

# Policy Brief

## Introduction

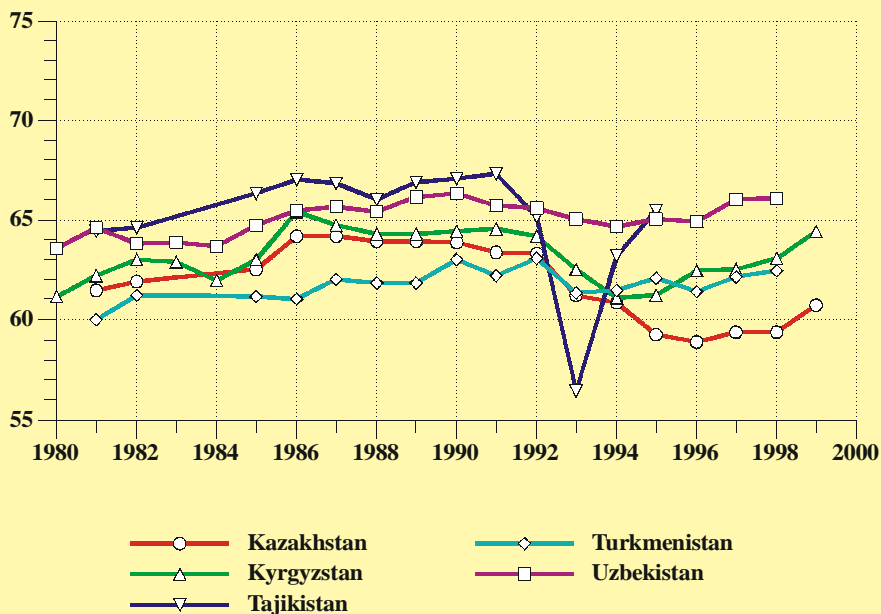
For many years, central Asia was one of the least known parts of the former Soviet Union. It covers a large and increasingly strategically important geographical area; Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan lie at the crossroads between Europe and Asia, with many of their borders based on lines drawn on maps in Moscow in the 1920s. Since independence in 1991 they

have faced the huge challenges of nation building, creating new constitutions and organs of government. They have also confronted the legacy of the past with structures, such as their health systems, that are inappropriate to today’s needs, unaffordable and in urgent need of reform.

Outside their own countries these health systems have received little attention. This briefing, which summarizes key points from the accompanying book, seeks to bring to a

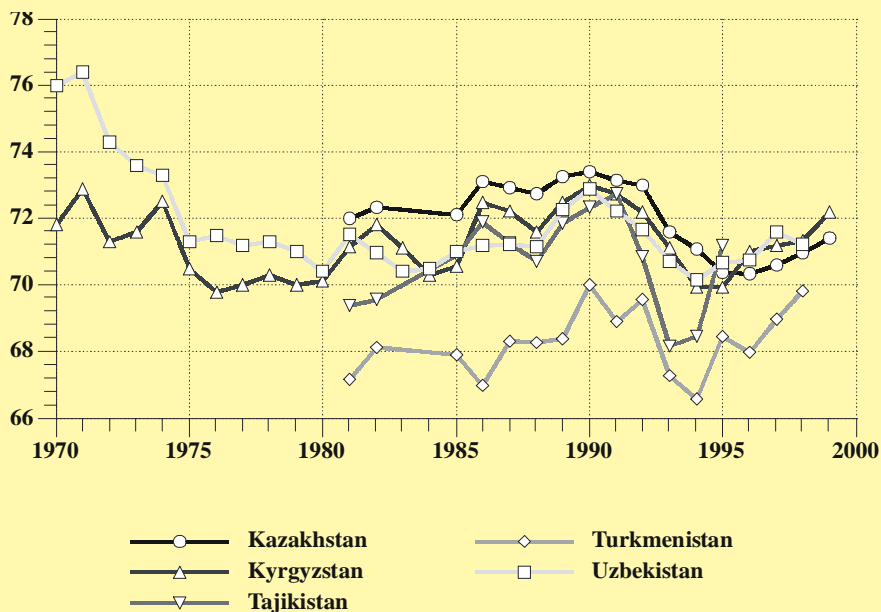


**Fig. 2. Life expectancy at birth, in years, males**



Source: WHO Regional Office for Europe health for all database.

