European Observatory on Health Systems and Policies

HiT profile in brief

Kyrgyzstan

Introduction

Geographical, political and economic context

Kyrgyzstan is a mountainous country located in central Asia and was part of the Soviet Union until 1991. The 1993 constitution defines the form of government as a democratic republic, although in subsequent years a presidential form of government was established. In 2005 a popular revolt, sparked by allegations of government interference in parliamentary elections, led to the resignation of former President Askar Akaev, who had led the country since 1990. Akaev was replaced by former Prime Minister Kurmanbek Bakiyev, who won the presidential elections in 2005 with 88.9% of the vote.

After 1991, Kyrgyzstan faced a severe recession and embarked on a course of liberalization and transition towards a market economy. In 1998, as the first Commonwealth of Independent States (CIS) country, Kyrgyzstan became a member of the World Trade Organization. There was a steep fall in gross domestic product (GDP) in the early years of transition, but it has recovered since and was recorded at current international US $ 1927 (purchasing power parity, PPP) per capita in 2005, which fell slightly short of its 1990 level. Due to remittances and direct foreign investment, GDP growth resumed in 2006. Using a poverty headcount of US $ 2 a day (PPP), 21.4% of the population were poor in 2005, while the Gini coefficient stood at 30.3 in 2003. Agriculture continues to constitute an important sector of the economy and contributed 34.1% to GDP in 2005 *(1)*.

Health status

Kyrgyzstan had a population of 5.14 million in 2005, 31.5% of which was below 15 years of age *(1)*. The majority of the population (64.2% in 2005) lives in rural areas. As in other countries in central Asia, officially recorded infant mortality does not capture actual rates, and official statistics consequently overestimate life expectancy. Survey-based estimates put life expectancy at birth in 2005 at 72.4 years for females and 64.5 years for males, which did not greatly differ from estimated life expectancies in 1990 *(1)*. Estimated infant mortality stood at 58 per 1000 live births in 2005, which compares to an estimated 68 per 1000 live births in 1990 *(1)*. Officially recorded maternal mortality is high and stood at 61 per 100 000 live births in 2005, although actual maternal mortality was estimated to be even higher, at 110 per 100 000 live births in 2000 *(2)*. The leading causes of death are diseases of the circulatory system, followed by diseases of the respiratory system and cancer *(2)*. Similar to other countries of the region, there has been a resurgence of tuberculosis and sexually transmitted diseases in recent years, and there is also a looming threat of a Human Immunodeficiency Virus (HIV) epidemic.

Organizational structure

Historical origins of the system

During the Soviet period, the health system followed the Semashko model, with centralized planning and administration and a focus on high numbers of doctors and hospital beds rather than on outcomes and quality of care. In the years following 1991, this communist legacy remained one of the major factors shaping health policy and practice in Kyrgyzstan *(3)*.

Organizational overview

The Ministry of Health (MoH) is responsible for developing and implementing the national health policy and the State Benefits Programme. It is also in charge of the quality control of pharmaceuticals, medical products and equipment and of the quality of health services. The Ministry has a supervisory role in relation to all health-related organizations (including medical education), regardless of ownership and administrative level, and direct managerial responsibility for a small number of specialized republican health facilities and tertiary level facilities in the capital, Bishkek. In addition, the MoH coordinates the activities of other health care organizations by means of coordination commissions on health management *(3)*.

The Department of State Sanitary-Epidemiological Surveillance administers the sanitary-epidemiology service, which forms the cornerstone of the public

health service. The Department of Drug Supply and Procurement of Medical Equipment, accountable to the MoH, is in charge of drug policy and the monitoring and evaluation of the quality of drugs. It registers pharmaceuticals and issues licences to producers and retailers of drugs *(3)*.

