HIV, TB and drug abuse interventions/services in Estonia. The analysis illustrates the specific nature of the fragmentation problem, while also offering

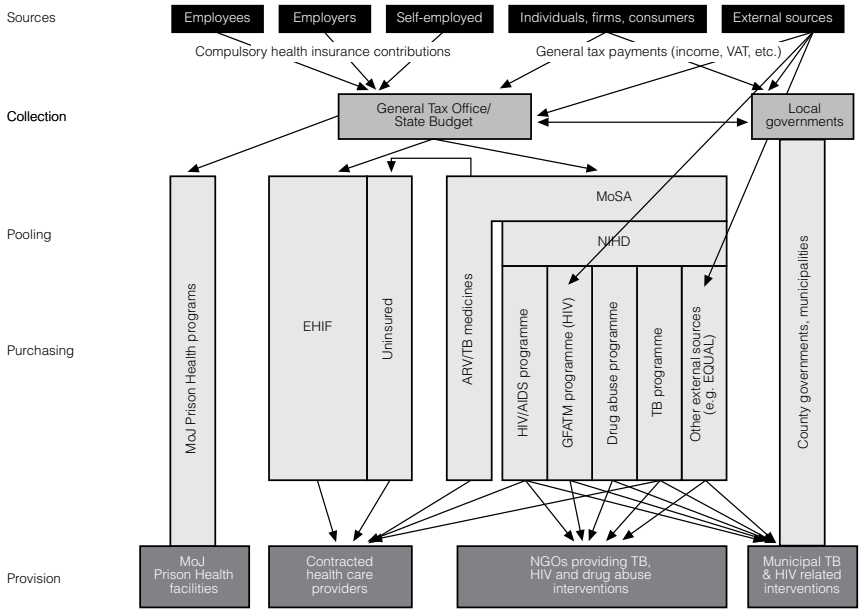


Fig. 9.1 *Financing of human immunodeficiency virus, tuberculosis and drug abuse services in Estonia*

Source: Alban and Kutzin 2006.

Notes: VAT: Value-added tax; MoJ: Ministry of Justice; HIV: Human immunodeficiency virus; AIDS: Acquired immunodeficiency syndrome; ARV: Antiretroviral; TB: Tuberculosis; MoSA: Ministry of Social Affairs; NIHD: National Institute of Health Development; EHIF: Estonian Health Insurance Fund; GFATM: Global Fund to Fight AIDS, TB, and Malaria; NGO: Nongovernmental organization; EQUAL: European Union-funded project.

insight into options for reform to improve the results obtained from public health programmes that provide both public and quasi-public goods.

Figure 9.1 shows that each of the national programmes – HIV/AIDS, TB and drug abuse – has a *vertical line* in the budget and manages a separate pool of funds for *their issue* allocated to them by the Estonian National Institute of Health Development, and then uses this money to contract with NGOs and municipalities to actually provide the relevant interventions. Municipalities also use their own funds to provide services, and the prison health system (run through the Ministry of Justice) uses its separate budget to fund and deliver services to the prison population in a vertically integrated way. Finally, there is a budget transfer from the Ministry of Social Affairs to the EHIF to fund antiretroviral and TB medicines for the insured (and some of the uninsured) population.

The analysis of the financing arrangements becomes a useful input to policy in the context of understanding the specific nature of a problem being addressed, such as HIV prevention and treatment. One of the main risk groups for HIV in Estonia is intravenous drug users. Given this, a desirable intervention strategy

would be to package HIV prevention and drug abuse interventions together (such as condom promotion, needle exchange, substitution therapy, treatment of STIs, and so on). As shown in Fig. 9.1, however, the HIV programme and the drug abuse programme manage separate pools of money and engage in separate contracting processes with NGOs to provide outreach services to drug users. Fragmentation of financing between these National Institute of Health Development programmes did not facilitate joint planning or – especially – pooling of resources to increase effectiveness. A critical step in this analysis, in fact, was to focus on the interventions associated with each "programme", rather than the programme per se (that is, an analysis of the financing and organization of services associated with the prevention of HIV and treatment of HIV-positive individuals, not an analysis of the financing of the HIV programme). This approach led to specific recommendations on the financing, organization and content of services, so that these are better aligned with "good practice" in terms of the control strategy.[87]

Typically, the financial arrangements used for *national programmes* in CE/EECCA countries are similar to the situation that the Estonian analysis revealed: budget allocations from government to the programme (often supplemented with international funds), with the programme acting as the pooler and purchaser. Indeed, in many countries the programme also has its own service delivery arrangements (such as a TB hospital), so that there is full integration of financing and delivery. Implicit in this approach is the assumption that by funding the programmes these will, in turn, reach the intended clients.

The problem with this approach can be illustrated by the example of trying to prevent HIV infection for an intravenous drug user who engages in commercial sex to support her drug habit. Presumably, she would need a package of interventions that might include drug treatment (for example, substitution therapy), harm reduction (such as needle exchange), and STI treatment and counselling (for example, safe sex education and condom promotion). If she seeks help, where does she go to get this package? In the fragmented and vertically integrated systems of many CE/EECCA countries, she may be required to go to multiple locations (narcology institute, dermato-venerealogy institute, national AIDS centre, and so on), which of course reduces the probability that she will go (and, given the fragmentation that exists between the programmes and their competition for funds, there are unlikely to be well-defined lines of communication between these centres in order to help their clients to navigate through the system). And if she does not seek help, who is responsible for providing outreach preventive services to the community?

87 For example, the follow-on analysis (Politi and Torvand 2007) included recommendations to introduce joint planning and budgeting across the programmes and to advocate the introduction of services that had been missing (such as methadone substitution therapy).

In the Estonian case highlighted in Fig. 9.1, for example, this responsibility rested with municipalities or was contracted out by the HIV and drug abuse programmes, separately, to NGOs.

This example highlights some critical misalignments between, on one hand, the way that many services are financed and organized, and on the other, the *best practice* service delivery strategies for delivering the needed package of interventions to the target clients in the most efficient manner. Indeed, the label of *public health* programme somehow obscures the reality that many of the necessary interventions are *personal* services.

As with other personal services, the delivery strategy (and the alignment of financing policy with it) should focus on the best way of reaching the clients. Among other things, developing such a "client-oriented" approach would require recognizing that individuals can have more than one risk factor (for example, drug abuse and STI infection, as described above) and that it may be necessary to *find* them, rather than waiting for them to appear in the "routine" primary care system, such as the GP's office. This latter point means that, as in the example given above, the delivery strategy may include an element of public–private partnership, such as contracting with NGOs that may have more expertise in finding individuals living on the margins of society. Again, the label *public health* programme should not obscure this possibility.

In another variant of distortions, the treatment of patients with TB in Georgia entailed the free distribution of pharmaceuticals (funded by the Global Fund), using the structures of the National Public Health Institute. However, a serious misalignment occurred between the objective (namely, reduction of TB by increasing the directly observed treatment strategy) and the service delivery instrument, in that such free pharmaceuticals had to be dispensed to patients by pulmonary specialists ("pneumologists") in privatized polyclinics. Although there was a legal prohibition against charging any fee to patients with TB (defined as a special risk group), informal payment was widespread for all services in Georgia following the collapse of public spending after 1990; this, in turn, contributed to falls in overall service utilization, also affecting the uptake of TB services.[88] Even more importantly than discouraging access or extortion of patients is the fact that virtually no systematic "case finding" of TB contacts was arranged and virtually no protocol – including the prophylactic use of medicines by (potentially affected) family members – was followed up. In other words, many cases were probably not prevented, not detected and/or not treated in a timely way, even if drugs were provided "for free".

The policy lesson here is that the mismatch between the delivery strategy and

88 Outpatient contacts per person per year fell from an estimate of 8.0 in 1990 to a low of 1.4 in 2000. Since then, there has been gradual increase and stabilization (WHO Regional Office for Europe 2009).

the underlying financial incentives and arrangements for this public health programme again harm the target population for which the system was designed. The results related to organizing the TB programme in this way showed lack of coordination, poor health outcomes and probably higher expenses at a later stage for patients and society at large. An analysis of the "fit" of this delivery strategy for TB with the existing arrangements for financing and delivery of TB interventions would have revealed this misalignment and suggested that reforms in financing would need to be included for the strategy to succeed.

Similarly, analysis of public spending for TB interventions in Kyrgyzstan revealed a substantial mismatch between aspects of the strategy – in particular the fact that about half of the cases are meant to be managed by PHC providers – and expenditure patterns showing only approximately 3–4% of TB-related health spending had occurred at primary level (Akkazieva et al. 2008). Again, this mismatch – leading to low motivation of PHC providers to deliver TB-related services – was a consequence of the failure to incorporate changes in financing policy into the overall strategy for TB control.

In short, the objective of the financing arrangements is to create an enabling environment for the right interventions to reach the right clients in the most cost-effective manner possible. Where financing or delivery occurs predominantly through a parallel pipeline, this efficiency objective is rarely achieved.

Immunization offers a similar example. In many countries, vaccines (such as the anti-TB drugs in the Georgian example) are provided free of charge by international donors, while the delivery of the service by non-motivated clinical PHC staff often results in low uptake. (The summary self-evaluation of one country surveyed for this chapter includes the remarkable sentence "The vaccination programme works well, but coverage is low"!)

Underlying many financing/delivery problems in public health is a lack of clarity on what specific services are to provide, compounded by a lack of clarity in roles and responsibilities for their provision. This lack of clarity contributes to, or is even generated by, fragmentation in the financing and delivery systems. Unfortunately, these problems are sometimes magnified by the intervention of international partners.

An instructive example is "health promotion". A usual first step in developing a health promotion strategy has been to produce a public health law or equivalent norm ascribing responsibilities for health promotion to the Institute of Public Health or similar organization, as well as to PHC providers. Frequently, fragmentation problems become compounded by a large number of external agencies providing funding to "support programmes on immunization, maternal and child health, including Integrated Management Childhood Illness

(IMCI), reproductive health, adolescent health, iodine deficiency, and HIV/AIDS prevention emphasizing mother to child transmission" (Hakobyan et al. 2006, p. 49) as, for example, in the case of Armenia. Each of these programmes has a health promotion component, with delivery responsibilities split between national programmes, PHC providers and NGOs, and with reporting lines mostly running to the donors rather than feeding national health policy processes. Indeed, in Armenia, shortcomings in organizational, human resource and financial capacity on the side of the government has resulted in health promotion activities being largely donor-driven and implemented through projects, leading to money being spent with little attention given to the longer term ability to sustain such funding or to develop a coherent, continuous, and coordinated national approach. A particular problem is the role of primary care providers, who could potentially play an important role in health promotion but are passive due to the lack of incentives or other mechanisms (Center for Health Services Research and Development of the American University of Armenia, 2010).

The lack of coordination and fragmentation of activities that is commonly found contributes to a vicious circle in which public health services are not associated with policy development and most assessment efforts are never linked to strategic priority-setting at country level. The incentives are not aligned to enable most countries to develop a cohesive long-term public health strategy supported by faithful collaboration between different stakeholders, and so on.

Often, these problems are ascribed to lack of funds, to a low degree of health system development and/or to a lack of human resources in the field of public health. In fact, public health specialists are not scarce in most CE/EECCA countries; they simply concentrate in the nongovernmental sector, and primarily around international organizations where salaries and working conditions are better.

An alternative approach would be to address policy challenges in a systematic way. For any disease or health behaviour that is ascribed to a public health programme, it is essential to develop a strategy that incorporates within it a package of interventions (commonly promotive, preventive and treatment). The next step would be to align service organization, financing (such as the money from international projects) and the available expertise to deliver this package in a coordinated way (including, for example, SES primary care and other services).

To illustrate, using the case of cardiovascular disease – the main killer in CE/EECCA countries – epidemiological assessment and other non-personal services, such as population educational campaigns are required to decrease hypertension, reduce obesity and combat smoking, as well as over-consumption

of alcohol. This might lead to better targeting of cost-effective personal services for established cardiovascular disease, be they diagnostic (such as cholesterol measurements in laboratories), preventive/promotive (such as counselling on alcohol or tobacco abuse, advice on increasing physical activity in PHC, free-of-charge screening programmes), pharmacological (such as prescription of diuretics), surgical (such as angioplasty), and so on. It might also lead to the development of a supportive health financing policy, such as Kyrgyzstan's outpatient drug benefits package, which targets specific conditions such as hypertension and monitors prescribing practice against new clinical guidelines (Jakab, Lundeen and Akkazieva 2007). In all spheres, the aim should be good health results *and* a decrease in health inequalities, so all effective services considered affordable within the national resources should be made accessible to those in need.

There is no "right" way to organize this process that applies to all countries. The approach suggests the need to develop (where it does not exist) what might be considered a new population-based service: operational research. This is needed as an integral part of the new service/strategy development and implementation in order to ascertain where, who, when and how services are most effectively delivered in the given circumstances of the country (for example, PHC, outpatient specialized clinics, highly specialized monothematic hospital units, intensive care units, and so on), and to enable the delivery mechanisms to adapt to changing circumstances over time or to differences in objective conditions that may exist in different parts of the same country. Having this capacity is essential for creating a virtuous circle that enables public health services and programmes to link with the rest of health services and health system functions (financing, resource generation and stewardship) in order to become an integral part of overall national health policy.

The explanations provided here show that enabling more effective disease control efforts requires attention not only by national health policy-makers but by the international community also (Brown, Cueto and Fee 2006), while acknowledging that this paper is not concerned with global health initiatives,[89] just as it is also not conceptually concerned with public health proper. A review of 31 original country-specific and cross-country articles and reports published between 2002 and 2007 – based on country-level fieldwork on three major global health initiatives (Biesma et al. 2009) – shows surprise relating to the thin body of evidence regarding their effects on health systems and warns about the aforementioned distortions.

89 For example, the Global Fund to Fight AIDS, TB and Malaria (GFTAM), the World Bank Multi-country AIDS Program (MAP) and the United States President's Emergency Plan for AIDS Relief (PEPFAR), among others.

In summary, the nature of public health services and the interventions supported through public health programmes has important implications for health financing policy, as detailed here.

- *As with all services*, it is essential to align arrangements for pooling and purchasing with the desired service delivery strategy. How this is carried out relates to both these *strategies* (that is, whatever is defined as "best practice" to ensure that the interventions are of high quality, are "packaged" appropriately and reach the target population or individuals in the most efficient manner) and the specific arrangements in place with regard to the organization of service delivery.
- *As with all services*, "who benefits" (that is, whether it is a private, quasi-public or public good) must be considered when determining the extent to which they should be subsidized (that is, the depth of coverage within the benefits package, as discussed in Chapter 7).

Although in a general sense these implications are indeed the same as for other services, the specific issues of alignment, fragmentation and incentives tend to be different.

D. Conclusions

In the fragmented systems that are characteristic of most of the CE/EECCA countries, it should be no wonder that the governance of public health remains a serious problem, with leadership and public health policy-making compromised by multiple agencies, departments and institutes competing for scarce domestic and potentially plentiful international funds, rather than cooperating on a common agenda with clearly specified and distinguished roles and responsibilities among them. At the same time, many health ministries – without clear structures and problem-solving processes – can become immersed in their own problems without sharing concerns and results with other public health stakeholders, including international organizations.

It is time for the challenge to be addressed. As this chapter has shown, the financing of public health services and programmes is more complex than just "budgeting for public goods", and the failure to address this issue does indeed have important, harmful implications for the health of the countries concerned. While complex, however, the issues are not intractable. The approach to health financing policy described in this book, along with health systems analytic tools more broadly, can be applied to facilitate understanding and development of country-specific solutions. This requires that policy-makers (including their health financing advisors) analyse the alignment, fragmentation and incentive

issues in a systematic way. Most importantly, countries (and health financing professionals nationally and internationally) cannot afford to ignore this part of the health system any more. More attention and support are needed to overcome the existing limitations in analysing "public health reforms" in CE/EECCA countries.

The evidence base (case study examples, evaluation reports, and so on) relating to approaches to align financing and service delivery reforms with public health strategies and programmes is thin. The limited examples cited in this chapter suggest that the financing framework used in this book has relevance as an analytical tool beyond the "general" or "typical" personal health services for which it is usually applied and for which it was initially developed. The main messages re-emphasize key ways in which to address these topics, as detailed in the following list.

- Understand the nature of the problem to be addressed, in terms of the extent of the "disease", its distribution across the country, the main risk groups, and so on.
- Design (in collaboration with "experts", such as those leading a particular public health programme) a strategy tailored to the specific nature of the problem. Clearly specify the needed (personal and population-based) interventions, how these should be packaged and the entities responsible for their delivery.
- Assess the strategy in the context of the existing arrangements for service delivery and financing. Identify whether and in what ways these arrangements are misaligned with the strategy. As an integral part of this analysis, map the current flow of funds – across collection, pooling, purchasing and provision – to the relevant interventions and highlight areas where fragmentation or inappropriate incentives are in conflict with the desired strategy (that is, identify the specific health system constraints on the efficient delivery of the interventions).
- Based on this analysis, expand the "strategy" to incorporate needed reforms in the organization and financing of service delivery.
- Implement operational research to support the roll out of the strategy, including the possible need to adjust implementation from the initial design (considering relevant implications, such as availability of sufficient qualified staff, legal norms, and so on).

While nothing of the above is new, the leading policy message – the need to align instruments and mitigate the consequences of fragmentation – appear central to the agenda of reforming the financing and delivery of public health services and programmes.

References

Akkazieva B et al. (2008). *Review of total expenditures for TB system for 2007 in Kyrgyzstan: NHA sub-accounts on TB system in Kyrgyzstan*. Manas Health Policy Analysis Project, Policy Research Paper. Bishkek, World Health Organization and Ministry of Health.

Alban A, Kutzin J (2006). *Scaling up treatment and care for HIV/AIDS and TB and accelerating prevention within the health system in the Baltic states (Estonia, Latvia, Lithuania): economic, health financing and health system implications*. Copenhagen, WHO Regional Office for Europe, Health Systems Financing Programme (http://www.euro.who.int/document/e90675.pdf, accessed 10 August 2009).

Albreht T et al. (2009). Slovenia: Health system review. *Health Systems in Transition*, 11(3):1–168.

Atun R et al. (2008). Health financing and communicable disease control: conceptual issues and implications. In: Coker R, Atun R, McKee M, eds. *Health systems and the challenge of communicable diseases*. Maidenhead, Open University Press:231–250.

Bayarsaikhan D, Muiser J (2007). *Financing health promotion.* Discussion Paper Number 4. Geneva, World Health Organization (http://www.who.int/health_financing/documents/dp_e_07_4-health_promotion.pdf, accessed 4 September 2009).

Biesma RG et al. (2009). The effects of global health initiatives on country health systems: a review of the evidence from HIV/AIDS control. *Health Policy and Planning*, 24:239–252.

Brown TM, Cueto M, Fee E (2006). The World Health Organization and the transition from international to global public health. *American Journal of Public Health*, 96(1):62–72.

Carande-Kulis VG, Getzen TE, Thacker SB (2007). Public goods and externalities: a research agenda for public health economics. *Journal of Public Health Management Practice*, 13(2):227–232.

Center for Health Services Research and Development of the American University of Armenia. *Assessment of public health services in Armenia*. Technical report provided for WHO. Copenhagen, WHO Regional Office for Europe.

Duran A et al. (forthcoming). Understanding health systems: scope, functions and objectives. In: Figueras J, McKee M, Menabde N, eds. *Health systems, health and wealth: assessing the case for investing in health systems.* Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, Open University Press.

Frenk J (1999). What's in a name? *Bulletin of the World Health Organization*, 77(2):101.

Hakobyan T et al. (2006). Armenia: health system review. *Health Systems in Transition*, 8(6):1–180.

Honoré PA et al. (2007). Creating financial transparency in public health: examining best practices of system partners. *Journal of Public Health Management Practice*, 13(2):121–129.

Jakab M, Lundeen E, Akkazieva B (2007). *Health system effectiveness in hypertension control in Kyrgyzstan*. Manas Health Policy Analysis Project, Policy Research Paper 44. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/MyFiles/PRP44.E.pdf, accessed 4 September 2009).

Kulzhanov M, Rechel B (2007). Kazakhstan: health system review. *Health Systems in Transition*, 9(7):1–158.

Levi J, Juliano C, Richardson M (2007). Financing public health: diminished funding for core needs and state-by-state variation in support. *Journal of Public Health Management Practice*, 13(2):97–102.

Liu X, Mills A (2002). Financing reforms of public health services in China: lessons for other nations. *Social Science and Medicine*, 54:1691–1698.

Liu X, O'Dougherty S (2004). *Purchasing priority public health services*. HNP Discussion Paper. Washington, DC, World Bank Resource Allocation and Purchasing Project.

McGinnis MJ, Williams-Russo P, Knickman JR (2002). The case for more active policy attention to health promotion. *Health Affairs*, 21(2):78–93.

McKee M, Nolte E (2004). *Does health care save lives? Avoidable mortality revisited*. London, Nuffield Trust.

Marmot MG, Shipley MJ (1996). Do socioeconomic differences in mortality persist after retirement? 25 year follow up of civil servants from the first Whitehall study. *BMJ*, 313:1177–1180.

OECD (2008). *OECD health data*. Paris, Organisation for Economic Co-operation and Development.

Politi C, Torvand T (2007). *Financing HIV/AIDS and tuberculosis interventions in Estonia*. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/document/E90770.pdf, accessed 1 September 2009).

Preston S (1980). Causes and consequences of mortality declines in less developed countries in the twentieth century. In: Easterlin RA, ed. *Population and economic change in developing countries*. Chicago, IL, University of Chicago Press:289–360.

Richardson E et al. (2008). Belarus: health system review. *Health Systems in Transition*, 10(6):1–118.

Rokosová M et al. (2005). *Health care systems in transition: Czech Republic*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Sensenig A (2007). Refining estimates of public health spending as measured in national health expenditures accounts: the United States experience. *Journal of Public Health Management Practice*, 13(2):103–114.

Tragakes E, Lessof S (2003). *Health care systems in transition: Russian Federation*. Copenhagen, European Observatory on Health Systems and Policies.

US National Advisory Committee on Microbiological Criteria for Foods (1997). *Hazard analysis and critical control point principles and application guidelines. Executive summary*. Washington, DC, US National Advisory Committee on Microbiological Criteria for Foods (http://www.fda.gov/Food/FoodSafety/HazardAnalysisCriticalControlPointsHACCP/HACCPPrinciplesApplicationGuidelines/default.htm, accessed 3 September 2009).

Voncina L et al. (2006). Croatia: health system review. *Health Systems in Transition*, 8(7):1–106.

WHO (2000). *World health report 2000. Health systems: improving performance*. Geneva, World Health Organization.

WHO (2007). *The stop TB strategy*. Geneva, World Health Organization.

WHO (2009). *Global tuberculosis control 2009: epidemiology, strategy, financing*. WHO/HTM/TB/2009.411. Geneva, World Health Organization.

WHO Regional Office for Europe (2009). *European Health for All database* (HFA-DB) [online database]. Copenhagen, WHO Regional Office for Europe, January 2009 update (http://www.euro.who.int/hfadb/, accessed 4 September 2009).

Chapter 10

Aligning public expenditure and financial management with health financing reforms

Sarbani Chakraborty, Sheila O'Dougherty, Panagiota Panopoulou, Milan Martin Cvikl, Cheryl Cashin

A. Introduction

The health sector does not operate in isolation, but rather as a part of the broader public sector. Consequently, the public sector expenditure and financial management (PEM/PFM) environment can significantly impact the pace and scale of health financing reforms. As CE/EECCA countries began the transition from centrally planned to market-based economies, they faced many public sector management challenges, including an over-extended public sector, a constrained public financing environment, the need for new institutions and mechanisms for resource allocation and management, and the need to strengthen the relationship between financing and policy priorities of government. Financial management systems also needed to be modernized. In some CE/EECCA countries, the broader PEM/PFM reform approach has facilitated the implementation of health financing reforms and contributed to a wider environment of structures and incentives that have allowed health financing reforms to result in their intended consequences. In other countries, the PEM/PFM framework has created a set of perverse incentives that have impeded the implementation of important health financing reform measures.

At the policy level, the guiding principles and objectives of PEM/PFM reforms are well synchronized with health financing reforms, and in fact they complement each other. Experience from the region has shown, however, that differences emerge during implementation. The policy or technical instruments of PEM/PFM reforms can create obstacles for health financing reforms, because at times they are not flexible enough to accommodate the unique aspects of the health sector compared with other parts of the public sector. The health sector uses public funds to buy health services, and – unlike, for example, the industrial or education sectors – the exact volume and distribution of these services are not known in advance because the financing system needs to account for the insurance or risk-pooling function inherent in health. The financing system needs to be flexible enough to distribute funding during the year in a way that follows health service utilization and often unpredictable health care needs (such as epidemics). Furthermore, the way in which the public health sector is financed creates more direct incentives for how services are produced and where they are utilized than in other sectors that receive public funding. The financing system needs to allow purchasers to use financing levers to improve the equity, efficiency and quality of health care services.

The absence of an implementation framework and roadmap integrating health financing and PEM/PFM reforms has led in some cases to unintended consequences or misunderstanding and miscommunication between policy-makers. Although the objectives are the same, at times there have been contradictions between the incentives created by the instruments of health financing and PEM/PFM policy. In essence, there is general agreement on what to do, but at times either disagreement or insufficient harmonization on how to do it, or how to adapt to unique health sector requirements. In this chapter, we discuss the linkages between PEM/PFM and health financing reforms in CE/EECCA countries and how the implementation of these reforms can be better aligned at the country level to achieve improved service delivery and outcomes in the health sector.

B. Overview of PEM/PFM reforms and alignment with health financing reforms in CE/EECCA countries

Generally, PEM/PFM reforms are driven by four guiding principles: (1) fiscal discipline/sustainability; (2) efficient resource allocation; (3) operational efficiency; and (4) transparency. These principles are compatible with the objectives of health financing reforms (Table 10.1). For example, adopting a state-guaranteed benefits package (SGBP) or health resource allocation formula based on health priorities, health needs or poverty criteria rather than inputs

Table 10.1 *Guiding principles of PEM/PFM reforms and alignment to the objectives of health financing reforms*

Principle	PEM/PFM definition	Health financing reforms	Areas for focus of harmonization
Fiscal discipline/ sustainability	Fiscal discipline refers to the effective control of the budget totals by setting ceilings on expenditures that are binding at the aggregate level and at the level of the spending entity. Control of the totals is the first purpose of the budget system. There is no need for a budget system if totals are allowed to float upwards to meet demand.	Fiscal discipline and predictable financing are critical elements of any health financing reform.	Health financing reforms generally require budget formation and expenditure caps at the health programme level not the health facility level (although global facility budgets may be formed within a programme) for the insurance or risk-protection function (pooling), output-based provider payment, shifting resources to PHC/prevention, improving the continuum of care, and patient choice.
Efficient resource allocation	Allocative efficiency is the ability to establish priorities within the budget and allocate resources across and within sectors based on these priorities.	Pooling and purchasing reforms under health financing achieve this objective at a sectoral level. Pooling ensures that resources are allocated to beneficiaries with the greatest need and sub-sectors (such as primary and secondary care) in a way that achieves the greatest improvement in health outcomes. Purchasing ensures that resources are allocated to providers according to activity and outcomes.	As above, the aim is to have budget formation and expenditure caps at the programme level, not the facility level. Programmes such as the State-Guaranteed Benefits Package determine priorities, and output-based provider payment systems match payment to these priorities.
Operational efficiency	Operational efficiency involves ensuring that public services are delivered in a way that produces the maximum volume and/ or quality of services for the inputs used, and minimizes leakages.	A major focus of health financing reforms in CE/ EECCA countries is on improving operational efficiency. Key tools are moving from input- to output-based payment systems to create appropriate incentives for providers; ensuring reinvestment of savings from restructuring/ rationalization into direct patient care; use of contracting; and increased health facility autonomy to allocate resources.	Shifting from input- to output-based provider payment systems; lump sum or line-item free payment or funds flow allowing providers to determine the best resource mix for individual patients needing different treatment regimens.

Table 10.1 *contd*

Principle	PEM/PFM definition	Health financing reforms	Areas for focus of harmonization
Transparency	Openness, communication and accountability. This encompasses a wide range of interventions, such as making fiscal and budget information available to the public, external scrutiny, and so on.	One of the objectives of health financing reforms in CE/EECCA countries has been to increase transparency by, for example, publicized provider payment rates linked to provision of specific services; establishing formal co-payments, contracts; and strengthened financial management systems (for example, accounting, internal and external audit, internal controls) to make health financing transparent and accountable.	Generally, PFM and health financing reforms aligned although finance sector control orientation or "mentality" at times undermines the appropriate separation of functions between health and finance sectors, which can reduce transparency. This occurs, for example, where the Treasury System provides both the cash management and the expenditure control functions.

Source: Allen and Tommasi 2001.

Notes: PEM: Public expenditure management; PFM: Public financial management; CE/EECCA: Central Europe, eastern Europe, the Caucasus and central Asia (as designated in Chapter 1); PHC: Primary Health Care.

contributes to a better match between the resources and policy priorities of governments (for example, poverty reduction), which contributes to efficient resource allocation. Output-based payment mechanisms that encourage health institutions to implement the right size infrastructure and personnel and to improve the resource mix for patient treatment contribute to improved operational efficiency.

During the transition period, modernization of public sector budgeting practices and fiscal management approaches has been a priority in CE/EECCA countries. The countries of the region share a similar starting point: the Soviet-style budgeting practices and public sector institutions that were not designed to be supportive of a market-based economy. The historical budget system served as little more than an accounting system for the implementation of government economic plans. The budget process involved institutions passively compiling resource requests based on pre-established normatives, which were then aggregated into the general budget. This was also true for the budget institutions of the health sector. Normatives for infrastructure and other inputs were derived from the planning process and translated into individual health facility budgets, which were then aggregated into the total health sector budget. In this way, the budgets were hierarchically interlinked, with the budgets of institutions (such as rural primary care centres) nested in the budgets of higher level institutions (such as regional hospitals), which were, in turn, nested in local government budgets, which were nested in national budgets (Martinez-Vasquez and Boez 2000). This budget structure reinforced incentives to establish and maintain a very inefficient cost structure with enormous excess capacity in the hospital sector at the expense of more cost-effective PHC. For example, occupancy was a factor in the budget normatives contained in this budget structure, and this encouraged unnecessary hospital admissions and long lengths of stay. In addition, it severely limited flexibility and autonomy for lower level spending units, such as health facilities.

Public expenditure and financial management reforms in the region have aimed to address the rigidities and lack of appropriate control in the historical public budget system. Key elements of PEM/PFM reform in the CE/EECCA countries have included an attempt to better link budgets to policy, remove the historical rigidities in resource allocation, and build a modern treasury system for budget execution with a single account and uniform accounting, cash and debt management systems (Martinez-Vasquez and Boez 2000). With few exceptions, the objectives of these PEM/PFM initiatives are well matched with the objectives of health financing reform, which also aim to link the health sector budget to strategic policy objectives and health priorities, establish clearer authority for resource allocation at the levels of the purchaser

and provider, and increase financial and management autonomy at the service delivery level. The appropriate instruments for achieving these objectives, or how the instruments should be implemented or adapted to the health sector, however, have at times differed in the region between the perspectives of PEM/PFM and health financing policy. The following sections outline how PEM/PFM policy instruments have at times interfered with strengthening the key health financing sub-functions that form the core of the preceding chapters.

i. Revenue collection

Regardless of the sources of financing, guaranteeing adequate levels and predictability of funding is instrumental to the effective implementation of health reforms and their capacity to sustain improved attainment of policy objectives. Gaps in financing can mean a reversal to informal payments, eroding population confidence in constitutionally guaranteed health benefits. In terms of implementing a purchaser–provider split and using contracts to encourage efficient behaviour on the part of providers, unpredictability in financing also erodes provider confidence in health reforms and contributes to a build-up of arrears. As discussed in previous chapters, although CE/EECCA countries vary in their level of dependence on general budget revenues and payroll taxes for financing their health systems, the general budget continues to be an important source of revenue for the health sector, even in countries that also use payroll taxes for compulsory health insurance. Therefore, how decisions are made in terms of the level of funding for the health sector, how the budget is formed, the alignment between policies and budgets, and the accuracy of forecasting of revenues and costing of policies all determine to a large extent the levels and stability of funding for the health sector. The basis on which budgets are formulated – whether expenditure line items or programmes and outputs – also influences how flexibly public funds can be spent, which has direct consequences for the implementation of new provider payment systems.

In Serbia and The former Yugoslav Republic of Macedonia, for example, so called "Special Programmes" financed through general budget revenues are contributing to the growing deficits of their Health Insurance Funds (HIFs). Special programmes cover preventive, public health and curative interventions for specific diseases (such as cancer, diabetes, kidney failure). In The former Yugoslav Republic of Macedonia, the estimated needs for Special Programmes and the approved budget vary by over 50% each year. Since these programmes are constitutionally guaranteed, providers cannot deny treatment, and these unfunded mandates contribute to the arrears of the health insurance fund. The gap between needs and approved budgets for special programmes reflects weaknesses in the budget process. While the objective of fiscal discipline is

achieved, and the Ministry of Finance maintains strict control over budget ceilings, there is no linkage between resource allocation and the policy priorities of government, and there are no incentives for line ministries and the health insurance funds to improve operational efficiency (World Bank 2004a, 2005a).

A central issue is weak linkages between policy, planning and budgeting. In addition, limited capacity in the region for costing and forecasting often lead to high levels of budget deviation and uncertainty, cash rationing and dependence on arrears (World Bank 2004b), all of which threaten the stability of public funding for the health system. Several public sector priority-setting tools have been introduced in the region, often at the suggestion or mandate of the international donor community, which attempt to strengthen the strategic orientation of the budget formation process. These tools include the Poverty Reduction Strategy Paper (PRSP) and the Medium-Term Expenditure Framework (MTEF), which can also be supported by health sector-specific tools such as NHAs.

PRSPs, which have been developed by the CE/EECCA countries facing the most difficult economic situations, describe the country's macroeconomic, structural and social policies and programmes to promote growth and reduce poverty, as well as associated external financing needs and major sources of financing (World Bank 2009). The MTEF is a planning and budget formulation process that sets three-year fiscal targets based on macroeconomic projections and allocates resources to strategic priorities within those targets based on the estimated costs of carrying out the policies (see Box 10.1). The MTEF also aims to base budget formation on programmes and outputs, rather than expenditure line items (inputs), and has been used in some countries to link budgets to PRSP programmes (World Bank 2004b). The success of these tools in improving the overall strategic orientation of public spending – including protecting stable expenditure levels for health – has been mixed in the region. In many cases, the MTEF is not adequately linked to the annual budget process or budget execution and audit reforms, and it has not yet been extended to local governments (World Bank 2004b). In several countries, however, the MTEF has been a catalyst to improving the budget formulation process, with positive consequences for health financing.

In Armenia, for example, the MTEF process has led to some improvements in the levels and transparency of budget funding for health (World Bank 2003a). An increase in the level of public resources for health and better execution of the health sector budget were closely linked to the introduction of multi-year expenditure programming in the country. The first MTEF was developed in 2003 for the period 2004–2006, although informal MTEF exercises were carried out before 2003. Since that time, an MTEF has been prepared every year for the subsequent three years. As stated in all three MTEF documents,

Box 10.1 *Key features of a Medium-Term Expenditure Framework (MTEF)*

Objectives of the MTEF

The MTEF is an integrated top-down and bottom-up system of public expenditure management, designed to:

- achieve macroeconomic stability without compromising economic development;
- direct the bulk of public spending to the nation's strategic priorities, as articulated in needs and for the attainment of the Millennium Development Goals (MDGs);
- assure predictability of funding;
- improve the value for money of federal spending.

Stages of an MTEF

- A ***Medium-Term Fiscal Framework*** (MTFF), which documents fiscal policy objectives and which comprises a set of integrated medium-term fiscal policy objectives plus fiscal targets and projections (including resource availability).
- A **Medium-Term Budget Framework** (MTBF), which documents medium-term budget estimates for individual spending agencies based on the nation's strategic priorities, and in a manner consistent with overall fiscal objectives.
- A ***Medium-Term Expenditure Framework*** (MTEF), which consolidates the MTBF of spending agencies and adds programme- and output-based budgeting.

The main benefits

Medium-Term Fiscal Framework (MTFF)

- Achieve the right balance between economic development and macroeconomic stability.

Medium-Term Budget Framework (MTBF)

- Direct the bulk of government spending towards national priorities, and ensure that budget holders are accountable for sums allocated to them.

Medium-Term Expenditure Framework (MTEF)

- Add programme- and output-based budgeting. This creates the opportunity to compare agreed outputs with actual outputs and identify variances.

Source: World Bank 2003b.

ensuring financial support for reforms in the health sector – along with other social sectors such as education, social security and social insurance – is among the main priorities of the state budget expenditures for the Government of Armenia and of the 2003 Poverty Reduction Strategy Program (Government of Armenia 2003, 2004, 2005).

The development of the MTEF and the emphasis placed on the health sector has required the MoH to set clear priority areas for expenditures each year, to develop a budget to achieve its goals in these areas, and to submit this budget to the Ministry of Economy and Finance for consideration. Because the MTEF

involves the development of expenditure projections for a three-year period rather than only for the next year's budget, the MoH is also mandated to elucidate a longer term vision and to ensure that certain priority programmes will have secure financing in the medium term. In addition, the MTEF has provided a more objective and transparent basis for budget discussions between the Ministries of Finance and Health. For example, while historical budgets are still taken into consideration, under the new framework the MoH can request an increase in funding to address the main health issues in the country. The MoH provides evidence on how it has used its past financing, such as monitoring indicators, as well as how it intends to use the additional resources to achieve specific outcomes. One of the weaknesses inherent in the process in Armenia is that external sources of financing (donor financing) are not integrated into the MTEF, which has contributed to some fragmentation of the budget and weak links between investment and recurrent expenditures.

Key criteria for evaluating the potential effectiveness of an MTEF include whether annual budget projections match the MTEF projections, and whether budget predictability improves with the implementation of the MTEF. Armenia is effectively meeting both criteria. As stipulated in the 2006–2008 MTEF exercise, public expenditures for health are expected to increase further in the coming years, reaching 1.62%, 1.92% and 2.06% of GDP in 2006, 2007 and 2008, respectively. Similarly, the share of total public expenditures allocated to the health sector is also expected to increase and to reach 10% by 2008. These targets are being exceeded. Government spending on health as a share of GDP rose to 1.9% in 2006 and 2.1% according to preliminary estimates for 2007. Similarly, the level of health spending as a share of total public spending rose to 9.7% in 2006 (from 6.8% in 2005) and to 11.6% in 2007 (WHO 2009).