**Fig. 3. Life expectancy at birth, in years, females**



Source: WHO Regional Office for Europe health for all database.

wider national and international audience some of the common challenges facing these health systems, as well as some of the solutions that are being proposed.

## Patterns of health in central Asia

The countries of central Asia face a double burden. They have the high adult mortality characteristic of the former Soviet Union but also relatively high levels of childhood mortality, especially from infections. The scale of premature death and disability has received remarkably little attention from either the research or policy community. In part, this reflects the longstanding weaknesses of both of these groups in the region. However, there are also some concerns about the validity of data in some countries (with some evidence of falsification for political purposes), as well as a deeply ingrained culture of secrecy.

Life expectancy at birth has the benefit of simplicity as a broad measure of population health. For men, it is apparent that prior to 1991 trends were broadly similar to those in the Russian Federation, particularly in Kazakhstan and Kyrgyzstan. In the early 1990s, life expectancy for men fell in all central Asian republics. The decline was greatest in Kazakhstan and Kyrgyzstan with more gradual declines in Turkmenistan and Uzbekistan. The steep decline in Tajikistan reflects the civil war with its resulting deaths and data problems. For women life expectancy also fell sharply in Uzbekistan while the already low life expectancy of women in Turkmenistan fell even further.

The situation began to improve in the late 1990s but, taking both sexes together, the figure for 1997, 67.2 years, is still more than ten years lower than in western Europe, where it is 78.1.

When compared with the Russian Federation, central Asian trends in life expectancy have been broadly similar, with those among men tending to be better but those of women somewhat worse. The situation for women is especially poor in the southern more traditional countries and in rural areas. In contrast, men are most disadvantaged in those countries that are least traditional, in part reflecting high levels of alcohol consumption.

## The legacy: Soviet model health care systems

Each country inherited a Soviet model of health care which offered, in theory, universal access to at least a basic level of care, but which also had many drawbacks. Health care was organized according to norms set in Moscow, which stifled the development of independent policy-making and impeded the emergence of capacity to implement change. Health services were centrally administered from republican ministries of health, through *oblast* (regional) health departments, with further administrations at city and *rayon* (district) levels.

The hierarchical but fragmented nature of the system is apparent from the chart on page 5. While there is some variation among countries, the model shown, Uzbekistan, illustrates many common features. Health posts (*feldsher accousserski punkt* – FAPs)

serve rural areas and are staffed by feldshers (who have 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 many of 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. Main cities in *oblasts* typically have specialist hospitals and dispensaries for diseases such as tuberculosis. In the capital cities, national-level hospitals provide more advanced and specialist treatment, such as for cardiovascular diseases and cancer. The sanitary epidemiological service (Sanepid or SES) concentrates on environmental surveillance and the control of communicable diseases.

Most of the formal hierarchical system remains in place although the infrastructure has deteriorated. Facilities have suffered from years of under-investment, and in rural areas often lack even basic amenities such as running water. The worsening economic situation in the 1980s and 1990s led to a continuing deterioration in services as equipment became obsolete, drug stocks dwindled, and the fabric of buildings decayed. Today there is still very little modern appropriate equipment. Primary health care remains poorly developed and health promotion activities are just beginning. Hospitals dominate the health care systems, taking most of the funds and employing most

of the health care professionals, even though the over-capacity is apparent in the very low occupancy levels

In general, health facilities are still funded according to rigid budget line items, which reinforces excess hospital capacity and offers no scope for innovation by managers or staff while encouraging wasteful patterns of treatment.

Most health professionals are poorly equipped for the challenges facing them. Doctors still specialize during undergraduate training. Primary care has yet to develop into a distinctive specialty on a par with those in hospitals. Most nurses have limited skills and undertake only basic tasks. Staff work in difficult conditions that are not conducive to providing high quality care, reflected in low levels of public satisfaction. Approaches to treatment are often outdated, with many patients being admitted with conditions that would be treated in ambulatory care elsewhere.

