

# Complications Related to The Introduction of Public Health Insurance and Their Solutions

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**Abstract.** *The article analyzes the theoretical foundations of compulsory medical insurance and the specific features of social protection after its introduction. The views and scientific conclusions of foreign scientists are systematized. Based on the research, scientific proposals and conclusions aimed at the introduction of compulsory medical insurance were developed.*

**Key words:** *compulsory medical insurance, medical service, social protection, healthcare, state budget*

## 1. INTRODUCTON

By introducing the mandatory medical insurance system, it serves to increase the efficiency of social protection of the population, coverage of medical services and targeted use of budget funds. This requires the formation of approaches in terms of early identification and elimination of problematic situations in the organization of compulsory medical insurance.

According to the World Health Organization, 930 million of the world's population currently person, or 12.7 percent, allocates at least 10 percent of their income directly to pay for medical services. Of these, it is noted that 90 million people live in extreme poverty, which makes it more difficult for them to receive medical services [1].

As can be seen from these figures in the world economy, it should be noted that the level of coverage of medical services is important for the country's economy. Therefore, the analysis of the advantages and disadvantages associated with the introduction of mandatory medical insurance also allows for the formation of important scientific conclusions. In our research, we try to analyze the strengths and weaknesses of compulsory insurance.

## 2. LITERATURE REVIEW

We continue our study by answering the question of what might be the strengths of compulsory health insurance.

In a study by P. Taneja et al., they argue that health insurance can help reduce poverty in developing countries [2]. This helps to reveal the positive aspects of health insurance.

When considering the strengths of mandatory health insurance, it is noted that it can help people with low incomes. However, controversial cases raise the question of whether compulsory health insurance increases the financial burden on the state budget. This requires the systematization of the advantages and disadvantages of compulsory health insurance.

R. Blendon et al. point out that those who do not have health insurance pay attention to health care when they need it [3]. In other words, it is noted that uninsured people do not consult a doctor until they need medical services.

S. Shogen and S. Desroches in their study emphasize that uninsured people do not turn to a doctor even when they need medical services [4]. They argue that they receive certain preventive health services and that certain chronic conditions are not taken seriously.

In our opinion, with the introduction of mandatory medical insurance, it has positive aspects and some features that need to be improved. Therefore, it is appropriate to analyze its strengths and weaknesses.

According to the World Health Organization and the World Bank [5], more than half of the world's population does not have access to primary health care services. From this point of view, it is important to use the aspect of compulsory medical insurance in providing social protection.

Secondly, the availability of funding for emergency medical services. It is fair to say that it is distinguished by its superiority in preventing the risk associated with the emergency financing of medical services.

In this regard, G. Biller and others note that frequent users of medical services have higher financial needs than others [6]. According to them, it is noted that frequent users of medical services feel a greater financial burden due to social and medical factors. With this, their need for social support is justified.

In our opinion, it is known from the world experience that those who have a constant need for medical services and those who have an urgent need for them face financial risks. For this reason, its superiority in the ability to eliminate

financial risks is also considered to be of particular importance.

Third, the advantage of increasing the utilization ratio of primary health care. It is known that in our country, in the financing of primary medical services, adjustment coefficients are used in relation to the age group of the population. In this process, funds are allocated from the budget with the hypothesis that a certain segment of the population does not use primary medical services. As a result, the preference for full population coverage may be lost. Therefore, it is appropriate to use compulsory medical insurance in this advantageous aspect.

For example, a middle-aged male population is considered to be less than one per capita likely to use primary health care services. This may mean that with the allocation of funds from the budget, full coverage will not be achieved. Therefore, it is considered positive to take advantage of health insurance to cover both the population and medical services.

Fourth, the advantage of increasing the share of the private sector in the market of medical services. Support the participation of private medical entities along with state medical institutions in the provision of medical services. It is characterized by the fact that insurance payments can be directed not only to state medical institutions, but also to private medical entities that have provided services. This creates the need to support and regulate the activities of private medical entities in the provision of primary and inpatient medical services.

At the same time, it is important to create opportunities for the participation of private insurance companies along with the state health insurance fund. In other words, through the participation of private insurance companies, there is an advantage to the effective use of budget funds.