In contrast to Armenia, the Medium-Term Budget Framework (MTBF) in Kyrgyzstan has remained a paper exercise that is not taken seriously by the Ministry of Finance or line ministries, despite significant support for health reforms in national documents and a stated commitment to matching policy priorities to medium-term resource allocation decisions. The MTBF projections in Kyrgyzstan tend to be overly optimistic rather than reflecting a realistic and balanced budget. The annual budget projections do not match the MTBF, and budget execution is problematic, especially for non-protected expenditures,[90] with sequestration[91] used as a tool to manage budget deficits. The result is reduced operational efficiency and a poor mix of fixed and variable costs

90 Protected expenditures are line items that cannot be cut to manage deficits during budget execution. For example, in the context of the Kyrgyz Republic, given chronic budget deficits, certain items such as salaries and pensions are protected and must be fully executed, regardless of budget shortfalls. However, health insurance contributions were not classified as protected items and, therefore, were subject to arbitrary cuts depending on the budget situation.

91 Budget sequestration is a legal means for the Ministry of Finance to seize a portion of the budget and make it unavailable for use by line agencies.

for direct patient care. For example, the 2006 health sector budget deviated from the MTBF projections by 26%. An additional problem is poor budget execution due to weak and non-transparent cash management. This contributes to the perception that medium-term planning is futile in the context of unpredictability in the monthly cash outlays by the Treasury. A key problem with the MTBF exercise in Kyrgyzstan is that it is still largely donor led, with limited ownership by the Ministry of Finance and line ministries.

Bottom-up costing of the guaranteed benefits package is a budget calculation mechanism that has been tried in a number of CE/EECCA countries as a basis for setting health sector budget ceilings. Two problems have arisen with this approach. First, it is very difficult to accurately cost a benefits package, as health services are not like costing the materials to assemble a car, or even calculating the cost of educating a student for a year. The difficulty relates to the unpredictability of health care needs and utilization. Second, a major objective of CE/EECCA health reform is changing the health sector cost structure, and funding the health sector based on benefits package costing runs the risk of further entrenching the old cost structure, rather than creating incentives for shifting to cost-effective PHC or reducing unnecessary services and outdated, ineffective clinical practices. In Tajikistan, for example, attempts to establish and cost a guaranteed benefits package early in the reform process produced confusion, conflict and inertia, which stalled the general health reform process. In Kyrgyzstan, an initial focus on pooling and health purchasing improvements produced changes in cost structure; tools to enable establishing minimum standards for the SGBP and matching provider payment to SGBP health services; and a surprisingly accurate specification of population formal co-payments (household surveys showed the level of population informal co-payments to be substantially reduced) (Jakab et al. 2005; Manjieva et al. 2007).

Setting budget ceilings for the health sector can be complicated by health financing policies that aim to ensure cohesive and integrated public and private sources of financing. In Kyrgyzstan, for example, the policy to establish formal co-payments to replace informal payments and thereby improve transparency and equity (through exemptions) initially resulted in an unintended consequence. The local governments considered the co-payment revenues to be additional resources for the health sector, instead of formalization of a previously informal source, and consequently the health budget was reduced in some regions (as health was now perceived to "need" less). This action led to some setbacks for the initial gains in equity, financial risk protection and transparency, because public funds were withdrawn as a response to the formalization of previously informal payments, and thus there was a shift to greater reliance on OOPS.

In a very real sense, the sector was penalized precisely because the reforms to improve transparency were working (Kutzin 2003).

Medium-term budget planning for the health sector in Kyrgyzstan is beginning to change in the context of the adoption of a health SWAp, with key donors providing their assistance in the form of direct budget support. The SWAp simultaneously supports the health financing reforms and PEM/PFM reforms to strengthen programme-based budgeting, improve budget execution, and modernize financial monitoring and reporting. For example, under the SWAp, the government agrees to guarantee 100% budget execution for the health sector. However, the MTBF did not form the basis of these budget projections and instead the donors agreed on incremental increases in the percentage of government expenditure allocated to the health sector to fund the SGBP. There are still concerns regarding intersectoral allocations, in a context in which the rules for such allocation are not transparent and remain open to political manipulation. Budget execution for the health sector in Kyrgyzstan, therefore, remains unpredictable, which jeopardizes the sustainability of the health financing reforms (World Bank 2005b).

ii. Pooling

The rigidities of the centrally controlled budget and resource allocation process inherited by the CE/EECCA countries – along with the failure of the process to sustain improvements in the performance of the public sector – brought about a discrediting of centralization in the region (UNDP 2005a). Many countries moved quickly toward decentralization as a goal in itself for political reasons, without fully analysing the fiscal and economic consequences, or the impact of such action on different sectors. The rapid fiscal decentralization has created some obstacles to pooling of health care funds, which allows better risk sharing and improved allocative efficiency of health care resources. The result has been excessive fragmentation in many cases, with a large number of small administrative units that are not of sufficient scale to raise adequate revenues, create stable risk pools or provide services efficiently (UNDP 2005a).

Fiscal decentralization involves shifting greater responsibility and autonomy in revenue generation and expenditure to subnational levels of government, and also typically involves intergovernmental fiscal transfers to equalize revenues, as well as subnational borrowing to cover revenue shortfalls (UNDP 2005b). According to the principles of public financing, one of the key reasons for fiscal decentralization and granting local governments autonomy over spending decisions – especially in terms of social services delivery – is to facilitate alignment between resource allocation and perceived needs of the population, thereby increasing the efficiency of spending (Bahl 1999). However, fiscal

decentralization has been a critical area in which the wider incentive structure that is created is in direct contradiction to achieving greater efficiency in health resource allocation and operational efficiency through health financing policy, particularly pooling of health funds.

In essence, policy on pooling of health funds determines the size of the geographic area across which the total public per capita funding amount is the same. The greater the fiscal decentralization, the greater the number of health budget pools, and the lower the scope for promoting equity in the funding and utilization of health services. With many small pools, there is less potential to cross-subsidize from less vulnerable to more vulnerable geographic areas or population groups. As shown in Chapters 5 (on pooling) and 6 (on purchasing), the degree of consolidation of health funding pools is closely related to the strength of incentives to improve efficiency through new provider payment systems and restructuring service delivery. Thus, fiscal decentralization has impeded efficiency gains in some countries.

It is theoretically possible to effectively expand the scope of pooling in the context of fiscal decentralization if a geographic resource allocation formula is used to equalize budget funding across geographic areas and thereby create a virtual national pool. In countries such as Kazakhstan, Kyrgyzstan and Tajikistan, however, there has been little success in implementing geographic resource allocation formulas, due in part to legal and budget structure constraints and in part to technical and implementation capacity constraints (author's personal communication). In addition, this resource allocation mechanism does not adequately address the issue of fiscal decentralization as an impediment to restructuring the health delivery system.

When health budgets are tied to lower levels of administration and formed based on inputs, the health providers are monopolies with little or no incentive to reduce the health infrastructure or increase efficiency or responsiveness to patients. In addition, this fragmentation of health care budgets often leads to duplication in the health care system. There is no incentive to consolidate health delivery systems under a decentralized, fragmented budgeting process because any savings generated in one delivery system by reducing hospital capacity cannot be retained or transferred throughout the health system, so the budgets are simply reduced. This is not the case if the health funds are pooled under conditions whereby the pool of funds remains the same even if facilities or hospital beds are rationalized. Kyrgyzstan is a rare example of a country that has been able to largely overcome the barriers to pooling posed by fiscal decentralization (see Box 10.2).

Box 10.2 *Preserving pooling of health funds with fiscal decentralization in Kyrgyzstan*

Throughout the EECCA countries, there are generally four levels of government or administration – republican, *oblast* (state), *rayon* (district), and rural or village level. In Kyrgyzstan, the trend has been toward greater budget decentralization for most functions or sectors, including health. Decentralization has been tied to the introduction and implementation of laws on local self-government, which generally increase the authority and accountability of government that are below the subnational level. Prior to the implementation of decentralization reforms, there was little technical analysis or functional specification driving this largely political decision. At the time, it appeared that the dynamics of local politicians desiring budget control converged with a national-level willingness to abdicate budget responsibility in a financial environment characterized by economic collapse. To avoid fragmentation and a large number of small pools, health financing policy-makers have advocated that the budget should not be pooled at less than the *oblast* level to meet both equity and efficiency objectives.

After *rayon*-level governments showed that they were unable to meet budget commitments, particularly in the social sectors, a portion of budget authority was re-centralized, with the budget allocated back to the *oblast* level in the form of categorical grants for health and education. The next few years brought about a number of attempts to pool the health budget at the *oblast* level, but wide swings in policy decisions continued, with funds pooled at the *oblast* level one year, and then decentralized back to the *rayon* level the next year. A final policy decision to pool health budget funds at the *oblast* level came with the pilot implementation, subsequent roll-out and incorporation into national legislation of the "Single-Payer" system, with the MHIF serving as the single health payer for both health insurance payroll tax funds and budget funds. The MHIF was the only mechanism capable of pooling funds at least at the *oblast* level, because its off-budget status allowed a de-linking of administrative level and revenues/expenditures. Using this mechanism, all health funds are now pooled at the national level in the Kyrgyz Republic. Kazakhstan experienced similar swings of the policy pendulum with health funds pooled at the national level through mandatory health insurance from 1996 to 1998, at the *rayon* level from 1999 to 2004, and at the *oblast* level from 2005 to 2009.

Source: Personal communication to the authors.

Notes: EECCA: Eastern Europe, the Caucasus and central Asia; MHIF: Mandatory Health Insurance Fund.

Armenia, by comparison, maintains a fiscally centralized system, including in the health sector, in which all health sector resources flow through the SHA and the MoH. The situation is similar in other sectors. While health financing is centralized, which supports effective pooling, there is a purchaser–provider split in the health system. Health providers, as joint-stock companies under the

supervision of local government and the MoH, enjoy substantial autonomy on budget and personnel decisions. Similar arrangements are in place in CE countries, such as Slovenia, The former Yugoslav Republic of Macedonia and Serbia (World Bank 2005a).

iii. Purchasing

This subsection discusses the alignment of PEM/PFM and health financing in budget formation and Treasury System operation. A key area of health financing reform that must be in alignment with PEM/PFM approaches is the basis on which the budget is formed. One of the main objectives of health financing reforms in the transition period has been to change the way providers are paid to create the right incentives for allocative and operational efficiency (see Chapter 6). It was clear at the outset of reform implementation that the existing line-item budget systems based on infrastructure or capacity norms were an impediment to improving the allocation of resources – especially between the hospital sector and PHC – and to encouraging operational efficiency at the facility level. It was recognized that payment systems should focus on the services delivered to people and not the maintenance of infrastructure. The problems of poor allocative and operational efficiency were particularly acute in the former Soviet countries that experienced a massive decline in public subsidies (particularly problematic given the enormous excess capacity and high fixed costs in the health system), along with increases in informal payments and rising energy prices.

With the establishment of new institutional mechanisms (namely the purchaser–provider split) and the heightened importance of matching payment to health services under the guaranteed benefits package, the majority of CE/EECCA countries began to adopt output-based payment mechanisms, including case-based payment (or case mix-adjusted global budgets) for hospitals and capitation for primary care (see Table 6.1). Contracts have been implemented between purchasers and providers. To enable health facilities to respond to the new incentives, they have been granted increased management autonomy to determine the input mix and make personnel decisions. The successful implementation of these new institutional mechanisms and provider payment systems require major changes in how health facility budgets are formed and executed as well as in the responsibility of purchasers and providers in the management of health funds.

In some countries there has been a major conceptual divide or limited implementation harmonization between the health financing reform and the PEM/PFM perspective regarding the basis on which budgets are formed, including what the spending units are, where expenditure ceilings should be

placed, whether budgets relate to inputs or outputs, and at what level budgets should be controlled. New output-based provider payment systems cannot succeed in creating new incentives in countries in which the spending units continue to be defined as health facilities, and budgets continue to be based on expenditure line items. To support new provider payment systems, budgets should be formed by health programme, not by the input requirements of each health facility. Under this approach, ceilings or expenditure controls are imposed by the programme, not by the health facility. Provider payment systems determine the method used to pay providers under each programme or sub-programme, and set the payment rates for each budget programme according to expenditure ceilings. Although a number of PEM/PFM and health financing reform interventions provide the foundation for a shift to programme- and output-based budgeting, the progress has been uneven across the region.

In Kyrgyzstan, for example, although new output-based provider payment systems have been in place for more than a decade, the move to programme or output-based budgeting and disbursement has occurred slowly. Moving to output-based budgeting is critical, since the SGBP is defined on the basis of health services for the population (outputs intended to reflect demand) and not by facility structure or budget line items (inputs reflecting supply). The reforms were implemented despite the rigidities of the PEM system – input-based budgeting and disbursement system, facility-level expenditure ceilings, rigid budget line items, a policy of protecting certain budget line items, and little or no accountability of local governments for executing the variable portion of the budget. The MHIF took on responsibility for synchronizing the new provider payment systems with the existing input-based budget formation and disbursement system. Health facilities submitted monthly bills (based on outputs such as the number of treated cases) to the regional MHIF. They also submitted a breakdown of expenditures by line item. The MHIF cross-validated this information and submitted a Treasury disbursement form for each facility. The Treasury System disbursed to each facility according to line item. In cases of a difference between the monthly submission and the actual number of services delivered, reconciliation was required. This system not only added to the administrative burden of the MHIF, but also left health facilities vulnerable to ad hoc decisions by local governments and the Treasury, which undermined provider confidence in the health purchasing reforms. For example, in the case of budget shortfalls, some line items were executed (typically salaries), while other line items were cut (World Bank 2003–2005).

In Kyrgyzstan, output-based provider payment systems had built health purchaser and health provider management systems and capacity since 1997, and further improvement was constrained by PEM/PFM rigidities. Some other

Box 10.3 *External audit of the Health Insurance Fund: The former Yugoslav Republic of Macedonia*

In 2005, Ernst and Young conducted an external audit of the Health Insurance Fund (HIF) of Macedonia (Government of Macedonia 2005). The audit was prompted by several reports, including the World Bank Country Financial Accountability Audit (CFAA), which identified the HIF as a high fiscal risk for the Government of The former Yugoslav Republic of Macedonia. At the time, the HIF had built up arrears which totalled almost 1.5% of GDP. The audit found the following points.

- Lack of systematic budget formulation rules between the HIF and health care institutions (HCIs).
- Weak budget execution and reporting. For example, HCIs' financial reports were not systematized and used by the HIF to control budget execution against the appropriated budget. There was no systematic tracking of arrears.
- Ex ante budget controls in the HIF and HCIs was very weak. This was partly attributable to weak financial management capacity in HCIs.
- There was no system of budget monitoring.
- The HIF did not have an internal audit unit, external audit was weak and the results of audits were not acted upon.
- The Board of the HIF was highly politicized and non-functional.
- Oversight of the Ministry of Health and Ministry of Finance over the HIF was very weak.

CE/EECCA countries, however, have benefited from greater controls, as health financing management systems and capacity were still immature and needed further development. The former Yugoslav Republic of Macedonia provides an example in which synchronizing PEM/PFM and health financing reforms has demanded the implementation of greater controls and limiting flexibility in resource allocation among spending units, at least in the short term. Purchasing and provider payment reforms were implemented without instituting a proper system of financial control in the health insurance funds and health care facilities (see Box 10.3). The Macedonian Health Insurance Fund was established in 1993 as the single payer, mandated with implementing a purchaser–provider split in the health system. The Health Insurance Fund – similarly to other payers in the region – uses output-based payment mechanisms and contracts to purchase health services for the population. The Health Insurance Fund adopted the German points-based system (essentially fee-for-service payments) for paying providers and used a system of invoicing to allocate funds. In the absence of proper budget formulation, and without ex ante and ex post controls and cross-validation of invoices submitted by health facilities, the Health Insurance Fund soon faced excessive billing by health care providers, and premature depletion

of available funds. Continuous accumulation of arrears was part of the process, exposing the health sector to high fiscal risk (Burchfield 2004).

To control expenditures, the Health Insurance Fund defaulted to an input-based budget, but since the legal framework still required it to pay for services, health care providers continued to invoice (sometimes fictitiously) and the problem of arrears did not go away. In this context, aligning PEM and health financing reforms in The former Yugoslav Republic of Macedonia has required the implementation of basic PEM principles, such as developing a defined budget for each health facility and ensuring hard budget constraints; and implementing a system of monthly financial reporting by the Health Insurance Fund and health facilities. Given the low level of controls in the health system, along with wastage due to corruption, as a short-term measure the Health Insurance Fund introduced input-based budgets and a simple set of key performance indicators, monitored through a contract. Simultaneously, the Health Insurance Fund took steps to build its capacity to move to more rational output-based payment systems that would create incentives for efficiency. These incremental steps are taking place in the context of a strengthened fund and health provider budget and financial management system, along with a reformed Health Insurance Fund Board with stronger oversight functions in terms of its relationship to the MoH and the Ministry of Finance. In The former Yugoslav Republic of Macedonia, therefore, aligning PEM and health financing reforms has contributed to system efficiency and reducing wastage due to fraud and corruption.

PEM/PFM reforms in the CE/EECCA region also have included creating or modernizing Treasury systems to improve budget execution and financial management (World Bank 2004b). This has created improvements in budget execution and financial stability in some cases. In Croatia, for example, all payroll taxes, including contributions for health insurance, were brought under a Treasury single account. The result has been that the budget of the Health Insurance Fund has been brought into alignment with the government fiscal policy and budget planning process. In addition, the liquidity and debt management of the fund have been improved, addressing the cash flow problems and subsequent arrears faced by the Health Insurance Fund in the past (Anusic 2005).

In a number of other cases, however, the new Treasury Systems have been implemented in a way that conflicts with health financing reforms. To improve operational efficiency, health financing reforms in the CE/EECCA region have included significantly greater autonomy for health providers to allocate and manage resources. In addition, under new provider payment systems, the total facility budget is often not known prospectively, because payments are based

on the number of patients served. This approach has implications for budget formation, budget execution and financial management, because the facility budget cannot be determined in advance and placed in the Treasury System for a year, although the total budget amount across facilities can be managed at the programme level. In other words, for health financing reforms to function more effectively, expenditure caps need to be implemented at the programme level rather than the facility level.

In Kazakhstan and Kyrgyzstan, for example, the Treasury System functions by setting a fixed line-item budget for each health facility, and then allocating funds according to this fixed line-item budget as the country's available cash allows. However, the output-based provider payment systems being implemented in these countries generally do not allow the prospective determination of a budget for each health provider, especially hospitals. A hospital's final budget for the year depends on how many cases they are able to attract and satisfactorily treat – patient choice and competition that stimulates efficiency increases and improvements in system responsiveness (O'Dougherty et al. 2009).

In addition, the rigidities of the Treasury System have interfered with the incentives in the health financing system for improving the efficiency of the service delivery infrastructure. A major objective of health financing reform – including new output-based provider payment systems – was to provide health facilities with incentives to rationalize infrastructure, reduce fixed costs such as utilities and re-allocate savings to direct patient care. The Treasury System continuing to allocate funds on a strict line-item basis removed these financial incentives to rationalize and increase efficiency. Soon, health facility restructuring in Kyrgyzstan began to slow down as facilities realized that there was no guarantee that they would be allowed to retain savings (O'Dougherty et al. 2009).

In these countries, the Treasury System has taken on other functions besides improving country cash management – specifically, control of the allocation of resources by health providers (expenditure control). This is inconsistent with both the rationale for establishing the Treasury System and the broad health financing reform strategies of separating the purchaser and provider of health services – centralizing finance but decentralizing management. Health providers whose autonomy is limited through control of resource allocation decisions by the Treasury System are unable to take advantage of the incentives in the new provider payment systems for increased efficiency and improved delivery of health services to the population. In this case, the objective of PEM/PFM reforms of increasing operational efficiency by strengthening the role of the Treasury System impedes improvements in efficiency of resource allocation and operational efficiency that could be achieved by the health sector under new output-based provider payment systems.

Another element of the dialogue between PEM/PFM and health financing policy-makers in Kyrgyzstan was whether health facilities should be allowed to retain individual bank accounts, and what the implications of that would be for the implementation of public expenditure reforms, especially cash management by the Treasury (personal communication to the authors). Cash management by the Treasury requires daily sweeping of public accounts so that cash is not sitting idly in bank accounts. This requires that the Treasury has an overview of cash in the public financial systems at all times. Consolidation of accounts is, therefore, considered good practice under PEM/PFM reforms, which contradicts the step toward health facility autonomy through managing their own bank accounts. In the context of unpredictable and non-transparent cash management by the Treasury, and rent-seeking behaviour[92] exacerbated by Treasury System expansion of its mandate into expenditure control, the creation of individual Treasury sub-accounts was not considered an optimal solution. Until the Treasury reforms sufficiently mature and transparency and accountability are improved, individual bank accounts for health facilities were considered to be the better option.

C. Toward better alignment of PEM/PFM and health financing policies

The imperative for reform of the public sector budget and financial processes is equally pressing from both the PEM/PFM and health financing perspectives. The following subsections discuss steps toward better alignment of PEM/PFM and health financing reform for each of the three health financing sub-functions. In general, actions to improve PEM/PFM and health financing reform alignment within the revenue collection and pooling functions consist of broad, discrete policy decisions, while strengthening health purchasing requires an ongoing process of improving alignment in systems, procedures and institutional and individual capacity.

i. Revenue collection

The way in which the sectoral ceiling for health within the government budget is determined – either through an MTEF process or the traditional budget process – is an area in which transparency needs to be improved. Health financing policy-makers have argued for a political or top-down decision that protects health as a priority within the budget and maintains stable funding levels. For example, establishing a budget condition of a set percentage of total government expenditure allocated to health – and linking it to donor funding

92 This consisted of Treasury officials demanding kick-back payments before disbursing funds, as documented by numerous author interviews. Such behaviour is of course not exclusive to the Treasury System.

through a SWAp – has worked well in Kyrgyzstan to maintain the stability of funding levels. However, financing authorities often desire a budget calculation methodology to replace the inherently concrete mathematical calculations of input-based or infrastructure normatives. This was implemented in the Republic of Moldova (see Chapter 4) for the transfers of general budget revenues to the NHIC on behalf of defined non-contributing groups. The law required that the level of per capita contributions from the state budget should be equivalent to the average per capita cost of the guaranteed benefits package. Annual recalculation of the package cost led to steady, predictable increases in budget transfers since 2004 (Shishkin, Kacevicius and Ciocanu 2008). The Czech Republic uses a simpler but effective mechanism as the basis for generating a stable flow of funds from general revenues to provide for health insurance coverage: an amount equal to 13.5% of the average wage (the same as the payroll tax rate) for the economically inactive population (Rokosová et al. 2005). Whether through simple formulas or complex calculations, building political will, ownership and capacity for matching policies/programmes and financing (including new output-based budget formation and calculation mechanisms) should be a focus for better PEM/PFM and health financing reform alignment, and – where relevant – an important objective of MTEF implementation.

ii. Pooling

At times, fiscal decentralization has been politically driven and implemented as a "blunt instrument", rather than as a well-conceived reform aimed at improving performance by specifying the appropriate level of decentralization for different sectors or functions. A more functional approach to fiscal decentralization is also needed to better harmonize the incentives of PEM/PFM and health financing reforms. The dynamics of the relationship between budget decentralization and the health financing pooling function are very powerful. There is often a misunderstanding in the PEM/PFM perspective that decentralization in the health sector refers mainly to service provision, which is assumed to be more effectively managed by local governments. In fact, this is consistent with the health financing perspective of the importance of greater autonomy and managerial control for health providers. The point at which the perspectives diverge is at the level of decentralization of revenues and expenditures, which determines the strength of the pooling function.

At times, health financing reformers are viewed as advocating against budget decentralization, when in reality they are advocating not only decentralization of the financial management of health services to the appropriate administrative unit but also centralizing the pooling of funds to enable implementation of broad health financing strategies such as the purchaser–provider split.

If requirements for the health financing pooling function are not met, due to budget decentralization or other public financing policies, country health financing reforms involve options such as the creation of off-budget health insurance funds to bring about the basic conditions required for effective health financing reform; that is, going around the PEM/PFM system rather than working through it.

To achieve better alignment of PEM/PFM approaches, it is important for public financing and health finance policy-makers to join forces in advocating the use of a ***functional specification approach*** to determine the appropriate administrative level of fiscal decentralization for each sector or type of government service. In general, health budgets should be pooled at the middle (state/region/*oblast*) or high (national) levels of country administration to support the insurance function and achieve the equity and efficiency objectives of health financing reforms.

iii. Purchasing

In terms of the health purchasing function, the experience in the CE/EECCA countries discussed above shows that there have been three key sources of contradiction in the respective PEM/PFM and health financing reform approaches, which have led to the PEM/PFM reforms at times creating perverse incentives that have impeded the ability of health financing reforms to achieve the common goals of promoting efficient resource allocation, operational efficiency and transparency in a fiscally sustainable and responsible manner: (1) continuing to define health facilities as spending units with expenditure caps in the budget formation process, rather than placing expenditure caps at the programme level; (2) slow movement from input-based line-item budgets to output-based provider payment systems; and (3) Treasury System control of health provider resource allocation. To bring PEM/PFM and health financing reforms into better alignment in the region, it is necessary to address these issues by continuing to de-link budget formation and execution from health facility fixed line-item budgets, and by strengthening functional specification with clearer definitions of institutional structure, roles and relationships.

De-linking budget formation and execution from health facility line-item budgets requires a greater transfer of expenditure control to health sector managers than PEM/PFM reforms have allowed. Good practice in public expenditure management generally means sequencing a gradual increase in autonomy over expenditure control (Table 10.2). The assumption is that the system should function well at one stage before moving to the next stage, and that each stage is built on the previous stage. There have been conflicts between the PEM/PFM and health financing approaches when PEM/PFM policy-

Table 10.2 *The stages of expenditure control*

Type of control	Exercised by	What is controlled	Mode of accountability
Stage 1: External control	Ministry of Finance and other central agencies	Specific inputs (individual items of expenditure, such as each position or purchase)	Compliance with line-item budget, civil service rules and other rules
Stage 2: Internal control	Spending departments	Major expenditure items (total salaries, all equipment or supplies)	Audit of systems to ensure that internal controls meet government standards
Stage 3: Managerial accountability	Spending or responsible units	Global operating budget running costs and outputs	Reports and audits on outputs, costs, quality and other results

Source: Schick 2004.

makers believe that health financing reforms are trying to move to the third stage before conditions of the first stage are met, or that the health sector has no capacity or is inherently less transparent than financing authorities.

A major part of the contradiction between the PEM/PFM perspectives and health financing reform comes from the historical assumption that the spending unit is the health facility, and the provider payment system or basis of health facility budgets ("what is controlled") at each stage is a fixed line-item budget based on physical infrastructure normatives. As discussed in great detail throughout this and the previous chapters, however, the major sources of inefficiency in the health sector cannot be addressed by continuing to pay providers according to fixed input-based budgets. To reduce excess capacity in the health system, shift from hospital services to more cost-effective PHC, provide incentives to modernize outdated clinical practice and be more responsive to consumers, provider payment systems must move toward reimbursing health providers for actual health services delivered rather than physical infrastructure, and must allow consumer choice of provider.

Since 1997 the strategy of health financing reforms in Kyrgyzstan has been to move step by step through each of the three stages of improving public expenditure management, using new health provider payment systems, even when the procedures to reconcile the two perspectives has been burdensome. Thus, the PEM/PFM and health financing perspectives are in agreement in regard to the need for these stages of expenditure control and autonomy, but they disagree on the underlying mechanism for paying health providers upon which each of the stages is built. Further complicating the situation, the public financing authorities have sent mixed messages regarding moving from input- to output-based payment systems; policy has been to move to output-based systems, but an input-based approach is easier to control and generally still preferred by the low- and mid-level financing specialists responsible for day-to-day operations.

This conflict can be resolved by removing the link between budget formation, budget execution/provider payment systems, and accounting and financial management. In the past, these three elements were intertwined – the budget for the entire health sector was formed by calculating the total of the individual health facility budgets based on infrastructure normative, the providers were paid based on these exact same budgets, and the process for accounting and financial management was to ensure that there was compliance with these budgets.

Separating the processes of budget formation, health provider payment, and accounting and financial management is necessary in order to bring the PEM/PFM and health financing approaches into alignment.

- Budget formation – budgets are formed by health programme (for example, public health, hospital services, PHC) rather than by health facility. In this way, the process of health budget formation determines the overall level of funding for the sector, and the prioritization and allocation of resources across the health programmes. Ceilings or expenditure controls are by programme not by health facility.
- Budget execution/provider payment systems – output-based provider payment systems appropriate for each programme or sub-programme are established and used to execute the budget. The payment rates are set for each budget programme to be within the programme expenditure ceilings and they may include volume caps or budget neutrality factors to help to ensure that total expenditures stay within the programme ceiling.
- Accounting and financial management – there are a number of options for health provider- or facility-level expenditure controls and the relationship to the Treasury System.

In summary, the importance of clear functional specification and appropriate institutional structure, roles and relationships cannot be overstated as PEM/PFM and health financing reformers work to better align their respective interventions. The right institution doing the right thing is a major driver of achieving both PEM/PFM and health financing reforms, as well as maximizing opportunities to create synergies between general public financing management and health financing reforms.

D. Lessons learned from implementation experience

As discussed at the beginning of this chapter, the objectives and guiding principles of PEM/PFM and health financing reforms are consistent and compatible at the policy level. In implementation, the choice of PEM/PFM policy instruments and approaches and how they are realized in different country environments has at times conflicted with the implementation of health financing reforms. Differences in assumptions or lack of understanding of the operational details of health financing reforms by public financing policy-makers can be resolved by better integrating PEM/PFM and health financing policy dialogue, and ensuring that the wider incentive environment created by PEM/PFM reforms enables (rather than inhibits) the ability of health financing reforms to achieve sustainable improvements in efficiency and transparency.

Experience from the region points to the need to better synchronize the PEM/PFM system with health care financing reforms. Key areas in which synchronization is needed include:

- synchronizing overall budget formation with the health sector programme budget;
- defining and adhering to rules for transparent and predictable budget execution, including producing and disseminating quarterly financial reports;
- pooling funds at the national level (centralizing sources of health financing);
- streamlining the flow of funds under new output-based provider payment systems;
- Treasury System disbursement without line items and greater autonomy for health providers to allocate resources;
- strengthening accounting and financial reporting of budget entities and health facilities; and
- implementing external and internal auditing.

In Kyrgyzstan, for example, improved synchronization of PEM and health care financing reforms is at least partially attributable to changing modalities of donor financing in the health sector. Recently, under a SWAp, donors are pooling financing and providing direct budget support to the health sector. Providing budget support requires that budget and financial mechanisms and systems are effectively geared towards increasing allocative efficiency, operational efficiency and transparency. However, improving PEM/PFM and health care financing reform requires more than just budget support; parallel donor financing and technical assistance are also critical to realignment and harmonization. In addition, it is important to note that changes related to health care financing reform have impacted on PEM/PFM policies and procedures for all sectors, thus driving general PEM/PFM improvement.

Another important lesson from country experience is that fully aligning PEM/PFM and health financing reforms requires a direct connection in the sequencing and timing of implementation. This remains an outstanding issue in Kyrgyzstan. While Treasury System modernization is expected to resolve the problem of inflexible and administratively cumbersome disbursement systems, the process could take up to five years. Given the previous history of weak implementation of PEM reforms, it could in fact take even longer. This would impede the continued progression of the successful health financing reforms. The next step is to agree on a joint implementation plan and timetable that creates a win–win situation for both sides: flexibility in disbursements for the health sector and sound cash and public debt management for the wider public sector.

A related lesson learned is that PEM/PFM and health financing reform may progress at different rates due to political, technical, operational or

environmental factors. Again, we draw on the rich Kyrgyz experience, whereby implementation of programme budgeting (PEM/PFM) and new output-based provider payment systems (health financing) were initially planned to proceed within the same time frame. Health financing and output-based provider payment systems have progressed continuously since 1997, while programme budgeting has not developed as well. In the short term, this created confusion and tension, which was partially mitigated by the excess administrative burden on the MHIF. However, in the medium term the progress in output-based provider payment systems created additional pressure to introduce programme budgeting. As of 2009, the health sector in Kyrgyzstan is the only sector in any central Asian country to have fully realized programme budgeting. The establishment and solidification of five health programmes (SGBP, Outpatient Drug Benefit, Public Health, High-Tech Fund, and "Other") linked explicitly to fund pools has enabled further development of health purchasing through provider payment systems matching health resource allocation to health programmes. In addition, the health sector is contributing to the implementation of other elements of the MTEF.

This example also starkly portrays the advantages and disadvantages of top-down and bottom-up approaches. The advantage of the bottom-up Kyrgyz approach was building systems, processes and capacity on the part of the health purchaser and health providers. Its disadvantage was bumping up against ceilings or obstacles in overall public financing management. However, once these obstacles were removed through improvement in public financing management policy, the capacity established through bottom-up implementation enabled rapid progress. There is no absolutely right or wrong implementation strategy, as these decisions depend on country environments. It is worth noting, however, that top-down implementation of PEM/PFM and/or health financing reforms through broad policy frameworks requires substantial political will to ensure the time needed to build bottom-up implementation capacity.

There is often a certain conservative mentality built into the country financing structures and personnel that discourages the delegation of management functions to health providers. While a certain level of caution and desire for improved financial management functions is natural, it is also important to separate functions and delegate increased authority, responsibility and accountability to health providers, in order to enable increased efficiency and transparency. Appropriate segregation of duties at all levels of the system related to financial management will – over time – increase transparency and reduce corruption. If the Treasury System retains most of the financial management functions and very few are delegated to health providers, a case can be made

that this does not constitute appropriate separation of functions or segregation of duties, enhancing overall transparency and accountability.

A dilemma exists that affects both country PEM/PFM and health financing policy-makers. To improve management systems and processes, health providers need both the autonomy to allocate resources and the time to develop their skills to do so. It is impossible to simulate or fully train providers to be responsible and accountable until they actually have autonomy. After decades of extremely limited autonomy, our reading of the evidence from the CE/EECCA countries suggests that the only way to improve health provider management capacity is to have autonomy and the time to adapt to it. An example in Chapter 6 discusses the response of hospitals in Kyrgyzstan to implementation of a new case-based hospital payment system containing guidelines rather than strict resource allocation rules. Initially, hospitals were passive and did not desire increased autonomy, since they were not sure how to manage it and were afraid of being punished, as they had been in the past. However, in a very short period of time (approximately six months) providers began to become very active and developed management systems and process for a wide range of functions, such as human resources and drug procurement. Health providers may not have sufficient financial management capability initially to satisfy the demands of PEM/PFM guidelines, but providers will never develop the capacity to improve resource allocation and operational efficiency if they are not given responsibility and held accountable for results.

One methodology for better aligning the financial management approaches of Treasury Systems with health financing approaches is a system in which cash leaves the Treasury System when allocated to the health purchaser (either a health insurance fund or the MoH, or both). Since the health purchaser disburses these funds to health facilities through the new provider payment systems very quickly, this solution does not negatively impact the country's ability to account for and manage cash. The health purchaser is then responsible for paying health providers, who account for and produce financial reports by line item; these reports are then sent back to the Treasury System through the health purchaser. In essence, the health providers are responsible to the health purchaser and the health purchaser is responsible to the Treasury System. This separation of functions can still ensure fiscal discipline and increase transparency, as well as enabling the health purchaser to match policy/programme priorities with financing (thus increasing allocative efficiency) and enabling providers greater autonomy to increase operational efficiency. Another possible solution is increased flexibility in the Treasury System information systems to allow funds to be released in a lump sum consistent with new provider payment systems,

provider autonomy to allocate resources, and financial reports by line item to be submitted back to the Treasury System.

E. Conclusions

As this chapter has shown, successful implementation of health financing reforms requires alignment with PEM/PFM reforms, and at the same time PEM/PFM reforms must be aligned (that is, must create an appropriate incentive environment) with the objectives of efficiency- and transparency-oriented health financing reforms. In situations in which this alignment is weak, the ability of health financing reforms to sustain policy objectives is seriously threatened. In cases in which a synergy has been established, it has only contributed to better results for health financing reforms. For example, in Armenia, the successful implementation of an MTEF has improved the levels and predictability in budget financing for the health sector. This provides a sustainable basis for gradual increases in public financing, within macroeconomic constraints, as well as integration of off-budget funds (such as donor funds). In The former Yugoslav Republic of Macedonia, while the health sector had implemented various health reforms, the basics of good governance and financial management were absent. This resulted in a health sector with wastage due to fraud and abuse, and major concerns with regard to efficiency and access. In Kyrgyzstan, while health financing reforms were extremely successful in improving allocative and operational efficiency and transparency, the reforms were put at risk by a PEM system that created contradictory incentives and effectively punished the health sector for these achievements. It seems quite obvious that a PFM system that creates incentives for inefficiency and lack of transparency, and that causes a financing mechanism to become more regressive, is a system that is not aligned with its own stated objectives and that, therefore, needs to change.

References

Allen R, Tommasi D, eds (2001). *Managing public expenditure: a reference book for transition countries*. Paris, Organisation for Economic Co-operation and Development.

Anusic Z (2005). *International experience in consolidated social contributions and tax collection, reporting and administration*. Internal report on the Professional Development Grant. Washington, DC, World Bank Europe and Central Asia Region.

Bahl R (1999). *Implementation rules for fiscal decentralization*. World Bank Institute Working Paper. Washington, DC, World Bank.

Burchfield K (2004). *HIF governance reform study*. Prepared for the World Bank-financed Health Sector Management Project. Skopje, Ministry of Health of The former Yugoslav Republic of Macedonia.

Government of Armenia (2003). *Medium-term expenditure framework 2004–2006*. Yerevan, Government of Armenia.

Government of Armenia (2004). M*edium-term expenditure framework 2005–2007*. Yerevan, Government of Armenia

Government of Armenia (2005). *Medium-term expenditure framework 2006–2008*. Yerevan, Government of Armenia

Government of Macedonia (2005). *External audit of the health insurance fund*. Luxembourg, Ernst and Young.

Jakab M et al. (2005). *Evaluating the Manas health sector reform (1996–2005): focus on health financing*. Manas Health Policy Analysis Project, Policy Research Paper 31. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/MyFiles/EvaluationofHealth%20financing_E_PRP31.pdf, accessed 23 February 2006).

Kutzin J (2003). *Health expenditures, reforms and policy priorities for the Kyrgyz Republic*. Manas Health Policy Analysis Project, Policy Research Paper 24. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/MyFiles/PER%20JK%20for%20PRP24.pdf, accessed 15 October 2009).

Manjieva E et al. (2007). *Analysis of the medium-term financial sustainability of the state-guaranteed benefits package*. Manas Health Policy Analysis Project, Policy Research Paper 43. Bishkek, World Health Organization and Ministry of Health (http://www.hpac.kg/images/pdf/PRP43.E.pdf, accessed 15 April 2008).

Martinez-Vasquez J, Boez J (2000). Budgeting and fiscal management in transitional countries. International Studies Program Working Paper 00-6. Atlanta, GA, Georgia State University.