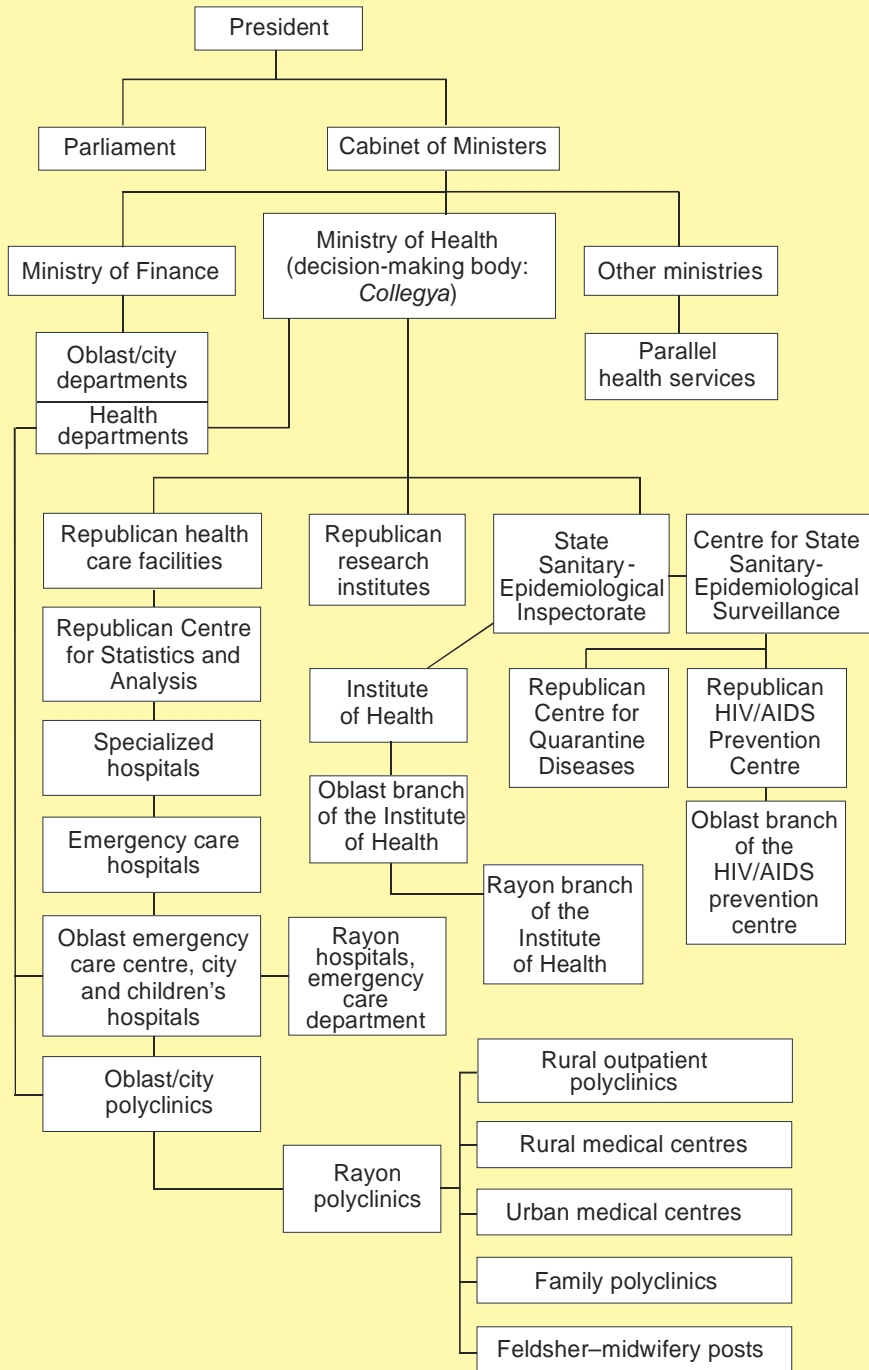
Overall, the inherited health care system was wasteful, ineffective and, in the long term, unsustainable. The prolonged economic crisis since independence made reform unavoidable and change is now occurring.

In terms of purchasing power western European countries spend over 30 times more per capita on health care than the central Asian republics.

## Funding health care

Much of the impetus for reform came from government efforts to identify more secure sources of revenue, as well as to reduce costs.

Fig. 4. Organization chart for Uzbekistan



The first priority was to halt the drop in revenue for the health budget. There were four main sources of revenue: taxes, insurance, out-of-pocket payments and funds from external donors.