A Mandatory Health Insurance Fund (MHIF) was established in 1996. It has now become the "single payer" in the health sector. The MHIF has been given responsibility for pooling all local budget revenues at *oblast* level (Kyrgyzstan is divided into seven *oblasts*, or regions) and for purchasing health care services. In 2006, fund pooling was further centralized to the national level, providing further opportunities to equalize health expenditures across regions. The Fund has additional roles in quality assurance and the development of health information systems, including systems of financial management in the health sector *(3)*.

Decentralization and centralization

One of the key elements of health financing reform was the centralization of financing at first the *oblast* and later at the national level to enable better risk pooling and to establish a split between provider and purchaser. This was seen as a way to reduce excess capacity. A complementary reform was the granting of more autonomy to health facilities to manage their budgets. With the introduction of new provider payment methods, especially official co-payments by patients, health facilities have been granted greater flexibility in internal resource allocation *(3)*.

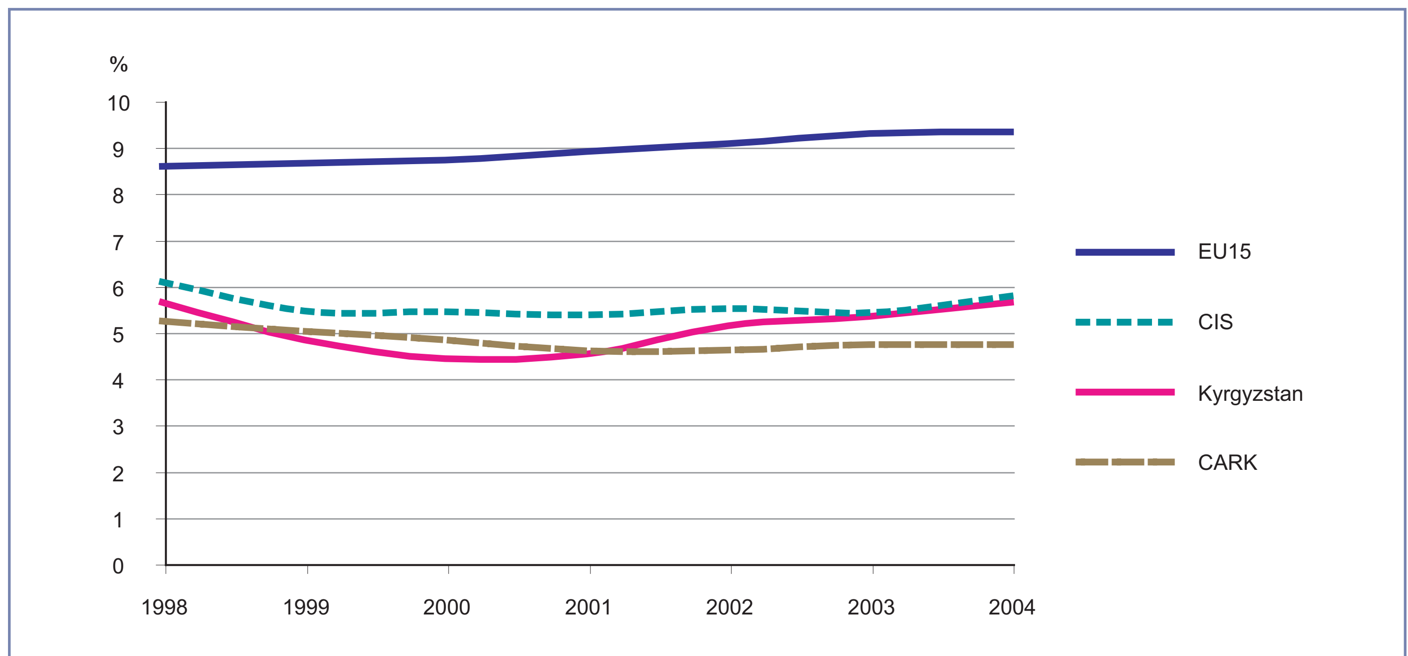
In recent years, some of the functions of the MoH have been transferred to nongovernmental organizations (NGOs). In particular, accreditation of health facilities has been delegated to the Medical Accreditation Commission. Privatization has so far been largely confined to pharmaceutical and dental care *(3)*. Public–private contracting has been limited to selected ophthalmological services in Bishkek, although there is an intention to expand this in the future.

