

## **Health Economics: Problems and Prospects in Kyrgyzstan**

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### **Abstract**

*The main aim of this study is to investigate the health care system in Kyrgyzstan during the transition period. The market of medical services in the Kyrgyz Republic is in the stage of early childhood. Regarding this we study the sources and principles of allocation of financial resources in health care system in Kyrgyzstan. The main problems of the system can be given as a lack of financial resources (funds) and inefficient use of the funds and a lack of motivation of quality in the health care system. With regard to this, we give some suggestions for improving government regulation of health care in the country.*

### **1. Introduction**

When we examine the studies about the health system in the world, the developments have been similar to each other in the last 30 years period. There has been health crisis in the world in many countries as a result of increase in costs. For this problem, similar health system models have been recommended. After the independence, the reform works started in many areas including health in Kyrgyzstan. The country aims to reach the world standards regarding the health sector by becoming a member of International Health Organisation.

### **2. The Analysis of Health Sector in Kyrgyzstan**

In this respect, the main aim of this study is to examine the developments, problems and solutions to these problems related to health sector in Kyrgyzstan. The health (medical) services have their own features that distinguish them from other goods. This type of service is unique and intangible. For instance, if a person buys a private good, he becomes its owner. However, it is impossible to say the same thing for health services. Health services, like medical checkup, are impossible to transport, store and package, in other words, they are intangible. Potential customers cannot understand the health problem that they have before getting the health services. In other words, they cannot diagnose themselves before going to the doctor. In addition, production and consumption of medical services cannot be broken into the time periods. A person has limited access to consuming a health service, Health organizations can only describe the advantages gained after the service. The quality of services can be assessed by the patients after getting the service.

The risk of disease and uncertainty should be noted as one of the main features of the medical services market. Usually the medical services need to occur suddenly, because nobody can guess when and how they can get ill beforehand. Compared to the other services, the customers are less aware of health services that they purchased. Therefore customers largely are suffered by an asymmetric information caused by the lack of their medical education and by measuring complexity of quality of medical services. The asymmetric information between physicians and patients appears in favour physicians and as a result they affect the possibility of creating demand for medical services.

Also, externalities are an essential feature of the medical services market. Thus, the well-timed vaccination of some parts of population (eg, from influenza) can prevent the vaccinated individuals from getting ill, and, thus, not infecting other people. Hence, the functioning of the medical market causes many problems for the population. It gives the rationale for the state intervention which has different forms in different countries (Stolyarov, 2003).

The economic transition in Kyrgyzstan provides additional features to health-care system related with the formation and development of market relations, while preserving some elements of the administrative command system. The development of economics has a great effect on health services. The health service was provided by the state during the Soviet era. The present system got the heritage from the old system such as low level of funding, disparity of institutional structures of health care system. The state still controls the health system in general. However, it cannot control everything in the transition period. For example, although the government has increased the wages of the doctors in recent years, it cannot control presence of illegal pricing. This illegal price leads to inefficient structure of production in the legal segment and in the prevalence of high costs of hospital sector.

The fact of the shadow market of medical services in Kyrgyzstan indicates that the market mechanism is developing but without government regulation. However, there is a necessity of the legal market as a way to displace the shadow of competition. Therefore, from our point of view, informal payments in medicine that patients pay to the physician should not be considered as a bribe. In the case absence of regulatory mechanism, the given payment is considered not to be regulated by the state. The only way to bring them to any frame or form is their legalization. And the part of paid services is becoming transparent. Thus, the shaping of the legal market of medical services in the transition period transforms shadow market into a legal market and helps the efficient use of resources. In Kyrgyzstan, health care system has been reformed for over 15 years. In 1996 with the support of international donations, the National Program called as *Manas* launched which prolonged to the program of state guarantees *ManasTaalimi* in 2006

Health care system reforms have the ultimate goal of improving the availability and quality of medical care in today's conditions. The first objective of these reforms was to reduce the mortality rate in the country especially infant and maternal. However, this aim was not achieved. On the contrary, a sharp increase in infant and maternal mortality has been recorded for the last two years which was not supposed to happen in the post-reform period. (Ministry of Public Health Report, 2011). The second important objective is to reduce morbidity level and increase the number of recovered patients. In the country the number of cases of HIV infection, dysentery and viral hepatitis have been increased in recent years. The third objective is an availability of health care services. This objective was initially unattainable compared with the pre-1991 period. Thus, the budget and insurance system which has developed to date, has a little effect on the quality of medical care service. The main problem is related to the economic interests of the health system participants, namely, health care workers and patients. The interest of health care workers is to get a sufficient salary for their job, while the interest of patient is a quality and reasonable health care service.