## Taxation

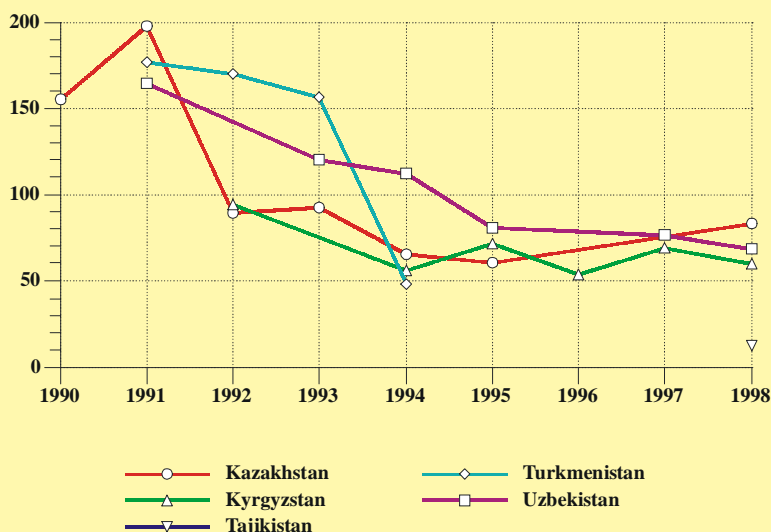
As in other parts of the former Soviet Union, central Asian governments have struggled to establish new revenue collection systems that could replace funds that previously came from state enterprises and from Moscow. Most countries experienced falls of over 60% in the first half of the 1990s, leading to budget deficits and severe cuts in health expenditure, down to a quarter or a third of their 1991 amounts. By 1998, the five central Asian republics were spending, on average, 2.5% of their by now very low GDP on health care

compared to 8.6% in western Europe. This gap is more stark when considered in terms of purchasing power; the central Asian republics spent, on average, US \$59 per capita (see Fig. 5), while western European countries spent over thirty times more (US \$1849 per capita).

## Insurance schemes

The second potential source is insurance contributions. Some countries saw a health insurance scheme as a solution to the challenge of securing guaranteed funding, given their failing economies and faltering taxation revenue. Compulsory insurance schemes were introduced in Kazakhstan (in 1996) and Kyrgyzstan (in 1997), with a voluntary state-run scheme in Turkmenistan (from 1996). Tajikistan and Uzbekistan have

Fig. 5. Total health expenditure in US \$PPP per capita



Source: WHO Regional Office for Europe health for all database.

retained funding from general government revenues. Insurance funds have never accounted for more than a small proportion of revenue, however, since the same problems that limit the ability to collect taxes also apply to a payroll-based health insurance.

The success, or otherwise, of these insurance schemes can be assessed in several ways, but a key indicator is the proportion of total health care expenditure raised. Insurance has contributed far less than expected, usually less than 10% of public expenditure on health. The illusion that insurance would tap extra sources of revenue, or even secure earmarked funds for health, has been dispelled and its introduction has failed to stem continuing decline in health budgets.

Health insurance was seen as attractive because it offered transparency and a break with the past. However, there was little recognition of certain key aspects of the social insurance model in the west, such as its historical roots in the western European industrial revolution, with involvement of the social partners (employers and trade unions), as well as its basis in modern patterns of employment.

Notwithstanding these problems, some reformers in central Asia argue that the process of implementing insurance has acted as a catalyst for change in the health system in other ways, such as the introduction of systems of new provider payments, selective purchasing, and setting and monitoring standards. The establishment of insurance funds that could contract selectively with service providers was thus partly a back-door way of introducing incentives to make health care services more efficient and effective.

## Out-of-pocket payments by the public

Payments by patients have become a major source of funding for health care systems.

The third source of revenue is out-of-pocket payments by the public. Given the failure of attempts to secure more revenue from public sources, payments by patients have become a major source of funding for health care systems as otherwise hospitals run out of essential supplies and wages are not paid. Out-of-pocket payments are estimated to account for more than half of total health expenditure in Kazakhstan and Kyrgyzstan, and perhaps 70% in Tajikistan, while less is known (except anecdotally) about Turkmenistan and Uzbekistan. Household surveys in central Asian republics typically report that over half of respondents indicated they had paid, either officially or unofficially, for health care.

Three categories of out-of-pocket payments can be defined. First, health providers (government or private) charge official fees. Second, semi-official charges are made for consumables, such as drugs and medical supplies. Third, patients make under-the-table payments to health care providers, either as a so-called gift or increasingly as a precondition for service.