Health care financing

Health expenditure

Using Treasury data on public expenditure and household survey data on out-of-pocket expenditures (including informal payments), the World Health Organization (WHO) estimated that total health expenditure in 2004 amounted to 5.6% of GDP, equivalent to PPP US $ 102 per capita (see Figure 1). Government expen-

Figure 1: Trends in total expenditure on health as a percentage of GDP in Kyrgyzstan, 1998–2004, WHO estimates



Notes:
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diture was estimated to constitute 40.9% of total health expenditure in 2004 *(2)*, which means that private out-of-pocket payments now constitute the main source of health financing. As part of the Manas Taalimi reform programme, it is intended to restore earlier levels of health spending and reverse the decline seen in the early 2000s. The Government envisages to increase health spending from 10.3% of total government expenditure in 2005 to 13.0% by 2010.

In order to make better use of the limited government expenditure on health, Kyrgyzstan has developed a State Benefits Package that specifies benefits, cost-sharing obligations and coverage of the population. The State Benefits Package was introduced in two pilot *oblasts* in 2001 and has now been extended to the whole country. It is annually approved by the Government on the basis of the expected revenues of the *oblast* and national pools of funds managed by the MHIF, as well as the projected levels of utilization and other parameters. The State Benefits Package covers free primary care from the contracted family group practice in which the patient is enrolled, free public health services from local sanitary-epidemiological and health promotion centres, and in-patient care following referral, for which a patient co-payment is required.

Revenue

The main sources of revenue for the Kyrgyz health sector are out-of-pocket payments, general budget revenues (republican and local), contributions to the MHIF, and grants and loans from international agencies. According to the Public Expenditure Review of the World Bank, in 2004 private out-of-pocket payments constituted 51.1% of total health financing, general budget revenues (of republican and local governments) constituted 44%, social insurance contributions 4% and international loans/grants 0.9%. Of general budget revenues, 32% come from the republican budget and 68% from local governments *(4)*.

Patient out-of-pocket payments include official co-payments, payments for pharmaceuticals and informal payments. Official co-payments for drugs, meals and certain types of health services were introduced within the framework of the single payer system in the hope that they would replace unofficial out-of-pocket payments *(3)*.

The role of the MHIF in health financing increased substantially with the introduction of the "single payer" system. In 2004, 83.6% of the population were covered by the MHIF. Voluntary health insurance was legalized in 1992, but remains virtually non-existent. The amount of foreign aid in the 1990s has been significant. In the period between 1998 and 2000, the level of foreign aid was as high as 10% of total health expenditure *(3)*, and has reached similar levels again under the Manas Taalimi reform programme.

Pooling and resource allocation

Prior to recent reforms, health care budgeting and resource allocation were determined according to traditional Soviet norms. The introduction of the "single payer" system consolidated budgetary (i.e. *rayon*, or district, city and *oblast*) and MHIF funds in a single pool of funds at the *oblast* level, with subsequent allocation of resources to health providers through a single channel *(3)*.

Payments

For both budgetary and mandatory health insurance funding, hospitals are paid according to the number of cases treated. Cases are categorized according to clinical expenditure groups, which are a version of diagnosis-related groups, based on Kyrgyz hospital utilization and cost data. Co-payments are paid directly to the hospital cash desk. Providers of outpatient care, primary care, and sanitary-epidemiological services are paid on a capitation basis *(3)*.

Until recently, public sector employees in the health sector were paid according to a national pay scale for public employees, under the "tarification" system. Since 1993, their salaries have been supplemented by official premiums from paid services. Physicians have also charged or accepted unofficial under-the-table payments. Since the introduction of the mandatory health insurance system, physicians have received additional salaries from mandatory health insurance funding. Significant revisions of the remuneration of health personnel in all health care facilities were made in 2002 and 2004. While still based on the "tarification" system, the groups and grades used to calculate various additions and bonuses have been revised *(3)*.