However, due to a low purchasing power, the patient needs a governmental support to get access to a health service. Thus, there are *failures* of the market in health care system that requires the active governmental participation. This is primarily reflected in shortage or even lack of medicines in hospitals. Patients are prescribed drugs and usually recommended to buy them in the nearest pharmacy calling the detailed address of the seller. Often in such situations physicians and nurses offer their services. Actually there are too many disputes and wrangles on this issue, but it is probably difficult to patient lying on a hospital bed to argue with the physician. In addition it should be noted poor diet, which is offered to patients in hospitals (Marat, 2011). Also, the hospitals in Kyrgyzstan suffer from a lack of basic sanitation and hygienic conditions. Obviously, all of these are directly related to the lack of funding and an inefficient use of limited resources. The health care financing problems can be solved in two main ways: finding new source of funds and secondly, improving the distribution of these funds in an efficient way.

In Kyrgyzstan, a considerable part of health organizations (more than two thousand and seventy) are working in the Unitary Payer System. These are the institutions and organizations of the Ministry of Health that is expected to implement the government guarantees program. The budget financing of health care organizations has gone through the foundation of obligatorily health insurance. In 2011, the consolidated budget of health care organizations implementing the program of governmental guarantees increased from 2421, 2 million in 2006 to 4771.8 million in 2011 (97.08% increase).

In the structure of the consolidated health-care expenditures, the share of the federal budget is equal to 60.1% (2932.0 million KG som), local budget is equal to 8.1% (386.5 million KG som), obligatorily health insurance funds are equal to 22.7% (1085.3 million KG som), co-payments are 5.4% (256.6 million KG som) and special funds are 1.6% (75.9 million KG som). This data are given in the Table 1 (according to the Ministry of Health of Kyrgyz Republic for 2006-2011).

**Table 1: Consolidated Budget Implementation, 2011**

	Million KG som		Growth %	Unit weight	
	2006	2011		2005	2011
Total	2 421,2	4771,8	97,08	100%	100%
Including:					
Federal budget	1454,4	2932,0	201,6	60,1	61,4
Local budget	312, 0	386,5	123,9	12,9	8,1
Obligatorily health insurance	393,2	1085,3	276,2	16,2	22,7
Co-payments	188,0	256,6	136,5	7,8	5,4
Special funds	73,6	75,9	103,1	3,0	1,6

*Source: The table is based on data from the Ministry of Health of Kyrgyz Republic for 2006-2011.*

As the table shows, one of the important sources of funding health care system is obligatory health insurance fund. The obligatory health insurance is a system of providing government-guaranteed package of health services through obligatory deductions from payroll fund. They are addressed to working citizens. The reason for the introduction of health insurance is the unpredictability of the disease. It leads to the difficulty of family planning of health care expenditures. Cash costs for the treatment of one of the members of the family are composed from a long stay in the hospital, complex surgical procedures, diagnostics, consulting. All of them might be very expensive and can have disastrous consequences for the family budget in whole.

The financial resources structure characterizes an insignificant share of obligatory health insurance funds in financing sources of health care system. The reason is in fact that the major payers of obligatory health insurance system in Kyrgyzstan are public sector employees with little fixed income, that provide a slight absolute amount of proceeds from obligatory health insurance. Of the population representing the business structure and segments with a higher income, despite a law requiring employers regardless of their ownership form to pay the insurance fees, is not almost covered by health insurance system. In addition, foreign citizens living in Kyrgyzstan for a long time can not insure their health. The cost of medical services provided to foreign citizens is unreasonably high that increases the number of solvent patients who are forced to look for and apply to private physicians and clinics passing around the governmental clinics. These conditions characterize the potential additional funding sources during the sharp shortage of financial resources.

The next financing source of health care system in Kyrgyzstan is a co-payment. The co-payment is a fixed payment of patients receiving hospital treatment in public hospitals. If you see the experiences of other countries, at this moment most of the countries in their funding schemes transfer some part of financial responsibility to the customer, which is known as a co-payment. The most important reason for the introduction of co-payments is a limitation of the patient from his desire for excessive treatment at the expense of insurance. Individual schemes of co-payment differ from each other in the nature of financial arrangements. Basically there are three types of schemes: withholding, co-insurance (the insured has to pay a certain proportion to the cost of each unit consumed on medical aid); and participation in payment for service.