O'Dougherty S et al. (2009). Case-based hospital payment systems. In: Langenbrunner J, Cashin C, O'Dougherty S, eds. *Designing and implementing health care provider payment systems: how-to manuals*. Washington, DC, World Bank:125–213.

Rokosová M et al. (2005). *Health care systems in transition: Czech Republic*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Schick A (2004). *Pathways to improving budget implementation*. Budget Management and Financial Accountability Course. Washington, DC, World Bank.

Shishkin S, Kacevicius G, Ciocanu M (2008). *Evaluation of Moldova's 2004 health financing reform*. Health Financing Policy Paper. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/document/HSF/healthfin_moldova.pdf, accessed 15 April 2009).

UNDP (2005a). *Fiscal decentralization in transition economies: case studies from the Balkans and Caucasus.* Bratislava: United Nations Development Programme.

UNDP (2005b). *UNDP primers: fiscal decentralization and poverty reduction*. New York, United Nations Development Programme.

WHO (2009) [web site]. *National Health Accounts Series*. Geneva, World Health Organization (http://www.who.int/nha/country/en/, accessed 31 August 2009).

World Bank (2003a). *Armenia: public expenditure review*. Washington, DC, World Bank Europe and Central Asia Region.

World Bank (2003b). *Training in medium-term expenditure framework*. Washington, DC, World Bank Institute.

World Bank (2003–2005). *Aide memoires of the second Kyrgyz health sector reforms project*. Washington, DC, World Bank.

World Bank (2004a). *Health financing in south-eastern European countries*. Washington, DC, World Bank Europe and Central Asia Region.

World Bank (2004b). *A study of public expenditure management capacity and reforms in ECA PRSP countries*. Washington, DC, World Bank Europe and Central Asia Region Poverty Reduction and Economic Management Unit.

World Bank (2005a). *Serbia: public expenditure review. Health chapter*. Washington, DC, World Bank Europe and Central Asia Region.

World Bank (2005b). *The Kyrgyz Republic: health and social project (project appraisal document)*. Washington, DC, World Bank Europe and Central Asian Region.

World Bank (2009) [web site]. PRSP web page. Washington, DC, World Bank (http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPRS/0,,menuPK:384207~pagePK:149018~piPK:149093~theSitePK:384201,00.html, accessed 31 August 2009).

Chapter 11

What role for voluntary health insurance

Sarah Thomson [93]

This chapter analyses the impact of voluntary forms of coverage on health policy objectives in countries in transition (CE/EECCA countries). It focuses on markets for VHI, beginning with a description of the following aspects of VHI across the region: the role it plays in relation to the publicly financed part of the health system ("the public system"); its contribution to expenditure on health issues relating to the health financing functions of collection, pooling and purchasing; and the regulatory framework. The chapter then reviews in more depth the few cases in the region in which VHI has been an explicit part of health financing reforms.[94] Concluding sections identify factors that

93 I gratefully acknowledge the contribution of Dina Balabanova and Tim Poletti in providing information on community-based health insurance in the Caucasus, and that of George Gotsadtze in providing information on reforms in Georgia. I also thank Joe Kutzin for his helpful comments on an earlier version of the chapter. I am responsible for any errors.

94 Community-based health insurance (CBHI) is a particular form of VHI that exists in a few countries in the region: Armenia, Azerbaijan, Georgia, Ukraine and (though not well documented) Tajikistan. Unlike the examples of VHI that are the focus of this chapter, CBHI schemes in the region have not typically been designed as an explicit part of health financing policy or the reform agenda, but have emerged as a response (either from local communities or national or international NGOs) to the failure of the public system to deliver promised entitlements to some parts of the population. They are intended to play a complementary role and their main aim is to reduce financial barriers to the use of health care.

The best-documented experience of CBHI schemes in the region are those supported by the international NGO Oxfam in Armenia, Azerbaijan and Georgia (Sloggett 2002; Poletti et al. 2007), which enrol families on a voluntary basis and attempt to provide poor and isolated rural communities with high-quality, affordable PHC, including essential drugs. Since their introduction, the schemes have grown in the regions of these countries that they serve, but coverage is still small when considered at the level of the whole population. The schemes will continue to require external subsidies from donors or governments; a situation that reflects the experience of CBHI internationally (Ekman 2004).

In Ukraine, voluntary "sickness funds" and credit unions have emerged as a type of CBHI, typically based around the local hospital. Because the Ukrainian constitution prohibits public organizations from collecting contributions to finance health care services that are guaranteed by law to be free of charge, the schemes are defined as "charities", but function as CBHI, collecting contributions from members. Similar to the Oxfam schemes, those in place in Ukraine aim to ensure access to pharmaceuticals in contexts in which public funds are insufficient. Similarly to the situation in the Caucasus, they make little impact on health financing at the level of the whole population, but they do appear to bring important benefits in terms of availability and quality of services (Lekhan, Rudiy and Nolte 2007).

Table 11.1 *Classification of voluntary health insurance markets*

Driver of market development	Market role	Covers
Breadth of public coverage (public system inclusiveness: the proportion of the population to which coverage is extended)	Substitutive	Population groups excluded from or allowed to opt out of the public system
Scope of public coverage (scope of benefits covered by the public system)	Complementary (services)	Services excluded from the public system
Depth of public coverage (proportion of the benefit cost met by the public system)	Complementary (user charges)	Statutory user charges imposed in the public system
User satisfaction (perceptions about quality of care)	Supplementary	Faster access and enhanced user choice

Source: Foubister et al. 2006.

present obstacles to or enable the development and expansion of VHI and highlight health policy concerns.[95]

A. Markets for VHI

i. Market role

VHI can be classified according to its role in relation to the public system. International research shows that markets for VHI tend to be shaped by the characteristics of the public system, particularly the extent of public coverage (Mossialos and Thomson 2004; OECD 2004). Consequently, gaps in public coverage are a key determinant of VHI market development (Foubister et al. 2006). Where VHI addresses deficiencies in the breadth of public system coverage, by providing financial protection to groups of people who are excluded from or allowed to opt out of the public system, it plays a substitutive role. Alternatively, it takes on a complementary role whereby it focuses on restrictions in the scope and depth of public system benefits, and a supplementary role in situations in which it responds to low levels of user satisfaction with the public system (see Table 11.1).

Substitutive VHI. In Estonia, the Czech Republic, Slovenia and Slovakia, small markets for substitutive VHI cover people who are not eligible for publicly financed coverage (Jesse et al. 2004; Rokosová et al. 2005). The Estonian market is very small, covering only a few hundred people, and substitutive

95 Another form of voluntary pre-payment for health care is the medical savings account (MSA). MSAs involve regular payments by individuals, households or firms into savings accounts to finance health care costs for the individual beneficiary or household, without any pooling of risks across the population. Because only one country in the region – Hungary (Gaál and Riesberg 2004) – has MSAs in place, they are not discussed further in this chapter. Limited market development in Hungary (despite tax subsidies) and the rest of the region may reflect the absence of important institutional prerequisites for MSAs; notably, significant levels of per capita income and formal sector employment (Nichols, Prescott and Phua 1997). International evidence suggests that MSAs are not likely to be an equitable or sustainable means of substituting pre-payment for OOPS (Nichols, Prescott and Phua 1997; Dixon 2002; Hanvoravongchai 2002).

policies are exclusively sold by the statutory health insurance fund, the EHIF. The Czech market mainly covers the growing number of migrant workers from non-EU countries (Dlouhy 2009). In 2005, a subsidiary of this statutory health insurance fund provided substitutive cover for approximately 0.3% of the population. With the exception of a reform introduced in 2007 in Georgia (see later) (Gotsadze 2008), substitutive VHI plays essentially no role in the countries that were formerly part of the Soviet Union.

Complementary VHI. The role of complementary VHI covering health services excluded from the public system's package of benefits is also limited. Such markets exist to cover drugs in Ukraine (in both commercial and "community-based" forms) and dental care and spa treatment in Latvia (Karaskevica and Tragakes 2001; Lekhan, Rudiy and Nolte 2004). Markets for complementary VHI covering user charges for publicly financed benefits play a role in Croatia, Latvia and Slovenia (Karaskevica and Tragakes 2001; Albreht et al. 2002; Voncina et al. 2006). Slovenia is the only country to have achieved a high level of population coverage (as discussed below).

Supplementary VHI. Most markets for VHI in CE/EECCA countries play a supplementary role, covering health care while travelling abroad and/or in private sector facilities (including private wards in public hospitals). In the latter case, supplementary VHI provides policy-holders with faster access to health care, a higher level of inpatient amenities and greater choice of provider in comparison with those using publicly financed services.

ii. Contribution to health expenditure

Levels of private spending on health are relatively high in the region, ranging from lows of under 15% of total health expenditure in a few countries (the Czech Republic and Croatia) to over 70% in some CE/EECCA countries (Azerbaijan, Georgia and Tajikistan) in 2006 (WHO 2009). In spite of this, the contribution of VHI to spending on health is minimal, rarely accounting for more than 1% of total health expenditure (see Table 11.3 below) (Kornai and Eggleston 2001; Kutzin and Cashin 2002). In some countries, there does not appear to be any market for VHI at all, while in other countries where there is some evidence of a functioning market, levels of spending are either not available or may be too small to be reported (WHO 2009). The Slovenian market is a clear outlier in terms of its contribution to total health expenditure (13%) and because it accounts for almost half of private spending on health.

Table 11.2 *Issues affecting health financing functions in voluntary health insurance markets*

Function	Issues
Collection	Who sells VHI? At what price? Do tax incentives affect price and uptake?
Pooling	What proportion of the population purchases/is covered by VHI? How are premiums set? Do insurers exclude coverage of pre-existing conditions?
Purchasing	What benefits does VHI provide? Is there cost sharing? Are benefits provided in kind or through reimbursement of health care expenses? How do insurers relate to health care providers? How do insurers ensure efficiency (including quality) in administration and delivery of health services?

Source: Authors' own compilation.

Note: VHI: Voluntary health insurance.

iii. Collection, pooling and purchasing

In markets for VHI the health financing functions of collection, pooling and purchasing are usually integrated. Table 11.2 summarizes issues relevant to each function, which are discussed in more detail above.

Who sells VHI? Commercial insurance companies are the most common type of seller of VHI, particularly (but not exclusively) in supplementary markets. However, mutual associations are prominent in providing complementary cover in Hungary and Slovenia; NGOs, charities and commercial companies cover the cost of drugs in Ukraine; statutory or private health insurance funds involved in the provision of publicly funded cover are permitted to offer voluntary cover in Bulgaria, Croatia, the Czech Republic, Estonia, Poland and Slovakia; private and/or public health care providers market pre-payment for their services in Uzbekistan and Poland; state-owned insurance enterprises are permitted to sell supplementary cover in Albania, Belarus and Uzbekistan; and the Health and Finance Ministries operate the so-called voluntary system of health insurance in Turkmenistan.[96] The number of sellers varies across countries, ranging from 1 in Albania and Belarus to 80 commercial companies plus an undetermined number of NGOs in Ukraine, to approximately 200 insurer-providers in Poland (Nuri and Tragakes 2002; Lekhan, Rudiy and Nolte 2004; Thomson and Mossialos 2009). Most markets appear to have approximately 5–10 sellers. Numbers alone are not indicative of levels of competition, however, as insurers in some countries may operate on a regional basis. For most countries there are no data on market concentration.

96 The Turkmen system is essentially mandatory for all formal sector employees and will not be discussed as VHI in this chapter.

At what price is VHI sold? One reason for the low level of population coverage achieved by VHI in CE/EECCA countries may be its high price, particularly in supplementary markets where insurers price premiums to attract high-income groups, putting VHI beyond the financial reach of many people. In Azerbaijan, for example, premiums range from US$ 600 to US$ 17 000 per year, with the cheapest premiums covering user charges in hospitals owned by the insurer and the most expensive covering medical evacuation to Turkey or the Russian Federation (Holley, Akhundov and Nolte 2004). In Poland, premiums for supplementary cover by a health maintenance organization-style system range in price from 12 Polish zloty (US$ 4) to several hundred zloty (over US$ 70) per month (Kuszewski and Gericke 2005). The most expensive premiums are aimed at top executives and wealthy individuals. Premiums in Armenia range from US$ 50 to US$ 670 per year, but for people aged between 35 and 40 years the premium tends to be approximately US$ 200–300 per year (Tsaturyan 2006). The variation in premiums is less marked in other countries; ranging in Uzbekistan, for example, from US$ 500 per year for an individual policy excluding surgical interventions to US$ 875 for a family policy covering surgical interventions (Ahmedov et al. 2007).

Do tax incentives affect price and uptake of VHI? The tax treatment of VHI premiums affects their price. Only a handful of countries provide tax incentives to purchase VHI (Bulgaria, Croatia, Georgia for supplementary cover only, Hungary, Latvia, Poland and Romania) (Voncina et al. 2006; Gotsadze 2008; Thomson and Mossialos 2009). Tax incentives mainly take the form of permitting individuals or employers to deduct the price of VHI premiums from their taxable income or permitting employees to receive VHI cover from their employers as a non-taxable benefit in kind. In other countries (Lithuania, Armenia and Estonia) tax disincentives mean that VHI is taxed as a benefit in kind for employees and may be subject to social security contributions for employers (Cerniauskas, Murauskiene and Tragakes 2000; Jesse et al. 2004; Hakobyan et al. 2006).

What proportion of the population is covered? Due to weak regulation and insufficient reporting mechanisms, it is difficult to obtain accurate data on the proportion of the population covered by VHI in most countries, and in some countries estimates conflict.[97] However, in most CE/EECCA countries, VHI covers a very small proportion of the population, often under 1%. The main exceptions are Georgia (approximately 10%), Croatia (16%) and Slovenia (74%) (Cotman 2005; Voncina, Dzakula and Mastilica 2007; Gotsadze 2008).

97 This issue is not limited to CE/EECCA countries. In many markets around the world, regulatory bodies do not systematically collect data on numbers of policy-holders and/or numbers of people covered by VHI policies. Even where these numbers are available (for example, in the United Kingdom), they tend to be aggregated and do not tell us about differences in the level of cover purchased by different policy-holders.

Who buys VHI? Buyers in VHI markets fall into two categories: individuals and groups. Group purchasers tend to be employers (typically larger firms, in some cases limited to multinational corporations, international organizations or specific sectors such as the oil and gas industries) buying on behalf of employees, but it can include other types of collective such as trade unions, local governments or geographically defined communities. Group buyers dominate the market in Lithuania, Latvia, Bulgaria and Poland. In Latvia, commercial insurers sell exclusively to groups, so the formerly state-owned insurer Rīgas Slimokase is the only source of individual policies (Müller et al. 2005). VHI is primarily purchased to cover the employees of large firms in countries like Croatia (supplementary VHI), Romania, Armenia, Azerbaijan, the Russian Federation and Ukraine.

How are premiums set? Do insurers exclude coverage of pre-existing conditions? Premiums are most likely to vary according to the level of benefits covered by a particular policy. Some insurers also vary premiums based on age, sex and health status (risk rating); in such cases insurers may also exclude coverage of pre-existing conditions. Non-profit-making insurers are more likely to offer community-rated premiums (for example, the statutory health insurance fund in Croatia), although until community rating became a regulatory requirement in Slovenia it was used by both the non-profit-making and one of the commercial insurers in the market (Voncina et al. 2006; Milenkovic Kramer, personal communication 2006). Conversely, premiums offered by the state-owned insurance enterprise UNIC in Uzbekistan are rated according to age, while those offered by a private provider are not (Ahmedov et al. 2007). However, the premiums offered by non-profit-making insurers may be substantially lower than those offered by commercial insurers, as in Uzbekistan, where UNIC's most comprehensive policies cost 24% less than the private provider's policies for the lowest risk group and 42% less for the highest risk group.

What benefits does VHI provide? The previous section on market role and Table 11.3 provide information on the broad nature of benefits covered by VHI in different markets. Substitutive policies generally provide a similar level of benefits to statutory cover, although in the Czech Republic they exclude treatment of some chronic conditions (HIV/AIDS, for example). In Georgia, substitutive VHI policies are typically much less comprehensive than the statutory package (Cashin et al. 2009). While substitutive VHI and complementary VHI covering statutory user charges are intended to enhance financial protection, supplementary VHI does not usually play a role in providing financial protection. Where VHI plays more than one role – for example, supplementary and complementary – benefits may be marketed and

Table 11.3 *Key features of voluntary health insurance markets in CE/EECCA countries*

Country	Market role(s)[a] and examples of benefits covered	population covered, 2006 (%)	TEH, 2006 (%)
European Union			
Bulgaria	• Supplementary: superior amenities, private room, faster access to care • Complementary (S): dental care, medical devices, OP drugs	2.0-4.6 [b]	0.4
Czech Republic	• Supplementary: private room • Substitutive: similar to statutory cover but excludes treatment of some chronic conditions, such as HIV/AIDS, drug addiction, mental health, spa treatment, etc.	n/a <1.0	0.2
Estonia	• Substitutive: similar to statutory cover, but commercial cover offers different benefit levels	<0.01	1.1
Hungary	• Complementary (S): physiotherapy, home care, preventive care, therapeutic spa services, sports/recreation, medical devices, drugs, CAM [c] • Supplementary: superior amenities in hospital	Commercial: 2.1 Mutual: 6.2	1.2
Latvia	• Complementary (UC): statutory user charges • Complementary (S): eye and dental care, physiotherapy and massage, rehabilitation, vaccines, hearing aids, prostheses, plastic surgery, IVF, CAM • Supplementary: direct access to specialists, access to non-contracted providers, faster access (consultations and clinical examinations)	(2003) 15.6	1.0
Lithuania	• Supplementary: OP care including surgery, consultations, diagnostics, prevention, prenatal care, home visits, physiotherapy, eye and dental care, rehabilitation, IP care	0.2	0.4
Poland	• Supplementary: private care, faster access	3.1–3.9 [d]	0.6
Romania	• Supplementary: superior hospital accommodation, choice of provider, second opinions, private care	0.1	4.0

Table 11.3 *contd*

Country	Market role(s)[a] and examples of benefits covered	population covered, 2006 (%)	TEH, 2006 (%)
European Union *contd*			
Slovenia	• Complementary (UC): statutory user charges • Complementary (S): CAM, superior dental care, elective care (such as cosmetic surgery), OP drugs • Supplementary: superior amenities and medical devices, drugs not on positive list, faster access • Substitutive	(2005) 73.8 (2004) <1.0	13.1
Slovakia	• Substitutive	n/a	0.0
Non-European Union, central Europe countries			
Albania	• Supplementary: mainly travel cover	n/a	0.0
Bosnia & Herzegovina	• No market has developed	n/a	n/a
Croatia	• Complementary (UC): statutory user charges • Supplementary: better amenities and care abroad	(2003) 16.0	1.2
TFYR Macedonia	• No market has developed	n/a	n/a
Serbia	• No market has developed	n/a	n/a
Russian Federation and westernmost former Soviet Republics			
Belarus	• Supplementary	n/a	<0.1
Republic of Moldova	• Supplementary	n/a	0.2
Russian Federation	• Supplementary: better hotel services and access to more prestigious institutions	5.0	3.7
Ukraine	• Complementary (S) and supplementary: usually for defraying costs of medicines, but in some cases for higher quality hospital accommodation	1.4	0.5

Caucasus and central Asia			
Armenia	• Supplementary: IP and OP care, with some exclusions	<0.1	0.1
Azerbaijan	• Complementary (S) and supplementary: IP and OP care, some treatment abroad	<0.1	0.1
Georgia	• Substitutive: government-defined package, which is partially subsidized by the state (insurers can also offer additional benefits, but within the premium limit set by the government) • Substitutive: unregulated	(2008) 10.0	1.1
Kazakhstan	• Supplementary	5.0	na
Kyrgyzstan	• Supplementary: specialist services	<0.1	na
Tajikistan	• No market has developed	n/a	0.0
Turkmenistan	• No real voluntary market has developed	n/a	0.0
Uzbekistan	• Supplementary: faster access, choice of provider, specialized hospitals, better amenities	n/a	0.0

Sources: EU Member States – Thomson and Mossialos 2009; all others – HiT reports published by the European Observatory on Health Systems and Policies (available from http://www.euro.who.int/observatory) and WHO TEH data (WHO 2010); Müller et al. 2005; Tsaturyan 2006; Waters et al. 2006; Lekhan, Rudiy and Shishkin 2007; Voncina, Dzakula and Mastilica 2007; Gotsadze 2008.

Notes: CE/EECCA: Central Europe, eastern Europe, the Caucasus and central Asia; TEH: Total expenditure on health; S: Services; OP: Outpatient; n/a: Not available; HIV/AIDS; Human immunodeficiency virus/acquired immunodeficiency syndrome; CAM: Complementary and alternative medicine; UC: User charges; IVF: In vitro fertilization; IP: Intpatient.

[a] The dominant role is listed first.
[b] There are two different estimates for population coverage. The Financial Supervision Commission estimates approximately 4.6%; a patient rights group estimates approximately 2.0%.
[c] The mutual associations in Hungary providing complementary cover offer individual savings accounts rather than genuine insurance involving risk pooling across groups of people.
[d] This figure refers to pre-paid subscriptions for medical benefits. Travel health insurance covers approximately 1.6% of the population. Private health insurance purchased alongside life insurance covers approximately 76.4% of the population, but the benefits provided are likely to be marginal.

sold together in a single package or plan. Data regarding benefit design are scarce. There is little information concerning the extent of product differentiation (the number and variation of plans offered by insurers); whether plan benefits are provided in kind or through reimbursement of health care expenses; and levels of cost sharing through maximum levels of reimbursement (that is, providing benefits up to a capped amount), deductibles or co-insurance.

How do insurers relate to health care providers? Most sellers are insurance companies, but there are some cases of health care providers offering VHI, notably in Poland and Uzbekistan. Public and private insurer-providers in Poland offer cover for faster access to (mainly outpatient) care (Kuszewski and Gericke 2005). Large private providers in Uzbekistan sell VHI in order to boost business and an insurer in Azerbaijan runs its own hospitals (Ilkhamov and Jakubowski 2001; Holley, Akhundov and Nolte 2004; Ahmedov et al. 2007). In 1999–2000, Tblisi municipality in Georgia experimented with contracting a private insurance company to manage its health care programme (Gamkrelidze et al. 2002).

How do insurers ensure efficiency in administration and the delivery of health services? Given the youth and size of many VHI markets in the region, insurers (unless vertically integrated with providers) are unlikely to have significant leverage over providers. However, some insurers use selective contracting in an effort to ensure that the providers they work with do not solicit informal payments from policy-holders.

iv. Regulation

VHI can suffer from a number of market failures[98] arising from the difficulty of covering people who are already ill or highly likely to incur health care costs. This is compounded by insurers' response to the situation, typically in the form of preferred risk selection and market segmentation (Barr 2004). Public policy can address these and other issues through direct intervention in the market (regulation) as well as by indirect means, such as tax incentives. Three main goals for government regulation can be defined (Chollet and Lewis 1997): (1) maintaining market stability by setting financial and non-financial standards for insurer entry and operation (including, for example, minimum solvency levels and requirements for insurers to specialize in health insurance or hold non-profit-making status) conditions for insurer exit and requirements for financial reporting, scrutiny and oversight; (2) protecting consumers by

98 In theory, markets for health insurance can only operate efficiently if there are no major problems with adverse selection, moral hazard and monopoly, as well as if the probabilities of becoming ill are less than one (no pre-existing conditions), independent of each other (no endemic communicable diseases) and known or estimable (insurers can estimate future claims and adjust premiums for risk). Moral hazard and monopoly issues can be problematic in both public and private health insurance.

governing insurers' marketing practices and their relations with health care providers; and (3) improving access to VHI through open enrolment (requiring insurers to accept all applicants), guaranteed renewal (preventing insurers from terminating contracts), community rating, the provision of minimum or standard benefits packages and prior approval of products and prices.

Most CE/EECCA countries engage in minimal regulation of VHI markets. There are, however, some exceptions. For example, the sale of VHI may be restricted to private institutions (Armenia), mutual associations (for complementary VHI in Hungary) and statutory health insurance funds (Croatia prior to 2004). Conversely, statutory health insurance funds are not permitted to sell VHI in Latvia and Slovenia (Karaskevica and Tragakes 2001; Albreht et al. 2002). In Hungary mutual associations are limited to covering services excluded from public coverage (Gaál and Riesberg 2004). The Bulgarian Government requires prior approval of products and prices, but this form of regulation does not appear to be widespread beyond Bulgaria (Koulaksazov et al. 2003). The Slovenian market for complementary VHI covering statutory user charges is the most tightly regulated in the region. From 2005 the Solvene Government has required all insurers to offer open enrolment and community-rated premiums, accompanied by a risk-equalization scheme to prevent risk selection (Albreht 2006). However, implementation of risk equalization was delayed by legal challenges from insurers (see below) and the European Commission recently initiated infringement proceedings against the Solvene Government on the grounds that risk equalization in the Slovene market contravenes EU law (the Third Non-Life Insurance Directive) (Thomson and Mossialos 2009).

B. Financing reforms involving VHI: selected experiences

Reforms involving VHI in CE/EECCA countries comprise both legislation permitting the introduction of a market for VHI and – related to this – the evolution of public policy towards VHI. Most countries across the region introduced legislation creating a legal framework for VHI during the early to mid-1990s. In some countries, administrative and regulatory details were never formulated alongside the legislation, which effectively prevented a market for VHI from developing, while in other countries additional legislation has been necessary to boost implementation.

Differences in the economic and fiscal contexts of CE/EECCA countries suggest that different reasons exist for introducing VHI. In the region's richer countries, characterized by universal or near-universal coverage, VHI may be seen as a means of relieving pressure on government budgets, perhaps by encouraging wealthier people to pay for their own health care (a substitutive role for VHI) or

allowing the public system to focus on financing "necessary" and cost-effective services (a complementary role) (Chollet and Lewis 1997). For these countries, the relevant policy choice is between increasing public spending or limiting public budget commitments and shifting health care costs onto those who seek care. Combining cost shifting with promotion of VHI reflects an attempt to balance concerns about the fiscal sustainability of the system with concerns about the financial barriers to access created by OOPS.

Poorer countries struggling to generate sufficient levels of public finance due to low levels of formal employment or weak tax-raising capacity may favour VHI for its potential to lower the financial burden of OOPS (that is, a complementary or substitutive role for VHI). In such fiscally constrained contexts, the scope for increasing public spending is limited; hence, the relevant policy concern is to reduce the problems associated with high OOPS by transforming them into some form of pre-payment. A longer term strategy may be to introduce VHI as a transitional measure, paving the way for larger, publicly financed risk pools as economies grow and become more formalized (Sekhri and Savedoff 2005).

The assumption that VHI will fill gaps in public systems has not always held true – neither internationally, nor in CE/EECCA countries. Unlike many of the regional reforms that took place in other social sectors and some parts of the health system (health care provision in some countries, for example), which followed a deliberate strategy of privatization, reforms in health financing have focused on generating and guaranteeing publicly financed benefits (Ferge 1997; Fajth 1999; Lavigne 2000; Davis 2001; Rys 2001). The absence of government interest in creating an explicit role for private sources of finance has meant that, with a few notable exceptions analysed below, VHI in most CE/EECCA countries is typically confined to playing a supplementary role. However, the cases below – those of Slovenia, Croatia and Georgia – show that there are countries in the region where VHI does play (or is intended to play) a significant role in health financing policy.

i. Complementary VHI covering statutory user charges in Slovenia and Croatia

Markets for complementary VHI covering statutory user charges have had some success in Slovenia and Croatia, the two largest markets in the region (see Table 11.4).

Slovenia. Factors contributing to the size of the Slovene market include the high level of statutory user charges, which apply to all adults and range from 5% to 75% of the total cost of most non-preventive health services, including pharmaceuticals (Albreht et al. 2002; MISSOC 2008); a well-regulated health

Table 11.4 *Key features of complementary voluntary health insurance markets in Slovenia and Croatia*

Features	Slovenia	Croatia
Year established	1993	2002
% of population covered	74% in 2005 (over 90% of those eligible to pay statutory user charges)	16% in 2003
% of total health expenditure	13% (2006)	1.1% (2006)
% of private expenditure	47% (2006)	7.8% (2006)
Number of insurers	1 mutual, 2 commercial	1 mutual
Premiums tax deductible	No	Yes

Sources: Albreht et al. 2002; Cotman 2005, Vzajemna 2006, Voncina, Dzakula and Mastilica 2007, WHO 2009.

system, with no evidence of informal payments; limited income inequality among the population; heavy promotion by government of a market designed to diversify funding sources; a regulatory framework requiring open enrolment and community-rated premiums for complementary cover; and the use of the statutory health insurance fund as a voluntary insurer. Although the sale of VHI has never been restricted to the statutory health insurance fund, from the outset the fund held a market share of almost 90%. The remaining 10% was held by a commercial insurer (Albreht et al. 2002).

Over time, the market has experienced several changes in public policy (see Table 11.5), reflecting growing disquiet about the role of complementary VHI in the Slovene health system. Although coverage is widespread and the market makes a significant contribution to financial risk protection, there are concerns about inequalities in access to health care because – as some have argued – VHI premiums have reached a level above which they are no longer accessible to lower income groups (Albreht et al. 2002). This is a risk because evidence suggests that not having VHI coverage presents both financial and organizational barriers to accessing health care. For example, doctors may be reluctant to treat those without VHI coverage in case they are unable to pay the statutory user charges involved (Milenkovic Kramer, personal communication 2006c). There are also concerns that the system's mix of funding sources is less progressive than it would be if the flat-rate VHI premiums were replaced by a slight increase in the payroll tax for statutory insurance. The decision to limit public commitments and rely on complementary VHI may reflect a trade-off of some financial equity in the interests of fiscal balance; it may also reflect the relative power of different interest groups (see the 2003 proposal – not implemented – in Table 11.5).

Table 11.5 *Developments in public policy towards voluntary health insurance in Slovenia, 1999–2007 (selected years)*

Year	Changes and proposals
1999	Change: VHI wing of the statutory health insurance fund established as an independent mutual association (Vzajemna).
2000	Change: complementary VHI defined as being in the public interest; risk equalization permitted but not implemented.
2003	Proposal (White Paper): merging statutory and complementary VHI, replacing VHI premiums with income-related contributions; approximately 39% of employees would have had to pay more, but lower income groups would have paid less; the merger also aimed to lower administrative costs; it was strongly opposed by employers and insurers and rejected by the Ministry of Finance due to concerns about labour costs.
2004	Change: risk rating of premiums permitted.
2005	Change: insurers must offer open enrolment and community-rated premiums; premium increases must be approved by the regulator (the Insurance Supervision Agency); risk equalization implemented.
2005	Legal challenge: mutual and commercial insurers challenge the risk-equalization scheme on the grounds that it might distort competition; High Court rules in the government's favour.
2007	Legal challenge: the European Commission begins infringement proceedings against Slovenia on the grounds that the risk-equalization scheme contravenes EU law (the Third Non-Life Insurance Directive).

Sources: Foubister, Thomson and Mossialos 2004; Slovenia Business Week 2004; Cotman 2005; Toplak 2005; Milenkovic Kramer 2006; Vzajemna 2006; Thomson and Mossialos 2009.

Notes: VHI: Voluntary health insurance; EU: European Union.

Changes in public policy also reflect concerns about market structure and conduct. After risk rating was permitted in 2004, the mutual association and one of the two existing commercial insurers continued to offer community-rated premiums (for approximately €20 per month), but a new commercial company entered the market offering premiums that were one third lower for younger people and two and half times higher for older people, leading to fears about risk selection and de-stabilization of the market (MGEN 2006). In the short term, the new regulatory framework (open enrolment, community-rated premiums, risk equalization) may stabilize premiums and prevent them from rising too quickly, particularly for older people (Albreht 2006). Nevertheless, concerns about the impact of complementary VHI on equity in finance and access to health care are likely to persist, not least because over a third of the mutual association's policy-holders are aged 60 years and over.

Croatia. The 2002 Health Care Law introducing complementary VHI aimed to strengthen the financial sustainability of public funding by reducing the depth of public coverage (increasing statutory user charges) and shifting expenditure from public to private sources. Influenced by the Slovenian experience,

promotion of VHI was made a part of this reform in order to encourage pre-payment, thereby limiting the potentially negative consequences of increased OOPS for equity and financial protection. VHI uptake was facilitated by the fact that complementary cover was exclusively offered by the statutory health insurance fund for the first two years, even though there was a commercial insurer in the market (Langenbrunner 2002). Premiums are community rated, with a lower rate for retired people, and fully tax deductible for individual and group buyers, as are other forms of private health spending (Voncina, Dzakula and Mastilica 2007*)*.

As in Slovenia, in Croatia there are concerns about equity and market stability (Langenbrunner 2002; Voncina et al. 2006; Voncina, Dzakula and Mastilica 2007). The introduction of complementary VHI has made the health financing system more regressive, increased financial barriers to access for lower income groups and skewed equity in the use of health services. Reducing depth of public coverage has further raised OOPS and – unlike the vast majority of Slovens, who are covered by complementary VHI – only a minority (approximately 16%) of the Croatian population benefited from such coverage in 2003, and no growth was experienced in following years (Voncina, Dzakula and Mastilica 2007). Although the lower VHI premium for retired people constitutes a form of intergenerational solidarity, it has also resulted in adverse selection problems, with retired people accounting for only a quarter of the total population but just over half of all voluntarily insured individuals (Voncina, Dzakula and Mastilica 2007).

ii. Substitutive VHI as part of health financing reform at low public expenditure levels: the case of Georgia

From a fiscal perspective Georgia suffered the most severe transition period following the end of the Soviet Union.[99] The IMF estimated that by 1995 total public revenue had fallen to only 5% of GDP, about an eightfold decline from 1989 (Cheasty 1996). While some recovery occurred after that, total public spending remained at approximately 20% of GDP until 2003. The legacy of low priority accorded to health from the Soviet era was maintained, with public spending on health ranging from approximately 4% to 8% of total public spending. As a result, public spending on health hovered at approximately 1% of GDP between 1996 and 2003 (WHO 2009). Economic reforms introduced in 2003 led to a remarkable improvement in the fiscal climate, with the ratio of public revenue to GDP increasing from approximately 16% in 2003 to an estimated 30% in 2008 (IMF 2009). As the fiscal situation improved, the

99 The description of the Georgian reform is based on Gotsadze (2008) as well as additional information provided by George Gotsadze in personal communications.

proportion of public spending devoted to health fell, dipping below 5% in 2007. Subsequently, government spending on health has remained below 2% of GDP. Historically, OOPS on health has been high, ranging from 70% to 80% of total health spending (WHO 2009).

Following years of internal debate regarding how to tackle the issue of health financing, the Georgian Government initiated a radical reform in 2007. The strategy was to target the limited available public funding to the most vulnerable groups, moving away from the citizenship-based system of entitlement, which had resulted in a very narrow package of covered services and high levels of OOPS. This involved explicitly reducing the breadth of public coverage by excluding the proportion of the population considered not poor. Because even non-poor households are at risk of becoming poor in the event of catastrophically costly illness, the promotion of substitutive VHI is an explicit part of the reform strategy and aims to channel some OOPS into pre-payment in order to reduce financial barriers to care for non-poor households.

Implementation of the reform built on changes to social security introduced in 2005, when the Georgian Government established a new administrative system using proxy means-testing to identify poor households. Initially, the system was used to provide these households with income support and, later, with health benefits. Targeted health benefits were piloted in two regions in 2007, followed by a nationwide roll-out in 2008. In 2007, the eligibility threshold was raised in order to lower the number of beneficiaries (Hou and Chao 2008).

Poorer households that are eligible for statutory coverage receive a voucher entitling them to free, statutory health cover from one of several competing private insurance companies. Annual premiums – calculated using actuarial methods – determine the level of funding transferred from the state budget to the insurers each year. The government-defined benefits package to which poor households are entitled covers the cost of medical services up to an established annual limit for certain services and provides a negative list of excluded services (for example, services funded from other programmes including PHC, TB and HIV/AIDS; non-emergency self-referrals to specialists; spa treatment; organ transplants; and some other services). The scope of the benefits package for the poor has grown over time.

There are currently two options for substitutive VHI coverage in Georgia. There is a state-regulated VHI package that can be offered by private insurers to non-poor households or to corporate clients, but only within the premium limit set by the government. From 2009, individuals can receive partial premium subsidies for the purchase of this package equal to 40 Georgian lari (approximately US$ 25), as long as the annual premium is not more than

approximately US$ 115 per person). The government-specified VHI package is still quite limited, but it does represent an increase in benefits over those covered under the state-funded programmes prior to 2009. This package currently does not cover outpatient prescription drugs – a major component of OOPS (Hou and Chao 2008). However, there is some coverage against emergency outpatient and inpatient treatment, up to a specified limit. Substitutive VHI is also offered by private insurers to groups through unregulated corporate or private packages, with a wide range of benefits and premium options.

The Georgian reforms are the first attempt by a CE/EECCA country with very low levels of public spending on health to introduce reform by narrowing coverage breadth (that is, explicitly excluding the non-poor population, concentrating public spending on the poorest households and encouraging and subsidizing the rest of the population to buy VHI for a government-defined benefits package). The government initiatives to encourage and subsidize a minimum benefits package for VHI are new, and it is too early to assess their success. Enrolment rates for 2009 suggest that uptake of subsidized VHI has been lower than expected (Cashin et al. 2009), but an important process has been set in motion. The government, private insurers and the population have started to identify the right balance of coverage, premiums and subsidies that may increase demand for a VHI package which is feasible for private insurers. Reaching this balance may take longer in new markets where information is less robust and there is not an insurance culture, but Georgia has taken the first steps. Furthermore, since the start of the reform the total number of individuals covered by private insurance, both statutorily and voluntarily, has grown significantly. By late 2008 up to 1.1 million (26% of the population) were covered, of whom approximately 38% were covered by VHI (Gotsadze 2008). This translates into an estimated 10% of the population with VHI – quite a large share when compared with other countries with similar economic and labour market characteristics to Georgia.

Undoubtedly, Georgia's health financing reform has its risks, but the country's failure to undertake effective reforms in previous years – combined with its health system's extreme dependence on OOPS – indicates that taking no action would also have been a high-risk strategy. The reform may facilitate an expansion of statutory coverage as the fiscal situation improves. However, it could equally induce continued low levels of public spending on health, as changes to the eligibility threshold and scope of benefits covered demonstrate.

C. Factors inhibiting or enabling the development of VHI

Gaps in the breadth, depth and scope of public coverage exist in CE/EECCA countries, although their magnitude varies considerably in relation to levels of public spending on health. However, the existence of gaps in coverage has not been sufficient to ensure the development of a viable market for VHI in most of the region; a wide range of obstacles stand in the way – for example, ability to pay, lack of regulatory capacity and the continued presence of informal payments.