Planning and regulation

In the Soviet era, planning, regulation and management were under the central control of the Soviet state. Following independence, the MoH of Kyrgyzstan assumed a leading role in health planning, regulation and management, but it is gradually decentralizing its

functions. The main regulatory functions of the MoH include: the development of methodical guidelines that are compulsory for all health care providers; the licensing and attestation of health care providers; and quality assurance procedures. The MoH is also responsible for financial planning and budgetary management.

Kyrgyzstan has several parallel health information systems. General morbidity data are collected by health facilities at the local level, pooled at regional medical information centres, and then pooled nationally by the Republican Medical Information Centre. Data related to infectious diseases are collected by local sanitary-epidemiological departments, pooled by regional sanitary-epidemiological departments, and then pooled nationally by the Department of State Sanitary-Epidemiological Surveillance. Data on births and mortality are collected through health facilities and through the civil registry offices that report data to the National Statistics Committee. Additional data collection systems are through separate vertical programmes and the parallel health systems operated by other ministries and state companies and it is unclear how far these data are captured by the Republican Medical Information Centre *(5)*.

Physical and human resources

Physical resources

The Soviet health system left Kyrgyzstan with excessive hospital capacity, and the rationalization of hospitals has been an important aim of health policy in the years since independence. The number of hospitals has been reduced from 304 in 1990 to 146 in 2005, with a decline in the number of acute hospital beds per 100 000 population from 986 in 1990 to 393 in 2005 (see Table 1) *(2)*. This decline in the ratio of hospitals and hospital beds is largely due to the policy and financing changes described earlier, i.e. changes in the payment of providers under the “single payer” system.

A greater emphasis on primary care has led to the establishment of family group practices on the basis of pre-existing health facilities, such as *feldsher-accoucher* points (FAPs) or polyclinics. In addition, in each *rayon* a family medicine centre was established that provides in addition to primary care more specialized outpatient services *(3)*.

Human resources

In 2005, there were 583 nurses (physical persons) per 100 000 population, a decrease from 901 in 1990. The ratio of physicians (physical persons) to population has also decreased since 1990, from 337 per 100 000 population to 253 in 2005 (Table 1) *(2)*.

As in many other European countries, human resources in the health sector are distributed unevenly. The northern regions are better staffed than the southern regions, where physicians are lacking. In addition, there is a countrywide excess of physicians in cities and a shortage in rural areas *(3)*.

Most health staff are employed by the state. Besides being paid irregularly, salaries in the health sector are

Table 1: Selected health care resources (nurses, physicians, acute hospital beds) per 100 000 population, 2005 or latest available year (in parentheses)

	Physicians (physical persons)	Nurses (physical persons)	Acute hospital beds
Kyrgyzstan	253	583	393
CARK average	283	767	525
CIS average	372	788	730
EU15 average	336 (2004)	749 (2004)	393 (2004)

Source: (2).

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very low. According to official statistics, the average monthly wage of health personnel in 2003 was only 49.2% of the national average of all occupations. The expertise of health personnel, particularly in remote areas, is insufficient, due to limited access to up-to-date medical literature and the lack of financial resources for continuous medical education. In the regions, health personnel still use methodological recommendations and clinical treatment schemes developed during the Soviet period *(3)*.

Medical education has undergone some changes, but more comprehensive reforms are under way. Systems of on-the-job training and retraining of health personnel are fragmented and mainly oriented towards inpatient care. Existing curricula have so far not been brought in line with the planned restructuring of the health delivery system; nursing education, in particular, needs further reform *(3)*.

Provision of services

Public health

Public health services have traditionally been provided by the sanitary-epidemiological service. In recent years, the task of health promotion has been transferred from the sanitary-epidemiological service to the newly established Republican Centre for Health Promotion, with the aim of developing a service based on modern health promotion concepts.

