European Observatory on Health Care Systems Series
Edited by Josep Figueras, Martin McKee, Elias Mossialos and Richard B. Saltman

Health care in central Asia

Edited by
Martin McKee, Judith Healy and Jane Falkingham

Open University Press
Buckingham · Philadelphia
## Contents

<table>
<thead>
<tr>
<th>part one</th>
<th>Context</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>one</td>
<td>Health care systems in the central Asian republics: an introduction</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Martin McKee, Judith Healy and Jane Falkingham</td>
<td></td>
</tr>
<tr>
<td>two</td>
<td>History and politics in central Asia: change and continuity</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Shirin Akiner</td>
<td></td>
</tr>
<tr>
<td>three</td>
<td>Macroeconomic pressures</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Richard Pomfret</td>
<td></td>
</tr>
<tr>
<td>four</td>
<td>Poverty, affordability and access to health care</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Jane Falkingham</td>
<td></td>
</tr>
<tr>
<td>five</td>
<td>Patterns of health</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Martin McKee and Laurent Chenet</td>
<td></td>
</tr>
<tr>
<td>six</td>
<td>The Soviet legacy: the past as prologue</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Mark G. Field</td>
<td></td>
</tr>
</tbody>
</table>
part two Health systems and services 77
seven The reform process 79
Serdar Savas, Gulpin Gedik and Marian Craig
eight Health system funding 92
Joe Kutzin and Cheryl Cashin
nine Allocating resources and paying providers 108
Tim Enser and Jack Langenbrunner
ten The health care workforce 125
Judith Healy
eleven Modernizing primary health care 141
Gulpin Gedik, Zafer Oztek and Antony Lewis
twelve Rationalizing hospital services 151
Johannes Vang and Steve Hajioff
thirteen Restructuring public health services 165
Ian MacArthur and Elena Shevkun
fourteen Health care systems in transition 179
Judith Healy, Jane Falkingham and Martin McKee

part three The countries 195
fifteen Profiles of country health care systems 197
Kazakhstan – Maksut Kulzhanov and Judith Healy
Kyrgyzstan – Acelle Sargaldakova, Judith Healy,
Joe Kutzin and Gulpin Gedik
Tajikistan – Rahmin Rahminov, Gulpin Gedik and
Judith Healy
Turkmenistan – Chary Mamedkuliev, Elena Shevkun
and Steve Hajioff
Uzbekistan – Farkhad A. Ilkhamov, Elke Jakubowski
and Steve Hajioff
Index 214
List of contributors

Shirin Akiner is Lecturer in Central Asian Studies at the School of Oriental and African Studies, University of London, United Kingdom.

Cheryl Cashin is a deputy director with ZdravReform, Abt Associates in Almaty, Kazakhstan.

Laurent Chenet is Lecturer in Public Health Demography at the London School of Hygiene & Tropical Medicine, United Kingdom.

Marian Craig is a Health Service Consultant and is currently studying at the London School of Hygiene & Tropical Medicine, United Kingdom.

Tim Ensor is Senior Research Fellow and Head of the International Programme at the Centre for Health Economics, University of York, United Kingdom.

Jane Falkingham is Reader in Social Policy and Population Studies at the London School of Economics and Political Science, United Kingdom.

Mark G. Field is Associate at the Davis Centre for Russian Studies and Adjunct Professor at the School of Public Health, Harvard University, Cambridge, MA, USA.

Gülin Gedik is Project Officer for CARNET Countries in the Health Sector unit at the WHO Regional Office for Europe in Copenhagen, Denmark.

Steve Hajioff is a Visiting Fellow at the European Centre on the Health of Societies in Transition at the London School of Hygiene & Tropical Medicine, United Kingdom.
Judith Healy is Senior Research Fellow of the European Observatory on Health Care Systems, and is an honorary Senior Lecturer in Public Health and Policy at the London School of Hygiene & Tropical Medicine, United Kingdom.

Farkhad A. Ilkhamov is Head of the main Curative Department at the Ministry of Health of Uzbekistan in Tashkent.

Elke Jakubowski is Research Officer at the European Observatory on Health Care Systems based at the WHO Regional Office for Europe in Copenhagen, Denmark.

Maksut Kulzhanov is Dean of the Kazakhstan School of Public Health in Almaty.