According to the Unitary Payer System, co-payments funds come into a unitary fund, and after that, according to the report of the primary health care organization (hospitals) over the past year on the number of recovered patients, redistributed to hospitals. As the Table 1 shows, in 2011 proceed of co-payments decreased. This is due to the expansion of the list of privileged categories of citizens entitled to free medical care (children under 5, pregnant women and retirees older than 75 years). With the introduction of co-payments, patients have to pay several times the same medical service, not having a guarantee for a full recovery in the end. The partly payment of the patient's own treatment, in our opinion, is more fair way to attract the patient to own treatment. It should be noted that in our conditions, patients additionally pay for medicines and drugs, and often make off-the record payments like "gifts" to physicians, other medical personnel and monetary award (especially fees for surgery).

In addition physician very often directs the patient to a pharmacy or laboratory, while having a share from the cost of drugs sold to the patient or the charges for laboratory analysis that may be even not necessary. Although 20% rate of VAT on medicines was withdrawn, in fact they are not cheaper. Therefore it would be useful rather than fixed co-payment in relation to the type of medical aid to introduce co-payments for medicines, i.e. to pay for a part of the drug cost used in the treatment of the patient (for example in the case of Turkey). (<http://www.regnum.ru>)

The next source of funding is paid services: official and off-the record. These funds do not pass through the official (governmental) channels of the redistribution and come to medical organizations in the form of a direct payment for medical services. Today in Kyrgyzstan there are following forms of personal health care costs such as a direct buying of medicines, medical services for fee for the full cost and off-the record, i.e. illegal payments for services.

The paid medical services contributed to the active introduction of new medical technologies. The physical infrastructure, human resources etc. began to be used more intensively. Of course, it takes the edge off the budget deficit in the transition to a market economy period. However, here there were serious problems.

Firstly, the paid medical services were beyond the governmental control. (There are price lists, but they are out of date, the extent of services is not provided).

Secondly, there is a tendency to use the public sector to rendering paid services. In other words, paid services are provided on the basis of public health facilities. In this regard, there is a fact of unreasonable hospitalization in a public hospital in the so-called fee-wards. There was a problem of inefficient use of healthcare system resources and additional public expenditures. All of it is contrary to optimize the hospital aid.

The greater the volume of paid services per capita, it is the higher the level and duration of hospitalization and the greater the number of beds. Hospital resources spread on a large number of hospital admissions, and as a result the cost of treating a single case reduces, and hence the health care quality reduces, too. Generally because of paid services there are superfluous capacity of medical facilities that are enough costly. In other words, in this case, paid services reduce the efficiency of resource use. Therefore, if these capacities are superfluous, they have to be closed, regardless of funding source (free or paid service). Despite the annual decline of hospitalization level in Kyrgyzstan, in hospitals there are many free and unfilled beds, which is an indicator of inefficient use of scarce resources in health care.

It should be noted that in the study of health-care problems in Kyrgyzstan and the use of international experience, different conditions should be taken into account. For example, in the financing of health care in countries with a developed market economy, there is the problem of the necessity to reduce costs, and they are looking for ways to optimize costs, i.e., the effective use of available resources at their disposal. Authors are mainly looking for ways to find and increase resources. And this is happening in conditions of the economically unreasonable payments for treatment (co-payment), the lack of standards and transparency, increase of charges with arbitrary prices and other unsupervised processes.

Thus, despite the fact that financing in Kyrgyzstan is an increasing rate, and the government spends on health care each year more and more as noted above, there is no tangible benefit. Now it is time to do the funds distribution analysis. In the implementation of the 2011 budget, the unit weight of such items as salaries and assignments to social fund take away 84.7% of the total budget assignments, at the same time financing expenses for medicines and food (3.1% and 4.1 % respectively) were significantly reduced. The funds provided for public services were also reduced to 4.3%. The salaries and assignments to social fund amounted to a substantial part of the funds (78.5% of the total, which is almost four billion KG som). All other expense items accounts for only 21.5%, including 4.0% for medicines and 4.6% for food. Funds for public services made to 5.6%, and only 0.4% funds was addressed for service of buildings and other constructions (according to the Ministry of Health of Kyrgyzstan data for 2006-2011).

The increasing of medical workers salaries by government was mirrored in the last year budget. This initiative was taken by the Government in order to improve the social status of medical workers and the specialists' quality of lives. It must be said that this decision of Government has reached its goals and medical workers income has increased significantly.