The sanitary-epidemiological service operates at the national, *oblast*, city and *rayon* levels. In addition to the national office of the Department of State Sanitary-Epidemiological Surveillance, there are 7 *oblast* centres and 50 *rayon* and city centres. The physical infrastructure of the sanitary-epidemiological service is weak. Many laboratories and their equipment are obsolete and in need of renewal. The Department has undergone some reorganization since 1990, but it continues to lag behind the reform process in the rest of the health sector *(3)*.

Primary health care

Primary care is provided by FAPs, family group practices, family medicine centres and ambulance and emergency care services. FAPs and family group practices are the first points of contact with the health care system for patients in rural areas. Family group practices have been formed in recent years on the basis of pre-existing health facilities (FAPs, rural doctor ambulatories, polyclinics and rural district hospitals). They have at least one physician, in addition to nurses and midwives, and serve villages with a population of more than 2000 inhabitants *(3)*.

Family medicine centres are the largest outpatient health facilities and are situated in the main settlement in the *rayon*. The reorganization of primary care is still under way. Family group practices are taking on more and more responsibilities in the health system. Since 2001, small family group practices have started to merge in order to create economies of scale *(3)*.

Hospital care

Secondary care is provided at the specialized outpatient and general hospital levels and differs in rural and urban areas. Rural district hospitals are the main facilities rendering hospital care in remote rural areas. They are the smallest hospital facilities, designed to have 25–30 beds. *Rayon* hospitals provide general hospital care at the *rayon* level. City hospitals of all types, including adult's and children's hospitals, maternity houses and gynaecological hospitals, provide general hospital care in cities *(3)*.

Oblast-merged hospitals provide specialized outpatient care, as well as general and specialized inpatient care at the *oblast* level. With the exception of the republican facilities, these are the largest providers in their respective *oblasts* and are usually situated in *oblast* capitals. *Oblast*-merged hospitals arose following a restructuring in 2000, when *oblast* health departments were abolished *(3)*.

Tertiary care is provided by the republican health facilities at the national level (national hospitals, centres and scientific research institutes) and by specialized dispensaries and hospitals at the subnational levels *(3)*.

Social care

In Kyrgyzstan, social services are the responsibility of the Ministry of Labour and Social Protection, which provides social benefits and payments for drugs to vulnerable population groups. Health care facilities, particularly hospitals, seem to perform a social care function, manifested in higher hospitalization rates and longer length of stay in wintertime. There are few links between the health and the social welfare sectors, and families remain the most important providers of social care. What social care the state does provide, is mainly provided in institutions *(3)*.

The social safety net inherited by Kyrgyzstan from the Soviet era is sophisticated but inefficient. With the assistance of the World Bank and other international agen-

cies, the Government is trying to target the social safety net better and make it more affordable. International and local NGOs have supported the provision of social care at home and the development of community care *(3)*.

Pharmaceuticals

With the break-up of the Soviet Union in 1991 and the independence of Kyrgyzstan, the drug supply in Kyrgyzstan dramatically worsened and the country encountered a shortage of drugs. The situation improved with the privatization of the pharmaceutical sector. In the early 1990s, the formerly state-owned Kyrgyz Pharmacia was turned into a joint stock company. The process of privatizing pharmaceutical retailing began in 1996, and only a few municipal pharmacies are still in public hands. In 2004, 97% of drugs were imported, mainly from other CIS countries *(3)*.

The first Essential Drugs List in Kyrgyzstan was developed in 1996 and a national drug policy was adopted in 1998. In 2000, the MHIF introduced an additional drugs package on a pilot basis in three polyclinics in Bishkek and the Alamudun *rayon* of Chui *oblast*. It has now been expanded to cover the whole country and forms part of the State Benefits Package *(3)*.

