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## **Health Care Financing System in the Republic of Kazakhstan**

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G.Zh. Doskeyeva<sup>1</sup>, A.E. Rakhimbekova<sup>2</sup>, M.K. Zhamkeyeva<sup>3</sup>,  
I.D. Saudambekova<sup>4</sup>, R.Zh. Bekova<sup>5</sup>

**Abstract:**

*This article is devoted to the current issues of health care financing in the Republic of Kazakhstan.*

*The study examines the positive results of the reforms carried out and the unresolved problems in the country's health care system.*

*Currently, the main challenges in this area are related to the organization and management of financial resources.*

*The article analyzes the dynamics of health care expenditures in Kazakhstan for 2000-2016, identifies issues in the financing system, and suggests possible ways to address them.*

**Keywords:** *Health care, health care financing system, compulsory social health insurance, voluntary health insurance, primary health care.*

**JEL Classification:** *H51, I13, I18.*

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<sup>1</sup>Narxoz University, E-mail: [gulashar.doskeeva@bk.ru](mailto:gulashar.doskeeva@bk.ru)

<sup>2</sup>Kazakh University of Economics, Finance and International Trade

<sup>3</sup>Kazakh University of Economics, Finance and International Trade

<sup>4</sup>Narxoz University

<sup>5</sup>Turan University

## 1. Introduction

In the context of building a socially oriented state, it is particularly important to create a competitive public health sector that provides affordable and high-quality health services. The effective functioning of public health care ensures the formation of a physically healthy nation, which is one of the basic conditions for building a competitive state.

In the Strategy "Kazakhstan-2050" and the President of Kazakhstan Nursultan Nazarbayev's Address to the Nation of Kazakhstan "*Third Modernization of Kazakhstan: Global Competitiveness*", one of the main tasks is to develop the country's health care sector and to ensure that it takes the path of innovations (The President of Kazakhstan Nursultan Nazarbayev's Address to the Nation of Kazakhstan, 2017).

Currently, a number of health care reforms associated with the introduction of compulsory social health insurance (CSHI) take place in the health care system of Kazakhstan. In addition to CSHI, the country's health care financing system introduces budget financing and a system of voluntary health insurance (VHI). This means that the country's health care is financed from the state budget, VHI funds and personal savings. According to official statistics, in 2016 more than 90% of health care expenditures were financed from the state budget, 1.5-2% – from VHI funds, and more than 8% of health care expenditures were covered by personal savings (Statistics Digest for 2016 of the Republic of Kazakhstan, 2016).

## 2. Materials and Methods

Public health care issues were addressed by such researchers as McKee and Brand (2005), Figueras *et al.* (2005), Saltman *et al.* (2004), Kutzin (2008). The works of the above-mentioned authors are aimed at studying the problems of health care systems in European countries and the possibilities of applying their experience in post-Soviet countries, including Kazakhstan. The research of Saltman *et al.* (2004) is mainly devoted to the application of modern health care strategies and practices prevailing in European states in developing countries, while the research of Kutzin (2008) considers the problems of health care financing and their solutions. The works of McKee and Brand (2005) as well as Figueras *et al.* (2005) address the issues of compulsory and voluntary health insurance systems in European countries.

Currently, health care financing systems of most developed countries have a mixed model, which includes the elements of government, insurance and private financing systems. For example, the work of Thomson *et al.* (2009) examines the features of health care financing systems in the European Union and determines their positive aspects and challenges. One of the challenges in health care financing systems is an increase in health care expenditures in European countries, which, according to the authors, necessitates the introduction of elements that involve the efficient use of

financial resources. The problems of health care financing systems faced by European countries during the global financial crisis and the ways of their solution were addressed by Mladovsky *et al.* (2012). The study of Adedigba (2016) on health care costs compares various methods of health care financing. To improve the efficiency of the financing system, the author suggests regularly evaluating the profitability of the method of financing health care organizations and choosing the most effective method, conducting an analysis of the domestic market of health services, as well as improving the resource management system.

In the world hospital financing system, the method of diagnosis-related groups (DRGs), based on the calculation of average costs for the treatment of a particular disease, is considered to be an effective mean of financing. The experience of using DRGs in a number of Western countries was discussed by Bielby (2016), Busse *et al.* (2011). The book of Busse *et al.* (2011), devoted to the development of DRGs in Europe, considers the DRG-based financing method to be an effective and optimal method for calculating hospital costs. The authors compare the functioning of the DRG-based method in Austria, Great Britain, France, Finland, Sweden, Germany, Poland, Estonia and other European countries, identify the advantages and disadvantages of this method and consider the possibilities for its improvement.