Official fees have become more common, partly justified by the use of market models. Estimates of official user charges are about 10% of revenue, but this is certainly an underestimate. Some countries have pursued a policy goal of making such payments transparent, by producing lists of items included with their associated charges. This

is thought to be more acceptable to the public than informal “under-the-table payments”, but there is no evidence so far that official charges have replaced these unofficial payments. Semi-official charges levied on consumables also are very common, simply to enable the facility to obtain them. Thus, many public hospitals now require patients to bring or buy their own dressings and food and arrange to wash their own sheets and towels, and buy their own medicines.

While evidence remains fragmented and partial, under-the-table payments appear to constitute a significant source of income for health professionals, whose salaries are very low and often paid months in arrears. Although there is a tradition of “gratitude” payments, evidence from surveys suggests that health providers now often demand payment as a prerequisite for service. For example, in some countries over half of respondents reported making such payments, particularly for hospital treatment.

## Reforming health system funding

Reform of health care financing has had little success so far in any of the countries of central Asia, with health insurance failing to offer a panacea. Three main conclusions can be drawn.

First, out-of-pocket payments are at best a temporary solution that must give way to a sustainable system of prepaid financing, ideally based on taxation. Since there is little prospect of increasing the health budget from existing levels of insurance revenues or taxes the obvious priority is to establish better tax

collection systems, while also concentrating on more cost-effective methods of treatment.

Second, the growing reliance on out-of-pocket payments by patients results in considerable inequity, with barriers to access by the poor. Thus, among the poorest groups in Tajikistan, over a third reported that cost deterred them from seeking the necessary treatment. Around a third of the population in Kazakhstan and Turkmenistan and the great majority in Tajikistan live on or below the poverty line of US \$4.30 per day.

Third, it is increasingly clear that the health care system must do better with fewer resources by implementing microeconomic reform. Since hospitals account for by far the largest share of the health budget, and by most measures contain considerable excess capacity, one policy aim has been to reduce both the number of hospitals and, within them, the number of beds.

## Restructuring hospital systems

Closures and mergers of hospitals will become increasingly important as they are the only way to make substantial savings in fixed costs.

Each country inherited large Soviet model hospital systems that absorbed around 70% of total health expenditure. Much of the hospital budget goes to paying utility costs and staff wages, with little left for maintenance or for buying drugs and equipment: in other words, for treating patients. The collapse of state budgets in the 1990s forced countries to look at how they could reduce capacity, preferably by transferring some work to ambulatory care.



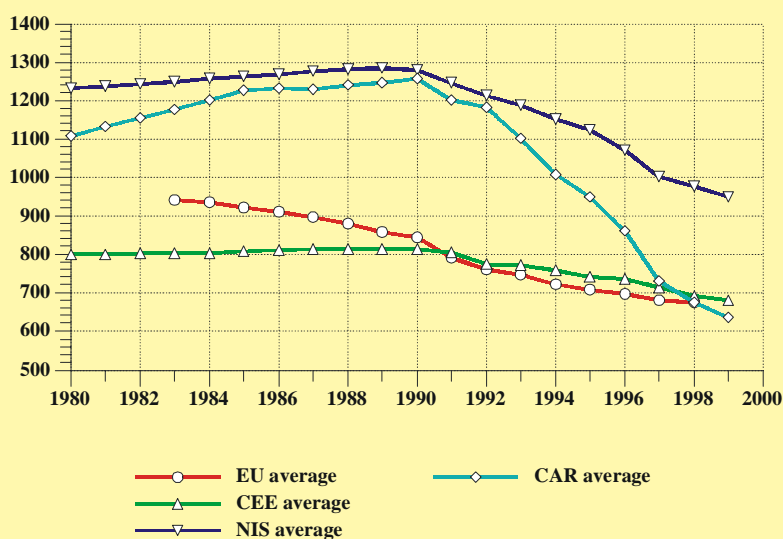
While hospital beds are an inadequate measure of the capacity of a hospital, they can be readily counted and the trends do provide some clues as to what has happened. Numbers of hospital beds (long-term and acute care) fell sharply in the central Asian republics after 1992 (see Fig. 6) to well below the average in the former Soviet Union (but still well above western Europe, at least in terms of what are defined as acute care beds).