Mental health care

Mental health services in Kyrgyzstan are overly centralized and based on large institutions. At present, the Government is unable to adequately meet even basic human needs such as food, basic health care and shelter. As part of the attempt to reform the mental health system, in 1999 the Government enacted the Psychiatric Care Law. In 2000, the Government launched its national programme "Mental Health of the Population of the Kyrgyz Republic in 2001–2010". Both the law and the programme anticipate a shift from institutionally based mental health care to more localized community-based care. Implementation of the programme remains so far incomplete, due to a lack of funding, lack of trained mental health professionals to provide the necessary community-based mental health care, particularly in rural areas, and the lack of private pay psychiatrists *(6)*.

Health reforms

Health reform in Kyrgyzstan has taken place in the difficult context of political and economic transition and in the face of severe economic pressures. In 1994 the MoH requested technical assistance from the WHO Regional Office for Europe in the development and implementation of a comprehensive health care reform programme. In the same year, the United States Agency for International Development began its support of the initial Issyk-Kul health reform pilot project. The ten-year national "Manas" Health Care Reform Programme for 1996 to 2005 was followed by "Manas Taalimi", a five-year national health reform programme for 2006 to 2010.

So far, the country has accomplished a number of the tasks it had set itself and has become a regional leader in health reform. A mandatory health insurance system has been introduced, followed by new provider payment methods and contract arrangements. One of the key reform measures was the introduction of the "single payer" system, which united all previous achievements of health reform and served as a catalyst for reform. The system provided for a purchaser–provider split in the health care system, pooled budgetary funds at *oblast* and later at the national level, based the allocation of resources to providers on enrolled population and outputs rather than on capacity norms, and introduced a State Benefits Package. One of the key lessons of the Kyrgyz experience has been that the restructuring of the health care delivery system has required new economic instruments, which in turn have had to be embedded in a reform of the financial system of the country *(3)*. The "Manas Taalimi" programme envisages further strengthening provider payment mechanisms and the purchasing function of the MHIF *(7)*, which will entail changes to the overall public finance system of the country.

Primary care has been restructured and strengthened. There has also been some progress in the reform of medical education. Training and retraining programmes in family medicine have been set up, a school of health management established and the curricula of the State Medical Academy revised. What is lacking so far is a comprehensive system of human resources management. The pharmaceutical sector has witnessed far-reaching reforms and has now been almost fully privatized. The MoH has developed a legislative and regulative base that emphasizes the use of generics. An Essential Drugs List was developed in 1996 and subsequently revised. The removal of barriers to imports of drugs and of the 20% value-added tax has significantly improved both the physical and the financial accessibility of drugs to the population *(3)*. The "Manas Taalimi" programme aims to strengthen FAPs, emer-

gency care services, and secondary and tertiary care, reform medical education, and reform the public health system *(7)*. The "Manas Taalimi" programme has been implemented using the sector-wide approach that aims to ensure greater transparency of the health budget and better donor coordination.

Assessment of the health system

Since independence, Kyrgyzstan's health system has undergone profound changes that were to a large extent determined through the dire economic transition. The breakdown of the Soviet system of free health care for all has resulted in decreased equity when accessing health care services. The Government has responded to this development by developing a State Benefits Package and an Essential Drugs List. Despite these reforms, about half of total health financing comes from private out-of-pocket payments, which include unofficial under-the-table payments. Although informal payments have to some extent been replaced by official co-payments, people with lower income continue to face difficulties in accessing health care and drugs. While Kyrgyzstan has a lower share of out-of-pocket spending than many other CIS countries for which good evidence exists, the need for patients to pay for their care remains a serious obstacle to equal access.

There are important lessons that emerge from the reform process in Kyrgyzstan for other health systems in transition. A number of factors have facilitated successful health reform in the country. These include sustained political commitment; involvement of the population; coordination of donors' efforts; continuity in health reform management; and a step-by-step approach, whereby pilot projects were linked to national health reform. Kyrgyzstan will continue to face the challenge of achieving a good performance in the health sector in the context of a difficult macroeconomic and political situation.

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