Limited ability to pay is a major barrier to the development of a role for VHI. In some countries, this is compounded by the absence of employer or government interest in subsidizing VHI premiums, leading to calls for greater use of tax incentives. However, internationally there is little evidence to suggest that tax subsidies encourage uptake of VHI, and the associated costs may be substantial. In practice, individuals' and employers' confidence in the market are more important factors in triggering market development (Colombo and Tapay 2003). Suspicion of insurance markets is particularly prevalent in countries that have experienced pyramid schemes, but it also reflects a wider distrust among the population directed towards private markets (due to fears about high costs and corruption) and lack of experience in buying any insurance generally. Public attitudes to VHI may be further complicated by a strong belief in the role of the state in ensuring universally free access to health care, leading to a preference for public financing and provision.

The persistence of informal payments in place of other more transparent payment mechanisms in the public and private sectors (Kornai and Eggleston 2001; Balabanova and McKee 2002; Ensor and Duran-Moreno 2002; Ensor 2004; Allin, Davaki and Mossialos 2006) may inhibit the development of VHI as a viable policy option in three ways. First, VHI is not always able to protect against informal payments, so people may fear having to pay twice – in the form of VHI premiums and then further informal payments – to access a particular service. Second, those who do purchase VHI must be certain that provider payment via a third party will not jeopardize the speed or quality of service they would expect to receive on the basis of informal payment. Third, even if individuals can afford VHI premiums, it may still be cheaper (in the short term) to pay out of pocket. The absence or near-absence of informal payments probably contributed to the development of complementary VHI as part of the Slovene health financing system, as did the large size of the Slovene VHI market.

Quality and information are further issues affecting demand for VHI. If insurers are unable to ensure clinical quality (for example, where they have

limited leverage over providers), people may not perceive any additional benefit in paying for health care via VHI. Poor information regarding the costs of and waiting times for publicly financed services may prevent some people from recognizing a need for VHI.

People may want to purchase voluntary cover but be prevented from doing so due to a range of constraints relating to supply-side factors. In some countries, markets have not developed because there has been no government interest in fostering VHI, or legislation introducing VHI has not been accompanied by sufficiently clear administrative and regulatory frameworks, leading to uncertainty and inertia among insurers. For example, inadequate regulation – such as insufficient reserve requirements – weakens markets for VHI and has, in some countries, led to insurer collapse (Dixon, Langenbrunner and Mossialos 2004), while lack of regulatory capacity to enforce data collection and the provision of information for consumers may impede effective competition.

Weak regulation is not the only supply-side factor affecting VHI development. Insurers may be held back by a lack of operational capacity, such as insurance know-how, particularly with regard to medical underwriting (which prevents them from developing appropriate products), but also in terms of human resources, administration, accounting and management practices. These problems can be compounded by limited private infrastructure and uncertainty surrounding public entitlements. Insurers that rely on private sector health care providers may struggle if private providers face high entry costs or if private provision is poorly developed, as is usually the case outside large urban centres. Where the public benefits package is not adequately defined, or where it changes from year to year, insurers may find it difficult to design products and people may not be able to determine the extent of additional cover they require. Clarity regarding who and what is covered from public sources, as in the case of Slovenia and Georgia, can therefore be a vital step in facilitating VHI to fill gaps in public coverage. However, clarity may not be enough. Insurers are sometimes wary of pooling risks for certain services (for example, drugs, dental care and cover of statutory user charges) due to concerns about adverse selection. In Estonia, for example, where adult dental care was explicitly removed from the publicly financed benefits package, a complementary VHI market has not materialized (Thomson and Mossialos 2009).

A recent report identifies the following factors as enabling VHI market development: a substantial middle class, capacity for regulatory oversight and management, viable financial markets in which to invest reserves, and the availability of other sources of health care funding (Gottret and Schieber 2006). To this list could be added, public trust in insurance institutions and

health care providers, employer interest in providing benefits for employees, and political will to foster and support a market for VHI.

D. Health policy concerns

This review of VHI in CE/EECCA countries suggests that policy-makers in the region face substantial challenges in expanding voluntary coverage. They also face challenges in ensuring that expansion does not jeopardize the attainment of health financing policy goals. The regional experience raises concerns about efficiency, equity and viability, which are summarized in the following paragraphs.

Efficiency. Concerns are tempered, for the time being, by the limited size of most VHI markets, but are likely to increase in importance if VHI coverage expands. The main challenges are preventing cost inflation arising from voluntary insurers' lack of purchasing power and from limited competition in VHI markets, along with ensuring that the existence of VHI does not distort national health system priorities such as improved purchasing, greater cost–effectiveness and coordinated care. As markets mature and insurers become more adept at pricing and product design, regulators will need to prevent competition from being stifled by consumers' inability to compare products in terms of value for money.

Equity. Concerns regarding equity are more pertinent and include issues of financial protection, affordability and inequalities in access to health care. Where policy-makers have aimed to curb public spending in the interest of maintaining fiscal balance by shifting health care costs onto households (as in Slovenia and Croatia), the effect has been to lower financial protection and equity. While VHI (especially in Slovenia) mitigates the harmful effects of greater reliance on OOPS, increased public funding may have been a viable alternative and would have improved attainment of financial protection and equity objectives. In line with international experience, VHI tends to benefit the more privileged groups in society; poorer groups are less likely to be covered because they are not in employment or cannot afford individual cover. Perhaps for this reason, policy-makers in the region had not – until the Georgian reforms – explicitly attempted to develop VHI as a means of lowering the financial burden of high levels of OOPS. Analysis in coming years will show whether the Georgian reforms prove successful in transforming OOPS into pre-payment.

Viability. The ongoing viability of VHI markets may be threatened by problems relating to adverse selection, which may, in turn, have serious implications where statutory health insurance funds provide VHI and rules requiring the separation of statutory and voluntary activity are not strictly

enforced. Devising an appropriate regulatory framework requires political and technical capacity. Regulators must be able to respond to changes in insurer behaviour as markets mature and insurers become health system stakeholders with vested interests. Regulation may also have to adapt to international developments such as EU accession leading to membership of the Single European Market. For example, the influence of the European Commission's Third Non-Life Insurance Directive on the freedom of national governments to determine regulatory frameworks in VHI is likely to grow over time (Thomson and Mossialos 2003, 2007).

E. Conclusions

This chapter does not promote VHI. Indeed, the minimal role played by VHI in the region to date – combined with the well-known market failures that plague voluntary insurance – suggest caution when considering its expansion. Nevertheless, VHI remains part of the policy debate in many CE/EECCA countries. It is, therefore, useful to draw lessons from the few countries in the region with longer experience of health financing reform involving VHI, better to inform policy-makers as they address the question of what role VHI might play.

As with any reform option, two considerations are essential: the context or starting point and clarity about objectives. For countries such as the Czech Republic, which have achieved universal coverage and substantial depth and scope of service coverage through public funding, VHI would appear to have little role to play (and indeed plays only a minor role). In Slovenia and Croatia, in contexts where governments had capacity to spend more, VHI was introduced as part of broader health financing reforms explicitly designed to limit public spending on health by shifting costs onto households and, at the same time, to mitigate the harmful effects of greater reliance on OOPS. In Georgia the intent was different. Given already high levels of OOPS and a reform agenda aimed at concentrating public spending on the poorest households, the purpose of promoting VHI has been to try and improve financial protection for non-poor households that do not qualify for fully subsidized coverage. Thus, in each case the role specified for VHI has been context specific.

The factors shown in Box 11.1 may also guide policy-makers when approaching changes involving VHI. These include a focus on enhancing financial protection rather than simply trying to expand coverage; effort to ensure complementarity between public and private sources of revenue for health care; and a clear strategy, from the outset, for regulating the market.

Box 11.1 *Policy approaches to health financing reform involving voluntary health insurance Enhance financial protection rather than expanding coverage*

- Identify gaps in public coverage and financial protection and other barriers to access.
- Focus on efforts to enhance financial protection for those who need it most, rather than expanding coverage for groups that are better off, such as civil servants and other formal sector employees.

Ensure complementarity between public and private sources of health care financing

- Identify gaps in public coverage before deciding on the role of voluntary health insurance (VHI).
- Attempt to shape the VHI market from the outset to avoid the pitfalls of ad hoc development, which tends to result in poorly regulated and purely supplementary markets.
- Ensure that VHI supports – rather than skews – national priorities for the health sector.
- Consider how to protect public sources of financing if VHI is intended to complement rather than substitute for public funding.
- Enforce boundaries between the compulsory and voluntary coverage that may be offered by the same entity/agency/company.
- Consider the equity and efficiency consequences of subsidizing VHI from tax revenues.
- Design VHI as an integral part of the wider health financing system.

Strengthen the regulatory framework to ensure financial and consumer protection

- Establish a framework with clear objectives and lines of responsibility, preferably with Ministry of Health involvement and focusing on the specific characteristics of health insurance.
- Consider the role of specialist and non-profit-making insurers; the former to ensure financial viability, the latter to keep premiums low and fairly priced. However, differential treatment of insurers, if applied, should be based on insurer behaviour rather than profit status.
- Bear in mind potential tension between competition, equity and user choice.
- Consider the role of centralized sources of comparable information for consumers in facilitating price competition.
- Consider the importance of centralized data collection to encourage transparency.
- Be aware of the European Union's legal framework for non-statutory health insurance and the potential for legal challenges to national regulation.
- Be prepared to adapt the regulatory framework in response to market development.

References

Ahmedov M et al. (2007). Uzbekistan: Health system review. *Health Systems in Transition*, 9(3):1–206.

Albreht T (2006). *Risk-equalizing schemes: the next chapter*. Gütersloh, Health Policy Monitor (http://www.healthpolicymonitor.org, accessed 16 March 2009).

Albreht T et al. (2002). *Health care systems in transition: Slovenia*. Copenhagen, European Observatory on Health Care Systems.

Allin S, Davaki K, Mossialos E (2006). *Paying for 'free' health care: the conundrum of informal payments in post-communist Europe*. Global corruption report 2006. Berlin, Transparency International.

Balabanova D, McKee M (2002). Understanding informal payments for health care: the example of Bulgaria. *Health Policy*, 62:243–273.

Barr N (2004). *The economics of the welfare state,* 2nd edition. Oxford, Oxford University Press.

Cashin C et al. (2009). *Georgia private insurance-based health financing reform: 3 policy briefs*. CoReform Project. Tbilisi, Abt Associates.

Cerniauskas G, Murauskiene L, Tragakes E (2000). *Health care systems in transition: Lithuania*. Copenhagen, European Observatory on Health Care Systems.

Cheasty A (1996). The revenue decline in the countries of the former Soviet Union. *Finance and Development*, June:32–35.

Chollet D, Lewis M (1997). Private insurance: principles and practice. In: Schieber G, ed. *Innovations in health care financing: proceedings of a World Bank Conference,* 10–11 March 1997. Discussion Paper Number 365. Washington, DC, World Bank.

Colombo F, Tapay N (2003). *The Slovak health insurance system and the potential role for private health insurance: policy challenges*. Paris, Organisation for Economic Co-operation and Development.

Cotman P (2005). Slovenia: risk equalisation scheme in the complementary health insurance. *Aim Flash Extra*, 3:7.

Davis C (2001). Reforms and performance of the medical systems in the transition states of the former Soviet Union and eastern Europe. *International Social Security Review*, 54(2–3):7–56.

Dixon A, (2002). Are medical savings accounts a viable option for funding health care? *Croatian Medical Journal,* 43(4): 408–416.

Dixon A, Langenbrunner J, Mossialos E (2004). Facing the challenges of health care financing. In: Figueras J et al., eds. *Health systems in transition: learning from experience*. Copenhagen, WHO Regional Office for Europe:51–83.

Dlouhy M (2009). *Private health insurance in the Czech Republic: a study for the European Commission*. London, LSE Health.

Ekman B (2004). Community-based health insurance in low-income countries: a systematic review of the evidence. *Health Policy and Planning*, 19(5):249–270.

Ensor T (2004). Informal payments for health care in transition economies. *Social Science and Medicine*, 58(2):237–246.

Ensor T, Duran-Moreno A (2002). Corruption as a challenge to effective regulation in the health sector. In: Saltman R, Busse R, Mossialos E, eds. *Regulating entrepreneurial behaviour in European health care systems*. Buckingham, Open University Press:106–124.

Fajth G (1999). Social security in a rapidly changing environment: the case of the post-communist transformation. *Social Policy and Administration*, 33(4):416–436.

Ferge Z (1997). The changed welfare paradigm: the individualization of the social. *Social Policy and Administration*, 31(1):20–44.

Foubister T, Thomson S, Mossialos E (2004). *Health care financing in ten central and eastern European countries*. Copenhagen, WHO Regional Office for Europe.

Foubister T et al. (2006). *Private medical insurance in the United Kingdom*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Gaál P, Riesberg A (2004). *Health care systems in transition: Hungary*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Gamkrelidze A et al. (2002). *Health care systems in transition: Georgia*. Copenhagen, European Observatory on Health Care Systems.

Gotsadze G (2008). Health care financing reforms in Georgia. *Presentation to GTZ, Frankfurt, 28 October 2008*.

Gottret P, Schieber G (2006). *Health financing revisited*. Washington, DC, World Bank.

Hakobyan T et al. (2006). Armenia: health system review. *Health Systems in Transition*, 8(6):1–180.

Hanvoravongchai P (2002). *Medical savings accounts: lessons learned from international experience.* EIP/HFS/PHF Discussion Paper No. 52. Geneva, World Health Organization.

Holley J, Akhundov O, Nolte E (2004). *Health care systems in transition: Azerbaijan*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Hou X, Chao S (2008). *An evaluation of the initial impact of the medical assistance program for the poor in Georgia*. Policy Research Working Paper 4588. Washington, DC, World Bank.

Ilkhamov FA, Jakubowski E (2001). *Health care systems in transition: Uzbekistan*. Copenhagen, European Observatory on Health Care Systems.

IMF (2009) [web site]. Georgia and the IMF links to Article IV consultation and other reports containing government financial operations data. Washington, DC, International Monetary Fund (http://www.imf.org/external/country/GEO/index.htm, accessed 31 August 2009).

Jesse M et al. (2004). *Health care systems in transition: Estonia*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Karaskevica J, Tragakes E (2001). *Health care systems in transition: Latvia*. Copenhagen, European Observatory on Health Care Systems.

Kornai J, Eggleston K (2001). *Welfare, choice and solidarity in transition: reforming the health sector in eastern Europe*. Cambridge, Cambridge University Press.

Koulaksazov S et al. (2003). *Health care systems in transition: Bulgaria*. Copenhagen, European Observatory on Health Care Systems.

Kuszewski K, Gericke C (2005). *Health Systems in Transition: Poland.* Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Kutzin J, Cashin C (2002). Health system funding. In: McKee M, Healy J, Falkingham J, eds. *Health care in central Asia*. Buckingham, Open University Press:92–107.

Langenbrunner J (2002). Supplemental health insurance: did Croatia miss an opportunity? *Croatian Medical Journal*, 43(4):403–407.

Lavigne M (2000). Ten years of transition: a review article. *Communist and Post-Communist Studies*, 33:475–483.

Lekhan V, Rudiy V, Nolte E (2004). *Health care systems in transition: Ukraine*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Lekhan V, Rudiy V, Shishkin S (2007). *The Ukrainian health financing system and options for reform*. Health Financing Policy Paper. Copenhagen, WHO Regional Office for Europe, Division of Country Health Systems (http://www.euro.who.int/document/E90754.pdf, accessed 20 November 2008).

MGEN (2006). *Missions of economic general interest carried out by mutual societies in Europe, between economic activity and social services*. Brussels, Mutuelle Générale de l'Education Nationale.

Milenkovic Kramer A (2006). *Is voluntary health insurance in Slovenia really a success story?* [dissertation]. London, London School of Economics and Political Science.

MISSOC (2008). *Comparative tables on social protection: situation on 1 July 2008*. Brussels, European Commission (http://ec.europa.eu/employment_social/missoc/db/public/compareTables.do?lang=en, accessed 22 April 2009).

Mossialos E, Thomson S (2004). *Voluntary health insurance in the European Union*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Müller K et al. (2005). *Transforming the Latvian health system: accessibility of health services from a pro-poor perspective*. DIE Studies No. 7. Bonn, Deutsches Institut für Entwicklungspolitik.

Nichols LM, Prescott N, Phua KH (1997). Medical savings accounts for developing countries. In: Schieber G, ed. *Innovations in health care financing*. Washington, DC, World Bank:233–246.

Nuri B, Tragakes E (2002). *Health care systems in transition: Albania*. Copenhagen, European Observatory on Health Care Systems.

OECD (2004). *Private health insurance in OECD countries*. Paris, Organisation for Economic Co-operation and Development.

Poletti T et al. (2007). The desirability and feasibility of scaling up community health insurance in low-income settings: lessons from Armenia. *Social Science and Medicine*, 64(3):509–520.

Rokosová M et al. (2005). *Health care systems in transition: Czech Republic*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Rys V (2001). Social protection in central and eastern Europe ten years after. *International Social Security Review*, 54(2–3):3–6.

Sekhri N, Savedoff W (2005). Private health insurance: implications for developing countries. *Bulletin of the World Health Organization*, 83(2):127–134.

Sloggett A (2002). *A report on the revolving drug fund schemes originated by Oxfam UK in Armenia, Azerbaijan and Georgia*. Oxford, Oxfam.

Slovenia Business Week (2004). *Insurance association opposes elimination of complementary health insurance*. Ljubljana, Slovenia Business Week (http://www.gzs.si/eng/news/sbw/head.asp?idc=14304, accessed April 2004).

Thomson S, Mossialos E (2003). The regulatory framework for voluntary health insurance in the European Union: implications for accession countries. In: den Exter A, ed. *EU accession and its consequences for candidate countries' health systems*. Rotterdam, Erasmus University.

Thomson S, Mossialos E (2007). Regulating private health insurance in the European Union: the implications of single market legislation and competition policy. *Journal of European Integration*, 29(1):89–107.

Thomson S, Mossialos E (2009). *Private health insurance in the European Union.* Brussels, European Commission.

Toplak S (2005). Constitutional court failed to please Vzajemna and Adriatic. *The Finance Business Daily Newspaper*, 18 November 2005 (http://www.finance-on.net/show.php?id=137526, accessed 16 March 2009).

Tsaturyan S (2006). *Concept paper on development of voluntary health insurance in the Republic of Armenia*. Unpublished document. Yerevan.

Voncina L, Dzakula A, Mastilica M (2007). Health care funding reforms in Croatia: a case of mistaken priorities. *Health Policy*, 80:144–157.

Voncina L et al. (2006). Croatia: Health system review. *Health Systems in Transition*, 8(7):1–106.

Vzajemna (2006) [web site]. Ljubljana, Vzajemna (http://www.vzajemna.si, accessed July 2006).

Waters H et al. (2006). *Health care modernization in central and eastern Europe.* Washington, DC, Johns Hopkins University and the Center for Strategic and International Studies.

WHO (2009) [web site]. *National Health Accounts Series*. Geneva, World Health Organization (http://www.who.int/nha/country/en/, accessed 31 August 2009).

WHO (2010) [web site]. *WHO statistical information system: health system resources*. Geneva, World Health Organization (http://www.who.int/whosis/data/Search.jsp?indicators=[Indicator].[HSR].Members, accessed 29 March 2010).

Chapter 12

Strategies to address informal payments for health care

Peter Gaál, Melitta Jakab, Sergey Shishkin

A. Introduction

Policy-makers of almost all of the CE/EECCA countries are confronted with informal payments for health care. The phenomenon is the legacy of the pre-transition health system, in which it was well-known that patients made payments to doctors for health services that should have officially been exempt from user charges (Ádám 1985; Feeley, Sheiman and Shishkin 1999; Wlodarczyk and Zajac 2002). With a few notable exceptions, such as the GDR and possibly Slovenia, there is evidence that informal payments to medical personnel were widespread during the communist period (Ádám 1989a; Masopust 1989; Marrée and Groenewegen 1997; Gaál, Evetovits and McKee 2006). Nonetheless, the issue only attracted significant international interest after the end of the communist era, when in many countries informal payments became more pervasive and took forms other than cash payments to health workers (Delcheva, Balabanova and McKee 1997; Ensor and Savelyeva 1998; Thompson and Witter 2000; Ensor and Witter 2001; Lewis 2002; Ensor 2004; Falkingham 2004). It is perhaps for this reason that informal payments are often regarded as a special phenomenon of the transition period (Lewis 2000), although the evidence suggests that they are not exclusively the product of the political, social and economic changes of the region.

In most countries, the reduction of informal payments is implicitly or explicitly on the reform agenda. Informal payments are often seen as undesirable for their assumed adverse impact on health financing policy objectives – in particular, transparency, financial protection, access to

care, and possibly efficiency – but sometimes they are simply viewed as a dysfunctional practice that is uncomfortable for patients and doctors. In other countries, efforts to reduce informal payments derive from a broader public policy concern with corruption in government. This reform agenda has been challenged occasionally on the grounds that not all informal payments are bad. It is suggested that informal payments can ensure the continuous supply of doctor services; that they may not distort access to services because physicians can and do discriminate in terms of setting prices according to the patients' ability to pay; and that they might even improve the responsiveness of health care staff (Delcheva, Balabanova and McKee 1997; Shahriari, Belli and Lewis 2001; Gaál and McKee 2005; Szende and Cuyler 2006). These contrasting views have not been fully explored with rigorous empirical evaluations, creating an environment of ambiguity for policy-making (Gaál and McKee 2005).

Despite large-scale health sector reforms, only a few countries have been able to make significant progress in reducing the burden of informal payments. It is not a coincidence that success stories are rare. The phenomenon itself is complex and its origin and impact are disputed. There is no widely accepted definition for informal payments; they are difficult to measure and even the name is a misnomer, since not all informal payments are informal in the sense that they are unaudited and unreported (Gaál et al. 2006). Therefore, the aim of this chapter is to clarify the concepts and synthesize the evidence by summarizing recent theoretical advances and empirical evidence exploring the nature of informal payments, and to evaluate informal payment reform experiences. Section B provides a definition and typology of informal payments. Section C links informal payments to health financing policy objectives by examining the available empirical evidence. Section D provides a description of selected reform experiences from Hungary, the Russian Federation, Kyrgyzstan and Tajikistan. Section E analyses these cases, with occasional reference to other countries, and Section F concludes with lessons learnt.

B. Definition, typology and origin of informal payments

Observationally, the most common form of informal payment is payment to medical personnel, but a wide variety of other informal cash and in-kind contributions are also reported in CE/EECCA countries. Payments can be cash or in kind and paid to different medical personnel involved in patients' care process: the treating doctor, surgeon, anaesthesiologist, nurses, laboratory technicians and other diagnostics personnel, and so on. In some countries, receiving medical treatment during hospitalization may require that patients contribute (with cash or in kind) towards the needed inputs of

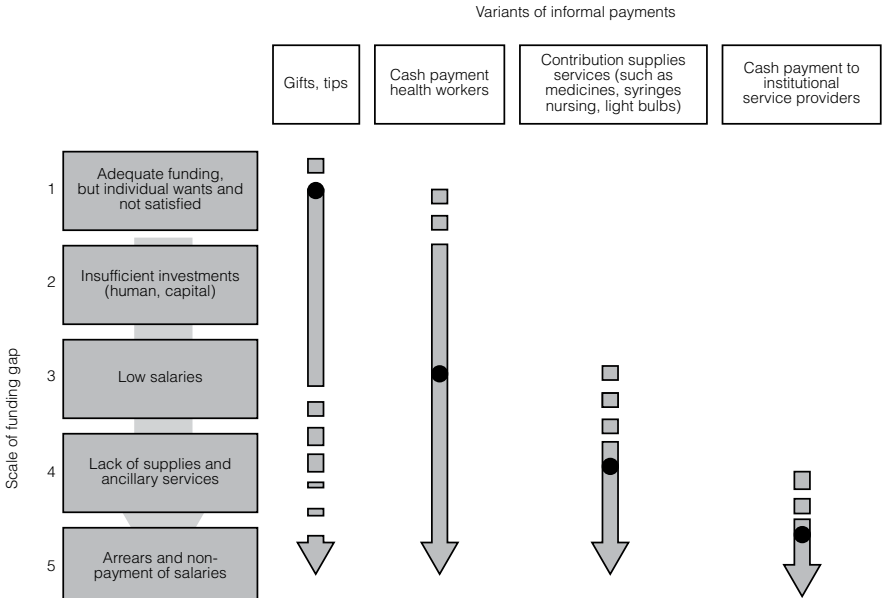


Fig. 12.1 *The phases of financial hardship and typologies of informal payment*

Source: Gaal et al. 2006.

care, including medicines, medical supplies (syringes, intravenous tubes) and even nonmedical supplies (light bulbs, soap, linen). Furthermore, relatives complement meagre staffing resources by providing catering and nursing care, as well as administering medicines and injections (Thompson and Witter 2000; Ensor and Witter 2001; Shahriari, Belli and Lewis 2001; Shishkin et al. 2003; Ensor 2004; Falkingham 2004).

Across the region, we find wide variety in the manifestation of informal payments, with the extent and type linked to the degree of economic downturn and fiscal contraction experienced in the early transition period (see Fig. 12.1). There are a few countries with no or limited informal payments: the Czech Republic, Slovenia (Masopust 1989; Lewis 2000, pp. 5–6; Central and Eastern European Health Network 2002) and possibly Estonia. In these health systems, salaries are relatively high and supplies are not lacking. In others, cash payments to health workers are prevalent, while contributions for medicines, medical and other supplies are uncommon, for example in Hungary, Slovakia, Croatia and Lithuania. While the transition period severely affected the economy and budget of these countries, there was limited decline in health care financing in real terms. Typically, salaries paid to medical staff were low and did not maintain the same level as the salary increase in the commercial sector, but the health system did not lack essential supplies. In contrast, in a large number of countries, informal payments are not limited to payment to

doctors but payment (in cash and/or in kind) for inputs required for treatment, such as medicines and supplies (for example, in Poland, the Russian Federation, Ukraine, Tajikistan, Armenia, Kyrgyzstan and Georgia). Further, in some of these countries, the crisis was so severe in the early transition period that even the salaries of personnel were in arrears, or not paid at all (Lewis 2000).

Despite a general agreement on what types of payment constitute "informal payment", there is no agreement on an overarching definition and conceptual framework. Researchers have suggested different definitions, which emphasize different distinctive characteristics of informal payments, such as corruption, illegality and informality (Lewis 2000; Shahriari, Belli and Lewis 2001; Ensor 2004), but such payments may not be (viewed as) corrupt, may not be illegal and may not even be informal, depending on the legal context of the country (Gaál 2004a). For example, in Kyrgyzstan and recently in Tajikistan, informal payments are not viewed by policy-makers as corrupt practices; their existence has been part of the policy dialogue, they are integrated into the national health system performance monitoring frameworks and they are not punished. In Hungary, health workers are obliged to declare the income from informal payments in their tax returns. If they do so, the payments cease to be informal. Furthermore, not all informal transactions are classed as informal payments. Unreported payments in a purely private setting – to evade taxation – are not considered to be official informal payments (Lewis 2000).

What is the distinctive feature of informal payments, which differentiates them from other OOPS? On the basis of the critique of earlier definitions and the review of the variants of informal payments observed in the region, Gaál and colleagues (2006) argue that the reference point for the definition of informal payments is the terms of entitlement, which describe the services that can be utilized by patients, along with what these services comprise and how much formal OOPS has to be made. They argue that all informal payments are some form of direct contribution *in addition to* what is formally required; that is, what the terms of entitlement determine. They arrive at a definition, which emphasizes this characteristic of the transaction: "Informal payment is a direct contribution, which is made in addition to any contribution determined by the terms of entitlement, in cash or in kind, by patients or others acting on their behalf, to health care providers for services that the patients are entitled to" (Gaál et al. 2006, p. 276). The advantages of this definition are that it is descriptive, encompasses all types of informal payment described above, and is not based on a judgement about the nature and motivation of such payments (for example, gratitude gifts, coercive payment, corruption). It also fits with how informal payments are viewed by policy-makers in CE/EECCA countries.

There are different explanations for the origin of informal payments, with different implications for policy-making. Informal payments are a subset of OOPS, with the distinguishing characteristic that formal OOPS is stipulated in the terms of entitlements, whilst informal payments are made in addition to these.[100] But why do people give more than is required? Is informal payment a special tradition of "thanksgiving"? Is informal payment a symptom of people being unaware of their entitlements? Or is such payment a symptom of the failure of the health care system to deliver what has been promised? The answer to these questions is crucial for policy-makers, not only because they determine what action can and should be taken regarding informal payments but also because they indicate whether it is necessary to do anything at all. In this respect, the most important difference lies between the cultural (gift giving) theory and other (legal, rational economic, social capital, "inxit") informal payment theories (Szabó 1973; Petschnig 1983; Ádám 1986; Ensor and Duran-Moreno 2002; Lewis 2002; Gaál and McKee 2004, 2005; Gaál et al. 2006). The cultural explanation essentially considers informal payment to be a benign, cultural phenomenon, motivated by gratitude, presented after the service and entirely voluntary in nature (Szabó 1973). If this is true for the bulk of informal payments, then the causes of informal payments are outside the health care system and the only way to reduce them is to change the culture of the society. However, this is not at all necessary, given that gratuities do not adversely affect the performance of the health care system. In contrast, all the other theories assume that informal payments are problematic because they behave similar to a fee-for-service payment, with its well known negative impact on equity, efficiency and other health financing policy objectives (Gaál and McKee 2005). Nonetheless, there is a smaller – yet important – difference between the legal–ethical (corruption) explanation and the rest of the models within the fee-for-service approach to the argument. The implication of the public sector corruption framework (Ensor and Duran-Moreno 2002; Lewis 2002) is that informal payments are a form of bribery and the primary responsibility for them lies with corrupt public servants, who need to be punished in order to reduce informal payments. In contrast, the economic, social capital and "inxit" frameworks all find the origin of informal payments in certain structural and operational features of the health care system (Gaál and McKee 2004, 2005; Gaál et al. 2006). In particular, the "inxit" theory (Fig. 12.2) incorporates all but one explanation into a single, synthesizing model.

Direct and indirect evidence suggests that the case for the cultural (gratitude) explanation is weak for the bulk of informal payments. First, it has been

100 As mentioned above, another important element of OOPS is the "purely private" purchase of privately provided services, for example when someone pays for a visit to a private practitioner that is outside of the publicly regulated benefits package. Of course, this type of OOPS is not considered to be informal payment. In these cases, it is the private provider who sets the terms of entitlement; therefore, all payments made accordingly are considered to be formal OOPS.

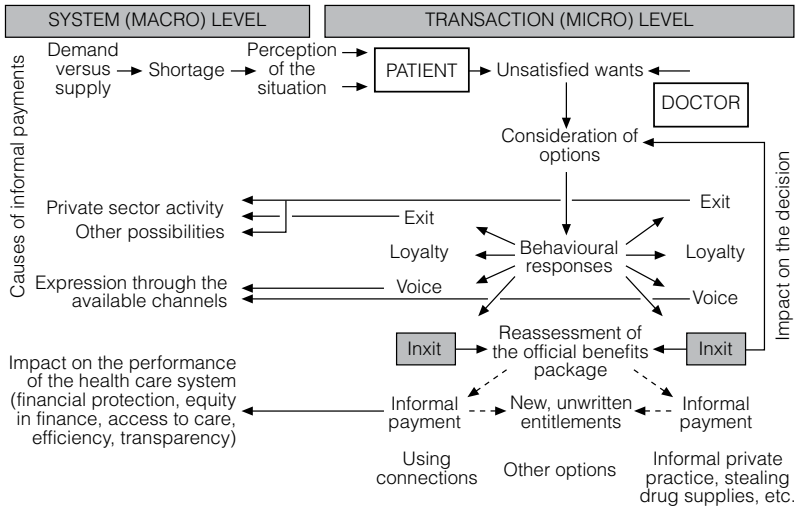


Fig. 12.2 *The cognitive–behavioural model of informal payment*

Source: Gaal and McKee 2004.

suggested that payments made to personnel after an episode of care are motivated by gratitude as opposed to payments given beforehand. However, it is not possible to distinguish clearly the beginning and the end of treatment episodes for many health services, especially in the context of primary and chronic care (Petschnig 1983; Ádám 1986; Buda 1992; Delcheva, Balabanova and McKee 1997; McKee and Chenet 1997). Second, in-kind contributions of medicines and supplies are not compatible with the cultural explanation of informal payments. Rather, these reflect contexts in which the large hospital infrastructure inherited from the Soviet era adsorbed a large share of the drastically reduced government budget, leaving limited resources to purchase medicines and medical supplies and remunerate personnel adequately. Finally, most surveys exploring motives for informal payment suggest that while gratitude is a widespread motivation of making informal payments so is some form of coercion. Disentangling the two motives is no simple task. For instance, the 2004 survey of discharged patients in Kyrgyzstan asked people why they gave to different categories of medical personnel (Fig. 12.3). There is considerable variation across these categories in the balance between gratitude and coercion. Respondents were more likely to consider payments to nurses and treating doctors as a gift (82% and 75%, respectively). By comparison, nearly all payments to diagnostics staff, laboratory staff, physiotherapists and anaesthesiologists reflected some form of demand for payment. In Hungary, Gaál (2004b) combined a household survey with in-depth follow-up interviews carried out in a middle-sized town. The study found at least three manifestations of coercion in all the follow-up qualitative interviews of those survey respondents who had previously reported only giving

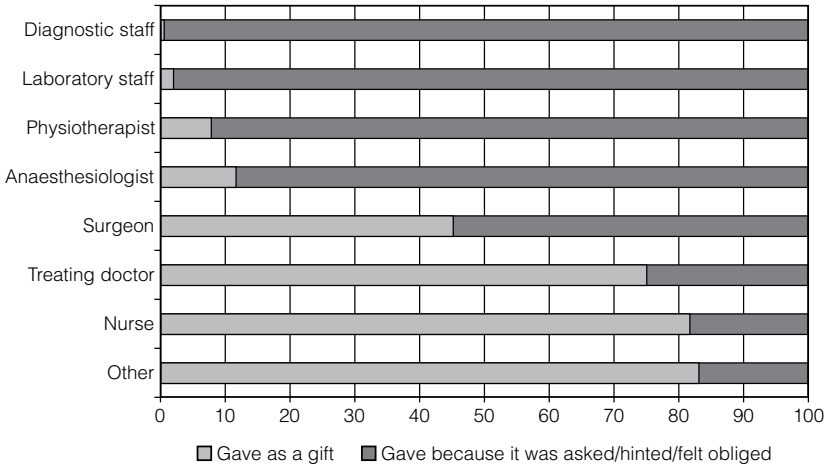


Fig. 12.3 *Reasons for paying to access medical personnel in Kyrgyzstan, 2006*

Sources: Authors' own calculations based on a sample of 5337 previously hospitalized patients with the sample representative of all hospitalizations in October 2006; see Jakab and Kutzin (2008) for a description of the Discharged Patients Survey that was used in Kyrgyzstan.

for non-coercive reasons (gratitude, custom) in the survey. This suggests that surveys do not accurately capture the motivation for informal payments; not primarily because respondents give biased answers, but because in practice the feeling of gratitude is inextricably intertwined with pressures to pay.

C. Is informal payment really a problem?

To what extent informal payments constitute a policy problem depends on how they impact on the performance of the health care system. Informal payment is often regarded as a problem in itself, but why should policy-makers be bothered if informal payments do not have a negative impact on the attainment of the health policy objectives outlined in Chapter 1? Overall, sound evidence linking informal payments to all the important policy objectives is limited. There is a growing evidence base on the impact of informal payment on financial protection, equity and transparency. However, evidence on quality and efficiency are scarce or remain unpublished.

Informal payment disproportionately burdens the poor. Informal payments for medicines and supplies behave like any other formal out-of-pocket charge, and there is little doubt that they are regressive. The much-debated issue in terms of equity is whether informal payment to medical personnel is equitable, with physicians practising a pattern of price discrimination (charging lower prices to the poorer and higher prices to the richer patients). Early evidence is mixed and hampered by data limitations, in terms of obtaining data on informal payments

Table 12.1 *Predicted informal payments to medical personnel and annual consumption in Kyrgyzstan in 2004*

	Predicted informal payment among those who pay (KGS)	Annual per capita consumption (from KIHS) (KGS)	Informal payment as a percentage of monthly consumption (KGS)
Poor	534.76	4 501.70	11.9
Middle	665.63	8 674.30	7.7
Rich	668.12	18 998.82	3.5
Total	**641.63**	**10 431.60**	**6.2**

Source: Jakab 2007.

Note: KGS: Kyrgyz som; KIHS: Kyrgyz Integrated Household Survey.

and socioeconomic status simultaneously that are equivalent in standard (Szende and Cuyler 2006). Jakab (2007) overcame data limitations by using a unique data set of 4533 hospitalized patients in Kyrgyzstan, surveyed at home, six months after their discharge from hospital. The study showed that the poor are not less likely to make informal payments to medical personnel than the non-poor population, but they pay slightly less when they do pay, controlling for a number of other demand- and supply-side variables. Informal payments to medical personnel for one hospitalization amounted to 11.9% of the monthly income of a poor household, 7.7% of a middle-income household, and 3.5% of a rich household (Table 12.1). Thus, the price discrimination practised by medical personnel is not sufficient to compensate variation in ability to pay. In Hungary, the findings of a secondary analysis of pre-transition surveys showed that the poor were less likely to make informal payments than the rich, but there were no significant differences in the average informal payment sum per transaction (Gaál 2004a). Therefore, research in both low- and high-income settings shows that informal payment to medical personnel does not appear particularly equitable with a built-in targeting mechanism, as claimed.

The mechanisms used by poor households to cope with high informal payments can be just as detrimental for household living standards as the coping mechanisms reported in countries with high formal OOPS. For instance, in the informal payment survey conducted in four *rayons* in Tajikistan, over 70% of hospitalized patients reported that they found it very difficult to collect money for hospitalization and over 30% had to delay hospitalization in order to find the necessary resources. Coping mechanisms for doing so included borrowing; selling assets, produce and/or animals; using savings; decreasing consumptions; and/or seeking help from relatives (Jakab et al. 2008). Similar figures were also reported in Kyrgyzstan prior to the reforms. Further, there is some evidence from Hungary that a significant portion of households (one in

five) use non-regular sources of income (mainly savings and donations, and to a minor extent sale of assets) to cover informal payments (Gaál 2004a). Similar findings have been reported from Poland and Romania (Central and Eastern European Health Network 2002, pp. 38–39).