Joe Kutzin is Senior Resident Adviser for the WHO Regional Office for Europe at the Ministry of Health of Kyrgyzstan in Bishkek.

Jack Langenbrunner is Senior Economist with the World Bank, working on health financing in the central Asian republics, eastern Europe, the Russian Federation and the Middle East.

Antony Lewis is Senior Lecturer in Primary Care at the University of Exeter and a general practitioner in Exmouth, Devon, United Kingdom.

Ian MacArthur is International Policy Manager at the WHO collaborating centre for environmental health, working primarily with the WHO Regional Office for Europe on the assessment and reform of sanitary epidemiology services.

Chary Mamedkuliev is Head of the Health Management and Organization Department of the Ministry of Health of Turkmenistan in Ashgabat.

Martin McKee is a Research Director of the European Observatory on Health Care Systems and Professor of European Public Health at the London School of Hygiene & Tropical Medicine in London, United Kingdom.

Zafer Oztek is in the Medical Faculty of the Department of Public Health at the Hacettepe University School of Medicine in Ankara, Turkey.

Richard Pomfret is Professor of the Department of Economics at the University of Adelaide, South Australia.

Rahmin Rahminov is an adviser to the Minister of Health of Tajikistan.

Acelle Sargaldakova is at the Department of Reform Coordination and Implementation, Ministry of Health of Kyrgyzstan in Bishkek.

Serdar Savas is a former Director, Programme Management at the WHO Regional Office for Europe and is currently Director of United Health Systems Ltd in Istanbul, Turkey.

Elena Shevkun is Technical Officer for the Health Sector unit at the WHO Regional Office for Europe in Copenhagen, Denmark.

Johannes Vang is in the Faculty of Health Sciences, Centre of Public Health Sciences at the University of Linköping, Sweden.
European national policy-makers broadly agree on the core objectives that their health care systems should pursue. The list is strikingly straightforward: universal access for all citizens, effective care for better health outcomes, efficient use of resources, high-quality services and responsiveness to patient concerns. It is a formula that resonates across the political spectrum and which, in various, sometimes inventive configurations, has played a role in most recent European national election campaigns.

Yet this clear consensus can only be observed at the abstract policy level. Once decision-makers seek to translate their objectives into the nuts and bolts of health system organization, common principles rapidly devolve into divergent, occasionally contradictory, approaches. This is, of course, not a new phenomenon in the health sector. Different nations, with different histories, cultures and political experiences, have long since constructed quite different institutional arrangements for funding and delivering health care services.

The diversity of health system configurations that has developed in response to broadly common objectives leads quite naturally to questions about the advantages and disadvantages inherent in different arrangements, and which approach is ‘better’ or even ‘best’ given a particular context and set of policy priorities. These concerns have intensified over the last decade as policy-makers have sought to improve health system performance through what has become a European-wide wave of health system reforms. The search for comparative advantage has triggered – in health policy as in clinical medicine – increased attention to its knowledge base, and to the possibility of overcoming at least
part of existing institutional divergence through more evidence-based health policy-making.

The volumes published in the European Observatory series are intended to provide precisely this kind of cross-national health policy analysis. Drawing on an extensive network of experts and policy-makers working in a variety of academic and administrative capacities, these studies seek to synthesize the available evidence on key health sector topics using a systematic methodology. Each volume explores the conceptual background, outcomes and lessons learned about the development of more equitable, more efficient and more effective health care systems in Europe. With this focus, the series seeks to contribute to the evolution of a more evidence-based approach to policy formulation in the health sector. While remaining sensitive to cultural, social and normative differences among countries, the studies explore a range of policy alternatives available for future decision-making. By examining closely both the advantages and disadvantages of different policy approaches, these volumes fulfil a central mandate of the Observatory: to serve as a bridge between pure academic research and the needs of policy-makers, and to stimulate the development of strategic responses suited to the real political world in which health sector reform must be implemented.

The European Observatory on Health Care Systems is a partnership that brings together three international agencies, three national governments, two research institutions and an international non-governmental organization. The partners are as follows: the World Health Organization Regional Office for Europe, which provides the Observatory secretariat; the governments of Greece, Norway and Spain; the European Investment Bank; the Open Society Institute, the World Bank; the London School of Hygiene & Tropical Medicine and the London School of Economics and Political Science.