The mechanism for managing the activity of health care institutions in Russia as well as the features of the health care financing system, based on the budget-insurance model, were described by such Russian researchers as Shchepin and Medik (2011). They presented a comprehensively review of the issues of development and modernization of rural health posts, clinics, hospitals, and the algorithms for improving the existing health care system in Russia. The works of Shevsky *et al.* (2008) as well as Popova (2009) are also devoted to the development of the health care system. Kazakh researchers as Tuseeva (2008), Stratulat (2009) and Akanov (<https://kaznmu.kz/eng/wp>) made a significant contribution in the field of health economics.

Thus, this literature review has shown that the possibility of improving the health care financing system through the introduction of effective methods of using financial resources is being considered throughout the world. The DRG-based methods of financing hospital costs are functioning in economically developed countries such as the US, Canada, Europe, Singapore, Japan, etc. In Kazakhstan, where the financing system is currently taking the path of compulsory social health insurance, the issues of the rational use of health care funds and the effective management of resources become especially urgent. In this regard, the relevance and timeliness of developing an innovative mechanism for managing health care financial resources is beyond question.

### **3. Results and Discussion**

Kazakhstan's health care is a unique area of the economy, which has undergone many reforms during the years of the country's independence. As a result of the reforms, the following steps have been implemented:

- ✓ The Unified National Health System has been created, which gives every citizen the right to freely choose a health care organization for planned hospitalization;
- ✓ Over the period from 2007 to 2015, more than 100 public and private hospitals as well as 489 clinics of various levels were built;
- ✓ For the last 10 years (2006-2016), the volume of financing for the health care sector has grown 7.8 times, and for the last 20 years (1996-2016) – 82 times;
- ✓ The state health care development program "Salamatty Kazakhstan" for 2011-2015 has been implemented. Currently, the state program aimed at the development of the health care system "Densaulyk" for 2016-2020 is being implemented;
- ✓ A medical cluster has been established, involving the following innovative health facilities: a children's rehabilitation center, maternity and childhood centers, emergency centers, neurosurgery and cardiology centers, a world-class cancer center;
- ✓ More than 3,300 clinics provide free primary health services for the entire population of the country;
- ✓ Transport medicine has been introduced, which provides health services for the most remote regions of the country (Saltman *et al.*, 2004; Kutzin, 2008).

However, despite these positive changes in the public health sector, the country's health care has a number of problems that need to be addressed. One of the main problems is the low level of development of primary health care (PHC), associated, in particular, with a weak material and technical base, a relatively low professional level of the staff, and insufficient funding for this health care unit.

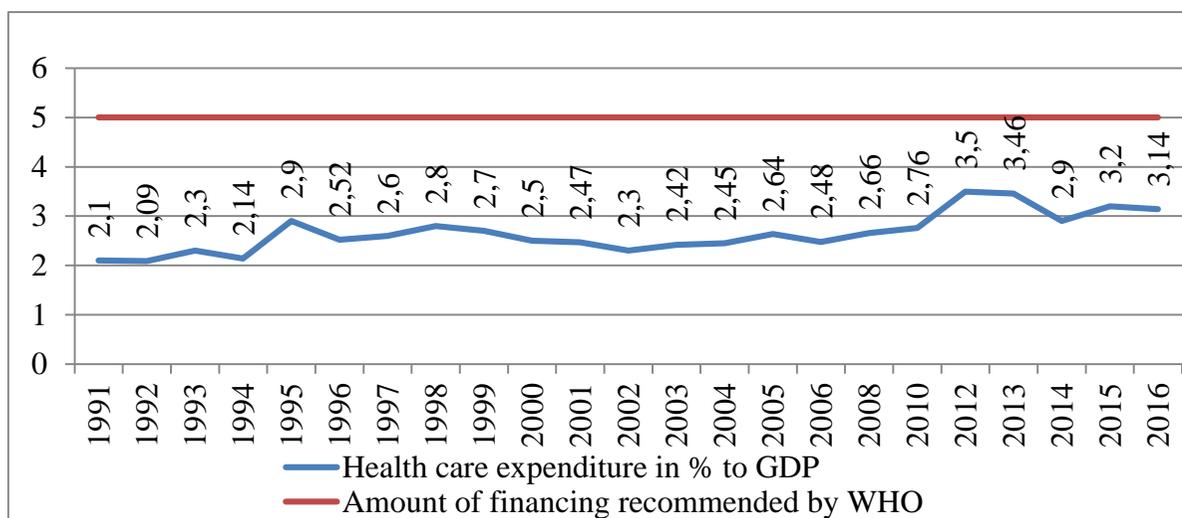
At the end of 2016, Kazakhstan invested only 17.8% of the funds of statutory free health care (SFHC) under the international standard of 40%. To solve the problems in PHC, a partial fund management system has been implemented based on a comprehensive per capita standard. This system requires that the costs of stimulating PHC workers to contribute to the achievement of the end result of activity to be increased based on the following indicators:

- ✓ non-occurrence of maternal mortality;
- ✓ non-occurrence of infant mortality;
- ✓ prevention of complaints about the quality of care from citizens;
- ✓ an increase in early diagnosis of malignant neoplasms of visual localization;
- ✓ timely diagnosis of pulmonary tuberculosis;
- ✓ reduction of complications from diseases of the circulatory system (infarction and stroke).

However, this system did not solve the problem of underdevelopment of PHC and this field requires new mechanisms for resource management. At the same time, an insufficient amount of financing remains an important problem hampering the development of Kazakhstan's health care sector. According to the World Health Organization (WHO), Kazakhstan ranks 153 out of 190 countries in terms of health care expenditure (Statistics Digest for 2016 of the Republic of Kazakhstan, 2016).

The World Health Organization recommends that the minimum amount of health care expenditure should be at least 5% of GDP for the country to ensure the adequate provision of public health care and the functioning of the health care sector. In Kazakhstan, despite a significant increase (82 times) in the amount of financing for 20 years (1996-2016), this figure remained at the level of 2.52% - 3.14% relative to the country's GDP during this period (Figure 1).

**Figure 1.** Health care expenditure in Kazakhstan for 1991-2016 Note. Compiled by the authors based on data from Statistics Digest for 2016 of the Republic of Kazakhstan (Statistics Digest for 2016 of the Republic of Kazakhstan, 2016)



In this regard, it is necessary to increase health care expenditures in proportion to the growth of GDP in the country. In addition, there is an inefficient use of the available amount of health care financing. According to statistics, more than 70% of all financial resources allocated to Kazakhstan's health care are directed to financing the cost of expensive inpatient treatment, while some diseases could be treated at the primary health care level by developing inpatient substitution technologies in hospitals. In this connection, there is a need to introduce a per capita method of financing based on full fund management that would enable the development of PHC and a natural reduction in the unreasonable costs of expensive inpatient

treatment. Another important problem in this area is related to the weak development of non- government financing, in particular, the voluntary health insurance system. VHI in Kazakhstan has been used since 1995. However, this system has not been properly developed. The main factors hampering the development of individual VHI in Kazakhstan include:

- ✓ the high cost of an insurance policy for individuals;
- ✓ the lack of recoverability and accumulation of funds if the insured event never occurred.

The main factors hampering the development of collective VHI include:

- ✓ the lack of motivation of the employer providing employees with a VHI health care package;
- ✓ an increase in the real value of an insurance package for the employer due to the amount of social tax (6%) and social deductions (5%) accrued on insurance premiums.

To solve these problems, it is proposed:

- ✓ to introduce personal medical accounts of citizens, formed in insurance companies on terms of repayment. The availability of personal medical bills functioning on the principles of recoverability can contribute to the development of individual VHI;
- ✓ to exempt the employer's VHI expenses from social tax and social deductions as well as other preferential tax treatments.

#### **4. Conclusion**

In connection with the above-mentioned problems in Kazakhstan's health care financing system, there is an urgent need to develop an innovative mechanism for the efficient management of health care financial resources, which ensures its competitiveness. To solve the problems of health care financing, Kazakhstan has introduced a compulsory social health insurance system in 2017.

This system suggests the provision of an additional source of financing. According to the system, employers, individual entrepreneurs, private lawyers, court executors and other persons who receive income on the basis of civil contracts will participate in health care financing.

Summarizing the above, one should note that Kazakhstan's compulsory social health insurance system is aimed at increasing the competitiveness of the health care sector and the quality of health services. The effective functioning of this project in accordance with the plan will require high responsibility from all its participants.

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