There is evidence that informal payment hampers access to care to a different extent in different countries. The data on the level and distribution of informal payment do not fully reflect its true burden on the poor, if the large expected payments deter or delay the seeking of health care, as is the case with formal user charges. There is evidence from the lower income countries of the region that this occurs. In Kyrgyzstan, 14% of respondents in the nationally representative household survey of 2000 reported needing, but not seeking, care, and 11% of these did not seek care for financial or geographic reasons. Again, it is symptomatic of the much greater financial distress in Tajikistan that the access barriers created by OOPS (all health care payments to public providers Tajikistan are considered informal) are greater than in neighbouring Kyrgyzstan. As Table 12.2 shows, 24% of those who did not seek care when needed reported financial reasons for this, which is twice the Kyrgyz figure (Falkingham 2004). As expected, this percentage is much greater among the poorest two quintiles, at 41–42%. In contrast, in CE countries informal payments do not seem to be a significant barrier to access care, at least as far as the first contact with the health care system is concerned (Central and Eastern European Health Network 2002, pp. 36–38). A cross-country comparative (albeit not nationally representative) research survey found in 2001 that informal payments played no role in delayed or interrupted treatment in the Czech Republic and in Hungary. In Poland, however, 5% of those who delayed seeking care did so for financial reasons. The corresponding figure was 30% in Romania. In addition, 10% of those not seeking care in Romania did not do so for financial reasons. It is important to note that the finding that informal payments do not deter patients from seeking care in Hungary does not mean that informal payments do not hamper access to certain services (such as special diagnostic tests, medicines or elective surgery) once patients find themselves within the health care system. For instance, secondary analysis of a 1996 survey of primary care services found that informal payments were associated with unsolicited home visits, as well as refusal to pay that resulted in care not being received at home, and enquiries about hospitalized patients by primary care doctors (Gaál 2004a). Further, a qualitative study in Hungary revealed how operation schedules can be manipulated so that non-paying patients are in fact denied the elective surgery, until the patients decide to pay (Gaál 2004a).

Informal payments are, by definition, not transparent and hence not amenable to exemption policies. A key problem with informal payments from

Table 12.2 *Reasons why respondents did not seek medical assistance by quintiles of per capita expenditure in Tajikistan, 2000*

	Percentage giving reason				
	Poorest quintile	**Quintile 2**	**Quintile 3**	**Quintile 4**	**Richest quintile**
Could not afford	42	41	28	30	24
Too far/facility closed/poor service	1	2	4	5	3
Believed problem would go away	11	3	16	5	6
Self-medicated	42	49	50	55	65
Other	5	5	2	5	2

Source: Falkingham 2004.

a transparency perspective is that patients do not know in advance how much they will have to pay during the course of their hospitalization. This adds to the unpredictability factor of unexpected illness. In addition, patients have no defence against physician demands and may not have a sense of what is a reasonable payment for a given service. In Tajikistan, for example, in two *rayons* in which no reforms were conducted, only 21% of hospitalized patients knew in advance how much they would have to pay for their hospitalization (Jakab et al. 2008). Therefore, even if informal payments prove to be slightly less harmful in terms of the fair distribution of the financial burden and access to care than formal OOPS, informal payments are outside the control of government, and it is impossible to build a system with transparent entitlements and well-targeted exemptions. However, formalization of informal payments does not necessary create a better situation for the poor, because the design and implementation of a system of formal user charges with appropriate exemptions is a not less-challenging task in itself. A transition period – during which informal and formal payments coexist – is unavoidable, and during this period it is very difficult to establish the transparency of entitlements. Indeed, there is evidence from CE/EECCA countries that patients are often confused about their health entitlements, especially when the rules are complicated and frequently changing (Lewis 2000, p. 16; Thompson and Witter 2000; Shahriari, Belli and Lewis 2001, p. 10).

D. Reforms to address informal payments

Nearly two decades into the transition process, many countries have tried to reduce informal payments, some with more and some with less success. In this section, we review four country cases and refer to other country

experiences as necessary to draw out some general lessons for policy-makers. Kyrgyzstan illustrates a success story with a significant decline in the frequency and level of informal payments for personnel, medicines and supplies. The Kyrgyz case is interesting because it is based on a comprehensive, well-sequenced and implemented health reform plan that was implemented in a tight fiscal context and in the absence of a punishment approach. In contrast, Tajikistan concentrated solely on the implementation of a basic benefits package with relatively high co-payments and was not successful in reducing the burden of informal payments. The Russian Federation illustrates a case with mixed success, with a reduction in informal payment for personnel at the primary care level but an increase at the level of specialists and hospitals. The Russian approach is also an interesting contrast to Kyrgyzstan, since the reforms have been less far reaching and comprehensive, but there was a significant increase in public funds, which allowed an increase in salaries and an intensification of the punishment for taking informal payments. As a CE example, Hungary did not manage to reduce informal payments for personnel, but at least was successful in preventing the in-kind variant of informal payment from taking root in the system. Interestingly, Hungary implemented similar reforms to Kyrgyzstan, but these took place amidst waves of substantial decline in public funding, effectively taking out the efficiency savings from the health sector and preventing an adequate increase in salaries and funding for refurbishment of health facilities.

i. Kyrgyzstan

Kyrgyzstan is one of the success stories in the region, with documented evidence that informal payment declined over time together with the overall patient financial burden. Informal payment was reduced (Fig. 12.4) through a comprehensive reform effort that focused both on achieving efficiency gains and on returning these savings to the health sector in order to reduce patient financial burden. The Kyrgyz health system reform process began in 1996, accelerated as a result of major health financing changes in 2001, and was refined with an update of the original reform strategy in 2006. Addressing informal payments featured in the strategy, framed within the objectives of reducing overall patient financial burden and improving the transparency of the system.

To achieve reduction in informal payment, greater resources need to be allocated to salaries, medicines and medical supplies. Downsizing of the excessive hospital capacity, which absorbed 80% of the continuously declining government health budget, was the key source of re-allocation of funds from utilities and other fixed costs to variable costs such as medicines. However,

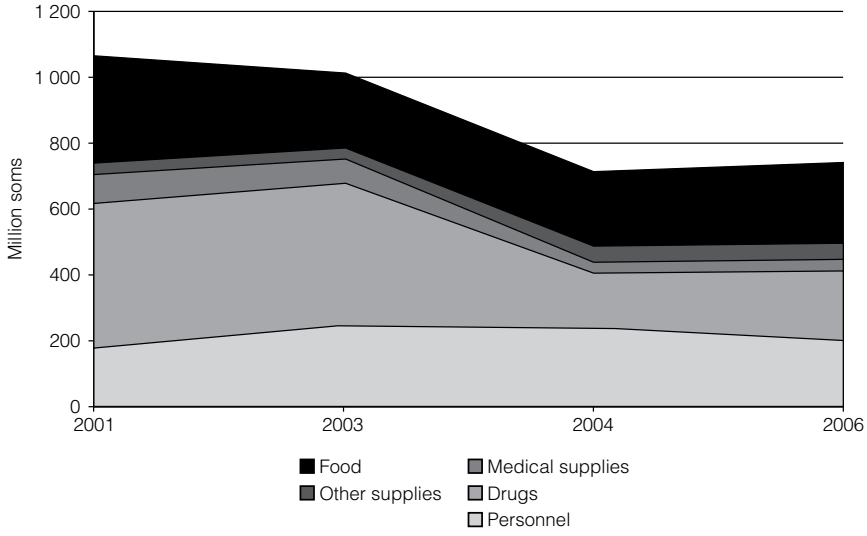


Fig. 12.4 *Total volume of informal payments, 2001–2004, in real terms (at 2001 prices) in Kyrgyzstan*

Source: Jakab and Kutzin 2008.

Notes: The WHO-DFID-CHSD Discharged Patients Survey was based on 2913 hospitalized respondents for 2001, 4533 hospitalized patients for 2004 and 5337 hospitalized patients for 2006. They were all interviewed post discharge at home to obtain more accurate responses to the informal payment questions.

the inherited system of financing and organization of health care services was not conducive to restructuring.[101] First, health financing was fragmented, with each administrative level raising its own budget and funding its own facilities without the possibility of merging funds across administrative levels. Second, payment to hospitals was based on historical line-item budgets, with a budget formulation process linked to existing capacities (beds and staff), creating a direct disincentive for downsizing. Therefore, the health sector strategy aimed at a complete overhaul of the financing and organization of service delivery.

Health financing reforms relied on three main instruments, which were gradually introduced nationwide over 2001–2004: centralization of funds pooling, new provider payment methods and transparent yet realistic entitlements.[102] Pooling reforms created *oblast*-level purchasing organizations that pooled all *oblast*, *rayon* and city tax revenues for health. This resolved the previous problem of fragmented health financing and facilitated the process of delivery system rationalization within *oblasts*. The second step involved changing the previous provider payment mechanism of line-item budgets to capitation

101 See Chapters 2 (historical legacy), 5 (pooling) and 6 (purchasing) for an analysis of the problems associated with the inherited health system.

102 See Chapters 5 (pooling), 6 (purchasing) and 7 (benefits package).

for outpatient care and case-based payment for inpatient care. Finally, a clear regulation of entitlements was introduced through the SGBP, which consists of free primary care for the entire population and hospital care with a flat co-payment payable upon admission. Co-payment varies by a number of criteria, and there are two main exempt groups. Facilities are required to allocate 80% of the collected co-payment to medicines, supplies and food and can use the remaining 20% for staff bonus payments.

This comprehensive approach began to produce the intended results by the mid-2000s. During 2001–2004, the physical capacity in the hospital sector was reduced from 1464 to 784 buildings, with a resultant change in the total operational area, utility costs and maintenance costs (Checheibaev 2004). As a result of restructuring, the internal allocation of funds in hospitals also changed: direct medical expenditures (medicines, medical supplies and food) increased from 20% to 32.7% between 2004 and 2007 relative to expenditures on staff and utilities (Ministry of Health of the Kyrgyz Republic 2008). Increased spending on medicines and supplies from efficiency gains and co-payments, coupled with increased spending on salaries and bonuses from government funds and co-payments, led to a gradual reduction in informal payments. Detailed analysis shows that the volume of informal payments declined significantly for medicines and supplies but not for medical personnel (Jakab and Kutzin 2008).

ii. Tajikistan

In contrast, Tajikistan introduced a benefits package similarly structured to that of its neighbour (in order to address equally high informal payments), but without the accompanying reforms in pooling, purchasing and restructuring. The basic benefits package was introduced in 2007 and regulates the entitlements of Tajik citizens to medical services (Jakab et al. 2008). The implementation of the basic benefits package began in 2007 on a pilot basis in four districts. Emergency care and primary care are provided free of charge, with the exception of certain laboratory and diagnostic tests. Outpatient specialized care is provided against a formal co-payment. Medicine at outpatient level is provided free of charge, based on a prescription by a primary care physician for eight types of priority disease. Inpatient hospital care is provided against a formal co-payment. Co-payment rates at the hospital level are based on eight clinical groups (for example, abdominal surgery, paediatrics, delivery, and so on) and three patient categories paying nothing, 30% or 70% of the estimated average cost of the case, creating a total of 24 co-payment levels. Patients in exempt categories do not make any co-payments. Non-exempt patients with a referral from a primary care physician pay 30% of the average cost of a treated case, whereas patients without a referral pay 70%. Patients who are not residents

of the district in which a given facility is located – along with citizens of other countries – pay the full cost of a treated case. Deliveries are free of charge if a woman has been registered with a primary care physician during her pregnancy and has made regular visits for antenatal care. The co-payment for a delivery is 30% if a woman has a written referral but has not attended regular antenatal visits; otherwise the level is 70%. Women delivering in districts in which they do not have residence permits are not eligible for any exemptions and pay the full price. At inpatient level there is no separate charge for medicines.

Early evaluation of the impact of the basic benefits package on overall patient financial burden compared trends in hospital patient payments before and after the policy in the two pilot districts with trends in two control districts. This showed no reduction in overall patient financial burden. Considering all payment categories (co-payment; payment to medical personnel; payment for medicines, supplies, laboratories and other items), the basic benefits package has not reduced significantly the share of patients who pay something towards the cost of their care. It has also not reduced patient financial burden in absolute terms, with the exception of deliveries and exempt patients. A positive effect of the basic benefits package is that the level of payment increased by less in pilot *rayons* than in control *rayons* (Jakab et al. 2008). The policy implication of these findings is that the basic benefits package alone is not a sufficient policy instrument to reduce patient financial burden.

iii. Russian Federation

The case of the Russian Federation illustrates a country with mixed success in addressing informal payments: reduction of informal payments in primary care but an increase in specialist outpatient and inpatient care. There are different estimations of the prevalence of OOPS and informal payments for health care (Table 12.3). The data of the largest survey (National Sample Survey of Household Welfare and Participation in Social Services (NOBUS)), conducted in the spring of 2003, show that 11% of patients made informal payments for outpatient care and 35% for inpatient care (Besstremyannaya and Shishkin 2005). The share of households that paid "under the table" was 17% and 29% for outpatient services and inpatient services, respectively, while 18% of patients purchased drugs in inpatient clinics during hospitalization. According to the Russian Longitudinal Monitoring Survey, the share of patients purchasing drugs during hospitalization was 43% in 2004, but unlike the NOBUS survey, the figure from this survey includes not only drugs purchased on site, but also drugs purchased in pharmacies. According to these data, the Russian Federation has an intermediate position in the region in terms of the prevalence of informal payments in specialist care, while the reform efforts

Table 12.3 *The frequency of out-of-pocket and informal payments according to national representative surveys in the Russian Federation, 1998–2008 (selected years)*

	1998	2001	2003	2004	2006	2008
Out-of-pocket payments						
Percentage of respondents, outpatient care	29.6	10.3	11.2	12.6	42.2	46.0
Percentage of respondents, inpatient care	69.2	55.4	35.4	47.2	53.8	53.7
Under-the-table payment						
Percentage of respondents, outpatient care	7.7	5.4	1.9	6.7	15.8	17.3
Percentage of respondents, inpatient care	30.2	7.1	10.1	9.0	24.4	22.8
Percentage of respondents purchasing inpatient care drugs	45.5	50.8	18.4	43.0	n/a	n/a
Surveys	CSR-CIHC	RLMS	NOBUS	RLMS	CSI	CSI
Unit of observation	Household	Household	Household	Household	Adults (16+)	Adults (16+)
Sample size	2200	4528 (12121)	44500 (117200)	4715 (12651)	2500	2000

Source: Falkingham 2004.

Notes and sources: CSR-CIHC: Center for Social Research (Moscow) and Center for International Health Care of Boston University (Feeley, Boikov and Shishkin 2001) –percentage of households, recall period was one month, gifts were included in informal payments; RLMS: Russia Longitudinal Monitoring Survey (RLMS 2004) – percentage of patients, most recent consultation for outpatient care, three-month recall period for inpatient care; NOBUS (NOBUS 2203; Besstremyannaya and Shishkin 2005) – percentage of patients, recall period was three months for outpatient care and 12 months for inpatient care, gifts were included in informal payments; CSI: The Consumer Sentiment Index Project (CSI 2008) – percentage of patients, recall period was three months for outpatient care and 12 months for inpatient care.

achieved a substantial improvement in primary care. A survey of physicians indicated a decline of informal payments in primary care in April–July of 2007 in Saratov and Yaroslavl *oblasts*, among a sample of 630 physicians (Chernets, Chirikova and Shishkin 2008).

The Russian Federation has pursued a mix of carrots (increased salaries) and sticks (punishment) to reduce informal payment amidst a rapidly growing economy and increased public funding for health. The economic growth observed from the year 2000 created preconditions for change in public policy towards health care. Public spending on health increased in real terms by more than 1.8 times from 2000 to 2007. The National Programme "Health" was launched in 2006. Allocations to the programme from the federal budget and social insurance funds alone constituted approximately 10% of the total public spending on health care in 2006 and 2007. The programme included a large set of public health actions, including investment in outpatient, emergency and tertiary care. The additional resources from the federal budget to primary care physicians and their assistant nurses were unprecedented. As a result, the salaries of primary care physicians and nurses increased nearly three times in two years, and amounted to US$ 880 per month for district doctors in 2007. The attitude of public authorities towards informal payments changed along with the increase in public funding for health care. The public prosecutor bodies started to enforce sanctions against all types of informal payments (including gifts) to physicians and against practices that ask patients to bring in pharmaceuticals and medical supplies to medical facilities. However, patients are still allowed to purchase modern drugs that are presumably more effective than those available in public hospitals. In addition, the development of the legal private market for health services has enabled physicians to earn money in ways other than taking informal payments.

The practice of informal payments has diminished in primary care due to a combination of stronger enforcement of sanctions, salary increase, and the development of the legal market for health services, but failed to show improvement in specialist care, which enjoyed less increase in public funding. The increase in public funding has prioritized salary increases for primary care physicians and nurses and not those areas of medical practice in which informal payments are most prevalent (surgery, obstetrics and gynaecology, proctology, urology, and so on). As a result, their prevalence and size increased, they have been considered more legitimate among specialists and have become more institutionally entrenched. The increase of informal payments was considered by specialists as a means "to restore the fairness" in the public salary system. The increased ability of patients to pay for medical services has also contributed to the increase of informal payments in these sectors.

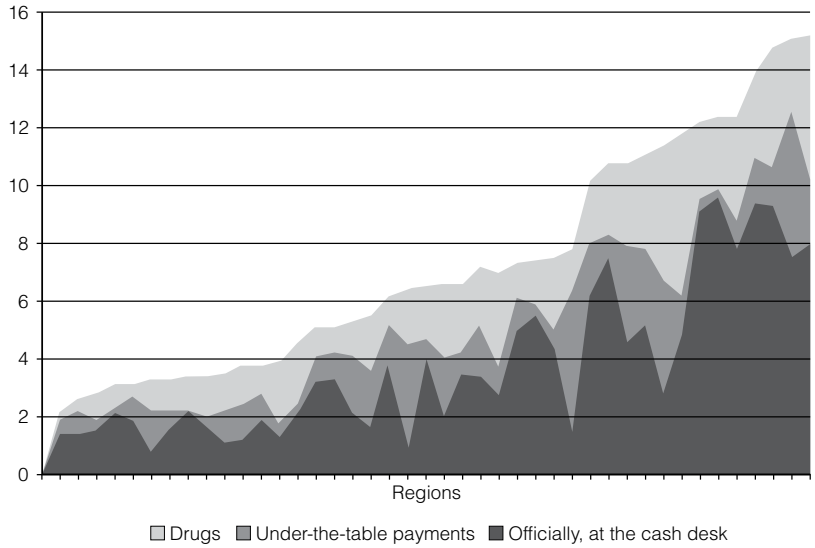


Fig. 12.5 *Average per capita monthly out-of-pocket spending for inpatient care in the regions of the Russian Federation, 2003, in rubles*

Source: Estimation on the basis of the NOBUS data (Besstremyannaya and Shishkin 2005).

In the Russian Federation, there is considerable regional variation in the amount of informal payments, which suggests a negative association between public spending on health care and informal payments. Total OOPS varies by a factor of 7 from the lowest to the highest spending regions, while informal payment varies by more than a factor of 10 (Fig. 12.5). This variation reflects socioeconomic status and public spending, but also policies towards informal payment. In the poorer regions, the practices of both formal OOPS and informal payments are much more frequent than in the richer regions. This can be explained by lower public financing for the benefits package in the poorer regions. As a general tendency, the lower the per capita public expenditures on health in the regions, the larger the share of those who pay for health services out of pocket. However, it is important to note the differences in the regions' policy regarding paid services (official fees). In the poorer regions, authorities granted more discretion to public providers to offer private (chargeable) medical services legally, which increased informal payments.

iv. Hungary

The Hungarian case provides an example whereby informal payments did not decline during the transition period and reform attempts have not been successful in reducing the prevalence of this practice. Informal payments in Hungary existed during the state socialist period, mentioned in official

documents as early as 1948 (Ádám 1985), and surveys dating back to 1969 (Tóth, Kádár and Balogh 1971). The *Household Budget Survey* of the Central Statistical Office provides the most complete trend line of informal payments, although there were important methodological changes in 2000 and 2001, limiting the validity of time comparisons. Together with other surveys, the data suggest that informal payments did not decline significantly between 1983 and 2006 (Fig. 12.6). Furthermore, where trend data are comparable, a slight increase is discernible between 2001 and 2006.

Reform efforts of the state socialist regime were not successful at reducing informal payments. During the communist period, policy-makers attempted to separate informal payments into two categories: (1) gratitude payment, tolerated by the regime but expected to be eliminated with educational campaigns; and (2) all other informal payments, considered as corruption, which were supposed to be eliminated by identifying and strictly punishing wrongdoers. The official policy of this differential treatment proved to be unsuccessful, as the scale of informal payments increased over time (Ádám 1986, pp. 62–213, 232–233). As an acknowledgment of defeat, the final measure of the communist regime was the attempt to tax informal payment (Ministerial Council of Hungary 1987, p. 17(7); National Assembly of Hungary 1987; Ádám 1989b, pp. 58–91). In 1988, as part of the newly introduced personal income tax system, gratitude payment was included in the tax returns as a separate item. Since the inception of the taxation policy, there was an order of magnitude difference between the amount declared on tax return forms and the findings of expenditure-side surveys. In addition, the number of tax payers declaring informal payment earnings as well as the declared amounts diminished over time, until 1997, when the tax authority abolished gratitude payment as a separate item in the tax return form (Gaál, Evetovits and McKee 2006).

Transition reform efforts were equally unsuccessful in addressing informal payments. The Hungarian health care reforms in the 1990s provided a complete overhaul of the health financing and service delivery arrangements in the context of massive political, social and economic changes (Gaál 2004b). Early structural reforms introduced by 1994 established a new contract model with separation of purchasing and provision. The purchaser (the single-payer National Health Insurance Fund Administration (OEP)) contracts with predominantly public providers – the ownership of which was transferred to local governments – but primary care (family doctor services) was functionally privatized. Incentives for efficiency were introduced via population- and output-based provider payment methods (capitation in PHC and case-based payment for inpatient care). Further reform efforts between 1995 and 2001 were dominated by strict cost-containment policies, which were characterized

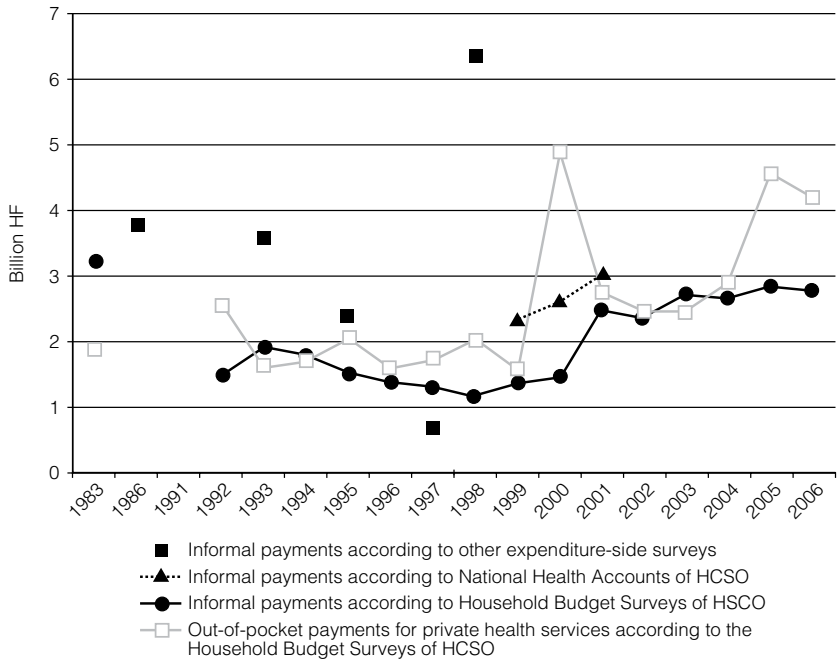


Fig. 12.6 *Informal payments to physicians, and out-of-pocket payments for private health services at constant 1990 prices (using consumer price index deflator) in Hungary, 1983–2006 (selected years)*

Sources: Other surveys, including GKI-1986 (Ékes 1987), SZGTI-1992 (Ékes 1993), SZGTI-1994 (Bondár and Ékes 1994), KSH-1997 (Hungarian Central Statistical Office 1998a), TÁRKI-1998 (Bognár, Gál and Kornai 1999); National Health Accounts data (Hungarian Central Statistical Office 2002a); Hungarian Central Statistical Office *Household Budget Surveys* (Hungarian Central Statistical Office 1984, 1993, 1994, 1995, 1996a,b, 1997, 1998, 1999, 2000, 2001, 2002b,c, 2003, 2004, 2005, 2006, 2007).

Notes: There are/were methodological differences and changes in the various years of the Household Budget Survey of the Hungarian Central Statistical Office (HCSO): 1983 – dedicated health care component; 2000 – health services are included in the annual expenditure questionnaire; 2001 – formal and informal payments are separated in the annual expenditure questionnaire.

by centralization and direct government interventions (for example, hospital beds were reduced by approximately 20%). A relatively "happy period" began in 2002 with a 50% pay rise on average, but this was followed by another wave of cost-containment starting in the autumn of 2006. Acute hospital beds were reduced by 27% (the largest reduction in the transition period), output volume limits for specialist services were implemented and patient cost sharing was introduced. These measures were introduced amidst severe cuts in public expenditures (by 0.6% of GDP in 2007, and further cuts were carried out in 2008 and 2009), taking any efficiency gains out of the health system.

An explicit attempt to formalize informal payments through official cost sharing was introduced quite late in the reform process, with dubious impact. Co-payments for service utilization were introduced in February 2007 as one of the measures to squeeze further efficiency gains out of the system

and to compensate providers for diminishing public funding. This was a short-lived policy, abolished later in April 2008 as a result of a national referendum. Although co-payments were relatively small (HUF 300 per visit in outpatient care, and HUF 300 per day for hospital stays), they had an unexpectedly large deterrence effect, particularly among those with less education and from lower income brackets (Gfk Hungaria 2007; Szinapszis Kft 2007). The latter survey also canvassed physicians, 30% of whom reported that the introduction of co-payments diminished informal payments. However, this does not seem to be confirmed by patients, only 6.6% of whom reported that since the introduction of user charges they had not paid informally at all, or had paid less. Another study detected a 25% decline in the overall magnitude of informal payment (Medián 2008), but the exact scale of reduction should be interpreted with caution. As a result of the small sample size and the general population sample, the detected decrease is not statistically significant, and the level of informal payment is fundamentally influenced by the ability of households to pay, which deteriorated substantially during the observation period (real wages decreased by 4.8% in 2007), especially among the poor. Further, it is important to note that user charges had little impact on the income of providers. Although the revenue from patient co-payments remained with the provider, it went directly into the budget of the institution, and was not enough to compensate for the effect of strict cost-containment measures, according to which spending on inpatient and outpatient health services decreased by 0.3% (from 3% to 2.7%) of the GDP in 2007 (Government of Hungary 2007). The only exception was primary care, in which most family doctors are private entrepreneurs paid by the OEP directly and – as a result of user charges – the average revenue per practice nominally increased by 19% in 2007 (Hungarian Minister of Health 2008). To put this into perspective, this amount – in real terms – is still below the level of practice financing of 2003.

The reforms have had a limited impact on the salaries of health care workers, which have remained below the national average during the transition period, while informal payment continues to be a significant additional source of their income. Figure 12.7 shows pay data in the health sector over a 12-year period, in comparison with selected other sectors of the economy. During this period, the salaries of white-collar health workers remained below the national average. Most health workers are salaried public employees whose pay level is set by the management in accordance with a legally defined pay scale. For outpatient specialist and hospital care, the introduction of output-based payment mechanisms in 1993 did not affect earnings, despite the fact that the pay scale determines no upper ceiling but only minimums, and the management has discretion over the use of efficiency savings. Nor did the functional privatization in primary care have any noticeable impact on the

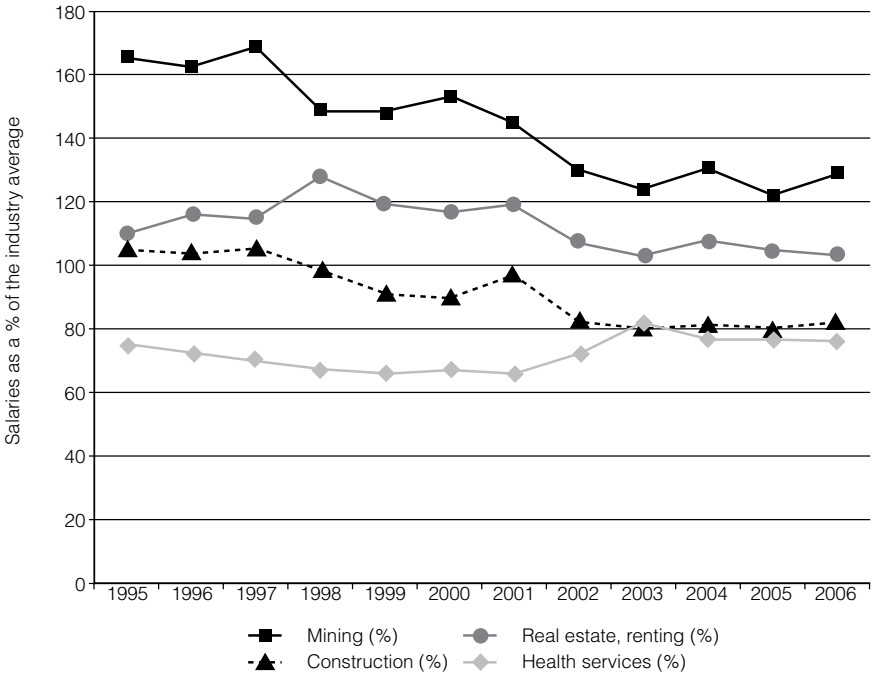


Fig. 12.7 *Average salary of white-collar workers in selected sectors as a percentage of the industry average (100%) in Hungary, 1995–2006*

official income of family doctors, who continued to rely on informal payments from patients. The sudden increase in 2003 was the result of a 50% (on average) pay rise for public employees in the autumn of 2002. However, this was a one-off increase and a gap of over 20% still remained between the salaries of health care personnel and the industry average of white-collar workers (Fig. 12.7). The pay increase did not have a significant impact on the overall magnitude of informal payments, either. On the contrary, an almost 20% increase in real terms is noticeable between 2002 and 2005 (Fig. 12.6), which suggests that a pay rise of such scale, in itself, was not enough to diminish informal payments.

E. Analysis of reform experiences

Certain key design and implementation features of health care reforms seem to distinguish more successful from less successful experiences. Successful reform requires a systematic approach with comprehensive and well-sequenced policy instruments, including clear and realistic entitlements, restructuring and reinvestment of efficiency gains in the health sector, stable and adequate public funding and the absence of a blaming culture (Table 12.4). Isolated reform instruments do not seem to work, as the contrasting reform experiences of two

otherwise similar countries show. The Kyrgyz approach – with a comprehensive and well-sequenced reform process – has achieved reductions in informal payments over time, while the Tajik approach of formalizing informal payments through a benefits package and co-payment policy – without accompanying reforms in pooling, purchasing and restructuring – has not had an impact. In addition, the Hungarian case illustrates that realistic and funded entitlements and reinvested efficiency gains are critical cornerstones of policies for reducing informal payments. The Russian Federation provides the starkest point in case, where there was no systematic health financing reform and the approach to reducing informal payments focused on punishment, which seemed to work in the presence of a massive salary increase but not otherwise.

Stable public funding and efficiency gains through service delivery restructuring create necessary – although not sufficient – conditions for reducing overall patient financial burden. The regional experience suggests that informal payments are associated with inadequate public funding for medicines and supplies and/or significantly below-average salaries of medical personnel. Informal payments fill the gap between the cost of providing promised entitlements and existing resources. An increase in public funds and efficiency gains can go a long way towards closing this funding gap, as long as savings are reinvested in the health sector. The early reform phase in Kyrgyzstan took place amidst significant decline in public expenditures. Although savings on utility costs resulting from restructuring were re-channelled into medicines and salary top-ups, they were not sufficient to compensate for the decline in public funds and the patient financial burden did not change. Once public funding was stable and even increasing, and the efficiency gains were fully reinvested in medicines, supplies and salaries, overall patient financial burden began to decline. Although Hungary introduced comprehensive reforms during the transition period, including measures that have led to a positive effect elsewhere, informal payment has not declined for several reasons. The implemented reforms did little to bring promises in line with the available financial resources (unrealistic entitlements), and not enough to increase the efficient use of these resources from which the savings could be used directly to improve working conditions and increase the formal income of health workers (efficiency gains have not been exhausted). Although some efficiency-enhancing measures were introduced and significant downsizing occurred during the period, massive reduction in public spending effectively removed efficiency gains from the health sector and prevented health worker salaries from being topped up. In contrast, Estonia (like Kyrgyzstan) implemented massive restructuring of its delivery system, and the efficiency gains were re-allocated to increase the salary of health workers (partly to prevent their migration to the more affluent Nordic countries). Incidentally, Estonia is one of the few countries in the region in which informal payments are negligible.

Table 12.4 *Comparison of the four country cases*

Types of informal payment	Comprehensive well-sequenced health reform	Clear benefits package with specification of patient cost sharing	Significant downsizing and re-allocation of efficiency gains within the sector	Stable or increasing public expenditure during reform period	Punishment of informal payment as a corrupt practice	Impact on informal payment
Kyrgyzstan						
Personnel Medicines Medical supplies Non-medical supplies	Yes Purchaser–provider split Centralization of pooling Population- and output-based provider payment Downsizing of infrastructure Clarification of benefits package	Yes The SGBP specifies entitlements and patient co-payments by level of care	Yes Downsizing took place and savings were retained after initial problems were solved	Partially (since 2006)	No Open discussion and monitoring of informal payment	Declined
Tajikistan						
Personnel Medicines Medical supplies Non-medical supplies	No	Yes (in 4 pilot rayons)	No	No	Yes	Mixed
Russian Federation						
Personnel Medicines	No	No	No	Partially (since 2006)	Yes	Mixed

Table 12.4 *contd*

Types of informal payment	Comprehensive well-sequenced health reform	Clear benefits package with specification of patient cost sharing	Significant downsizing and re-allocation of efficiency gains within the sector	Stable or increasing public expenditure during reform period	Punishment of informal payment as a corrupt practice	Impact on informal payment
Hungary						
Personnel	Yes Purchaser–provider split Population- and output-based provider payment Autonomous providers Downsizing of infrastructure	No Lack of clarity, unrealistic benefits package Co-payment for service use was introduced in 2007and eliminated a year later	No Downsizing took place, but savings extracted by severe reductions in public spending	Unstable Three major waves of cost-containment took place Increased spending in election years	No (During the communist regime part of informal payment was considered corrupt)	Did not decline

Source: Authors' own compilation.

Note: SGBP: State-Guaranteed Benefits Package.

Adequate remuneration of health workers – especially physicians – plays an important part in the scale of informal payments, but a small pay rise for doctors is unlikely to reduce informal payments. Any pay rise policy to reduce informal payments should at least consider three important characteristics: its scale, its source and its method. In most CE/EECCA countries, health worker salaries are significantly below national averages. In Hungary, for example, the official salary level in the health sector was 75% of the average salary of white-collar workers in 1995 and declined to 66% by 2001 due to severe cost-containment measures in the health sector. Salary increases followed, reducing the gap to 76% of the average salary level by 2006, but never quite closing it (Fig. 12.7). The Hungarian example shows that in countries in which salaries in the health sector are consistently low, even a relatively high (50%) pay rise can have no impact on the prevalence of informal payments, while the Russian case of success in primary care suggests real impact can be achieved at the order of magnitude of double and triple pay. The case of Hungary is instructive in that the incorporation of more private financing should result in additional income for the providers, not the replacement of public resources, and a substantial part of it should go directly to the health workers, not to the budget of the health facility. Finally, an "unconditional" pay rise is unlikely to be the best means of tackling informal payments, since it has a one-off effect, which wears off over time. The increase of physicians' income should instead be linked to increased performance, both in terms of efficiency and responsiveness to patients' expectations. This can create a positive reinforcement cycle, in which the motivation of patients to make informal payments is diminished and further efficiency gains are realized; this, in turn, can be used to further increase the remuneration of health workers and to improve working conditions, and so on.

Condemning informal payments as a corrupt practice and pursuing a punishment policy through the legal system or institutions of medical ethics is unlikely to be successful if the majority of providers and patients consider operational conditions to be unfair and unrealistic. People's actions are influenced by the examples of how others behave, and mass non-compliance undermines the legitimacy of regulations and makes enforcement virtually unfeasible (Galasi and Kertesi 1991; Csaba 1993; Roberts et al. 1998). As the Hungarian and Russian cases show, the punishment approach has failed to deliver results, with the exception of primary care in the Russian Federation, where the enforcement of the non-acceptance policy was coupled with an unprecedented pay rise and increase in public financing of primary care services.

Creating a realistic, clear and transparent benefits package is an important policy instrument in the context of an overall systemic reform. However, the introduction of user charges, the exclusion of services and the encouragement

of the development of the private sector – alone – are unlikely to diminish the overall financial burden of patients. The Kyrgyz case is a good example whereby transparent and realistic entitlements are an important component of successful reforms, but the introduction of a basic benefits package and co-payment policy in isolation – as in Tajikistan – is not sufficient to decrease the magnitude of informal payments. In addition, the reduction of the benefits package creates fertile ground for the development of the private sector, which in transition economies is inextricably intertwined with the public sector (Shahriari, Belli and Lewis 2001, p. 4; Gaál 2004a; Gaál et al. 2006). Advance payments, recruitment of patients for private practice and part-time private practice in public institutions are examples of the blurred boundaries between the two sectors. In Poland, "medical foundations" provide a private service by hiring the public facilities and employees, which leaves the designated surgery hours and the fee as the only differences between the two services (Ensor and Witter 2001; Shahriari, Belli and Lewis 2001, pp. 13, 21). The growth of this unique private sector is difficult to control and may provide unexpected results – as the case of the poorer regions of the Russian Federation shows – whereby the permission of public facilities to offer private (chargeable) services increased not only the scale of formal OOPS but informal payments as well. Consequently, a simple market-based solution, which makes exit available, is unlikely to yield the best possible outcome for the poor.

The design of a realistic benefits package is not a straightforward task, because affordability has to be balanced with clear and transparent entitlements. However, even if users are fully aware of their entitlements and the system is able to provide them, informal payments may persist, if there is insufficient trust in the system. Reform experiences in the region show that transparency is an important success factor for informal payment reforms (Shahriari, Belli and Lewis 2001; Falkingham 2004). During the existence of the communist regime, new and unwritten terms of entitlement emerged that did not coincide with the official rules and rhetoric (Gaál and McKee 2004). Therefore, it is not surprising that changes in the official entitlements can create confusion and may be the breeding ground for informal payments, especially if the rules are complicated and frequently changing. This was observed in Poland, where patients did complain about officially introduced user charges, while at the same time accepting doctors demanding payment for services that were meant to be provided free of charge (Shahriari, Belli and Lewis 2001). The 2007 introduction of co-payments for visits and hospital stays in Hungary is a good example of a situation whereby even a relatively simple co-payment scheme with clear exemptions can create confusion among patients and give rise to informal charging (disguised as formal OOPS) among physicians. Relatively simple, transparent and well-communicated entitlements, however, are not

enough. Given the information asymmetry between patients and providers, lack of trust in the performance of providers can trigger and maintain informal payments, even if good quality of care is provided. For example, according to a survey carried out in the Russian Federation, 25% of those who used private services did so because "they lacked confidence in the professional qualifications of public employee physicians" (Lewis 2000, p. 18). Attempts to close the gap between entitlements and available financial resources, therefore, do not seem to be sufficient to address informal payments without measures to increase popular trust in the performance of the health care system (Gaál et al. 2006).