In addition to the analytical and cross-national comparative studies published in this Open University Press series, the Observatory produces Health Care Systems in Transition Profiles (HiTs) for the countries of Europe, the Observatory Summer School and the Euro Observer newsletter. Further information about Observatory publications and activities can be found on its website at www.observatory.dk.

Josep Figueras, Martin McKee, Elias Mossialos and Richard B. Saltman
Foreword

The central Asian republics are facing enormous challenges in embarking on health sector reform, owing to their changing economic circumstances combined with the process of constructing new systems of government.

The rising burden of disease in many of these countries is a matter of great concern, both to their own health policy-makers and to international agencies. Nevertheless, the health status of the populations in this region has been the subject of very little research. Also, little is known outside the region about the health care systems of these countries, or their experiences over the last decade in seeking to restructure and improve their health services. Despite these many difficulties, however, the central Asian republics remain optimistic and committed to meeting the challenges involved in producing better health care for their populations.

This volume fills some large gaps in our knowledge about health care in central Asia. It will thus be a valuable resource for policy-makers in the region and in the international agencies, and for others interested in these culturally diverse countries.

In producing this book, the European Observatory on Health Care Systems has drawn on the conceptual skills of academics and consultants, as well as the practical experience of policy-makers, in offering some insight into effective health policy-making in the central Asian republics.

Marc Danzon
WHO Regional Director for Europe
Acknowledgements

This volume is one in a series of books undertaken by the European Observatory on Health Care Systems. We are very grateful to our authors, who responded promptly in producing their chapters despite busy schedules that included ongoing work in the central Asian region.

The editors owe a debt of gratitude to Serdar Savas, former Director, Programme Management at the WHO Regional Office for Europe, who supported the idea of this book and helped to develop the original concept, drawing on his extensive experience of the central Asian republics. We also wish to acknowledge his leadership of a series of programmes in the region that provided valuable input to this study: the MANAS programme in Kyrgyzstan, the SOMONI programme in Tajikistan, the LUKMAN programme in Turkmenistan, the Kazakhstan School of Public Health, and CARNET, the Central Asian Republic Network on Health Care Reform.

We very much appreciate the constructive comments made by our reviewers, Michael Borowitz, Gülın Gedik, Denise Holmes, Gillian Holmes and Robin Thompson. Gillian Holmes also provided very valuable support at the inception of the project. We should also like to thank the Observatory’s partners for their review of, and input to, successive versions of the manuscript.

Our special thanks go to Caroline White, who processed and formatted the chapters. We also thank all our colleagues in the Observatory. In particular, we are grateful to Suszy Lessof for her coordinating and managerial role, to Jeffrey Lazarus, Jenn Cain and Phyllis Dahl for managing the book production and delivery and to Jerome Rosen for his copy-editing. Myriam Andersen was, as always, very helpful with many administrative tasks.
Finally, we are grateful to the United Kingdom Department for International Development, which provided financial support for this project. The Department cannot, however, accept any responsibility for the views expressed.

Martin McKee, Judith Healy and Jane Falkingham
part one

Context
chapter one

Health care systems in the central Asian republics: an introduction

Martin McKee, Judith Healy and Jane Falkingham

Introduction

At the crossroads between Europe and Asia, the countries of central Asia have been occupied over the last decade with the enormous challenges of establishing and stabilizing their states and societies and with claiming their place in the international community. Although the term ‘central Asia’ covers a wide region, we use it here to refer to the five countries of former Soviet central Asia: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan (Figure 1.1). These central Asian republics gained their unexpected independence in 1991, upon the dissolution of the Soviet Union. Since these dramatic events, these five republics have received more attention from the international community, especially given the political and economic significance of the region.

Because these health care systems are not well known outside their own countries, this book aims to describe and analyse them for a wider audience, both within and without the region. We do so for several reasons. First, policy-makers within central Asia face enormous challenges in bringing about health sector reform in an environment with extremely adverse macroeconomics and major internal economic and political changes. To assist them in reorganizing their health systems, these policy-makers need better information about their own and other health care systems (as do policy-makers in developed countries). Second, the countries in the region are interested in the experiences of other countries, so that they can learn about what works and why, and which
initiatives might transfer successfully across borders. Finally, those working for international organizations need to share more information and analysis on how and why health care systems work in these countries and on the impact of the many changes underway.