Fifth, it is explained by giving priority to the formation of a competitive environment in the market of medical services. In this case, healthy competition between state medical institutions and private medical entities will create positive trends in which payments for medical services will be reimbursed by insurance, not in advance, but later.

The existence of competition in the field of medical services is one of the necessary elements of the market economy. Therefore, the participation of the private sector creates the need to fight for financial resources in public medical institutions. This reflects the need to regulate the competitive environment.

In our opinion, some elements of the strengths of compulsory health insurance are manifested in the cases mentioned above. We can briefly mention them below:

- superiority in targeted social protection of the population;
- priority in funding emergency medical services;
- advantage of non-existence of restrictions related to age and gender in covering the population;
- advantage of supporting the participation of private medical entities;
- formation of a competitive environment in the market of medical services can be mentioned.

In the course of our research, we will try to focus on the weaknesses of compulsory medical insurance.

First, the lack of confidence in compulsory medical insurance. The fact that the share of out-of-pocket expenses for medical services is high in our country requires the formation of trust in the practice of reimbursement of medical insurance. As we have seen in our research, the share of direct out-of-pocket costs in increasing costs for medical services is becoming significant.

Table 1: Volume of population incomes and medical services payments, bln. soum

<b>Years</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Population income	62632	85933	104263	126268	146393	169344	197962
Volume of medical service	258	354.4	498.8	671.9	869.9	1100.4	1416.3
<b>Years</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Population income	236893	300843	365736	414969	519181	634797	728826
Volume of medical service	1701.5	2220	3104.3	3386.7	5105.9	6613.1	8441.2

Source: Formed based on the data of the Statistical Agency under the President of the Republic of Uzbekistan

In this regard, the conclusions of the study carried out by N. Wang and others [7] are noteworthy. In China, high-income families' emergency medical expenses increased 6 times between 2011 and 2015. Also, in the composition of this indicator, costs for inpatient medical services, as well as cases, have increased 2.25 times. This is justified by the need to reduce out-of-pocket costs.

J. Pendzialek and others in their study analyze the price elasticity of insurance financing of medical services [8].

They point out that it is important to adjust health insurance premiums based on age and income, and that the effects of other factors are negligible.

The experience of the Netherlands is analyzed by van de van and F. Shute [9]. According to them, it is emphasized that the Risk Equalization Fund provides compensation to the insurance company for expensive medical services.

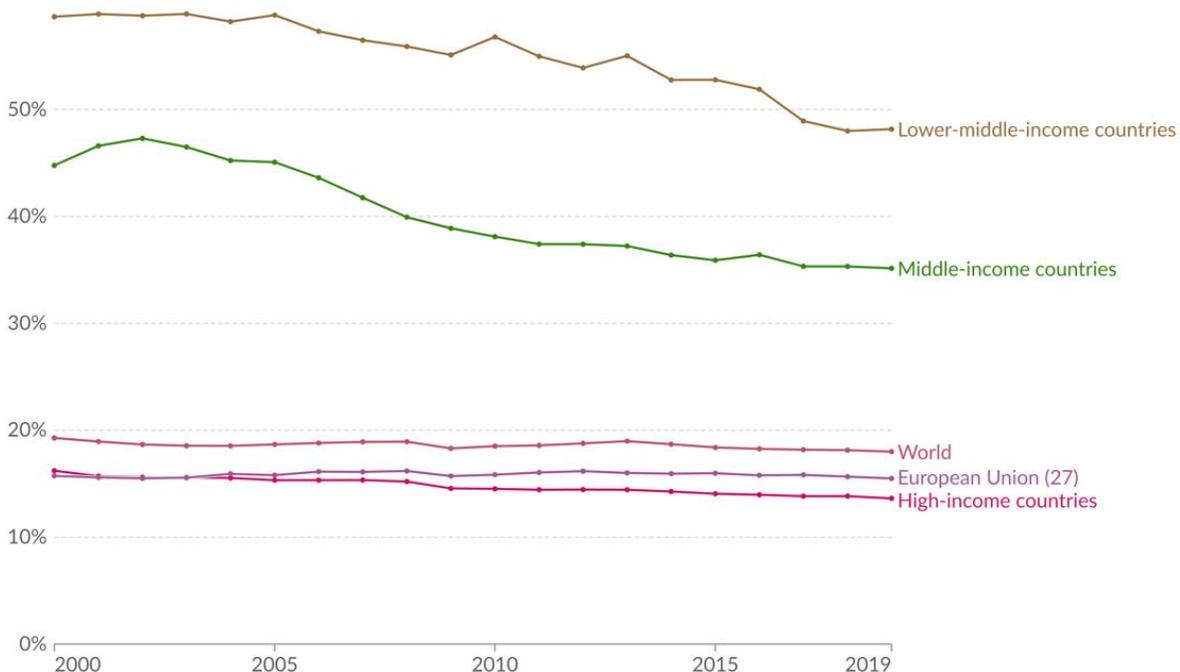
A number of scientists have noted that there are a number of complications in providing comprehensive and high-quality medical services. For example, the existence of some problems in financing [10] and the complications related to quality control of medical services are highlighted by [11].