F. Conclusions and lessons learnt

There is no "magic bullet" to reduce informal payments in health systems; any reform instrument implemented in isolation from a well-designed and sequenced comprehensive reform plan is likely to fail. The success of the Kyrgyz reforms in this regard shows a positive example. It was understood that a single instrument would not be able to address the structural problems in the financing and organization of the health system that led to the emergence of informal payments. A comprehensive health financing and service delivery reform was necessary to reduce the underlying inefficiencies and re-channel savings to salaries and medicines, which in turn led to the reduction not just in informal payments but in total OOPS as well.

This lesson regarding comprehensive reforms is particularly important for those countries that are considering the introduction or refinement of a publicly funded benefits package with co-payments as the lead or sole instrument aimed at reducing informal payment. A clear benefits package and a co-payment policy can help to reduce the practice of informal payments if it is embedded in an overall reform programme. If it is the only instrument, however, it will not address the problematic inefficiencies and lack of funds for salaries and medicines that led to the growth of informal payment in the first place. While informal payments may reduce in this case due to limitations on population ability to pay, the overall payment burden may increase with people not only paying formally, but also having to pay for medicines and other supplies which remain without public funding. This approach was applied in Tajikistan where a basic benefits package was introduced with co-payments, but in isolation from other reform efforts (pooling and provider payment).

Addressing insufficient public funding for salaries, medicines and supplies is a key enabling factor that allows the reduction of informal payments, either through reinvested efficiency gains or increased public funding. Kyrgyzstan relied on both mechanisms, but in the early reform phase the focus

was on reinvesting efficiency gains in the health sector. Reduced spending on utilities allowed increased spending on medicines and salaries. Maintaining steady public funding while the size of the infrastructure declined was a major challenge, since the Ministry of Finance continued to link budget formation to capacity-based norms even though the health sector had moved to output-based funding of hospital care. This issue exposed significant tension between health reform and public finance reform.[103] Nevertheless, Kyrgyzstan was successful at maintaining steady public financing in real terms during the years of restructuring (2001–2004), after some initial wavering, enabling some reinvestment of savings. Public spending began to increase after 2006, enabling even better funding of salaries and medicines, as well as further reductions in informal payment. The Russian case also illustrates that an aggressive increase in salaries for medical personnel can reduce informal payments. Conversely, where public spending is reduced at the time of restructuring, as was the case in Hungary, the extraction of efficiency gains from the health sector prevents reinvestment into salaries and medicines, and as a result there is unlikely to be any impact on informal payments.

Effective stewardship is an important contributing factor to success. In Kyrgyzstan, the MoH and the government have had a healthy attitude to informal payments. In effect, the practice was treated as a symptom of the general condition of the health system, rather than as a problem in itself or as a corrupt practice to be punished. This openness led to efforts to measure the scale of informal payments on a regular basis, thus providing an important tool to evaluate the reforms against making progress on reducing their frequency. At the same time, the openness and focus on informal payments did not turn into a counterproductive obsession: the focus was on overall patient financial burden and not on informal payment per se. Since salaries of medical personnel have remained constantly under the national average throughout the region, punishment alone would only deteriorate the already low morale of medical workers in many countries and could contribute to loss of human resources in the lower income countries of the region. Interestingly, only the Russian Federation pursued reforms that included punishment of the practice of informal payment, but this went hand in hand with a massive increase in salaries for primary care practitioners.

In summary, successful reforms are based on the right combination of key ingredients in a comprehensive and well-sequenced reform plan, but what exactly needs to (and can) be done depends on the cultural, political, economic and health care context of the actual countries concerned. The ability of a country to pay always determines the boundaries of the

103 See Chapter 10 for discussion on this.

health sector, while the willingness of citizens to pay taxes limits the extent to which the financial burden of patients can be reduced. These characteristics also profoundly influence the efforts to increase the efficiency of the health care system. While Kyrgyzstan had a terribly inefficient system, which could have been improved substantially with the centralization of pooling and the downsizing of the hospital sector, Hungary started the reforms with centralized pooling and well-developed plans and pilots – for instance, for the adaptation of DRGs as the payment method for acute inpatient care. The essence of the challenge for Hungary was the same as for Kyrgyzstan, yet the tools used to approach the problem had to be different. Hungary had to combine into one reform model incentives for efficiency savings, the income of health workers and the experiences with patients' willingness to pay as a potential source of private revenue. The reasons why Hungary – unlike Kyrgyzstan – eventually failed can probably be found in the wider fiscal and political context, and this should not be ignored by health policy-makers.

References

Ádám G (1985). Az orvosi hálapénz története Magyarországon [The history of medical gratitude payment in Hungary]. *Mozgó Világ*, (3,4):56–69; 49–61.

Ádám G (1986). *Az orvosi hálapénz Magyarországon [Medical gratitude payment in Hungary]*. Budapest, Magvető Kiadó.

Ádám G (1989a). Gratuity for doctors and medical ethics. *Journal of Medicine and Philosophy*, 14:315–322.

Ádám G (1989b). *Adóztatás után (Még egyszer az orvosi hálapénzről) [After taxation (medical gratitude payment revisited)]*. Budapest, Magvető Kiadó.

Besstremyannaya G, Shishkin S (2005). The accessibility of health care. In: Ovtcharova LN ed. *Incomes and social services: inequality, vulnerability, poverty*. Moscow, Publishing House of the State University Higher School of Economics:141–167 [In Russian].

Bognár G, Gál RI, Kornai J (1999). *Hálapénz a magyar egészségügyben [Gratitude payment in the Hungarian health care system]*. Budapest, TÁRKI.

Bondár É, Ékes I (1994). *Életmód, egészségi állapot és vélemények az egészségbiztosításról [Lifestyle, health status and opinion about the health insurance]*. Budapest, SZGTI.

Buda B (1992). A hálapénz-szindróma; A magyar egészségügy különleges tünete nyomában [The gratitude payment syndrome; on the track of the special symptom of the Hungarian health care system]. *Replika*, 3(1–2):80–87.

Central and Eastern European Health Network (2002). *Formal and informal household spending on health: a multicountry study in central and eastern Europe*. Boston, MA, Harvard School of Public Health International Health Systems Group.

Checheibaev E (2004). *Did hospital restructuring lead to savings on utility expenditures?* WHO Health Policy Analysis Research Paper No. 27. Bishkek, World Health Organization.

Chernets V, Chirikova A, Shishkin S (2008). Informal payment for medical services: tendencies of institutional changes. In: Shishkin S, ed. *Russian health care: physician's motivation and acceddibility for citizens*. Moscow, Independent Institute for Social Policy:229–284 [In Russian].

Csaba I (1993). A hálapénz közgazdasági értelmezéséhez [To the economic interpretation of gratitude payment]. *Replika*, 95–107.

CSI (2008). *Consumer sentiment index project*. Moscow, Independent Institute for Social Policy (http://ipn.socpol.ru/, accessed 29 August 2008).

Delcheva E, Balabanova D, McKee M (1997). Under-the-counter payments for health care: evidence from Bulgaria. *Health Policy*, 42:89–100.

Ékes I (1987). *A lakosság egyes láthatatlan jövedelmei [The invisible incomes of the population]*. Budapest, Gazdaságkutató Intézet Statisztikai Kiadó Vállalat.

Ékes I (1993). A magyarországi rejtett gazdaságra vonatkozó 1992. évi felmérés és becslés [Estimation and survey on the hidden economy in Hungary in 1992]. In: Ékes I ed. *Rejtett gazdaság - láthatatlan jövedelmek [Hidden economy - invisible incomes]*. Budapest, Ékes Ildikó.

Ensor T (2004). Informal payments for health care in transition economies. *Social Science and Medicine*, 58(2):237–246.

Ensor T, Duran-Moreno A (2002). Corruption as a challenge to effective regulation in the health sector. In: Saltman R, Busse R, Mossialos E, eds. *Regulating entrepreneurial behaviour in European health care systems*. Buckingham, Open University Press:106–125.

Ensor T, Savelyeva A (1998). Informal payments for health care in the former Soviet Union: some evidence from Kazakstan. *Health Policy and Planning*, 13(1):41–49.

Ensor T, Witter S (2001). Health economics in low income countries: adapting to the reality of the unofficial economy. *Health Policy*, 57:1–13.

Falkingham J (2004). Poverty, out-of-pocket payments and access to health care: evidence from Tajikistan. *Social Science and Medicine*, 58(2):247–258.

Feeley FG, Boikov V, Shishkin S (2001). *Household health expenditures in the Russian Federation*. Boston, MA, Boston University Center for

International Health (http://dcc2.bumc.bu.edu/RussianLegalHealthReform/ProjectDocuments/n1030.IIIB3.Analysis.pdf, accessed 20 September 2008).

Feeley FG, Sheiman IM, Shishkin S (1999). *Health sector informal payments in Russia*. Boston, MA, Boston University Press.

Gaál P (2004a). *Informal payments for health care in Hungary*. London, Universty of London, London School of Hygiene & Tropical Medicine, Department of Public Health and Policy Health Services Research Unit.

Gaál P (2004b). *Health care systems in transition: Hungary*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems Policies.

Gaál P, McKee M (2004). Informal payments for health care and the theory of 'inxit'. *International Journal of Health Planning and Management*, 19:163–178.

Gaál P, McKee M (2005). Fee-for-service or donation? Hungarian perspectives on informal payment for health care. *Social Science and Medicine*, 60(7):1445–1457.

Gaál P, Evetovits T, McKee M (2006). Informal payments for health care: evidence from Hungary. *Health Policy*, 77(1):86–102.

Gaál P et al. (2006). Informal payments for health care: definitions, distinctions and dilemmas. *Health Politics, Policy and Law*, 31(2):251–293.

Galasi P, Kertesi G (1991). A hálapénz ökonómiája [The economics of gratitude payment]. *Közgazdasági Szemle*, 37(3):260–278.

Gfk Hungaria (2007). *Lakossági egészségfelmérés és gyógyszerhasználat 2007. [Population health survey and the use of pharmaceuticals]*. Budapest, GFK Hungaria Market Research Institute.

Government of Hungary (2007). *Magyarország aktualizált konvergencia programja 2007–2011. [The updated convergence programme of Hungary 2007–2011]*. Budapest, Government of Hungary.

Hungarian Central Statistical Office (1984). *Lakossági egészségügyi kiadások 1983 [Household health expenditures 1983]*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (1993). *Household budget survey, 1989, 1991 (Data of 12 000 households)*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (1994). *Household budget survey 2nd half of 1992 (Data of 5000 households)*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (1995). *Household budget survey (Data of 8000 households)*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (1996a). *Household budget survey 1994 II, annual report*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (1996b). *Household budget survey 1995, annual report*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (1997). *Household budget survey 1996, annual report*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (1998a). *Rejtett gazdaság Magyarországon [Hidden economy in Hungary]*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (1998b). *Household budget survey 1997, annual report*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (1999). *Household budget survey 1998, annual report*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (2000). *Household budget survey 1999, annual report*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (2001). *Household budget survey 2000, annual report*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (2002a). *A magyar Nemzeti Egészségügyi Számlák (NESZ), 1998–2000 [Hungarian national health accounts (NHA), 1998–2000]*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (2002b). *Household budget survey 2000, annual report*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (2002c). *Yearbook of household statistics, 2001*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (2003). *Statistical yearbook of Hungary 2002*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (2004). *Statistical yearbook of Hungary 2003*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (2005). *Statistical yearbook of Hungary 2004*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (2006). *Statistical yearbook of Hungary 2005*. Budapest, Hungarian Central Statistical Office.

Hungarian Central Statistical Office (2007). *Statistical yearbook of Hungary 2006*. Budapest, Hungarian Central Statistical Office.

Hungarian Minister of Health (2008). *A Fidesz ígérgetéseiről [About the promises of Fidesz]*. Budapest, Minister of Health of Hungary (http://www.eum.hu/main.php?folderID=35392&objectID=6003049, accessed 18 January 2008).

Jakab M (2007). *An empirical evaluation of the Kyrgyz health reform: does it work for the poor?* Cambridge, MA, Harvard University, Harvard School of Public Health Department of Health Policy and Management.

Jakab M, Kutzin J (2008). *Improving financial protection in Kyrgyzstan through reducing informal payments: evidence from 2001–2006*. WHO Health Policy Analysis Research Paper No. 57. Bishkek, World Health Organization.

Jakab M et al. (2008). *The basic benefit package and patient financial burden at the hospital level: an intermediate investigation*. WHO Working Paper. Copenhagen, WHO Regional Office for Europe.

Lewis M (2000). *Who is paying for health care in eastern Europe and central Asia?* Washington, DC, World Bank Europe and Central Asia Region Human Development Sector Unit.

Lewis M (2002). Informal health payments in central and eastern Europe and the former Soviet Union: issues, trends and policy explanations. In: Mossialos E et al. *Funding health care: options for Europe*. Buckingham, Open University Press:184–205.

McKee M, Chenet L (1997). Informing the market: the strengths and weaknesses of information in the British National Health Service. *Health Care Analysis*, (5):149–156.

Marrée J, Groenewegen P (1997). *Back to Bismarck: eastern European health care systems in transition*. Aldershot, Avebury.

Masopust V (1989). Bribes in health care and the patients' opinions. *Cesk-Zdrav*, 37:299–307.

Medián (2008). *Zsebből menő egészség [Health out-of-pocket]*. Budapest, Medián (http://www.median.hu/object.5f0ad37d-6ea6-4483-8e8c-fd851cabf721.ivy, accessed 18 January 2010).

Ministerial Council of Hungary (1987). 38/1987. (X. 12.) *MT rendelet a magánszemélyek jövedelemadójáról szóló 1987. évi VI. törvény egyes rendelkezéseinek végrehajtásáról [Decree No. 38/1987. (X. 12.) MT on the implementation of certain provisions of Act VI of 1987 on personal income tax]*. Budapest, Ministerial Council of Hungary.

Ministry of Health of the Kyrgyz Republic (2008). *Mid-term review report: Manas Taalimi health sector strategy*. Bishkek, Ministry of Health of the Kyrgyz Republic.

National Assembly of Hungary (1987). *1987. évi VI. törvény a magánszemélyek jövedelemadójáról [Act VI of 1987 on personal income tax]*. Budapest, National Assembly of Hungary.

NOBUS (2003) [web site]. *NOBUS Russian Households Survey*. Washington, DC, World Bank (http://go.worldbank.org/VWPUL3S9F0, accessed 14 February 2004).

Petschnig M (1983). Az orvosi hálapénzről – nem etikai alapon [About medical gratitude payment – not on a moral basis]. *Valóság*, 11:47–55.

RLMS (2004) [web site]. *Russia Longitudinal Monitoring Survey*. Chapel Hill, NC, University of North Carolina, Carolina Population Center (http://www.cpc.unc.edu/rlms/, accessed 31 March 2005).

Roberts MJ et al. (1998). *Diagnostic approaches to assessing strength, weaknesses, and change of health systems*. Washington, DC, Harvard University Economic Development Institute of the World Bank.

Shahriari H, Belli P, Lewis M (2001). *Institutional issues in informal health payments in Poland: report on the qualitative part of the study, health, nutrition and population*. Washington, DC, Population Reproductive Health Thematic Group of the World Bank.

Shishkin S et al. (2003). *Informal out-of-pocket payments for health care in Russia*. Moscow, Moscow Public Science Foundation Independent Institute for Social Policy.

Szabó F (1973). *Orvosetikai kérdésekről [Issues in medical ethics]*. Budapest, Medicina.

Szende A, Cuyler AJ (2006). The inequity of informal payments for health care: the case of Hungary. *Health Policy*, 75(3):262–271.

Szinapszis Kft (2007). *Átfogó egészségpolitikai kutatás Magyarországon a 2007-es törvényi változások tükrében [Comprehensive health policy research in Hungary in light of the legal changes of 2007]*. Debrecen, Szinapszis Kft.

Thompson R, Witter S (2000). Informal payments in transitional economies: implications for health sector reform. *International Journal of Health Planning and Management*, 15:169–187.

Tóth I, Kádár T, Balogh J (1971). Vizsgálatok a lakosság és az egészségügyi ellátás kapcsolatainak szociológiai megközelítésére a fővárosban [Sociological research on the relationships between the people and the health services in the capital]. *Népegészségügy*, 52:333–338.

Wlodarczyk WC, Zajac M (2002). Poland. In: Fried BJ, Gaydos LM. *World health systems: challenges and perspectives*. Chicago, IL, Health Administration Press and AUPHA Press:279–299.

Chapter 13

Promoting accountability in health care financing institutions

William D. Savedoff, Hernan L. Fuenzalida-Puelma

A. Introduction

The CE/EECCA countries have undergone sweeping changes in the structure of their health care systems, both in the provision of care and its financing. A great deal of attention in these reforms has been focused on mobilizing resources in cash-starved systems, finding new ways to manage staff and facilities and breaking apart centralized forms of administration. These are pressing issues for health care that remained foremost while these countries struggled with the consequences of a massive realignment of their societies following the demise of communism, which was frequently accompanied by economic crisis, political turmoil, and even violent conflict.

Addressing these pressing issues related to financing and managing health care is not enough. If these health care systems are to function well and adapt to changing circumstances, they must, in addition, be governed effectively. This, in turn, requires transparency – generating and disseminating useful performance information – as well as accountability – transmitting performance information to interested parties who have the authority to demand good management.

Health care systems are quite heterogeneous around the world, and vary significantly even among the transition countries. For this reason, no single mode of governance is necessarily the best. At least three broad models of governance can be identified, associated with different health care system structures. The first relies primarily on political processes and is found in health

care systems with predominantly public provision of health care (for example, Sweden, Costa Rica). The second model relies on a combination of private accountability mechanisms and public regulation (for example, corporate governance codes and health insurance regulators in the United States or Chile). A third model involves a mixture of political and social processes governing autonomous social insurance entities, as is commonly found in many western European countries.

Among the CE/EECCA countries, some (such as Estonia) have clearly moved toward a model involving an autonomous social insurance entity. Other countries (like Kyrgyzstan and the Republic of Moldova) have a predominantly public system that is governed through political processes, while establishing a national insurance fund that has more in common with entities governed through a mix of political and social mechanisms. Where public funding for health care has largely collapsed and private OOPS predominate (such as in Tajikistan), it appears that the requisite accountability cannot be achieved by political administration, public regulation, or market mechanisms. Most transition countries have created health insurance institutions – with varying degrees of autonomy – as key actors in their health systems. Governing these new insurance institutions is a major challenge.

It is the premise of this chapter that, regardless of the model adopted, all of these countries can benefit by explicitly addressing and improving the transparency and accountability of their health care financing institutions. Attention will be focused on governance of autonomous health insurance institutions, both in their structural features and in their relationship with other important actors, such as health ministries and health care providers.[104] The chapter does not address the full range of governance issues. Rather, it emphasizes how health insurance institutions can be held accountable for their performance, while trying to keep the discussion of accountability grounded in the broader context of governance issues.

The chapter begins with a brief historical discussion of how health financing models and their governance have evolved in different parts of the world, pointing out that the transition countries are reforming their systems in a very different context today. It continues with a discussion of accountability, particularly as it has developed for financial institutions both inside and outside the health sector. The chapter then describes the stakeholders and relationships that fundamentally condition the governance of health financing institutions,

104 The focus on health insurance institutions necessarily draws attention to the financing of "personal" health care goods and services aimed at preventing, treating and managing illness and preserving mental and physical well-being, rather than institutions that finance decidedly "public" health functions, such as epidemiological surveillance, public education or broad environmental interventions.

after which it presents specific mechanisms that are put in place to manage these competing pressures.

B. Evolution of health care financing and governance

Originally, health care services were either provided voluntarily by traditional healers and midwives or paid for with gifts or cash. As health care professions evolved and payments became the norm, new institutions emerged to offset unexpected costs, whether in the form of mutual aid associations, medical cooperatives or retainer fees. In the late 19th century, such private voluntary health financing arrangements continued to develop, but in the world's wealthier countries, they were gradually eclipsed by the establishment and expansion of public health care financing systems. Within the private sphere, commercial insurers later emerged, offering indemnity plans to reimburse the cost of hospitalizations, accidents and other forms of medical care. Governing such private financial arrangements was (and remains) heterogeneous, reflecting the variety of arrangements and multiplicity of laws that regulate their activities.

Two key health financing innovations took place in the public sphere and displaced private financing in most of the world's wealthier countries. The first of these innovations was the creation of social health insurance, which began in the late 19th century in western Europe and was adopted extensively in the Americas in the 20th century. Key characteristics of this kind of financing include mandatory payroll contributions that are managed by non-profit-making and autonomous insurers. Commonly, the insurer reimburses health care providers, who are themselves independent. It is also common for the insurance institutions to be accountable to bi- or tripartite boards, comprising representatives of employers and employees, as well as possibly the state (Busse, Saltman and Dubois 2004; Saltman and Dubois 2004).

The second innovation was the creation of national public health services, first in the Soviet Union in the 1920s and later – in modified form – in Britain and other parts of the Commonwealth. Key characteristics of this kind of financing include the integration of financial management within the government budget process and reliance on general tax revenues that are managed by government agencies accountable to the executive branch (Mossialos et al. 2002; Savedoff 2004).

These two major financing system innovations – social health insurance and a national public health service – emerged from major social trends, including industrialization and the accompanying transformation of employment; the rise of unions and collective bargaining; and political struggles to increase the role of the state in regulating society and offering security. They also emerged

in periods during which medical technology was quite limited and relatively inexpensive. In fact, health insurance often made up a much smaller share of social welfare expenditures than benefited for unemployment, pensions or death.

The experience of the transition countries today is quite different from that of western Europe or Latin America in the last century. Rather than evolving from voluntary and private financing systems, transition countries are moving from highly centralized systems[105] to decentralized or even market-based ones. Consequently, they are challenged with building new institutional arrangements in places where, for decades, the kind of transparency and accountability mechanisms necessary to govern health financing were notably absent. Furthermore, they generally lack the kinds of movement that engaged civil society in governing social health insurance in western Europe and Latin America. Where social health insurance expanded in the 20th century, it did so within the context of growing welfare states and confidence in the role of the state as a guarantor of basic social rights. By contrast, health care financing institutions in CE/EECCA countries today are being established in a context that is generally cautious, if not hostile, to state-centred solutions as a reaction to the communist era.

In summary, the basic models for governing health financing in transition countries are similar to those that have been pioneered in Europe and the Americas: political processes in government-run health financing systems, private accountability mechanisms combined with public regulation in market systems, and regulated representation of social actors in governing semi-public institutions. Depending on the structure of health financing, the lessons from one or more of these models will be most relevant. Nevertheless, improving the governance of health financing in transition countries will necessarily face different challenges to those faced by countries in other regions, due to their markedly different starting points – such as dismantling highly centralized public health services – and their significantly different political environment – such as being skeptical of government involvement.

C. Evolution of corporate governance and its lessons

The relevant lessons on governance of health financing in countries that have pioneered these institutions come from a number of different experiences: governing financial institutions, health care providers, public administration and private corporations. Health care financing entities are first and foremost

105 Even if – particularly for most of the CE countries, as noted in Davis (Chapter 2) – this change marks in part a return to the systems that had emerged prior to 1945.

financial entities. If they are not governed in ways that are consistent with governing other financial institutions (such as banks, insurers), then they cannot be expected to perform well in those specific dimensions that are unique to insuring and financing health care. Financial sector experiences with governance may be most relevant to health financing systems with multiple actors and market mechanisms, but are also useful in systems in which direct public expenditures are involved.

Health financing entities must be held accountable not only for their financial performance (for example, solvency, administrative efficiency) but also for getting "value for money". In this case, "value" means *good-quality health care services* for those who are covered. Therefore, lessons in governing health care service management and procurement are also important.

Because public funds generally play a significant role in health care financing, lessons regarding governance of *public institutions* are also extremely relevant. Health care financing by public agencies and semi-public institutions is vulnerable to many of the same problems of inefficiency, capture or corruption that occur in other public sectors (Savedoff and Hussmann 2006). Thus, experiences with improving public services by providing greater voice, transparency and accountability are also of real relevance (World Bank 2004).

Since the mid-1990s, a worldwide concern for *corporate governance* has become a dominant theme for corporations, supervisors/regulators and the general public. Many approaches have been taken to improving governance, with most focusing on particular accountability mechanisms and associated requirements for transparency. For example, the World Bank's International Finance Corporation defines corporate governance as structures and processes that direct and control companies (World Bank 1994). In this way, governance concerns the relationships among the management, board of directors, controlling shareholders, minority shareholders and other stakeholders. Good corporate governance contributes to sustainable economic development by enhancing the performance of companies and increasing their access to outside capital.

Efforts to improve the governance of financial institutions have generally focused on banking and insurance, with little or no attention to health insurance (whether understood as health insurance proper, as social security, or as pre-paid plans and other schemes of health care financing). For instance, the OECD Principles on Corporate Governance do not mention health insurance, nor do the Principles and Guidance issued by the International Association of Insurance Supervisors (IAIS). This lack of attention is beginning to be redressed with studies by the World Bank to adapt the IAIS principles on insurance to health insurance.

Of the four different kinds of governance experience (financial, health care providers, public administration and private corporations), work on governance in the financial and private corporate sectors has the longest history. Beginning in the 19th century, legislation in many countries evolved to protect the interests of shareholders. It developed under the premise that shareholders would adequately control the directors that they appointed (and could dismiss). Consequently, governance requirements, codes and regulations regarding the behaviour of directors were quite minimal. Abuses or mismanagement by directors was effectively viewed as the responsibility of the shareholders who had appointed them.

As publicly traded institutions diversified their ownership and directors became increasingly distant from their shareholders, legislation and regulations evolved to protect the interests of minority shareholders and to increase the accountability of directors by explicitly addressing their qualifications and scope of responsibility. The resulting concepts and practices defining a director's duty to shareholders and the public has permeated public and private companies, including, in many cases, personal liability for breach of duties when signing documents without considering their purpose (such as transfer of corporate assets, blank authorizations to executive management). In most countries, directors are now held responsible for actively performing their duties and investigating any evidence of mismanagement or abuses by company managers. The conditions for delegating authority have also been elaborated, requiring such delegation to be reasoned and specific.

In addition to developing legislation and regulations to increasingly hold directors accountable, governments have expanded oversight of company behaviour through such measures as licensing; minimum requirements for capitalization, solvency and reporting; constraining the use of limited liability provisions; protecting creditors; and criminalizing wrongful and fraudulent activities. These measures are enforced either by a single unified entity (such as the United Kingdom's Financial Services Commission) or by various separate supervisors and regulators – insurance supervisors, banking supervisors, health insurance supervisors). These institutions have the power to audit, investigate, fine, close or bring legal proceedings against corporations in court.

The adoption of non-binding governance codes is among the most recent developments in governing financial and private corporate institutions. Such codes clarify the boundaries of responsibility for shareholders, directors and management and are generally voluntary. Nevertheless, as such codes become widely accepted norms, they can gain legal force when regulators and courts begin to use them as references for deciding cases of malfeasance. The interest in improving governance is now taking on international dimensions

with such initiatives as the OECD's Principles of Corporate Governance (OECD 2004) and its Guidelines for Insurance Governance (OECD 2005).

D. Governance, transparency and accountability for health financing institutions

Despite all this attention to governance, transparency and accountability, there are no uniquely accepted definitions. Furthermore, importing concepts and words from other legal, economic and institutional environments and incorporating them into new settings is complex and should be approached with care. For instance, Wyatt (2004) argued that one important limitation to improving governance in transition countries is the extreme difficulty of translating "governance" into local languages.

Bearing in mind these cautions, for our purposes *governance* can usefully be defined as the social institutions that influence the behaviour of an organization. For health insurance entities, these social institutions include government legislation, regulation and supervision; channels for representing taxpayers, employers, employees and other groups in decision-making bodies; and relationships with organized health care providers (reviews of the many meanings of governance in health care can be found by Dodgson, Lee and Drager 2002; Chinitz, Wismar and Le Pen 2004; and Kempa, Shearing and Burris 2005).

Defined in this way, governance has at least two different levels (Savedoff 2008). At the broadest level, political debates, social movements and negotiations between major stakeholders contest the rules under which health financing institutions will operate. This level comprises the characteristics of the relationships between a health financing entity (insurer or government agency) with the executive, judicial and legislative branches of government, its members, any other payers (such as employers), health care providers and other insurers (such as competitors, if any). At this level, social actors make decisions regarding, for example, whether health care financing will be the responsibility of a government agency or an autonomous insurer; or whether health care service prices will be set by technical formulas or by a process of collective bargaining.

At the second level, governance involves the operation of those rules, looking specifically at the mechanisms that are used to hold the health financing entity accountable. These mechanisms include such things as the election process for board members; the scope and style of government supervision; the scope of managerial discretion in defining benefits, contribution rates and negotiating contracts; along with reporting and auditing requirements.

Governance has two key aspects of interest here: transparency and accountability. *Transparency* describes institutions that provide useful information about their actions to a wide range of stakeholders, including boards, investors, supervisors, regulators and the general public. It is not sufficient to publish raw data regarding an institution's activities; rather, information must be disseminated that is relevant to decision-making and judgements regarding performance, that is reliable and accurate, and that is presented in a way that can be understood and used by different actors. For corporations, this entails reporting on all types of activity, financial and non-financial, such that the corporation's activities are traceable and documented, subject to reviews by independent technical committees and auditors and also demonstrate whether it has abided by regulatory and supervisory requirements. Without transparency, managers, directors and employees cannot be held accountable for their actions because the information with which to judge their performance would be lacking.

Accountability relies on the notion that individuals can be held responsible for their actions as they affect the performance of the organization or offices they manage. It involves providing reliable relevant information about institutional performance to those with a direct interest in good performance – often shareholders, members or taxpayers – and particularly to those with the authority to hire and fire chief executive officers or to review and set binding policies for the organization. This is one way in which health insurance funds in CE/EECCA countries differ substantially from those of western Europe. Since the government has generally established these funds with little involvement from other social actors, the funds lack independent constituencies. Consequently, the government remains the key stakeholder with authority over the health insurance funds, even when they are nominally independent. This arrangement can be advantageous when it makes the funds accountable to effective representative governments. However, the limited independence can also be abused by governments that want to interfere in health insurance fund management for aims unrelated to the fund's mandate. In Kazakhstan, for example, the autonomous MHIF was accountable to a governing board that reported directly to the Kazak Prime Minister. The composition and processes of the board were not transparent, however, and the MHIF was manipulated for other purposes. The charges of corruption were one of the key reasons for which the health insurance system was cancelled after only two years of operation (Kutzin and Cashin 2002). Such interference is facilitated by the difficulties of setting clear objectives in the health sector and within monitoring processes.

Within the complex array of governance issues, accountability mechanisms play a central role. In the case of private corporations, these mechanisms tend to be reasonably direct and separable. A corporation's management is accountable to

its shareholders through their selection of board members and decisions with regard to selling or buying equity. It is also accountable to society through governmental regulation of acceptable environmental, labour and market behaviours.

Health insurance institutions also have a range of accountability mechanisms, but these tend to be less direct and overlapping. For example, the insurer may have board members representing beneficiaries, employers and government agencies at the same time that it is subjected to governmental supervision and regulations, pressured by beneficiaries who may exercise their options to select another fund, as well as negotiating with provider associations on terms of payment and quality of care.[106]

There is no obvious method of categorizing the different mechanisms for achieving accountability, although the general rules are fairly simple: align incentives and make information available and transparent. Many different schemes can be proposed for organizing the analysis of accountability mechanisms. For our purposes, three dimensions are of particular importance (based on Preker and Harding 2003; World Bank 1997; Williamson 1999; World Bank 1996):

- mechanisms of representation
- forms and scope of governmental supervision
- transparency and informational requirements.

The *specific mechanisms for representation of interests* – including owners, but sometimes also including disinterested parties, consumers, employees, or medical care providers – will have an important impact on the insurer's accountability. Representation of consumers' and employees' interests may be indirect, as when insurance agencies are directly operated as part of government, or direct, as occurs in consumer or medical cooperatives. It is common for insurers to be governed by a board of directors, with members elected by shareholders, employers, employees or beneficiaries. This election may be direct or intermediated by unions and employer associations. Terms can be short or long, synchronized or staggered, and terms of office, ethical standards and compensation also vary. Decisions regarding the mechanisms for selecting and maintaining a board have to consider that each choice has an impact on the degree of independence enjoyed by board members and on the incentives they face in guiding the institution. For example, when terms are short, board members may be more sensitive to the needs of those who elected or selected them. However, they may also be focused on short-term performance instead of longer term sustainability.

106 The rest of this section draws from Savedoff 2008.

Governmental supervision is yet another means by which insurers can be held accountable for their performance. In some countries, insurers operate in a relatively unfettered market and governmental supervision is restricted to assuring that contracts are fulfilled and that basic fiduciary responsibilities are adhered to. At the other extreme are countries with laws and/or regulations that establish strict conditions for operation, including standardizing contracts, defining a basic health plan, requiring insurers to accept any applicants regardless of health status, setting premiums, and/or requiring that contracted providers meet quality of care standards (Saltman, Busse and Mossialos 2002).

Governmental supervision can be conducted through ex ante reviews or ex post auditing. It can be the responsibility of a specific government office, a quasi-governmental independent agency, or through delegation to a privately constituted entity. The supervisory agent's funding can be amassed from government budgets, from taxes on premiums, or as a payment directly from the regulated insurers (Maarse, Paulus and Kuiper 2005).

Finally, *transparency* is critical to accountability. Insurers can be made more or less accountable through the kinds of information that they are required to compile and either make public or provide to regulators. In general, greater disclosure of information enhances the accountability of insurers; however, compiling and publishing information in a readily useable form can be expensive. In most cases, policies try to set standards for reporting information that allows consumers and regulators to hold insurers' accountable for making good decisions on a timely basis without creating an undue burden. The standards for financial reporting may be straightforward, and oriented towards assuring that insurer's have the liquidity to meet their obligations. However, standards for reporting medical care and treatments are currently at a more primitive level of development and are more complex.

In summary, the way a health insurer is governed depends substantially upon the mechanisms for representing interests on its board, the forms and scope of governmental supervision, and information regarding reporting requirements. While the literature and experience provide numerous ideas relating to the advantages and disadvantages of different arrangements, most of these "lessons" are actually hypotheses that require empirical testing. The following sections explore in turn each of these three dimensions of governance.

E. Representation of interests

Transition countries have had widely different experience with using governing boards to control health insurance funds, just as they have diverged in promoting good corporate governance in their private sectors.

The Estonian Health Insurance Fund (EHIF) in Estonia has a Board that seems to be functioning quite effectively, receiving high marks for transparency in terms of its informational reporting and administrative efficiency (Habicht 2008).[107] By contrast, the supervisory board of the former State Unified Social Insurance Fund that managed state-funded health care in Georgia from 1997 to 2007 rarely dealt effectively with – and was passive in the face of – operational and administrative problems (author's interview in 2005 with the then Deputy Director General (Health) of the former State Unified Social Insurance Fund).

Part of these difficulties may derive from a weak tradition of effective collective decision-making in these countries. Despite the extensive use of committees in former Soviet countries, a few people in each case effectively dominated decision-making. Passivity was the norm for committee members, and they served more to dilute responsibility than to enhance it. Consequently, in many countries, strong politically appointed personalities continue to hold sway over largely formal and passive boards. In other countries, the culture of collective decision-making is evolving, with more active engagement by individuals who represent competing interests and perspectives.

Another feature of governing boards that has been evolving with difficulty in transition countries is the separation of board functions; that is, policy-level decisions and supervision from management functions, such as planning, administration and operations. The usual role for a chief executive officer or general manager is to participate in board meetings with a voice and no vote; to perform as the *secretary ex officio* of the board; to prepare the agenda and minutes; and to enforce the board's decisions. Giving managers voting rights on the board creates conflicts of interest, because in such circumstances they are effectively supervising themselves. The board's main function is to hold managers accountable for their performance, to review and choose courses of action related to criticism of their activities, and to make decisions on compensation, hiring and firing. No manager should be in the position of influencing the board's decisions on such matters.

The appointment of medical doctors to boards, and sometimes as chairpersons, is controversial. Some countries require the participation of physicians in the governance of health financing institutions in order to incorporate technical expertise related to medical care in decision-making bodies. However, physicians often have a range of personal and professional interests that are affected by health insurance fund decisions and this can lead to conflicts of interest. Instances have been documented in which a particular physician

107 For example, the EHIF has received five times the title of "flagship of the financial reporting among public sector organizations" for producing the most transparent and comprehensive annual report in the Estonian public sector. It also was acknowledged for its excellent management by the European Foundation for Quality Management, which granted its "Recognized for Excellence" label to the EHIF (EHIF 2007, 2008).

has skewed decisions to favour the fees they receive, the hospitals they serve in, or the pharmaceutical or equipment manufacturers with which they have contracts (Transparency International 2006). Even when a physician does not have specific personal interests, they can often dominate agendas and control discussion in board meetings by alluding to their professional expertise, as well as influencing decisions to favour provider interests over those of beneficiaries or taxpayers. Therefore, each country has to consider the advantages and disadvantages of involving physicians in health financing governance. At a minimum, governance codes should explicitly define conflicts of interest and procedures to follow regarding disclosure, recusals and removal of physicians serving in such positions of responsibility.

Conflicts of interest become even more complex and compromise proper governance when the general managers of public health care financing entities are also physicians. When general managers of public and private hospitals are also physicians, providers' interests are strongly represented and are not counterbalanced by strong leaders representing patients, their families or taxpayers.

Another conflict of interest emerges in the relationship between government supervision and the operation of autonomous health insurance funds. In many cases, political power overrides safeguards that have been built into the governance structure. For example, funds should not be diverted from functions explicitly related to the insurer's mission at the direction of political authorities, a practice which has unfortunately occurred in several CE/EECCA countries. Instead, health insurance institutions need to be held accountable for fulfilling their mandate, which means directing their funds to purchasing health care services for their members and to the activities that are necessary in order to support efficient administration and management of insurance coverage. Depending on the insurer's mandate, this may include financing health promotion activities that offset the institution's future liabilities by reducing health risks among affiliated individuals.

Laws should be explicit regarding the purpose of governing bodies, including their rules; the rights and responsibilities of directors; the relationship between boards and management; as well as the specific roles and duties of boards in ensuring transparency and in being accountable and demanding accountability from management. In some cases, it seems that ministers of health only pay lip service to the autonomy of funds and their boards while giving direct instructions to management on what to finance and for whom. While remaining vigilant in protecting against such interference, it is also important to assure that funds are accountable to the public and are not overly insulated from external scrutiny.

