

## CONDITIONAL RESULTS OF THE INTRODUCTION OF STATE MEDICAL INSURANCE IN THE SYRDARA REGION

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**Abstract.** In the article, the authors studied the preliminary data on the introduction of state health insurance, by questioning the heads of medical institutions, a preliminary analysis of statistical data from 2020 to 2022.

**Keywords:** compulsory health insurance, beds, financing.

**Introduction.** In Germany until 2002, health insurance companies paid for medical services on the basis of an integrated tariff system or for the treatment of certain diseases [8-9]. In some cases, in the form of an experiment conducted on a system of lump-sum (from the German word *paschal* - whole, wholesale, averaged, relative) values of diagnosis and treatment. Since 2003, the DRG financing system has been universally introduced in Germany, in which the cost is firmly established and linked to the diagnosis of each patient, regardless of the length of his stay in the hospital; on the principle of "same price - the same quality". This principle is established according to the Law § 17 KHG "On the financing of hospitals": the prices of medical services are the same for all patients [10-12].

With the help of this system, it was possible to avoid unjustified costs for extending the patient's stay in the hospital, to improve the quality of service, since the services began to meet the standards of treatment for each diagnosis [1-4]. The introduction of this system was accompanied in Germany by measures to assess the quality of medical services [13]. These are standardized treatment protocols that document treatment once a diagnosis has been made. The mechanisms of this system allow to increase the efficiency of services and improve their quality [5-7].

According to the Decree of the President of the Republic of Uzbekistan PP-4890 dated November 12, 2020 "On measures to introduce a new model for organizing the healthcare system and mechanisms of state medical insurance in the Syrdarya region", a proposal from the Ministry of Health was adopted to implement, based on the recommendations of the World Health Organization, a pilot project to introduce a new model organization of the healthcare system and mechanisms of state medical insurance in the Syrdarya region.

**Purpose of the research.** To study the preliminary results of the introduction of state health insurance in the Syrdarya region.

**Materials and research methods.** We have assessed the opinions of the heads and doctors of medical institutions working in the Syrdarya region. The questionnaire consisted of 13 questions, which were sent to study the issues of relations and mechanisms for the implementation of state health insurance in inpatient and outpatient clinics. The study was conducted in 2022. The target group consisted of 116 heads and doctors of medical institutions. The results of the survey were entered into a computer program based on Microsoft Excel. In addition, the MIS information system (medical information system) was studied, according to which the methodology for introducing the relative cost weight and the weight coefficient of medical services was determined.

**Results and its discussion.** The gender distribution of heads and doctors of medical institutions was as follows: 45 (39%) women and 71 (61%) men. According to the age limit, the respondents were divided as follows: up to 39 years old 14 (12%) respondents, 40-59 years old 59 (51%) respondents, 60 years and older 43 (37%) respondents. For us, it was important to determine the place of work of the respondents, in this regard, we determined that 62 (53%) of the respondents work in outpatient clinics and 54 (46%) work in inpatient health facilities.

The following series of questions were directed to the study of new forms of financing that will be introduced with compulsory health insurance and to the question what do you understand by the concept of financing per capita? (Table 1)

**Table 1**

**The choice of respondents to the question, what do you understand by the concept of financing per capita**

№	Suggested types of answers	Quantity	%
1.	This is a prepaid method that is paid for the provision of certain services per capita at a fixed rate	70	60
2.	Financing model for inpatient care	6	5
3.	AAP funding model	28	24
4.	I do not know	12	10

In contrast to the current system of financing health care facilities, with compulsory medical insurance, depending on the methods of providing medical care, financing of health care facilities has a significant difference. If outpatient facilities receive funding based on the attached population, while inpatient medical facilities are funded based on the work done, that is, the number of patients treated.

Since during the survey some of the respondents work in hospitals, we asked the following question: what do you understand by the concept of financing for a treated case? (Table 2)

**Table 2**

**What do you understand by the concept of financing for a treated case?**

<b>№</b>	<b>Suggested types of answers</b>	<b>Quantity</b>	<b>%</b>
1.	Financing each population with a certain amount	70	60
2.	This is a financing model for outpatient clinics	28	24
3.	this is a method of financing an inpatient medical facility, according to which, based on a predetermined tariff, each treated patient is financed	6	5
4.	I do not know	12	10

Thus, only 5% of respondents chose the most correct answer, and according to this, we believe that managers and doctors should know the method of financing, because their direct salary depends on their fulfillment of the amount of financing, which differs significantly from the current system of financing inpatient healthcare facilities and may encourage improvements in the quality of care.