This gives an opportunity to prevent the financial risks of people becoming patients and transfer these risks to the insurance company. As a result, it can reduce the need for people to pay for health services through out-of-pocket costs. In general, the presence of out-of-pocket costs makes people less likely to need emergency medical services, while reducing their daily consumption expenditures. Therefore, compulsory health insurance can lead to qualitative changes in people's consumption.

### 3. ANALYSIS AND RESULTS

The role of the state budget in the introduction of compulsory medical insurance in Uzbekistan is considered important. It should be noted that in the financing of medical services, the per capita cost standard is used. For example, financing of primary health care services is based on per capita expenditure. It is no exaggeration to say that there is an initial view of the indirect form of the health insurance method. Therefore, we think that it will be possible to increase the level of coverage with medical services by means of compulsory medical insurance.

Trends in out-of-pocket costs in the financing of medical services are also present in the global economy. The development of this category is closely related to the methods of using state budget funds in the country.



Data source: World Health Organization (via World Bank)

[OurWorldInData.org/financing-healthcare](https://OurWorldInData.org/financing-healthcare) | CC BY

Note: 'Out-of-pocket' refers to direct outlays made by households to healthcare providers.

Figure 1. Share of "out-of-pocket costs" for medical services in the world economy [12]

If we pay attention to the data presented in Figure 1, it is possible to observe the share of out-of-pocket costs in the financing of medical services in the countries of the world. According to it, it should be noted that the level of development of the economy is inversely proportional to the size of these expenses. In particular, we see that in 2000-2019, this cost was 59-48 percent in low-income countries, and 16-13 percent in high-income countries. In the European Union, it can be seen that the average is 15 percent. In short, the development of the market economy requires a review of the approach to the financing of medical services. In particular, it should be noted that the share

of this indicator was around 50-60 percent in Uzbekistan during this period. This reflects the importance of direct financing of medical services of the population (see Figure 1).

In our view, maintaining high out-of-pocket costs leads to higher financial risk for people. As a result, people are forced to direct their savings to finance emergency medical services rather than new consumption or the financial market. In this context, there is a need to develop an approach aimed at social protection of the population and help them to be free from financial risks using the model of compulsory medical insurance.

In our opinion, it is necessary to pay attention to the following aspects (principles) in the further development of compulsory medical insurance:

- legal grounds;
- institutional factors;
- financing elements;
- population coverage criteria;
- medical services classification factors.

It is appropriate to pay attention to two aspects when creating the legal basis of compulsory medical insurance. First, the development and adoption of a document prescribed by the Law of the country. It will be necessary to specify general rules and insurance model. Secondly, it is appropriate to adopt legal documents, in which it is considered appropriate to provide for the development of documents regulating financial relations between the participants of the insurance model.

Legal documents can be understood as a set of documents that serve to establish mutual activities of institutions that provide insurance policies based on state budget funds and provide medical services on this basis.

From this point of view, we will try to develop a model that can be implemented in Uzbekistan, taking into account the above-mentioned factors when introducing mandatory medical insurance. We think that the introduction of this model will allow to manage compulsory medical insurance both in terms of social services and financially. In this, it is assumed to take into account the elements of covering the population and corresponding financing. In the compulsory medical insurance model presented in Figure 3.4, the mechanism of institutional activity is proposed. It outlines the social and financial aspects of the health insurance system. We will try to explain their essence. Compulsory health insurance is divided into two types. This includes financing of primary and inpatient medical services. The sources of these forms of financing are divided into two groups accordingly.