F. Governmental supervision and regulation

Supervision and regulation is critical for governance. In most countries, the legislative branch of government is responsible for providing the overall orientation for government supervision of health insurance institutions. This includes establishing the responsibilities of health insurers, the process of developing regulations and the tools available to regulators for monitoring and enforcing compliance. These last functions are usually the responsibility of the ministries of health and finance or specialized agencies, but in cases where social partners are involved (such as unions and employer associations), they may also play significant roles. One of the difficulties that emerges is that the technical expertise for supervising health insurance entities is often split between agencies with financial expertise (such as finance ministries) and those with expertise in consumer protection and assuring health care quality.

There are various methods that countries use to organize the supervision and regulation of health care financing institutions: (1) health insurance can be entrusted to the (general) insurance supervisor; (2) health insurance can be supervised and regulated by specialized autonomous supervisors; (3) health insurance can be subject to special joint insurance and health supervision; (4) all forms of health care financing (public and private), as well as health care providers, can be supervised and regulated by one entity; or (5) ministries of health or regional/local governments can supervise health insurance schemes themselves.

Many governments in CE/EECCA countries are highly centralized and hesitate to devolve power to autonomous supervisory and regulatory authorities. However, some autonomy is probably important for successful regulation and supervision. Nevertheless, this autonomy does not have to be complete or apply to all functions. For example, functions that are more general, such as the setting of rules, may be less subject to abuse – and can therefore be retained by government – than more specific functions, such as inspections and audits.

As health financing institutions have evolved, the governmental institutions that supervise and regulate them have also changed. In this regard, the trend in most countries worldwide has been towards consolidation both of health financing institutions and the institutions that supervise them. Examples in CE/EECCA countries include Estonia and Poland, both of which unified their previously regional health insurance funds (see Chapter 5). In some countries, this has culminated in the creation of a single supervising agency to cover all forms of health insurance, whether public or private, profit-making or non-profit-making. Increasingly, these supervisory agencies are also responsible for supervising the qualifications and quality of health care providers. For example, Slovakia's Health Financing Authority supervises and regulates all public health

insurance companies and all health care providers. Similarly, the Netherlands' recent health reform has created autonomous agencies to regulate financial and medical aspects of the country's health insurers. In other cases, regulation of financial aspects of health insurance funds is combined with regulation of other financial institutions, leaving responsibility for the aspects directly related to regulating the quality of health care with a different agency. Regardless of the arrangement, regulatory authorities need the appropriate expertise to address both financial and health care issues.

The functions within governmental supervision vary across countries and differ most significantly between countries with a single health insurer and those with many health insurers. In general, these functions will include:

- complying with legislation to establish appropriate norms, requirements or conditions for health financing institution activities;
- maintaining dialogue with regulated institutions to improve compliance;
- providing technical assistance to comply with regulations;
- setting standards for reporting public information;
- setting standards for reporting to supervisory agencies (which may be confidential);
- conducting periodic and regular audits to identify problems;
- conducting random audits and investigations for the purposes informing policy and enforcement strategies; and
- administering grievance procedures or referring cases to judicial review.

This is not an exhaustive list, nor are all these functions required in every circumstance. However, it shows the range of tools that fall within the purview of governmental supervisory institutions. Many of these, including dialogue and reporting, play a role in promoting transparency.

G. Elements of transparency

Thus far, accountability has been discussed in terms of the direct responsibilities of board members and government to request information, to assess performance, and to make decisions about policy, compensation and hiring/firing of managers. Transparency in such direct accountability mechanisms requires particular forms of reporting to enable boards to assess whether managers are adhering to policies.

However, additional checks and balances are required to assure that health insurance funds act properly. To this end, information about performance and activities must be disseminated beyond the direct accountability chain to include other stakeholders – the public, the media and civil society groups.

Regularly scheduled public hearings on the work of health care financing institutions can provide clients and the general public with the opportunity to learn about corporate behaviour and performance. Broadcasting parliamentary hearings on radio and television can be an effective channel for dissemination of information; but public hearings in which consumers and the public can participate directly can enhance transparency even more, strengthening the power of such hearings to hold health insurance funds accountable.

Publications on revenues, management decisions and expenditures can be widely disseminated to inform the press, civil society organizations, political parties and citizens. The mere fact of publishing audited reports can be an effective deterrent to malfeasance and can encourage good management by decision-makers. Such reports are likely to be most effective if they are published in different forms – more or less technical and more or less comprehensive depending on the audience. In any event, public disclosure for consumers and the general public should be provided in clear, simple language with accurate and uncomplicated data. One example of such reporting can be found in Estonia, where the EHIF's annual report is audited by a prominent international auditing firm, published both in hardcopy and online,[108] and has been cited among the best public reporting documents in the country.

In some cases, health insurers and medical providers have sought to obstruct such reports by claiming that they violate the privacy of individuals. However, a wide range of approaches can be used to protect individual privacy without obstructing the flow of important information about the effectiveness of the health insurance agency and the health care providers that it reimburses or pays.

A final element of transparency that requires attention relates to conflicts of interest. The most effective way to avoid conflicts of interest is to exclude people from serving in important decision-making positions if they have substantial personal interests that may be affected by their decisions. In most cases, however, people who are qualified to serve on boards or within supervisory agencies will have some potential conflicts of interest, or conflicts of interest will arise around particular issues or decisions. In such cases, transparency is a critical tool for improving decisions and limiting damage. Board members and managers should be required to report possible conflicts of interest, for example publicly disclosing relevant financial holdings, contracts with pharmaceutical companies or equipment manufacturers, professional partnerships and any gifts or benefits they receive from interested parties. The governance codes should be explicit regarding when board members and managers should recuse themselves from decisions, and should establish formal mechanisms for investigating conflicts of interest and determining appropriate sanctions

108 See http://www.haigekassa.ee/eng/ehif/annual.

or actions when conflicts are revealed. By publicly reporting such information, it is possible to bring social pressure to bear and to keep boards and managers honest. When board members or managers hide information that should have been public, an explicit threshold is crossed that can serve as an objective reason for their removal.

H. Codes of corporate governance

Codes of corporate governance are important tools for raising awareness and changing norms that affect the performance of public and private institutions. These codes are non-binding rules that go beyond the law, taking country-specific conditions into account and often exceeding the standards set by international guidelines. Such codes usually address the elements of accountability and transparency discussed so far, including separation and definition of roles (for example, between government, boards and management), reporting requirements, and conflicts of interest. Since the release of the Cadbury Report[109] in the United Kingdom 1992, corporate governance standards and codes have become more common and more prominent (see Table 13.1).

Since such codes are not binding, they must rely on persuasion. Fortunately, experiences have shown that, once applied at the corporate level, the behaviours required by codes tend to persist – reinforced by new social norms – as well as becoming standards for enforcement of contracts and regulations. For example, when codes become publicly accepted, financial institutions and their directors, managers, brokers and agents may face penalties – including suspension or cancellation of licences – if they do not comply with the codes. Despite their non-binding character, codes often become de facto standards for defining negligence and personal liability in criminal and civil proceedings.

Designing national codes to meet international standards – such as following the Core Principles issued by the IAIS for insurance institutions – has substantial benefits. Directors, managers and customers can use experiences in other countries as the basis for interpreting the codes and understanding what is expected of them. Efficiencies are also likely to result wherever codes affect reporting requirements and administrative tasks. In addition, the public can utilize cross-country information to better hold insurers and agents to account. Finally, regulatory authorities can draw on other conceptual and practical guidelines to intervene and impose sanctions where necessary.

109 After Adrian Cadbury, Chairman of the Committee on the Financial Aspects of Corporate Governance, London 1992. The Committee's recommendations focus on the control and reporting functions of boards, and on the role of auditors, reflecting the Committee's purpose to review those aspects of corporate governance specifically related to financial reporting and accountability.

Table 13.1 *Corporate governance codes/principles/recommendations in selected countries (Central Europe/EECCA countries are highlighted)*

Country	Code/principles/guidelines	Date
Australia	Principles of Good Corporate Governance and Best Practice Recommendations	2003
Austria	Austrian Code of Corporate Governance	2002
Bangladesh	The Code of Corporate Governance of Bangladesh	2004
Belgium	Belgian Corporate Governance Code	2004
	Code Buysee: Corporate Governance for Non-Listed Companies	2005
Brazil	Code of Best Practices of Corporate Governance	2004
Canada	Corporate Governance: A Guide to Good Disclosure	2003
China	The Code of Corporate Governance for Listed Companies in China	2001
Cyprus	Addendum of the Corporate Governance Code (2002)	2003
Czech Republic	**Corporate Governance Code based on the OECD Principles**	**2004**
Estonia	**Corporate Governance Recommendations**	**2006**
Hungary	**Corporate Governance Recommendations**	**2002**
India	Report of the Kumar Mangalam Birla Committee on Corporate Governance	2000
Indonesia	Code for Good Corporate Governance	2001
Jamaica	Code of Corporate Governance	2005
Kenya	Principles of Corporate Governance in Kenya	2002
Latin America	Latin America Corporate Governance White Paper	2003
Latvia	**Principles of Corporate Governance and Recommendations for their Application**	**2005**
Lithuania	**Corporate Governance Code for Companies Listed in the National Stock Exchange of Lithuania**	**2003**
Malaysia	Malaysian Code on Corporate Governance	2000
Mexico	Code of Best Corporative Practices	1999
Pakistan	Code of Corporate Governance (revised)	2002
Peru	Principles of Good Governance for Peruvian Companies	2002
Poland	**Best Practices in Public Companies**	**2004**
Romania	**Corporate Governance Code of Romania**	**2002**
Russian Federation	**The Russian Code of Corporate Conduct**	**2002**
Singapore	Code of Corporate Governance	2005
Slovakia	**Corporate Governance Code (based on OECD Principles)**	**2002**

Table 13.1 *contd*

Country	Code/principles/guidelines	Date
Slovenia	**Corporate Governance Code**	**2005**
South Africa	King Report on Corporate Governance for South Africa (King II Report)	2002
The Netherlands	SCGO Handbook of Corporate Governance	2004
The Philippines	ICD Code of proper Practices for Directors	2000
Turkey	Corporate Governance Principles	2003
Ukraine	**Ukrainian Corporate Governance Principles**	**2003**
USA	Principles of Corporate Governance	2002

Source: European Corporate Governance Institute.

Notes: The web site of the European Corporate Governance Institute (http://www.ecgi.org) contains the full texts of corporate governance codes, principles of corporate governance and corporate governance reforms in Europe and other countries in the world. OECD: Organisation for Economic Co-operation and Development.

I. Conclusions

Transition countries are reforming their health systems in a context that is very different from that experienced by countries in western Europe and the Americas at the time they established their health care financing institutions. They are moving from centralized toward decentralized provision and multiple forms of financing and insurance, in a context of high expectations for medical care and a cautious mood of public sector involvement in health care. As many of these countries establish autonomous health insurance funds, they are struggling to find the balance between making these funds accountable to government agencies and making them vulnerable to inappropriate political influence. The roles of social partners in representing competing interests and holding insurance funds to account is not prevalent in these countries, and it is not clear that – given their particular political and social conditions – such representation would necessarily succeed.

It is fortunate, therefore, that countries around the world have demonstrated a wide range of effective mechanisms to promote transparency and accountability. Transition countries can benefit by studying these experiences and adapting those mechanisms that look promising for their particular conditions. In particular, transition countries seem to face particular challenges in separating and clearly defining the roles and responsibilities of government, boards, management and the public; in opening information to public scrutiny; and in changing the norms of collective decision-making. Addressing these challenges is inherently political and is necessarily faced with vested interests. However, those who are committed to establishing good governance in health financing

will find ever-increasing resources and allies whenever they push the agenda forward with transparency and openness.

References

Busse R, Saltman RB, Dubois HFW (2004). Organization and financing of social health insurance systems: current status and recent policy developments. In: Saltman RB, Busse R, Figueras J, eds. *Social health insurance systems in western Europe*. Maidenhead, Open University Press:33–80.

Chinitz D, Wismar M, Le Pen C (2004). Governance and (self-)regulation in social health insurance systems. In: Saltman RB, Busse R, Figueras J, eds. *Social health insurance systems in western Europe*. Maidenhead, Open University Press:155–169.

Dodgson R, Lee K, Drager N (2002). *Global health governance. A conceptual review*. Discussion Paper No. 1, Global Change & Health, February 2002. London, London School of Hygiene & Tropical Medicine and World Health Organization, Department of Health & Development.

EHIF (2007). *Estonian Health Insurance Fund annual report 2006*. Tallinn, Estonian Health Insurance Fund (http://www.haigekassa.ee/files/eng_ehif_annual/EHIF_Annual%20Report_2006.pdf, accessed 1 August 2009).

EHIF (2008). *Estonian Health Insurance Fund annual report 2007*. Tallinn, Estonian Health Insurance Fund (http://www.haigekassa.ee/files/eng_ehif_annual/EHIF_Annual_Report_2007.pdf, accessed 1 August 2009).

Habicht T (2008). Governing a single-payer mandatory health insurance system: the case of Estonia. In: Savedoff WD, Gottret P, eds. *Governing mandatory health insurance: learning from experience*. Washington, DC, World Bank:108–128.

Kempa M, Shearing C, Burris S (2005). Changes in governance: a background review. Working paper. In: *Salzburg Seminar on Governance of Health, 12 May 2005 to 12 August 2005*. Philadelphia, PA, Temple University (http://www.temple.edu/lawschool/phrhcs/salzburg/Global_Health_Governance_Review.pdf, accessed 25 January 2009).

Kutzin J, Cashin C (2002). Health system funding. In: McKee M, Healy J, Falkingham J, eds. *Health care in central Asia*. Buckingham, Open University Press:92–107.

Maarse H, Paulus A, Kuiper G (2005). Supervision in social health insurance: a four country study. *Health Policy*, 71(3):333–346.

Mossialos E et al. (2002). *Funding health care: options for Europe*. Buckingham, Open University Press.

OECD (2004). *OECD principles of corporate governance*. Paris, Organisation for Economic Co-operation and Development.

OECD (2005). *Guidelines for insurer's governance*. Prepared by the Directorate of Financial and Enterprise Affairs and approved by OECD Council on 28 April 2005. Paris, Organisation for Economic Co-operation and Development.

Preker AS, Harding A (2003). A conceptual framework for the organizational reforms of hospitals. In: Preker AS, Harding A, eds. *Innovations in health service delivery*: *the corporatization of public hospitals*. Washington, DC, World Bank:23–78.

Saltman RB, Dubois HFW (2004). The historical and social base of social health insurance systems. In: Saltman RB, Busse R, Figueras J, eds. *Social health insurance systems in western Europe*. Maidenhead, Open University Press:21–32.

Saltman RB, Busse R, Mossialos E, eds (2002). *Regulating entrepreneurial behaviour in European health care systems*. Buckingham, Open University Press.

Savedoff WD (2004). *Tax-based financing for health systems: options and experiences*. Discussion Paper No. 4. Geneva, World Health Organization.

Savedoff WD (2008). Governing mandatory health insurance: concepts, framework, and cases. In: Savedoff WD, Gottret P, eds. *Governing mandatory health insurance: learning from experience*. Washington, DC, World Bank:13–48.

Savedoff WD, Hussmann K (2006). The causes of corruption in the health sector: a focus on health care systems. In: Transparency International, *Global corruption report 2006: corruption and health.* London, Pluto Press:4–16.

Transparency International (2006). *Global corruption report 2006: corruption and health*. London, Pluto Press.

Williamson OE (1999). *The mechanisms of governance.* New York, Oxford University Press.

World Bank (1994). *Governance: the World Bank's experience*. *Development in practice*. Washington, DC, World Bank.

World Bank (1996). *Bureaucrats in business: the economics and politics of government ownership*. Policy Research Report. Washington, DC, World Bank.

World Bank (1997). *World development report 1997: the state in a changing world*. Washington, DC, World Bank.

World Bank (2004). *World development report: making services work for poor people*. Washington, DC, World Bank.

Wyatt M (2004). *A handbook on NGO governance.* Budapest, The Central and Eastern European Working Group on Nonprofit Governance.

Part four:

Synthesis – lessons for policy from the experience of CE/EECCA countries on the implementation of health financing reforms

Chapter 14

Implementing health financing reform in CE/EECCA countries: synthesis and lessons learned

Joseph Kutzin, Cheryl Cashin, Melitta Jakab, Armin Fidler, Nata Menabde[110]

A. Introduction

The analysis of implementation of health financing reforms in the transition countries presented in the previous chapters is based on ***a functional approach to health financing***, relating the health financing sub-functions and policies (revenue collection, pooling, purchasing and benefit entitlements) and their stewardship arrangements to progress towards health system objectives. Moving away from broad classifications of health systems – or labels – has been more than an analytical tool; it also reflects how several of these countries have innovated and experimented with new ideas "outside of the box". For example, the Kyrgyz and Moldovan cases of creating compulsory health insurance funds to purchase care for the population – while retaining the predominance of general tax financing as the revenue collection mechanism with a complementary role for payroll tax funding – were home-grown innovations that responded to the specific problems and contexts of these countries. Thinking in terms of traditional labels such as "tax-funded systems" or "social health insurance systems" would not have generated these types of reform, and in general restricts consideration of possible policy choices.

110 The authors are grateful to Antonio Duran and Sheila O'Dougherty for useful comments provided on earlier drafts.

The experience and approaches described in the previous chapters have been analysed with the goal of identifying lessons regarding how the design and implementation of health financing policy in CE/EECCA countries has affected progress toward the health financing policy objectives proposed in Chapter 1: universal financial protection and equity in finance, equity in the use of services, efficiency and quality in service delivery, transparency and accountability of the system to the population, and efficiency in the administration of the system. In spite of the enormous changes and experiments that have been undertaken in health financing policy in the region since the mid-1990s, there are few rigorous evaluations or definitive conclusions about the most effective approaches to achieve these objectives. The previous chapters represent an attempt to fill this gap by attempting to minimize ideological perspectives on particular reform strategies and instead synthesizing the implementation experience, disentangling the effects of policies and approaches from the general political and economic trends of the transition period.

The main conclusion from the nearly 20 years of policy reform experience represented in the previous chapters is that ***coherent and successfully implemented reform strategies require clear identification of specific policy objectives***, based on analysis of critical health system performance problems, and careful choice of a combination of ***well-aligned policy instruments*** that respond to the identified problems. Having a clear roadmap with guiding principles for reform, linked to processes to generate evidence for monitoring progress, makes it possible to adapt implementation to accommodate changes over time, while retaining the overall goals and integrity of the reform process. Consistent but adaptable implementation of the roadmap, in turn, requires political will and some degree of continuity. The experience also suggests that it is overly simplistic to conclude that successful reform efforts have been exclusively enjoyed by those countries with better overall economic performance. Having a more favourable economic and fiscal context certainly makes it possible to *attain* more in terms of health financing policy objectives, but varying degrees of *progress* on these objectives were achieved by countries in very different contexts. In short, ***policy matters***.

The aim of this final chapter is to synthesize key lessons from implementation, both in terms of *what* policies were most effective, and *how* policy processes were organized to achieve most effectively and sustain improvements in the health financing policy objectives. This synthesis draws out common themes and lessons from each of the previous chapters and integrates key messages across chapters. Section B discusses the contextual factors that appear to have facilitated or hampered health financing reform efforts. Section C synthesizes messages with regard to the key alignment issues between the health financing functions and the importance of an integrated approach to implementation.

Section D highlights policy pitfalls to be avoided, based on negative experiences with financing reform. Section E focuses on lessons learnt regarding the reform process and discusses issues related to the sequencing of reform measures, and Section F concludes. The lessons are intended to inform policy-makers within these countries, but may have wider applicability beyond that.

B. Contextual factors that facilitate or limit options for reform

The reviewed reform experience suggests that there a few key contextual factors that have facilitated or limited reform options and the implementation path: the specifics of the inherited health system; fiscal shock associated with the early transition period; change in relative prices due to integration in the world economy; the degree of severity in economic collapse in the early transition period; and, finally, changes in the political context.

A key message of the framework used for this book is that, even if broad goals may be shared across countries, the specific path of reform depends critically on the "starting point" of each country. Key aspects of this starting point are the organization of health financing arrangements and wider economic and fiscal context within which health systems operate. By the end of the communist era, the health financing systems of CE/EECCA countries were characterized by high degrees of fragmentation, but in different forms. As described in Chapter 2, the countries that were formerly part of the USSR and the CMEA[111] (plus Albania) inherited a system that was organizationally fragmented along the lines of the decentralized politico-administrative system. The vertical integration of pooling, purchasing and provision through a hierarchical budgetary process was fragmented geographically, or horizontally, across administrative areas. This horizontal fragmentation caused duplication of population financial and service coverage because administrative boundaries were not territorially distinct (for example, *rayon* financing and delivery systems existed within *oblast* financing and delivery systems), particularly in large urban centres. The countries that were formerly part of Yugoslavia inherited a system that was also fragmented, with integrated collection, pooling and purchasing arrangements at the level of many small communes. In both contexts, purchasing was passively implemented via input-based normatives, with very limited flexibility at provider level to re-allocate across the numerous budget line items. Hence, despite some differences, the key problematic features of the inherited health financing systems that reforms needed to address were (1) reducing fragmentation and (2) changing the incentive structure.

111 See Chapter 2.

In terms of performance, the achievements of the pre-transition health financing system were mixed (see Chapter 2 for an in-depth analysis). The greatest achievement was universal protection against financial risk. This is notable when comparing the reform experience of these countries with low- and middle-income countries elsewhere in the world, because for transitional countries the starting point was universal coverage and their populations had an expectation of mostly free access to care when needed. On the negative side, there were inequities in the distribution of services and spending, both in terms of significant urban bias, as well as in favour of the "elite" sub-systems. As would be expected from the organizational arrangements and incentive structure, the systems were also quite inefficient in terms of how services were organized and how systems were administered – both marked by excess capacity. Importantly, however, the consequences of this were not felt because of the wider context of distorted input prices and plentiful public funds.

As noted at the end of Chapter 2, two aspects of the early transition period greatly altered the performance of health systems almost immediately. The first was the ***fiscal shock*** that greatly reduced the ability of governments to spend; health budgets declined in most countries of the region, some precipitously. The second was their ***integration into the world economy*** and consequent ***change in relative input prices***, in particular for medicines and energy.[112] In the early transition period, this combination of less money and higher prices led to reduced attainment of policy objectives, with the decline related closely to the magnitude of the revenue and price shocks. In the most affected countries of central Asia and the Caucasus, OOPS rose rapidly and previously high levels of financial protection were lost. It is noteworthy that while these systems showed marked problems of equity and financial protection by the mid-late 1990s, the roots of these problems were largely in the inefficient organizational arrangements and incentives inherited from the past. These were magnified by the changed revenue and price context, which led to a mismatch between consumer expectations and resources. Getting to the roots of performance problems required a focus on addressing these underlying inefficiencies. In a very real sense, the growing equity problems were a consequence of the efficiency problem, and the reform experience suggests strongly that it was necessary to address the structural fragmentation and capacity-expanding incentives before progress on equity objectives could be attained.

While fiscal shock and change in relative prices occurred in all transition countries, the ***severity of economic collapse*** in the early transition period varied greatly across the region. As noted in Chapter 3, the large differences

112 The impact on the price of imported medicines occurred quickly. Most governments did not allow energy prices to rise immediately; these began rising in the mid-1990s as countries liberalized prices for public utilities.

that emerged across the countries – particularly with regard to fiscal context – has meant that the grouping of these countries under the common title of "transitional" does not help with understanding the differences in the attainment of policy objectives between them. For example, a simple comparison of the OOPS burden of countries such as Hungary, Slovenia or Slovakia with that of countries such as Armenia, Kyrgyzstan or Tajikistan does not reveal much about the success or failure of health financing policy in any particular case, because the differences in fiscal context between the countries means that the former group can sustain a much higher level of public spending than the latter. Similarly, differences in fiscal context (as well as the degree of integration into the world economy) probably explain much of the apparent "good performance" of Belarus compared with many other former Soviet countries, in terms of access to care and frequency/magnitude of informal payments (Balabanova et al. 2004).[113]

Differences in the magnitude of the fiscal impact of transition in different countries influenced their imperative to reform, the available resources to support reform and the overall reform directions and sequencing. In countries in which the crisis was particularly dramatic, the reform measures were often the most radical. In these countries, the consequences of postponing some highly politically contentious reforms – particularly downsizing and explicit reduction in entitlements – were severe. Most of the severely affected countries did attempt major reforms by the mid-to-late 1990s (such as Armenia, Georgia, Kyrgyzstan), while a few did not, either simply failing to act (Azerbaijan) or undergoing internal civil strife that prevented significant action (Tajikistan). The reform imperative may have been less crucial in CE countries, where the crisis was less severe, and some of the countries appear to have put off some of the more politically challenging reforms. For example, while Armenia and Georgia drastically reduced the populations and services covered by government health funding, most of the middle-income CE countries continued to guarantee universal coverage for a comprehensive set of services, adding only minor cost-sharing arrangements for a limited set of services and medicines (although in some cases, such as the example of Hungary described in Chapter 12, informal payments remain widespread). Virtually all of the CE countries introduced compulsory health insurance early in the transition period, although with significant differences in how it was organized, funded and governed.

Where the health funding levels were particularly low, there was often less resistance from stakeholders to reform measures, which provided the opportunity to redirect the flow of funds before financing levels increased.

113 As a country whose economy has not, in effect, gone through transition, Belarus has not experienced the impact on public revenues or on relative input prices (for example, energy prices remain artificially low, as do the costs of food and housing). This – combined with its relative political stability – has protected the country from the need to deal with some of the "shocks" that the transition process brought to the other countries.

In Kyrgyzstan, for example, resistance to reform measures among specialty providers and local governments was much less than in neighbouring Kazakhstan, where the expectation of future oil wealth appeared both to limit acknowledgment of the current economic crisis, and to motivate stakeholders to resist downsizing infrastructure or re-allocating what were – at that time – very limited health sector resources.

In the countries that had a clear set of policy objectives and a coherent approach to selecting policy instruments, such as in Kyrgyzstan and later in the Republic of Moldova, the economic crisis was turned into a health reform opportunity. In other countries, however, such as Armenia and Georgia during the 1990s, the policy responses led to an exacerbation of the crisis in the health system, and there were severe negative consequences for the population, particularly in terms of equity and financial risk protection. Similarly, the relatively high level of resources were used to improve health system performance in some CE countries with policy agendas clearly oriented towards system objectives (such as Estonia and Slovenia), but the delay in undertaking restructuring has had negative consequences for various aspects of health system performance in Hungary, for example.

Finally, the ***changed political context*** was also a major factor in many reforms. In most countries there was a demand for democratizing and marketizing change across all sectors. On the one hand, this provided an opportunity to implement far-reaching reforms. On the other, it was also a source of problems in countries with limited knowledge of the particular economics of the health sector (and indeed, in many countries, limited experience of policy-making of any kind), as well as more generally where the reform agenda was driven by the wider shift in ideology led by the new political leadership (or simply a reaction against the past), rather than being tightly focused on addressing specific problems in health system performance. Particularly in the CE countries in the early transition phase, the creation of semi-autonomous social insurance funds matched the political ideal of reducing direct state control and "command and control"-type management mechanisms. Decentralization of facility ownership to local governments was in line with the ideal of increased citizen involvement in social affairs.[114] The often discussed – but less frequently implemented – models of competitive social insurance and privatization of service delivery were ideas derived from the general economic sphere and applied to the health sphere.

114 The "ideal" occasionally clashed with the reality in poorer localities unable to raise funds for maintenance and upkeep, or where responsibilities were fragmented such that it was very difficult to create a coherent incentive environment for providers (for example, Albania).

C. Aligning instruments to reduce fragmentation and improve incentives

While we have analysed the health financing sub-functions separately in Part two, the experience presented throughout this book indicates clearly that successful reform design and implementation requires effectively coordinating measures across sub-functions. As noted above, addressing the growing performance problems of the health financing systems of these countries required action in order to both reduce fragmentation and improve incentives. In this section, we highlight the key lessons for the content of effective health financing reform derived from the experience in CE/EECCA countries.

i. Aligning revenue collection and pooling

Most of the countries introduced payroll or otherwise dedicated tax-funded compulsory health insurance funds in an effort to reverse the revenue decline experienced in the early transition period. Many had the additional aims of changing the "mentality" of the system from the rigidities of the pre-transition period, as well as returning to the type of financing systems that had been developing prior to 1945. The impact of this change on both the level of public revenues for health – and on wider policy objectives such as promoting universal financial protection and access to care – depended critically on the extent to which this reform was coordinated with ***corresponding changes in the level and flow of general budget funding***, and on the ***coordination of these different sources of public funds via changes in pooling arrangements***.

As noted in Chapter 4, the impact of introducing a dedicated tax for health on the level of funds is hard to discern due to concomitant underlying changes in fiscal context in these countries. For the CE countries that had a less severe economic transition, changes in the level of public revenues raised via dedicated taxes grew in line with changes in the overall economy, similar to overall public revenues. For the more severely affected countries that also introduced payroll tax, the level of funds raised was not great. In each case, however, corresponding reforms with regard to the allocation of general budget revenues to health were of critical importance. This was shown most clearly by Kazakhstan's short-lived experience with its MHIF from 1996 to 1998, whereby the slight increase in revenues from payroll tax was more than offset by the decline in revenues provided by local governments to the health system. Similarly in Estonia, the near-complete reliance on its "social tax" for the revenues of the EHIF (for both recurrent costs and capital investments) led to a decline in public funding for health (as a share of GDP) over the period, as wages became a smaller share of the overall economy. The contrasting examples are the positive experiences of the

Czech Republic and the Republic of Moldova, which introduced defined central budget transfers to their insurance funds on behalf of specific non-contributing groups of the population. The evidence from the region suggests that it is essential that clear commitments for budgetary funds are designed as an integral part of the compulsory health insurance introduction, in order to avoid offsetting revenue declines (and also to promote universality), and further suggests that such commitments are more likely to be implemented when the source of budget funds is the central rather than decentralized levels of government.

Many of the countries that introduced compulsory health insurance also changed the nature of entitlement from citizenship to contribution. In doing so, they faced the problem of creating explicitly uncovered population groups for the first time (remembering that prior to 1990 they had universal coverage). Related to this was the possibility of introducing a new form of fragmentation: different systems for the insured and uninsured parts of the population. Creating such parallel systems could have contributed to overall efficiency and equity problems, as has frequently been the case in many low- and middle-income countries that introduced compulsory health insurance in contexts in which a large share of the population is not employed in the formal sector (Kutzin 1997; Londoño and Frenk 1997; Savedoff 2004; Lloyd-Sherlock 2006; Kutzin 2007). From the start, however, most CE/EECCA countries that introduced compulsory health insurance concurrently introduced measures to fund the coverage of non-contributing population groups. Changes in pooling arrangements – combined with the link to reforms in the flow of general budget revenues – were key to implementing such measures.

In Kyrgyzstan and the Republic of Moldova, the introduction of the compulsory health insurance fund was actually part of a package of measures to reduce the fragmentation in the inherited health system. As shown in Chapter 5, the key was the coordination of pooling arrangements for payroll tax and general budget funds within their national compulsory health insurance funds. Conversely, in Albania and the Russian Federation, budget funds were not well coordinated with payroll tax revenues, and these countries developed new, harmful forms of fragmentation as a result. The changes over time in risk-adjusted pooling across insurance funds in the Czech Republic – and particularly the pooling of all payroll and general budget revenues for health insurance that began in 2004 – reflect a case of effective coordination of different funding sources to reduce fragmentation and improve the potential for equitable financial protection.

ii. Aligning revenue collection and purchasing

One theoretical advantage of having dedicated revenues for health insurance is that the purchaser has a good basis for predicting its level of funding and is thus

better able to engage in a realistic contracting process with providers. Having a stable and predictable inflow of revenues is essential for good purchasing; however, a dedicated tax alone is not a sufficient condition to achieve this in many countries, particularly those in highly challenged fiscal or governance contexts.[115] Indeed, it is the ***ability to ensure dedicated revenues, rather than merely having a dedicated tax***, that makes the difference.

Just as a dedicated tax is a theoretical advantage for predictability, so too is general revenue funding a potential disadvantage because it is subject to the annual budget negotiation process, and – at least for most of the ex-USSR countries – the legacy of low priority for the health sector has persisted. This can contradict our general recommendation, with regard to the importance of not relying solely on payroll taxes in order to pursue the objective of universality. For the countries with some negative experiences of diversification, such as the Russian Federation, Kazakhstan and the initial Kyrgyz experience, meeting reimbursement commitments to providers was at times compromised as a result of the considerable difference between the planned and realized levels of budget funding. The positive experience of both the Czech Republic and the Republic of Moldova suggest, however, that it is possible for budget flows to be made predictable over a period of years, and hence it is possible to benefit from the advantages of both diversification and stability. These countries have incorporated into health insurance/financing legislation an enforceable budget transfer mechanism. In the Czech case, this took place through a requirement to transfer a fixed percentage of the average wage on behalf of the economically inactive population, while in the Republic of Moldova it took the form of a requirement to transfer the equivalent of the annually estimated per capita cost of the benefits package on behalf of "state-insured persons". While the insurance laws in Kazakhstan and the Russian Federation also required transfers from general revenues on behalf of specific groups of non-contributors, these were not enforced. As reviewed in Chapter 4, a key difference between the more and less successful experiences was the centralization of the budget transfer requirement. In the Czech, Moldovan and later Kyrgyz experiences, responsibility for making the budget transfers belonged with the central government. In the Kazakh, Russian and early Kyrgyz cases, the responsibility fell to local governments.

iii. Aligning pooling and purchasing for redistribution and efficiency gain

Chapter 5 illustrated the importance of reducing fragmentation in the pooling function in order to enable greater redistribution (for equity and financial protection objectives), as well as to facilitate restructuring for efficiency gain.

115 For example, Kyrgyzstan's early experience with its payroll tax-funded MHIF demonstrates that simply having a dedicated tax was not sufficient to ensure dedicated revenues because the legal provisions for transfer of funds to the MHIF were not enforced (see Chapter 4).

If pooling is centralized but purchasing mechanisms remain linked to capacity, redistribution will not take place, and there will still be no incentives to reduce fixed costs. Conversely, the gains from any new payment incentives will be limited if pooling remains fragmented. In Bosnia and Herzegovina, for example, partial capitation payment for primary care providers did little to redress the large geographic differences in per capita public spending on health, because pooling is fragmented at the cantonal and entity levels (reflecting the highly decentralized governmental structure arising from the political settlement of the earlier civil conflict), with very limited scope for redistribution across these territories. Similarly, the Russian Federation has attempted to move to new provider payment mechanisms de-linked from capacity, but in most regions pooling remains fragmented between insurers and local governments, and hence the impact on financial protection, equity and efficiency of the delivery system are yet to be seen. Kyrgyzstan is one of the few countries in which there is clear evidence over time of improvements in all of these dimensions. The shift from input- to output-based payment methods for health services – combined with pooling that was progressively centralized from *rayon* (district) to national level over a period of seven years – led to greater equity in the financing and utilization of health services, as well as efficiency gains from the downsizing that led to reductions in fixed costs (see Chapters 5, 6 and 8, as well as Kutzin, Jakab and Shishkin 2009). Therefore, reducing fragmentation in pooling is a necessary but not sufficient condition for better redistribution of health care resources and infrastructure downsizing. It requires both ***pooling reforms to reduce fragmentation*** and ***purchasing reforms to create the appropriate incentives*** for making progress on these efficiency, equity and financial protection objectives.

iv. Aligning revenue collection with benefits package design

Theoretically, the most obvious linkage among the health financing sub-functions is the one between revenue collection and benefits design. Benefits that are promised cannot exceed revenues collected without threatening the transparency objective of the system; the consequence(s) of doing so will be that the entitlements cannot be delivered under the conditions promised, providers cannot be paid for delivering them, or both. Instead, there will be implicit rationing, perhaps most commonly appearing in the form of informal payments (see Chapter 12) for services.[116] In practice, however, all countries have struggled with this issue of aligning public revenues with promised benefits. Chapter 2 highlighted that one of the legacies of the former health systems was high levels of coverage against the financial risk of illness, although the benefits package

116 See the discussion of sustainability trade-offs in Chapter 1, as well as in Thomson et al. 2009.

was not explicitly defined. This was achieved by keeping input prices much lower than they would have been in a market economy, limiting technology inflow, and leaving rationing decisions to physicians. Chapter 7 described the erosion in the high levels of coverage during the transition process due to the decline in the ability of governments to fund previous levels of entitlements and activity. The fiscal pressure to bring benefits in line with revenues and the popular pressures to clarify patient entitlements triggered benefits package reforms in many countries.

A few countries, such as Slovenia, the Republic of Moldova and Estonia, have successfully linked the revenue collection function to benefits. Most others, however, found an explicit reduction in the benefits package that was radical enough in magnitude to bring about fiscal balance to be politically unpopular and, therefore, shied away from its full implementation. In some cases (such as in Hungary, Croatia and Poland) the gap between benefits and revenues is exposed not only through the persistence of informal payments but also through the persistent deficit of health insurance funds or debts accumulated by providers.[117] Therefore, although the link between the revenue collection and benefit functions is theoretically clear, the political difficulty of making this explicit has meant that its effective implementation has been one of the most contentious issues in the region (and in many other regions as well).

v. Aligning benefits package design with purchasing

Experience indicates the importance of aligning benefits package design with purchasing instruments so that entitlements are more than declarative and desired patterns of service utilization can be promoted. For example, most countries have promoted the role of primary care gatekeeping by having in place policies that provide for additional charges for patients that self-refer to specialists for non-urgent consultations. In effect, this means that such self-referral is not covered, or is covered to a lesser extent, than seeking care first at the primary care level. Without this measure, the gatekeeper role is declared but not supported by incentives.

The lesson we derive from the experience of the CE/EECCA countries in this regard is that reform of the benefits package (and associated policies on co-payments) is unlikely to be successful without the necessary changes in purchasing required to alter the overall incentive environment. Given the radical decline in the availability of public revenues that had occurred by the mid-1990s, in Armenia and Georgia for example, the initial focus of reforms was on trying to specify the package more precisely. This seemed rational, given

117 In the Hungarian case, this was to some extent deliberate, as there was a practice of over-spending the budget, particularly in terms of pharmaceuticals, until 2007. See the related discussion in Chapter 6.

the need to try and focus both public funds on the services with the greatest health gain and co-payment exemptions on the population groups most in need. Without having a purchaser in place that functions well, however, these aims could not be realized. The ability to enforce a package of entitlements depends critically on the ability of the system to purchase them. In turn, this means that there must be a purchaser in place, supported by information systems that enable a link to be made between provider payment and clinical/patient data from providers. When such systems are in place, it then becomes possible not only to declare the entitlements of the population but actually to purchase them. Without them, the evidence suggests (see Chapters 7 and 12) that the effort at formal rationing will be undermined by informal methods (such as informal payments).