This book has three parts. The first part (Chapters 1–6) sets out the context in which health care systems must function in the central Asian republics. These chapters explore the challenges that arise from the ancient and complex history of the region, the current very difficult economic situation, the rising burden of disease and the legacy of the past. The second part (Chapters 7–14) analyses health sector reforms in the different countries, such as efforts to find new sources of health sector revenue, the introduction of new payment systems, and the initiatives that are underway to improve both preventive and curative health services. The third part of the book (Chapter 15) contains brief descriptions of the health care systems in each country based on the Health Care Systems in Transition country profiles published by the European Observatory on Health Care Systems (www.observatory.dk).

Themes and chapters

Before the twentieth century, central Asia was inhabited mainly by the nomadic people of the steppes and deserts, and by settled people living in the oases and river valleys. For thousands of years, the region was a crossroad for the intermingling of populations, cultures and religions, with a long history of successive invasions by powerful neighbours, including Persians, Greeks, Arabs, Turks and Russians. Central Asia is perhaps best known in the West as the setting for the 'Silk Road' over which trade was conducted between Europe and China before the inception of the sea route to the east.

During the eighteenth century, the khanates of Bukhara, Kokand and Khiva retreated into isolation in the face of pressure from Russia and Britain, who waged a long, largely covert campaign, the ‘Great Game’ (Hopkirk 1990), to control this region and thus the land route to India. By the late nineteenth century, however, central Asia had been annexed by the Russian Empire. From 1918 on, Soviet rule brought fundamental social and economic changes. Large-scale movements of population, including the imposition of a ruling Russian elite and the forced migration of minorities (coupled with rapid urbanization and collectivization), transformed the region. The present-day borders were drawn in 1924, when Joseph Stalin divided the region into several nominally independent republics.

In Chapter 2, on the history and politics in central Asia, Akiner outlines the massive social engineering undertaken by the Soviet regime, which changed most aspects of life for people in the region. Although this involved political and cultural oppression, it also produced substantial benefits, such as the establishment of a comprehensive health care system. Throughout the Soviet era, the region continued to be isolated from the outside world, with all contacts tightly controlled – in part, because it was the location of many elements of the military-industrial complex. One result of this isolation was to cut these countries off from developments in medical research, education and clinical
practice in the rest of the world. The removal of central control, following the collapse of the Soviet Union in 1991, allowed these countries, albeit very cautiously, to open up to outside ideas and contacts.

To the existing ethnic diversity of the peoples of the region was added huge numbers of Russian settlers in the nineteenth century, followed in the Stalinist period with the forced migration of minorities, such as Meshketian Turks, Volga Germans and Chechens. It so changed the ethnic mix that, by the 1990s, most of the population of Kazakhstan was non-Kazakh. Although the borders drawn in 1924 sought to create homogeneous entities, they nonetheless cut across ethnic groups (Sabol 1995). For example, present-day Uzbekistan contains two ethnically imbalanced neighbouring cities: Tashkent, which is largely populated by Uzbeks, and Samarkand, which is largely populated by Tajiks, and the two are divided by countryside that is largely populated by Kazakhs. Also, the division of the fertile and densely populated Fergana Valley between Uzbekistan, Kyrgyzstan and Tajikistan remains particularly problematic. Although much political effort has gone into developing national identities since independence (Atkin 1993), independence has exposed pre-existing ethnic, regional, religious and political tensions; in Tajikistan, this has led to outright civil war. The disintegration of the Soviet Union also led to further population movements, as many of the people relocated during the Soviet era returned to their places of origin.

Traditionally, nomadic or pastoral groups in central Asia were organized according to clan, tribal and regional affiliations, with a clearly defined hierarchy from the family upwards to the khan (the ruler). During the Soviet era, these links formed the basis of a parallel system of power, with the purges of the 1930s enabling some groups to eliminate others, thus achieving positions of power that they have largely retained throughout the political changes. These clan and regional ties have been extended to encompass other shared experiences. The pyramid form of societal organization largely remains, however, whereby loyalty extends upwards to a particular patron or leader and patronage extends downwards, which has important implications for political and social institutions and the growth of civil societies.