The next question that interested us concerned the definition of ways to provide funding, that is, leave the current one, according to which funding is provided from the state budget through the regional departments of finance and health, or change to a health insurance fund (Table 3).

**Table 3**

**What method of financing inpatient facilities in the context of the transition to market relations and health insurance do you consider the most effective?**

<b>№</b>	<b>Suggested types of answers</b>	<b>Quantity</b>	<b>%</b>
1.	Financing through the National Health Insurance for each treated patient at a predetermined rate	67	58
2.	Funding for staff units based on attached population norms	23	20
3.	Funding from the funds of the health departments or finance from the estimated income and expenses depending on the number of staff members working in	17	15

	the hospital		
4.	I do not know	9	8

If the majority want to change the current financing model, we have proposed the following question: What is your opinion on the introduction of compulsory health insurance? For this question, the respondents chose the following answers. The highest answer is good 69 (59%), very good 25 (22%), unsatisfactory 10 (9%) and I cannot answer this question was answered by 12 (10%) respondents. Thus, the majority or 94 (81%) of the respondents wanted to change the method of financing from switching to compulsory health insurance, although they probably know that this will not be so easy.

A comparative analysis of key indicators before and during the pilot project showed that the number of outpatient clinics increased by 20 from 2 2020 to 94, which will ultimately help improve primary health care and reduce the burden on stationary medical institutions (Table 4).

From December 1, 2020, the State Health Insurance Fund, tasks have been defined and sources of funding for the Fund have been approved. New methods of financing inpatient and outpatient clinics have been approved. The use of a prospective method of determining the cost through the base rate and the relative weight of costs made it possible to pre-set prices for medical services depending on their group. Codes were approved for 59 nosologies, which were given a relative cost weight (or rejection factor). An electronic program was developed for the medical information system (MIS) - accounting for inpatients in accordance with the statistical form 066. According to the MIS, the amount of funding through the State Medical Insurance Fund is determined monthly.

As a result of the measures taken, compared to 2020, the number of round-the-clock inpatient beds decreased by 109 from 3428 and amounted to 3319 beds. The number of treated patients in 2020 amounted to 141115, for 6 months of 2022 80319, the expected figure by the end of the year is about 160,000 patients. The average duration of inpatient treatment in 2020 was 6.4 days, while in 2022 this figure will be 6.2 days, which can serve to intensify the provision of medical care and increase the number of patients who receive inpatient medical care (Table 5).

Compared with the increase in the number of employees in outpatient clinics by 477 staff units, the average amount allocated for the treatment of outpatients increased almost 2 times (Table 6).

Conclusions. Thus, the study of knowledge through a questionnaire on the implementation of state health insurance shows that the heads of medical institutions in the Syrdarya region are well aware of changes in financing methods, and the benefits and independence provided have reduced the number of bed-days and increased the number of inpatients, increased the number of staff units in outpatient clinics.

**Table 4**

**General information about medical institutions of the Syrdarya region**

<b>Total</b>		<b>Including,</b>					
		<b>Stationary</b>		<b>APU</b>		<b>Other</b>	
2020	2022 (January June)	2020	2022 (January June)	2020	2022 (January June)	2020	2022 (January June)
118	138	26	26	74	94	18	18

**Table 5**

**Information on the activities of stationary health care facilities of the Syrdarya region**

<b>Number of beds</b>		<b>Number of treated patients</b>		<b>Average length of inpatient stay (in days)</b>		<b>Number of staff units working in hospitals</b>		<b>The average amount of allocated funds per treated patient</b>	
2020	2022	2020	2022	2020	2022	2020	2022	2020	2022
3428	3319	141 115	80319	6,5	6,2	3350	3619	599 867,1	901 168,9

**Table 6**

**Information about outpatient facilities of the Syrdarya region**

<b>Number of staff units working in APU</b>		<b>Funds allocated (million soums)</b>		<b>The average amount of allocated funds per treated patient</b>	
2020	2022 (January June)	2020	2022 (January June)	2020	2022 (January June)
2448,25	2925,25	8205045931	4954043793	3846187,95	6225520,38

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