This is exemplified by the Kyrgyz reforms, which link a patient's formal co-payment category to the "base rate" for the case-based inpatient payment system (Chapters 6 and 7). Hospitals received higher payments from the MHIF for patients in exempt categories, and lower levels for others who had to pay. This explicit linkage – together with policies to enable the hospitals to use the formal co-payment revenues to buy inputs and increase staff salaries – led to a reduction in the frequency with which patients paid informally, as well as a marked reduction in OOPS in hospitals by individuals in exempt categories. This alignment of purchasing with entitlements at the level of each patient – rather than, for example, a declaration of exempt people and a provision of a budget to the hospital – led to improvement in the transparency of the system. This reinforces the more general lesson that the alignment of purchasing with benefits is required in order to provide for explicitly funded entitlements, and to avoid the often-experienced reality of exemptions as the result of an unfunded mandate.

vi. Aligning revenue collection, pooling and purchasing with service delivery

Critical linkages exist not only among the health financing sub-functions, but also between health financing and service delivery. The previous system of budget allocations tied to capacity-related norms and fragmentation in funds pooling was a major contributor to the excess physical capacity that characterized post-transition health care delivery systems. Many countries had the potential to substantially reduce the size of their delivery systems without damaging access, and hence to improve the efficiency of resource utilization (for example, by enabling a shift in public spending from fixed to variable cost inputs). Downsizing the service delivery infrastructure can thus be viewed as a key "health reform imperative" for virtually all the CE/EECCA countries, given this legacy of the pre-transition health system and the changed context of

higher input prices and lower public revenues. More concretely, it was essential to change the incentive structure in order to achieve a more streamlined and efficient service delivery system.

The key lesson from the experience of these countries is – again – that effective reform requires a combination of measures. Single instruments, such as the development of a facility master plan or a change in provider payment methods, were not very successful on their own. In fact, success appears to have been the product of coordinated changes in revenue collection, pooling, purchasing and service delivery arrangements (see also Fidler et al. 2006). These changes included changes in the health facility budget formation process and public financial management rules (collection), shifting the organization and funding arrangements of health facilities from the political/administrative level to a territorial/geographic basis (pooling) and from input/norm-based to output- and population-based provider payment methods (purchasing). Changes also involved the development of facility restructuring plans, along with greater managerial autonomy at provider level (delivery) – sometimes, but not always, involving privatization of service provision. Underlying (and where lacking, undermining) these technical instruments is the strength of political will to take on what is invariably a difficult and painful process that threatens powerful interests.

Several of the cases described in Chapters 6 and 8 illustrate the importance of taking a multi-pronged approach to downsizing infrastructure. In Estonia, Hungary, Kyrgyzstan and Lithuania, restructuring plans were supported by organizational and provider payment reforms to stimulate implementation of those plans and, where relevant, these were supported by changes in budget formation practices. However, these and other cases also illustrate that political constraints have mostly limited the potential gains from such restructuring. Typically, it is a country's capital city that has the greatest excess capacity, but in most cases (Estonia being a notable exception), progress on downsizing/merging of the large national hospital centres and the municipal hospitals has been limited. In Hungary, for example, case-based payment incentives for hospitals had set the stage for infrastructure downsizing for 10 years, but the government decided not to implement this until 2007. Kyrgyzstan achieved considerable progress in reducing infrastructure at *oblast* level, but progress in the two biggest urban centres of the country has been minimal due to the political power of the "medical elite" combined with the power of the municipal governments. Bulgaria and Romania are cases in which the purchasing agencies were simply not given the tools or appropriate corresponding measures by government, and little progress has been made in terms of restructuring as a result.

Often, the revenue collection mechanism (or more precisely, the conditions attached to the funds that flow to the purchasing agency) has implications for the flexibility of the funds for later use for purchasing services and in turn, for enabling providers to make internal allocation decisions to improve efficiency. This is particularly true in the case of revenues that flow through a government's "treasury" or are otherwise subject to strict government budgetary rules or conditions. Conceptually, there is no reason why the source of funds should constrain the flexibility with which they are used by either the purchaser or the provider. The evidence from reform implementation in the region, however, suggests that the practical reality is often quite different. In Chapter 10, the experience of Kazakhstan and Kyrgyzstan shows that where the "budget formation process" for facilities owned by the public sector was still based on line-item input norms, and their Treasury Systems continued to disburse funds on this basis, it was very difficult to implement fully the new provider payment systems based on outputs or population considerations. In addition, there has been a temptation for the Treasury System to take on other functions beyond improving country cash management: specifically, control of the allocation of resources by health providers.[118] This is inconsistent with the broad health financing reform strategies of separating the purchaser and provider(s) of health services, and giving the providers more autonomy over their internal resource management decisions. Similarly, the strict legal and regulatory conditions placed on the funds received by Bulgaria's NHIF effectively prevent it from using its potential market power to induce required changes at provider level. Countries that have been able to provide the necessary operational flexibility to their purchasing agencies – often by aligning their purchasing arrangements with the underlying revenue management systems in their public sectors – have had an easier time establishing new purchasing systems. A positive example of this is the Republic of Moldova, which effectively transformed the legal nature of the general budget funds pooled in its NHIC and also changed the legal status of the providers. By so doing, the NHIC was able to create appropriate incentives for downsizing, and providers were able to respond.

D. Some policy pitfalls to avoid

The reform experience also suggests some lessons with regard to what *not* to do, either in terms of policy or implementation. While many issues of policy reform are of course context specific, here we suggest some commonly observed pitfalls in either the development or the implementation of health financing policies in the CE/EECCA countries.

118 At times this may have been well intentioned in the context of treasury reform, but without full understanding by the financial authorities of the nature of the health sector, and in particular, the special status of hospitals that could be state property but are nonetheless regulated under private law (Fidler et al. 2006).

- Pitfall 1. Treating the benefits package as the solution to an accounting problem rather than as a policy instrument.
- Pitfall 2. "Solving" informal payments simply by legalizing them as co-payments.
- Pitfall 3. Undertaking incomplete or "half-hearted" reforms.
- Pitfall 4. Implementing contradictory policies.
- Pitfall 5. Having unrealistic expectations in terms of the effectiveness of health financing instruments in improving quality of care.
- Pitfall 6. "Starting insurance" with the formal sector and hoping that economic growth will bring eventual progress towards universal coverage, as it did historically in many western European countries.
- Pitfall 7. Ignoring public health services and public health programmes in health financing reform and policy analysis.

Pitfall 1. Treating the benefits package as a solution to an accounting problem rather than as a policy instrument. Many health systems face pressures to calculate the "true" or "real" cost of their benefits packages. This often involves recommendations to undertake large scale burden-of-disease, costing and cost–effectiveness studies. When combined with estimated utilization levels and revenue projections, it is theoretically possible to determine a cost–effectiveness threshold for inclusion or exclusion of services from the package, and therefore to "buy" the most health with limited available public funds.

There are several problems with this approach in practice. Because of the structural legacies of the pre-transition health systems combined with the imperative to improve efficiency in the period that followed, one of the main objectives of reform was to change the underlying cost structure of the service delivery system. In particular, it was essential to address fragmentation and align incentives in order to reduce the fixed costs of maintaining the "heavy" infrastructure of the past. Because "cost" is, in economic terms, a function rather than simply a point estimate, the observed unit cost of service delivery in any one year reflects both capacity utilization and the existing inefficiencies in the structure of service delivery. To the extent that restructuring reforms succeed in reducing fixed costs, the same level of public revenues can buy many more services than was possible prior to that efficiency gain. Similarly, the cost of increased levels of utilization will be less than the calculated unit cost if there remains substantial excess capacity.[119] For these reasons, it is essential to understand the cost and production functions of service delivery, rather than merely having a single point estimate of unit costs. Worse, fixing unit costs and contracting on that basis may actually inhibit restructuring reforms, as the

119 Where there is excess capacity (for example, low levels of inpatient bed occupancy), the marginal cost of increased utilization is less than the average cost that would be reflected in a unit-costing exercise.

contractual price is likely to be overstated and this will reduce the incentives for further downsizing.

A second problem associated with the approach to benefits package design in many CE/EECCA countries has been the tendency to make them quite complex as the "scientific" outcome of a detailed calculation. In a sense, developing the package on the basis of such calculations reflects what is, in effect, just a new central planning tool that neglects the health economics of patient–provider interaction. If, for example, the determination of whether something is or is not covered depends on the doctor's decision, then this decision can be affected by the interests of that doctor. As noted in Chapter 7, this has been the case in several countries (such as Ukraine, Georgia and Armenia). In effect, a highly detailed package creates an enabling environment for provider manipulation, and in so doing can contribute to informal payments.

Pitfall 2. "Solving" informal payments simply by legalizing them as co-payments. Related to this is the perception that informal payments are per se a problem that should be addressed by transforming them into formal co-payments. The real problem, however, relates to the policy objective of promoting transparency in the entitlements and obligations of the population, and the benefits package (and related policy on co-payments) should be oriented to promoting that objective. Although informal payments certainly reflect a transparency problem, simply formalizing them does not necessarily improve transparency. This is particularly true when formalization takes the form of a highly detailed schedule of fees. The message for both the benefits package and co-payments is that, while calculations are required in order to provide rough estimates of the magnitude of what is affordable for the system, these calculations must be transformed to enable communication of the package to the population in a manner that is understandable. This means, for example, defining entitlements in terms of levels of care (for example, primary care consultation) rather than a long list of diagnoses, and having a limited number of co-payment levels so that people have a real chance of understanding what they will have to pay prior to the decision to seek care.

Pitfall 3. Undertaking incomplete or "half-hearted" reforms. The CE/EECCA countries have implemented very different reforms under increasingly different contextual constraints. Despite these differences, what appears to mark the more successful reformers (such as the Czech Republic, Estonia, Kyrgyzstan, the Republic of Moldova and Slovenia) has been full implementation of their reforms and progressive development of their institutions once decisions had been made with regard to the main direction of change. For example, despite the initial difficulties experienced by the Czech system following the implementation of their competitive insurance model in 1993, the focus of

policy was on improving the functioning of this system, as demonstrated by the changes introduced over time in the risk-adjustment mechanism. Similarly in Estonia and Slovenia, initial decisions on their particular form of Single Payer model (in Slovenia with complementary VHI) were followed by progressively strengthening the purchasing capacity of their social insurance fund. Despite the lower income and more fiscally constrained contexts of Kyrgyzstan and the Republic of Moldova, they also demonstrated the same pattern of both fully implementing their approach to reforms and progressively improving the functioning of key agencies – their compulsory insurance funds.[120]

In contrast to these cases, there are numerous examples of countries that appeared to make a decision on the direction of their reforms but then did not fully implement what had been decided. One example is the Russian Federation. First, the decision was made to solve the inherited fragmentation problem by creating a territorially based compulsory health insurance model to be implemented through competing insurers within each territory. In practice, this was only implemented halfway, as most local governments that were supposed to allocate funds to this process on behalf of non-contributors continued instead to directly fund their health facilities. The result was an even more fragmented system that has not made much progress in addressing the critical performance problems it faces. Similarly in Albania, the HII did not become the single payer it was intended to become for more than a decade after its creation in 1995, as budget allocations continued to flow directly to health facilities. In addition, the government did not create the conditions needed for the HII become a strong and active purchasing agency. The Albanian and Russian examples (analysed in Chapter 5), as well as those of many other countries, suggest the importance of "seeing things through", rather than only putting in place half measures.

Pitfall 4. Implementing contradictory policies. While compromise is an inevitable part of any reform process, it is essential that the compromises made do not fundamentally conflict with the objectives of reducing fragmentation and creating financial incentives for efficiency gain. Both Albania and the Russian Federation established new institutional arrangements that could have driven progressive changes in their systems, but this was undermined by failing to coordinate (or pool) general budget and payroll tax revenues in a coherent way. Similarly, as shown in Chapter 6, the constraints placed on Bulgaria's NHIF effectively prevented it from using its purchasing power. Contradictions were also faced in the early years of the Kyrgyz reforms, when the incentives

120 This does not mean that in these countries, there were not obstacles or at times threats to cancel or backtrack on the reforms. A critical part of the process (noted in Section E of this chapter) was to build in an objective analysis and to document the results of the reforms, so that a convincing case could be made to continue with the process when these threats appeared. In some of the countries (such as Kyrgyzstan, the Republic of Moldova), donors also played a role in keeping on track and fully implementing reform programmes.

to reduced fixed costs arising from the new output-based purchasing methods used by the MHIF – along with the progress made in converting informal payments into formal co-payments – were undermined by the input-based budget formation process and restrictive Kyrgyz Treasury System rules (see Chapter 10). These contradictions led to a reduction in the provision of budget funds as a direct result of both downsizing and the sudden appearance of "new money" from patients in hospital accounting systems. The key to effective policy reform in this and other positive cases was knowing which compromises could be accepted and which could not. The latter would be those measures that undermined the aims of reducing fragmentation and changing the incentive environment.

Pitfall 5. Having unrealistic expectations in terms of the effectiveness of health financing instruments in improving quality of care. While it is widely accepted that the provider payment incentives of the pre-transition health systems were tied to outdated clinical practices and did not provide clear incentives to promote quality of care, the evidence from these (and other) countries suggests that the scope for driving quality improvement through purchasing incentives alone is limited (Figueras, Robinson and Jakubowski 2005; Velasco-Garrido et al. 2005; Maynard 2008). Quality is inherently difficult to measure in a systematic, real-time way that allows for purchasing decisions to be regularly made on this basis. Hence, while purchasers can and should make use of quality standards, the scope for improving quality through financial incentives alone is limited. This reflects an important recognition in terms of financing policy more generally; namely, that financing incentives need to be combined with changes in medical education and provider-level quality improvement processes.[121] This issue is now entering the forefront of the policy agenda in those countries that have reformed their health financing arrangements with relative success, but are yet to see improvements in clinical quality of care and health outcomes. There remains an important agenda for purchasing to promote efficiency in the organization and delivery of services. Yet countries should avoid over-design of financial incentives for quality (or penalties for poor quality). At the very least, a reasonable aim for policy in many cases would simply be to eliminate incentives that promote poor or uncoordinated care and replace them with neutral incentives.

Pitfall 6. "Starting insurance" with the formal sector and hoping that economic growth will bring eventual progress towards universal coverage, as it did historically in many western European countries. For both transition countries and low- or middle-income countries more generally, some have

121 For example, some quality initiatives can be designed in parallel to financing/provider payment reforms, and these will converge over time; for example, accreditation or the existence of internal quality improvement processes that eventually become a conditions for contracting by the purchaser.

argued that the path to developing a universal health system should follow that experienced by western European countries, such as Germany or the United Kingdom. Based on the historical experience of these countries, it is argued that transitional and developing countries with high dependence on OOPS should "start" with VHI and eventually scale up coverage as the economy and formal sector employment grow (Busse, Schreyögg and Gericke 2007). We see this as a fundamentally flawed approach, based on a failure to understand a basic message of the functional framework for health financing, which is that every country has a starting point of existing collection, pooling and purchasing arrangements and hence is not a blank slate with "no insurance". Further, they fail to appreciate that the context of low- and middle-income countries today is different from that facing western European countries 70–100 years ago.[122] It is also a recipe for inaction by countries with limited resources or poor economic growth potential – exactly the countries most in need of an effective policy response.

Conversely, we believe the evidence demonstrates that there is considerable scope for action, even for low- and low-middle income countries, as reflected by the reforms in Kyrgyzstan and the Republic of Moldova that are highlighted in this book. Because modern medical technology is available now in all countries, the rationing decisions facing today's health systems are far different from those facing western European countries in the middle of the previous century. Taking the route of "gradual scale up" of insurance along with the growth of the formal sector is more likely to lead to segmented systems (Londoño and Frenk 1997; González Rossetti 2002), as the initially insured groups solidify their access to benefits rather than promoting inclusion of the rest of the population. Hence, it is essential that countries "design in" universality in their reform processes from the beginning (Kutzin 2007). This has been the experience of most CE/EECCA countries that combined general revenue funding with new compulsory contributory insurance mechanisms. Further, because the starting point of the transitional countries was made up of not only over-dimensioned and inefficient systems but also universal coverage, there has been (and continues to be) great scope for financing reforms to address efficiency problems without sacrificing universality. Indeed, because inefficiencies tend to spill over into funding shortfalls, which, in turn, manifest as the need for patients to pay more out of pocket, it is the poor who suffer most from them. Hence, using financing instruments to address system inefficiencies – rather than fragmenting the system through voluntary insurance that would

122 In particular, this refers to the radically different capability and costs of medical technology (including medicines) that exist today compared with 75 years ago. In the early part of the 20th century, the potential to incur impoverishing levels of health care costs did not exist to any meaningful extent, and similarly, the potential gains from medical care were very limited. Today, however, even in very poor countries, health systems do exist and expensive medical technologies and inputs are available (for example, in the national tertiary hospitals). In turn, this requires a public policy choice regarding how to ration access to such services. Hence, the recommendation for countries to simply follow the path that began when health systems barely existed in western Europe ignores these important differences in context and is inappropriate.

undermine the scope of purchasing to drive efficiency gain – seems to us to be a better approach. Certainly, it is hoped that economic growth will enable large and sustained increases in revenues, which will, in turn, allow for further improvements in access and financial protection, but it would be irresponsible for health policy-makers (and their advisors) to make "hope" a centrepiece of health financing policy.

Pitfall 7. Ignoring public health services and public health programmes in health financing reform and policy analysis. While this book has demonstrated that the health financing reform experience in CE/EECCA countries is quite rich, a notable exception is financing reforms with respect to public health services and programmes. Typically, the purchasing of such services has been touched only to a limited extent by new agencies, such as compulsory health insurance funds. However, the financing arrangements for these services need reform; they contribute greatly (together with unreformed service delivery arrangements) to the critical public health/disease control problems that exist in many of these countries. This failure reflects not merely inadequate policies but rather insufficient attention to the nature of the problem. As shown in Chapter 9, the same framework that is used to analyse the financing of the personal services typically covered in a benefits package can also be usefully applied to public health services and programmes. Further, without addressing the core problems of fragmentation and misalignment of instruments as they apply to these services, the health systems of the CE/EECCA countries will only make limited progress in improving the health of their populations. It can no longer be acceptable to continue to ignore the financing and service delivery arrangements for this part of the health system. For those countries with substantial reliance on external funding sources for some of these services (such as HIV and TB services supported by the Global Fund), the failure to address underlying systemic problems may do more than impede progress. Indeed, it may be that pouring more funds into unreformed arrangements (for example, the fragmented financing and delivery arrangements for control of TB that exist in most of the countries of the region) is akin to throwing gasoline on the fire – reinforcing the fragmentation that inhibits solutions, rather than getting to the root of the problem.

E. Lessons for the sequencing of policy reform

The previous two sections focused on lessons with regard to the content of health financing reforms. Here we focus on lessons with regard to the sequencing of steps in the reform process. As with the content, the appropriate sequencing of reforms at a particular point in time in any one country is very much context specific, and the "lessons" here are not intended as an implementation manual

as such. Nevertheless, certain themes do emerge from the experience of the CE/EECCA countries.

i. Sequencing of policy objectives

In Chapter 1, we proposed a set of health financing policy objectives that are relevant to all countries, although of course the relative importance of each (or the relative size of the problem with regard to each) is country specific. Given the structural legacy of the inherited health system, combined with the new context of limited public revenues and changed input prices, ***addressing inefficiencies in the organization of service delivery was the first priority*** (and continues to be so for many countries). This is not meant to imply that efficiency is more important than the objectives of, for example, financial protection, equity of access or transparency. The message is rather that the structural inefficiencies need to be addressed before (or at least concurrently) tackling the other objectives of the system.

Indeed, the nature of the inherited inefficiencies actually resulted in consequences for the other objectives of the system. The more government has to spend to provide energy (heat, electricity, and so on) for an extensive and poorly maintained physical infrastructure (reaching over 20% of public spending on health in some countries at various times during the transition era), the less funding is available to pay for variable cost inputs, such as medicines (Chapters 6 and 8). This has meant that patients have to pay more for medicines than they otherwise would in a more streamlined and efficient system. In turn, the need to make such payments is a greater obstacle to service utilization for poorer individuals, and similarly a greater financial burden for them should they choose to pay. Hence, there were – and continue to be – ***distributional consequences of system's structural problems: the poor suffer more from inefficiencies***. To the extent that such payments were informal, the inefficiency problem also spilled over to become a transparency problem. So long as systems continue to "waste" a substantial amount of the public resources provided to them, little progress will be made to improve financial protection, equity and transparency – or health, particularly considering the inefficiencies plaguing the financing arrangements for public health services and programmes. Moreover, it is hard to make the case to increase public spending for health if the system cannot demonstrate that current funds are being used efficiently. For these reasons, addressing major structural inefficiencies is the first order of business for health financing reforms. Following this, systems will be better able to address problems of equity, financial protection and transparency.

ii. Implications for sequencing reform actions

The preceding discussion implies that addressing the roots of the structural efficiency problem are the first priority for action. As noted above, this means reducing fragmentation and eliminating the incentives for capacity expansion. In turn, this requires the alignment of reform instruments in order to achieve these aims. Conceptually, there are many approaches to reducing fragmentation in financing and changing the incentive environment. The reform experience suggests, however, that there are important differences between what is conceptually possible and what is practically (or politically) feasible to implement.

We have noted that reducing fragmentation in pooling and changing provider payment incentives are critical prerequisites for progress (see Chapters 5 and 6). Although a new revenue collection mechanism is not conceptually necessary to make such changes (as is demonstrated by the experience of the United Kingdom, Finland, Sweden and others, for example), most CE/EECCA countries could not initially implement this change from within their core public financial management systems. Meaningful change seemed to require the creation of a new agency to pool funds and purchase services – namely, a health insurance fund (although constituted under a variety of labels, with differences in the basis for entitlement, differences in the mix of funding sources, and so on). Therefore, a critical reform implementation step has been to establish a new agency, which typically goes hand-in-hand with the introduction of a new dedicated tax (Armenia is a notable exception). The tax does not have to be high (for example, in Kyrgyzstan it was – and remains – only 2% of payroll), but it appears to be necessary as a means to establish *new* ***institutional arrangements that create opportunities to drive broader health financing reforms.*** Perhaps the most important role of the new compulsory insurance funds in the region has been to allow or even catalyse new approaches to pooling and purchasing arrangements, particularly the creation of a purchaser–provider split. This split was also an essential step given the starting point of vertical integration and excess capacity on the provision side. In addition, the new institutions created to support or run the operations of the new insurance agencies had an explicit or implied mandate to move away from "business as usual" and modernize the relationship between the purchaser and providers of health care. In other words, they were the key ***agents of change*** in the reform process. From this perspective, the principal role of the payroll tax was not to generate new revenues, but instead to be an integral part (again, in practical rather than conceptual terms) of a package of measures required in order to establish new institutional arrangements in the health system.

Experience suggests that successful reformers began with the simultaneous introduction of a new dedicated (usually payroll) tax and a new agency responsible for pooling and purchasing. Unfortunately, experience also shows that many unsuccessful reformers began this way as well. Simply creating the new agency is not enough to make it an effective agent of change. ***A new agency needs to be accompanied by measures to create or strengthen the purchasing function***. Most countries needed to start with a new institution outside of the MoH, with an off-budget status to overcome the rigidities of the inherited system. In the more successful reforming countries, new roles and relationships between purchasers and providers took root, and they reached a point at which there was no risk of reverting back to the old methods of doing business. Thus, having established the purchasing entity (or entities), it is essential to create the conditions for it (or them) to be effective. One of these conditions is *time*. In particular, becoming a good purchaser means developing the skills and systems needed to make an effective shift from input- to output-based allocation practices. It also requires the time needed to identify other underlying constraints on the ability to implement active purchasing of services, such as the underlying public financing/budget formation rules, institutional or managerial constraints at provider level, and so on. Fundamentally, ensuring that purchasers have enough time to develop requires political commitment to work through the inevitable problems that arise early in the process. Good examples are the commitment shown by the Czech authorities to their new model, despite significant difficulties experienced in the mid-1990s, and the development of the purchasing capacity of Kyrgyzstan's MHIF over a four-year period. This gradual capacity development prepared the MHIF to shift from managing a small pool of funds to gradually taking responsibility for purchasing the SGBP using all budget and payroll tax funds.

Part of the process of establishing a strong purchasing agency, creating the appropriate incentive environment and avoiding contradictory policies is also ***to establish clear governance and accountability arrangements for the agency*** (Chapter 13). While there is no "best" model for doing so, the arrangements should aim to ensure that the purchasing is aligned with the overall government health policy, and that there is transparent reporting on the use of funds. Given that purchasers need to be free of many of the restrictive elements of the core public financial management system, it is essential to establish mechanisms to ensure that government and population have confidence in this new method of managing funds (especially before implementing any decision to set up a large pool of public funds outside the Treasury System). Ideally, this reporting can develop in the direction exemplified by the annual report of the EHIF, which provides public information not only on its revenues and expenditures but

also on its performance against a number of indicators related to population satisfaction, access to care, and quality (EHIF 2009).

Good governance and accountability may also be associated with consistent analysis and reporting on the performance of the financing system against well-defined policy objectives. This reporting reflects on the performance of the purchasing agency, even if not carried out directly by the agency. The Kyrgyz reform process is a good example. Since the conception of the Single Payer reform, the process has included regular reporting against a defined monitoring and evaluation framework, including the production of analytic reports on progress towards reducing excess physical capacity, reducing informal payments, equity in financing and utilization of care, and financial protection (see, for example, Ministry of Health of the Kyrgyz Republic 2008). This consistent flow of monitoring reports and evaluation studies contributed greatly to the decision by donor agencies to invest money directly into the Single Payer funding mechanism (the money for the SGBP managed by the Kyrgyz MHIF) rather than into separate projects, as well as further motivating an increase in the share of government spending allocated to the health sector. More generally, countries (such as the Czech Republic, the Republic of Moldova and Slovenia) that demonstrated a strong commitment to documenting how funds were used and reporting their progress against key policy objectives appear to have been best able to sustain the implementation of their reforms, and ultimately demonstrate better results. This suggests that accounting for the use of funds and for performance have been critical elements in sustaining political support for health financing policy reform.

This suggests that, following the identification of the priority (in terms of timing) objective of addressing structural inefficiencies in the system, the critical first implementation step is to establish and strengthen the agency responsible for pooling funds and purchasing services. Creation of this agency (or more precisely, this responsibility) outside of the core public sector financial management system has tended to come as a package with a new source of funds (typically a payroll tax) in order to stimulate the creation of a new incentive environment within the sector and *create movement* in a manner different from the inherited bureaucratic process.[123] Closely linked to this is the extension of greater managerial autonomy to providers, at least with regard to the funds flowing in new ways from the new agency. Faced with the need to make internal resource allocation decisions, rather than simply implementing line-item budgets, the extension of autonomy creates a demand (from the

123 It is notable that even in Kazakhstan, where the MHIF only existed from 1996 to 1998, a legacy of new output-based payment systems was retained and further developed within the *oblast* health departments. This continues to be a central element of the country's health financing system. Even though this example of reduced fragmentation and changed incentives exists within the core public financial management structure, the implementation process represented a move outside that structure.

providers, the purchaser and policy-makers) for improved management skills and systems at provider level. Introducing such provider-level developmental actions without changing provider autonomy or the rules of the financing system will not bring any lasting improvement. The provider-level development actions may be introduced simultaneously with the extension of autonomy, but it is not useful for them to precede this extension or to "wait until the providers are ready" before extending autonomy. Managerial errors are inevitable, but the system will never develop if reforms wait for the "right time", because this time will only come when the "rules of the game" are changed.

One of the most crucial lessons about the sequencing of reforms has to do with changes in the benefits package. The lesson we derive from the experience of CE/EECCA countries is that reform of the package (and associated policies on co-payments) is unlikely to be successful without first creating the necessary changes in pooling arrangements and the incentive environment. This relates to the more general recommendation to first address structural efficiency problems before attempting to confront directly other objectives, such as equity and transparency. The countries that have experienced more success first established the appropriate institutional arrangements for pooling and purchasing, and then over time made progress on refining entitlements and narrowing the gap between what was promised and what was delivered. In countries in which informal payments are a notable indicator of this promise not being fulfilled, the appropriate response is systemic change to improve efficiency through reduced fragmentation and more coherent incentives for change, as well as (hopefully) increased funding flowing through the purchaser, and public education to inform people about what they are entitled to and what they have to pay. Hence, the idea is not to precisely balance revenues and entitlements and thus eliminate informal payments, but rather to reduce them over time as a consequence of comprehensive system reform. Starting the financing reform process with major[124] modifications of the benefits package as the first step, however, has proven problematic. It is also politically dangerous, as the specification of entitlements and obligations is perhaps the most visible part of health financing policy to the population. If government is unable to deliver on these (the early experience from Armenia and Georgia is instructive here), the credibility of the entire reform process is threatened.

F. Conclusions

In this book we have reviewed the experience of CE/EECCA countries with implementation of health financing reforms. The approach used was both

124 Of course, simple measures such as the creation of a limited "negative list" of services that are not covered (typically things like spa treatment, or cosmetic surgery that is not medically necessary, and so on) can proceed quickly.

to apply the functional framework described in Chapter 1 and to focus the evidence on well-documented examples of reform, rather than attempting to say something about every country in the region. While the review of experience is, by definition, backward looking, the purpose is to derive lessons for policy-makers now and in the future. Although the countries began largely at a common starting point (albeit with important differences, as noted in Chapter 2), there have been many changes in country context and reform experience since 1990, which lead us to conclude that the label "transitional" is no longer very meaningful or helpful for understanding the context of the CE/EECCA countries. Still, these countries – like all countries in the world – are characterized by health systems that suffer from varying degrees of performance problems. Health financing reforms can contribute to addressing these problems. Their reform experience suggests a series of important – although necessarily general, given the context specificity of each health system – messages for policy-makers, as detailed here.

1) **Define clearly the nature of the performance challenges facing the system as a basis for setting the policy objectives for reform**. Despite gains made in some countries, structural inefficiencies remain a widespread concern, and progress on addressing these is a prerequisite for sustaining improvement in terms of other objectives, such as financial protection, equity in access, and transparency.

2) **Identify all sources of fragmentation and the (technical/political) scope for either reducing it or mitigating its effects**. Similarly, identify how the existing organization of financing and service delivery arrangements may be misaligned with each other and with the policy objectives of the system.

3) **Create a strategy to reduce fragmentation and align incentives**. Critical to this is the strengthening of purchasing mechanisms in the system and altering the flow of general budget funds from subsidizing supply to subsidizing the purchase of services on behalf of the population. Related to this, in turn, are reforms in pooling to enable reduced fragmentation or at least explicit coordination of the use of funds from different public sources.

4) **Fully implement the strategy, bearing in mind a distinction between those issues on which some compromise might be made and those for which compromise is dangerous**. The latter would include anything that undermines the agenda of reducing fragmentation and aligning incentives to strengthen purchasing and the scope for redistribution.

5) **Accompany implementation with mechanisms for public accountability and policy analysis**. The former is needed to promote transparency and assure the government and the public that the funds are being used for the purpose intended, even in contexts in which they are not subject to the tight constraints of the public sector financial management system. The latter is essential to identify and make possible a response to the problems that will inevitably arise in the implementation process, as well as to demonstrate the effects of the reforms on the key defined policy objectives. Both are critical to maintaining political support for the reform agenda and hence to the ability to fully implement the strategy.

Of course, successful reform depends on much more than simply getting the technical steps right. Underlying the ability of a country to take any of the aforementioned steps is the political context within which decisions are made. Technical factors and capacities aside, the ability of a new public entity, such as a compulsory insurance fund, to be an effective agent of change for the health system depends critically on the political context and the *authorizing environment*[125] within which the agency operates. While this is a "lesson learned", it is not an operational recommendation that can be easily transferred.

Perhaps more useful in terms of the political dimension is the lesson that what matters most for health financing reform, as with policy reform more generally, is ***effective, consistent stewardship***. Concretely, this refers to the public policy leadership and coordination that government brings to bear on the design, implementation, governance and monitoring of health financing reforms. All of the key elements of effective reform processes outlined in this chapter (problem definition, establishing policy objectives, choosing policy instruments, ensuring prioritization and sequencing, coordinating across functions, and so on) need to be defined, integrated, coordinated and managed in an objective way, incorporating evidence-based policy approaches. Strong stewardship is required, with a reform roadmap and guiding principles that can be adapted as new realities are encountered during implementation. These features mark the relatively successful reforming countries reviewed here, such as the Czech Republic, Estonia, Kyrgyzstan, the Republic of Moldova and Slovenia. Each country used a different mix of policy instruments, but they exhibited important similarities in process. In each case, a decision was made with regard to how they intended to organize the basic structure of their reformed systems, and then they took steps over time to gradually improve their functioning. Throughout, they generated and used evidence for public accountability and to guide further decision-making, such that now each is

125 This term comes from the field of public administration and refers to the actors upon whom a public sector manager depends to authorize her/his actions – a critical determinant of the manager's (and her/his agency's) effectiveness (McLaughlin and McLaughlin 2008).

able to document how their purchasers are using funds and with what results. This enabled the political and financial support needed from the rest of the government (and the population) to fully transform their financing systems. They have also avoided multiple, sudden shifts of direction in reforms and the "rules of the game" by which all actors in the system have to play.

There is no endpoint to the reform process, and good stewardship is essential in order to identify when changes are needed and to develop the appropriate responses. In all of the CE/EECCA countries, health system stewardship could be further enhanced by putting better systems in place to assess on an ongoing basis whether reforms are meeting their intended objectives, to identify unintended consequences, and to inform refinements to the reform process. Hopefully, by drawing on the lessons learned during the first 15–20 years following transition, policy-makers will be better armed to conceive and implement comprehensive financing reform strategies in the years to come.

References

Balabanova D et al. (2004). Health service utilization in the former Soviet Union: evidence from eight countries. *Health Services Research*, 39:1927–1949.

Busse R, Schreyögg J, Gericke C (2007). *Analyzing changes in health financing arrangements in high-income countries*. Health, Nutrition and Population Discussion Paper. Washington, DC, World Bank.

EHIF (2009). *Estonian Health Insurance Fund annual report 2008*. Tallinn, Estonian Health Insurance Fund (http://www.haigekassa.ee/uploads/userfiles/Majandusaasta%20aruanne%202008_ENG.pdf, accessed 3 December 2009).

Fidler AH et al. (2006). Incorporation of public hospitals: a "silver bullet" against overcapacity, managerial bottlenecks and resource constraints? Case studies from Austria and Estonia. *Health Policy*, 81(2–3):328–338.

Figueras J, Robinson R, Jakubowski E (2005). Purchasing to improve health systems performance: drawing the lessons. In: Figueras J, Robinson R, Jakubowski E, eds. *Purchasing to improve health systems performance*. Maidenhead, Open University Press:44–80.

González Rossetti A (2002). Social health insurance in Latin America. Background paper. In: *DFID Health Insurance Workshop, London, 9–10 April 2002*. London, Institute for Health Sector Development.

Kutzin J (1997). Health insurance for the formal sector in Africa: 'yes, but...'. *Current Concerns* series, ARA Paper No. 14. Geneva, World Health Organization Division of Analysis, Research and Assessment (WHO/ARA/CC/97.4).

Kutzin J (2007). Myths, instruments and objectives in health financing and insurance. In: Holst J, Brandrup-Lukanow A, eds. *Extending social protection in health. Developing countries' experiences, lessons learnt, and recommendations.* Eschborn, GTZ, International Labour Organization and World Health Organization.

Kutzin J, Jakab M, Shishkin S (2009). From scheme to system: social health insurance and the transformation of health financing in Kyrgyzstan and Moldova. [In: Chernichovsky D, Hanson K, eds. *Innovations in health system finance in developing and transitional economies*.] *Advances in Health Economics and Health Services Research*, 21:291–312.

Lloyd-Sherlock P (2006). When social health insurance goes wrong: lessons from Argentina and Mexico. *Social Policy and Administration*, 40(4):353–368.

Londoño J-L, Frenk J (1997). Structured pluralism: towards an innovative model for health system reform in Latin America. *Health Policy*, 41(1):1–36.

Maynard A (2008). *Payment for performance (P4P): international experience and a cautionary proposal for Estonia*. Health financing policy paper. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/Document/HSF/P4P_Estonia.pdf, accessed 3 December 2009).

McLaughlin CP, McLaughlin C (2008). *Health policy analysis: an interdisciplinary approach*. Sudbury, MA, Jones and Bartlett.

Ministry of Health of the Kyrgyz Republic (2008). *Mid-term review report: Manas Taalimi Health Sector Strategy*. Bishkek, Ministry of Health of the Kyrgyz Republic.

Savedoff WD (2004). Is there a case for social insurance? *Health Policy and Planning*, 19(3):183–184.

Thomson S et al. (2009). *Addressing financial sustainability in health systems*. Background document prepared for the Czech Presidency of the European Union conference on the financial sustainability of health systems in Europe. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Velasco-Garrido M et al. (2005). Purchasing for quality of care. In: Figueras J, Robinson R, Jakubowski E, eds. *Purchasing to improve health systems performance*. Maidenhead, Open University Press:215–235.

Since 1990, the paths of the so-called *transition countries* of central and eastern Europe, the Caucasus, and central Asia have diverged with regard to their social and economic policies, including the implementation of reforms in the financing of their health systems. Until now, this rich experience has not been analysed in a systematic way.

The book begins with the background to health financing systems and reform in these countries, starting with the legacy of the systems in the USSR and central Europe before 1990 and the consequences (particularly fiscal) of the transition for their organization and performance. Relying on in-depth country case experiences, reforms are analysed first from a *functional* perspective, with chapters focusing on how policies were implemented to change mechanisms for revenue collection, pooling, purchasing and policy on benefit entitlements. Highlighted in subsequent chapters are particular reform topics, such as:

- financing of capital costs
- links between health financing reform and the wider public finance system
- financing of public health services and programmes
- role of voluntary health insurance
- informal payments
- accountability in health financing institutions.

With many authors having practical experience of implementing, advising, or evaluating health financing policies in the region, the book offers important lessons as well as pitfalls to avoid in reform processes. This book is essential reading for health finance policy-makers, advisers, and analysts in this region and beyond.

The editors

Joseph Kutzin is Regional Advisor for Health Systems Financing and Head of the Barcelona Office for Health Systems Strengthening, WHO Regional Office for Europe.

Cheryl Cashin is Research Fellow at the Nicholas C. Petris Center on Health Care Markets and Consumer Welfare, School of Public Health, University of California, Berkeley, United States.

Melitta Jakab is Senior Health Financing Policy Analyst at the Barcelona Office for Health Systems Strengthening, WHO Regional Office for Europe.

Observatory Studies Series No. 21

European Observatory on Health Systems and Policies