After independence the republics developed a formal policy of building more democratic societies. The central Asian states are typified by a governmental culture of strong presidential rule supported by family and clan ties. Reference is often made to ancient or mythical leaders such as Genghis Khan in Kazakhstan, Manas in Kyrgyzstan and Tamerlane in Uzbekistan. In most republics, the existing leadership has remained in power, albeit with some relabelling and changes in ideology. Most of the current generation of political leaders, except for the President of Kyrgyzstan, held high office during the Soviet era, but nevertheless are seen as the ‘founding fathers’ of independence. Opposition parties are either weak or, as in Turkmenistan and Uzbekistan, banned. In each republic there was a revival of Islamic beliefs during the period of perestroika. This revival has continued, although largely under political control, ostensibly, as in Uzbekistan, to prevent the emergence of fundamentalism.

New constitutions have been drafted and parliamentary and judiciary systems established in each country, but authority resides mainly with the presidents
Health care in central Asia

(Dawisha and Parrott 1997). At the sub-national level, each republic is divided into oblasts (regions) and rayons (districts), called velayats and etraps, respectively, in Turkmenistan. Each level has its own elected administration. The president appoints the governor (hakim) in each oblast; this person wields considerable power and typically reinforces presidential authority. Any significant changes to the health care system, therefore, require the backing of the president and his nominees at the regional level.

The many visible manifestations of change in these countries since independence, however, range from the newly acquired freedom to travel to massive advertising campaigns by Western tobacco companies. The isolation imposed by the Soviet Union gave way to a situation in which visitors from western Europe are able to fly directly to most capital cities in central Asia.

Some other things have not changed. The earlier rivalry over the land route to India has given way to a new Great Game, in which a larger constellation of powers, including China, India, Pakistan, Turkey, the Russian Federation and the United States, vie with one another for political and commercial clout. This is mostly driven by the desire for access to the large reserves of natural resources, such as oil, gas and precious metals.

In Chapter 3, Pomfret outlines the role of central Asia as a producer of raw material in the Soviet Union division of labour. As the least developed parts of the Soviet Union (Akhtar 1993), the central Asian republic economies were based on the production of a few commodities, such as grain, gas and oil in Kazakhstan, agricultural produce in Kyrgyzstan and Tajikistan, cotton and natural gas in Turkmenistan, and cotton and gold in Uzbekistan. This lack of diversification had many adverse consequences, of which the best known is the serious environmental degradation around the Aral Sea. Moreover, the collapse of the interlocked Soviet production system brought down the economies of each of the republics. These countries experienced severe economic depression and rapid inflation, with negative economic growth until 1995, followed by gradual improvement, although production is still below pre-independence levels.

Kazakhstan and Kyrgyzstan, both facing serious balance of payments problems after independence, soon introduced austerity programmes. Uzbekistan, which is somewhat better endowed with natural resources than the other central Asian republics, has pursued a more gradual programme of stabilization. Tajikistan, beset by civil war for most of this period, was for several years unable to tackle its serious financial problems, and there has been little attempt to do so in Turkmenistan. In the first half of the 1990s, real public spending in these countries declined by about 50–70 per cent. In all five countries, real economic output, in 1999, remains lower than a decade earlier.

Since independence, poverty has increased dramatically in the five republics. In Chapter 4, Falkingham shows that over a third of the population of Kazakhstan and Turkmenistan are living below the poverty line, based on World Bank Living Standard Measurement Surveys, with an even higher proportion in the struggling economies of Kyrgyzstan and Tajikistan. Because of shrinking government health budgets, households now pay much more for health care services (previously virtually free), both in official charges and under-the-table payments. There is growing evidence that many poor people can no longer afford access to ‘free’ health care.
In Chapter 5, McKee and Chenet analyse patterns of health and disease in the region. While cautioning that the validity of much of the data is questionable, they note that life expectancy is similar to that of other countries of the former Soviet Union, but 10 years less than that in European Union (EU) countries. The region exhibits some of the worst features of both developed and developing countries, with high rates of heart disease and childhood infections. This pattern indicates the importance of strengthening health promotion and primary health care.