First, the coverage of primary health care services serves as a system that serves to reduce the level of morbidity in the country and implement its early detection. Therefore, the delivery of this type of service on an equal basis for all helps to realize the constitutional rights of citizens. This type of medical service is provided on an equal basis for taxpayers. In this case, insurance premiums and payments can be classified according to the age and gender of the population of compulsory health insurance. For example, it may be appropriate to use adjustment coefficients in budget financing of primary health care services. This creates conditions for proper use of budget funds.

In particular, it is necessary to provide insurance policies for the following purposes at the expense of the republican budget:

Reimbursement rule-1 – receiving outpatient medical advice and being under medical supervision. This does not include the purchase of drugs. The primary care provider may prescribe preventive counseling and (if necessary) appropriate medication. Obtaining this form of reimbursement from the insurance company with a document justifying the provision of the service confirmed by the patient (signed or other form of confirmation) of the specified primary medical service information forms. As a result, there is an opportunity to use the insurance model for primary medical services.

Reimbursement-2 rule - provides for the purchase of drugs (medicines) for outpatient treatment within the primary medical service. This mechanism does not provide for the financing of other medical services. In this case, it is considered the expenses purchased on the basis of the list of drugs recommended and approved by the doctor. Monitoring of the market price of drugs on the basis of reimbursement-2 should be provided by the insurance company.

In this case, it is necessary to specify that information about the population provided with preventive (primary) medical services should be submitted by medical institutions to the State Medical Insurance Fund in the form of a report. At the same time, insurance companies will also have to submit a report on reimbursement payments to the State Medical Insurance Fund.

Secondly, to provide inpatient medical services on the basis of insurance principles, to consider the low-income segment of the population. As we have already mentioned, the pocket expenses of the population can affect the sharp

changes in the structure of consumption. This can cause the consumption of low-income population to be diverted to medical services. From this point of view, it is appropriate to use the possibilities of social protection of the population in the introduction of medical insurance.