While some of this reduction was solely on paper, as hospitals had been funded partly on the number of beds, thus providing an incentive to maximize their count, there has also been a true, and substantial drop in capacity. The numbers of beds in larger hospitals have fallen and many small rural hospitals closed. In Kazakhstan, the number of village “hospitals” fell from 684 in 1994 to 208 in 1997 although, as already noted, many of

these hospitals could do little more than offer basic shelter. In contrast, it has been very difficult to either close or merge larger hospitals, especially in capital cities. Closures and mergers will become increasingly important, as they are the only way to make substantial savings in fixed costs.

While statistics on utilization of hospitals must be treated with caution in countries undergoing major transitions, what evidence exists suggests a fall in admissions by a third or more in all countries between 1990 and 1998. However, what happens to patients once they are admitted seems to have changed little, with average length of stay remaining at around 12–13 days. Perverse financial and other incentives, outdated treatment protocols and a lack of alternatives all combine to keep patients in hospital for long periods.

**Fig. 6. Number of hospital beds per 100 000**



Source: WHO Regional Office for Europe health for all database.

## Primary health care

While the Soviet system managed to provide wide geographical coverage, this was done with very limited resources. Primary care only ever received 10–15% of the health budget. Inevitably, given the lack of equipment in primary care facilities and the lack of primary health care training for staff, rates of referral to hospitals have been very high. The challenges of maintaining coverage are especially great in rural areas, where between 45% and 70% of the population of the central Asian countries live.

Each country has identified strengthening of primary care as a major reform objective, and although each has worked in different ways and at a different pace, all have adopted the principle of replacing the “specialists” currently employed in primary care facilities with more broadly trained family physicians. There are also widespread moves to create group practices, although there is still relatively little attention to increasing the skills, and with them the responsibilities, of other health professionals.

These policies focusing on the delivery of primary care goals have been accompanied by some changes in financing mechanisms. Initially, some extremely complex methods, such as fund-holding, were promoted, with little regard for the level of infrastructure in place, but after almost a decade of experience, most proponents of such ideas have stepped back, realizing the difficulties inherent in such approaches.

There have been high expectations for the benefits that would flow from reformed systems of primary care and changed payment systems. The process has, however, taken

much longer than expected. There are several reasons for this. State budgetary systems have been inflexible. New payment mechanisms have involved few fiscal incentives, reflecting the sharp economic decline. And the capacity to bring about change has often been underestimated. Current efforts are somewhat less ambitious, emphasizing incremental changes in clinical practices brought about through retraining of staff.

## Where to now?

Reform is clearly necessary, as the existing systems are unsustainable.

Those who must reform the health sector in the central Asian republics, whether in governments, local health administrations, health facilities or international agencies, face a daunting task as they are working in the context of adverse political and economic circumstances. Reform is clearly necessary, as the existing systems are unsustainable and the scale of the health crisis is such that it will act as a brake on general economic development.

Reform of the health sector cannot be considered in isolation from the broader economic and political situation. Ultimately, high quality, modern health systems, providing effective services for all depend on economic recovery, which in turn depends on creating a climate conducive to widespread economic growth, and not just exploitation of this region’s extensive natural resources in ways that perpetuate the positions of oligarchies. This will require investment in education and infrastructure and a

commitment to transparency and action to reduce corruption. These, in turn, will have tangible benefits for the health of the population. However, in the short term there are four important challenges that must be addressed now.

The first is how to raise sufficient funds to pay for the services that are needed, while promoting equity. This will inevitably require considerable redistribution, a task that may be politically very difficult, given widening income disparities, especially between urban and rural areas.

A second is how to enhance local decision-making, moving away from the centralized systems that were inherited from the Soviet system.

A third is how to respond to the pressure for privatization. The private sector has, potentially, a major role in many areas of the health sector, such as the manufacture and distribution of pharmaceuticals. However, there is a real danger of state assets being disposed of by politicians at well below market value to political or personal supporters. Given the complexity of the process in countries where the financial systems are still poorly developed, undue haste to privatize assets seems unwise.

Finally, there is an urgent need to restructure facilities, disposing of excess capacity. However, this conflicts with policies designed to ensure full employment, which is especially problematic where health services are seen as a means of creating jobs.

## **The European Observatory on Health Care Systems**

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