In Chapter 6, Field examines the legacy of the Soviet health care system that was implemented in all the republics. Although the central Asian countries share many similarities, some differences have emerged since independence, reflecting their differing political trajectories. Under the former Soviet system, the distribution of resources was based on norms set by the Semashko All Union Research Institute in Moscow, while the administration of health services was extremely hierarchical. The Ministry of Health in Moscow formulated policy and, within each republic, health ministries were responsible for implementing these policies, which they did through oblast health departments. Within the oblast there were further health administrations at the rayon level and at the city level. The Academy of Medical Sciences under the Ministry of Health in Moscow supervised the national-level research institutes in each country.

Most of the hierarchical health service delivery system set up in Soviet times (Petrov 1983; Khudaibergenov 1986) remains in place, although the infrastructure is deteriorating. Rural areas are served by health posts (feldsher accousherski punkt, FAPs) staffed by feldshers with basic medical training and by midwives. Rural polyclinics (selskaya vrachebnaya ambulatorya, SVAs) are generally staffed by four types of physicians (until recently, there were no general practitioners): adult therapist, paediatrician, obstetrician and stomatologist (dentist). Small rural hospitals (selskaya uchaskovaya bolnitsia, SUBs) with about 20–30 beds offer very limited treatment, although increasingly these are being closed. Each rayon has a central town hospital that offers basic care, as well as ambulatory polyclinics staffed by specialists, with different clinics for adults and children. The main city in the oblast has specialist hospitals, and specialized dispensaries for long-term conditions, such as tuberculosis and cancer. At the national level in a capital city, hospitals provide more advanced and specialist treatment, for conditions such as cardiovascular diseases and cancer. In addition, a sanitary epidemiological service (Sanepid or SES) concentrates on environmental surveillance and the control of communicable diseases.

The Soviet model of health care may have the advantage of universal access to at least a basic level of care, but it also has many drawbacks. For example, facilities suffer from years of under-investment, and many in rural areas lack even basic amenities, such as running water or sewerage (Feshbach 1989). The worsening economic situation in the 1980s and 1990s led to a slow deterioration in services, as equipment became antiquated or needed to be replaced, drug stocks dwindled and the fabric of buildings decayed. There is still very little modern equipment. In general, health facilities are funded according to rigid input budget line items, an approach that offers no room for innovation and encourages wasteful patterns of treatment. Primary health care remains poorly developed and health promotion activities are just beginning. Overall,
Health care in central Asia

medical staff are poorly prepared. Many doctors specialize during their undergraduate training and are not trained to undertake general practice, while nurses have limited skills and undertake only basic tasks. Furthermore, clinical management is often outdated, allowing admissions to hospitals for many conditions that would be treated in ambulatory care units elsewhere. Such treatment regimes require a large number of hospital beds (although supply often exceeds demand) and lead to low occupancy levels. Health care staff work under difficult conditions that are not conducive to offering high-quality care, while the public is very dissatisfied with the health services provided.

Overall, the health care system was wasteful, ineffective and, in the long term, unsustainable. The prolonged economic crisis after independence in 1991 made reform unavoidable. In response to various reform efforts, the health system inherited at the beginning of the 1990s has begun to change slowly, with the type and pace of change differing among countries.

In Chapter 7, Savas, Gedik and Craig examine the process of health care reform in the five central Asian republics. They argue that, because of a hierarchical administrative tradition (with the power of the central government vested mainly in the president), health reform had to proceed initially through a top-down process driven by specialist policy teams within the ministries of health. A major barrier to the implementation of reform in each country, however, has been the lack of policy analysis and management capacity.

In Chapter 8, Kutzin and Cashin show that real government spending on the health system has declined by a quarter to a third of its pre-independence level. They argue that pressure from international financial institutions to reduce public-sector borrowing and restore fiscal balance has kept these governments from increasing health care spending. Since the options for increasing health revenue through insurance contributions and taxation are generally very limited, health services must do more with less. If resources are to be freed and shifted to other parts of the health system, reform strategies must concentrate on improving efficiency and reducing costs.