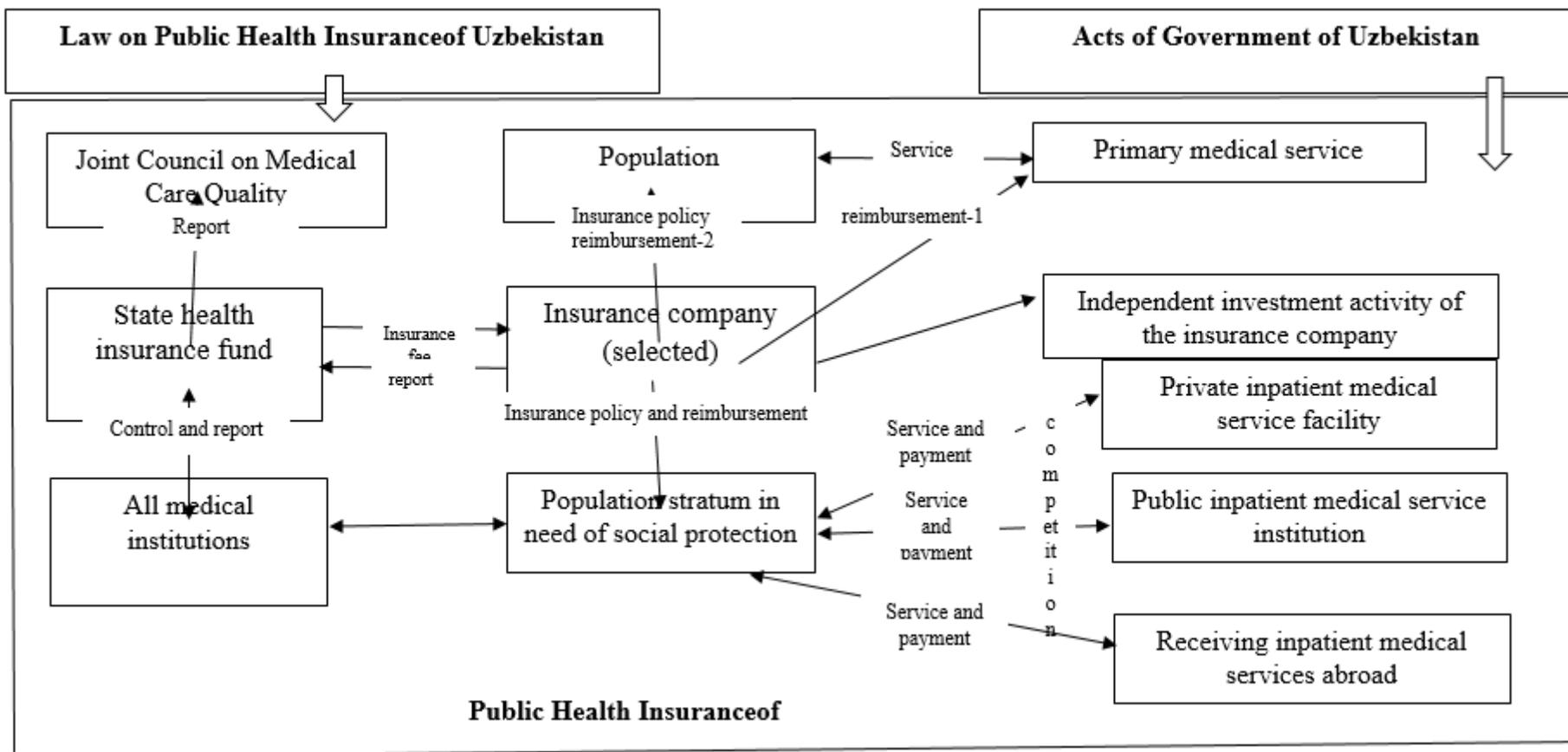


Figure 1. Model of introduction of compulsory medical insurance in Uzbekistan

It is important to pay attention to the classification of the population based on the following factors:

- age and gender;
- number of residents in the family;
- it is necessary to note the average income per capita in the family.

We think that it would be appropriate to classify the classes of medical insurance for receiving medical services through the classification of this segment of the population:

- financing the cost of consultation and treatment as part of the medical service. Taking into account the classification of stationary services according to the income of the population;
- funding of accommodation and daily food allowances;
- financing the cost of purchasing medicines.

#### 4. DISCUSSION

We will try to express our proposal in a more precise form in Table 2:

Table 2: Social protection model of compulsory medical insurance classification of medical service expenses

Type of medical service	Population classification in terms of social protection			
	A person who is officially unemployed	A person with income less than the minimum consumption expenditure (621 thousand soums for 2024)	A person with an income below the average (by region) wage	Has an income above the average wage
Cost of medical consultation	is available	does not exist	is available	is available
Cost of medical services during treatment	is available	is available	is available	does not exist
The cost of medicines	is available	is available	does not exist	does not exist
Bed expenses	is available	is available	does not exist	does not exist
Food cost	is available	is available	does not exist	does not exist
Travel expenses abroad	is available	is available	does not exist	does not exist

As can be seen from table 2, we think that it will be possible to achieve social protection of the population by introducing mandatory medical insurance in our country. In this case, it is important to consider the financing of specific forms of medical services for appropriate groups of the population from insurance.

At the same time, ensuring the participation of public and private medical institutions under equal conditions in the provision of medical services serves as the main factor in creating a competitive environment. It is appropriate to use the methods developed by the State Medical Insurance Fund together with insurance companies when choosing private and state medical institutions. As a result, conditions are created for healthy competition between them.

It is also proposed to consider the possibility of using the services of foreign medical institutions. It is also important to allow the necessary medical service in cases where it is not possible to provide it in the territory of Uzbekistan. This makes it possible to cover citizens of the country with all types of medical services. As a result, there is a basis for the increase of citizens' trust in health insurance.

#### 5. SUMMARY & CONCLUSIONS

In these processes, the development of the law of the Republic of Uzbekistan and the legal documents of state management bodies in the legal regulation of compulsory medical insurance is also relevant. In this regard, we think that the general activity of the mandatory medical insurance mechanism and its institutional structure should be regulated by the Law.

It is necessary to carry out activities in mutual cooperation of compulsory health insurance institutes and to regulate

financial relations between them through legal documents. It is important to consider the creation of conditions for the effective operation of each process.

In general, when introducing mandatory medical insurance, taking into account its legal basis, institutional factors, financing elements, population coverage criteria, and medical services classification factors will give a positive result. As a result, full opportunities will be created to ensure the trust and human dignity of the population in relation to medical insurance and medical services within its scope.

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