In spite of increasing of medical workers salaries the desire and habit of getting the additional revenue directly from patients and their relatives have not disappeared. It is strangely enough. Bribery as gifts from *thankful* patient, unfortunately, is still very common in hospitals, especially where the patient receives surgical treatment. Unambiguous hints of medical staff force the patients or their relatives to make gifts, often money awards. All of this not only blemish the name of healthcare system in public, but also caused serious damage to the family budget of citizens, caught up in a hospital not of their own free will. It is focused on that despite the significant increase in the unit weight of expenditures on salaries; corruption in health care system continues to bloom. For in what extent the government should increase the salaries of medical workers so that they refuse bribes and kickbacks? Before proceeding to the factors of labor incentives in healthcare system it is necessary to reveal the modern principles of health workers compensation.

The amount of payment is determined on the basis of official rate calculated on the basis of the Single Rate Schedule and category coefficients, and is charged with the implementation of the working time regulations. When payroll charges, medical workers are paid the allowances and additional payments besides official salary rate. Allowances are provided according to followings: the duration of continuous working, the complexity, intensity and quality of work, as well as an academic degree.

Additional payments to official salaries are executed in following cases: for professional integration, the expansion of operating range and increasing operating volume, as well as physicians with administrative roles.

Healthcare organizations payroll fund formation which works in the Unitary Payer System is executed through followings: the government budget, obligatory health insurance funds, special funds and co-payments.

Most importantly to note that the payroll fund in hospitals is defined on the cost *recovered cases* in last year that is far from the treated statement of patients. Treatment is carried out through the use of hard standards, where several alternatives are laid on minimum cost of treatment. It begs the question: where is the real source of incentive for good physician's work?

In practice the incentive fund is formed for account of the profit. In medicine, a source of incentive and encouragement is pre-defined payroll fund on the basis of past cost. And it is logically that an increasing of incentives must pass through the main part of the payment. And according to mathematic rules "after the relocation of the summands the amount of the payroll fund remains unchanged. In this regard, as there is no profit in medicine, is it possible to use part of special funds formed from paid services as a source of incentive and encouragement? It is important to pay attention to the experience of other countries where the motivation has an important place in the healthcare management system. In other words, economically reasonable approaches, that can transform the intangible values as health into economic, tangible and able to measured by specific indicators category, are used.

The basic idea of the motivation based on ones appraisal and incentive is to avoid time-based wage system and the maximum introduction of piece-work payment in different versions. And, the most important and the one measure of work appraisal is the level of patient's health after appropriate medical activities.

Currently in Kyrgyzstan over 60% of the funds allocated to healthcare, accounts for the maintenance of hospitals. Considering that the hospitals are the most expensive type of medical care in comparison with outpatient and polyclinic treatment, these financial allocations are ineffective. Number of hospital beds per 1,000 people in England is equal to 3-5, in Denmark is 4-5, in Kyrgyzstan is 8-8, and in Bishkek is 15 (Djaparova, 2010).

Turning to the experience of Belarus, where most of the funds focused on the level of health centers and primary care is provided free of charge, in the primary contact "patient – physician" the pathology is identified and 70% of patients do not reach the critical level and does not need medical care at the hospital level. As a result, the highest life expectancy in Belarus in comparison with other CIS countries and the lowest infant mortality rate (Kontseal, 2012).

Talking about the cost structure, in our opinion, it is not very logical to make contributions to the social fund from the obligatory health insurance fund. The fund itself is one of the forms of social contributions. It should be used for its intended purpose, i.e. to provide the insured payer with the normal quality treatment. For a health insurance for medical employees it is necessary to look for other sources. For example, employees of the Ministry of Internal Affairs not paying the insured payment are receiving retiree fees and other benefits from the government.

### **3. Conclusion**

Peculiarities in the health care market require government intervention. During the transition period, it is important to transform shadow market in to the legal market. The health system requires additional sources of funding. Also, the part of the population is not covered by health insurance and most foreigners in Kyrgyzstan do not have the capacity to have health insurance. Also, with the introduction of co-payments, patients have to pay repeatedly. Regarding this, the partly payment of the patient's own treatment would be fairer. Moreover, use of public sector provision of health services leads to inefficient use of resources. With regard to this, to motivate labor, it is necessary to implement piecework payment form in various versions.

In Kyrgyzstan, more than 60% of the funds allocated to health care are used for maintenance of hospitals. Regarding this, we can recommend to government to use the experience of Belarus, where most of the funds focused on the level of health centers and primary care is free.

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