In reviewing the way that funds are allocated within central Asian health systems, Ensor and Langenbrunner (Chapter 9) conclude that new payment methods, introduced mainly by the insurance funds, so far are marginal in comparison with the traditional method of input funding. Kazakhstan, Kyrgyzstan and, to a lesser extent, Turkmenistan are testing new methods, but little change has occurred in Tajikistan and Uzbekistan. Given the limited capacity in the region and the institutional barriers to change, a simple reimbursement system has the greatest chance of success. The way in which funds are allocated to regions remains a key weakness.

Although the health sector relies on its staff to produce effective and efficient health care services, health sector reform in these countries has been slow to address human resource issues (Healy, Chapter 10). Few steps have been taken to reduce the large health sector workforce; this is socially and politically very difficult, given the lack of alternative employment and the likely adverse effect on public morale. Most of the central Asian countries, however, now are investing more strategically in their human resources. First, education and training needs are being addressed through changes in the medical curriculum and through some retraining. Second, some countries have reduced their large
number of physicians and have sought to broaden the professional skill mix. The widespread practice of informal payments to health workers remains a serious problem, because it distorts accountability to employers and impoverishes patients. One alternative is to raise salaries, but higher pay for all health care workers must be matched by increased productivity. To provide better quality care to patients, the skill mix, pay, conditions and training of staff need to be addressed.

In Chapter 11, Gedik, Oztek and Lewis describe the extensive primary health care system, where (theoretically) most people have access to services: a health post or physician clinic in rural areas and a polyclinic in urban areas. The problems faced by primary care services include inadequate funding, since primary care receives less than 10 per cent of the already small health budget. Furthermore, primary care is geared to clinical care rather than to disease prevention and health promotion. The quality of care is poor for a number of reasons: physicians were not trained as general physicians, they lack the necessary professional support (such as up-to-date treatment protocols) and also they are constrained by severe shortages of equipment and drugs. Most central Asian countries have begun retraining specialists as family physicians and have introduced general practice into undergraduate and postgraduate curricula. Under the present system, primary care remains funded and administered by the state, but some alternatives are being explored. Kazakhstan and Kyrgyzstan have introduced demonstration projects with capitation for family group practices, but earlier enthusiasm for fundholding (whereby primary practices hold a budget to buy specialist services on behalf of those enrolled) based on the British model has waned.

In Chapter 12, Vang and Hajioff note concern among health sector reformers in the central Asian republics about the dominant role of hospitals. While some quantitative change can be tracked, such as closures of hospital beds, it is much more difficult to assess whether the quality of hospital care has improved.

Public health services (Sanepid) in the region have been a major component of the Soviet health care system, concentrating on the traditional tasks of disease prevention and surveillance of sanitary standards, such as water and food safety. In Chapter 13, MacArthur and Shevkun argue that, to be prepared to respond to new population health needs, staff should be retrained and service structures reorganized. The Sanepid senior staff believe, however, that service reforms call for more funds and recognition, but only incremental change to their functions.

In looking to the future, Healy, Falkingham and McKee (Chapter 14) assess the achievements in managing the transition from a health care system based on the Soviet model. They conclude that, while much thought and considerable effort has been expended on health sector reform, progress in the central Asian republics has been very difficult, given the adverse economic climate. Much still needs to be done to develop and implement sustainable and fair systems of financing and appropriate means of health care delivery. The urgent problem of how to secure adequate finance for the health system as well as issues that relate to the efficiency of allocations and the use of technology have commanded most attention. Issues that relate to the quality and outcomes of health
Figure 1.1 Map of central Asia

Source: Map No. 3763 Rev. 4 UNITED NATIONS, October 1998, Department of Public Information, Cartographic Section
Health care systems in the central Asian republics

services remain to be addressed in the next phase of health care reform. They end by reviewing the challenges that these countries still face.

References

State spending for health care and medical equipment in Tajikistan was a fraction of the average for the Soviet Union. Tajikistani regimes had long regarded social needs such as medical care as less important than economic development. Admission standards for the republic's best medical school, the Abu Ali ibn Sino Institute of Medicine in Dushanbe, were notoriously lax. As in other parts of Central Asia, a large proportion of health care professionals in Tajikistan were members of nonindigenous nationalities, especially Russians, Ukrainians, and Jews, many of whom emigrated after 1989. Within months of the February 1990 disturbances in Dushanbe, about 1,300 doctors and nurses emigrated from the republic.