### NEWS

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# MODERN TENDENCIES OF STATE MANAGEMENT OF THE HEALTH CARE SYSTEM OF THE REPUBLIC OF KAZAKHSTAN

**Abstract**: The article is devoted to the study of issues of public administration of the health system of the Republic of Kazakhstan at the present stage of development. The authors have identified the features of state management of the health care system, conducted a comparative analysis of the indicators of the health care system. Based on the analysis made, the relevant conclusions were made.

Institutional transformations of the health system in the conditions of social and economic development of the state covered its various spheres: legislative base, management and financing, personnel training, medical education, quality assurance of medical services, development of the health information system, etc. During the study, the authors used statistical techniques and methods (data collection, analysis and comparison).

According to the study, the health care system can be described as centralized, state-controlled. It should be noted that government agencies are taking measures aimed at introducing new management approaches in order to improve the accessibility and quality of medical services to the population.

**Keywords:** public administration, health care, health care system, financing, compulsory social health insurance.

Introduction - According to global trends, the success of the functioning of the health care system depends on well-developed state policy. In the annual Messages to the people of Kazakhstan, the President of the Republic N.A. Nazarbayev notes the importance of preserving and strengthening the health of Kazakhstan, stressing that "The health of the nation is the basis of our successful future." The fundamental role of protecting public health as an essential condition of society's life is recognized in Article 29 of the Constitution of the Republic of Kazakhstan [1]. At the present stage of economic and social development of the state, the state of the health care system can be described as follows: the regulatory framework is being improved, government programs have been implemented, strategic planning is being carried out, etc.

The Strategic Plan of the Ministry of Health of the Republic of Kazakhstan for 2017–2021 defines specific strategic goals [2]. Also from 2016, the state continued the practice of implementing the state program in the health sector for 2016–2020 [3], aimed at strengthening the health of the population to ensure sustainable socio-economic development of the country.

However, despite the measures taken, today there are a number of unresolved problems in the health care system, which include: lack of staffing; low amounts of budgetary funding for the provision of free medical care to citizens, barriers to the implementation of the system of compulsory social health insurance, etc.

Thus, the increasing urgency of solving objective problems in health care necessitated a comprehensive study of the public administration of the health care system, which would ensure a dynamic and stable development of health care in Kazakhstan.

The aim of the study is to analyze the public administration of the health system of the Republic of Kazakhstan at the present stage of development.

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**Methodology** - At the beginning of the article the institutional and organizational features of the public administration of the health care system are revealed. The analysis of the main indicators of the health care system. Reflects the main directions of improvement of public administration of the health system.

The methodological basis of the study was the provisions and concepts of public administration of the health care system.

In the process of research, the following statistical methods and methods were used - economic and statistical, comparative analysis of data, etc. The information base of the study consists of legislative and regulatory legal acts in the field of health care, as well as statistical compendia on the activities of health organizations and health indicators of the population of the Republic of Kazakhstan.

**Literature review** - The problems of the functioning and development of the public sector as a whole, an important component of which is the health care sector, are revealed in the works of many wellknown foreign scientists. A deep study of financing and state regulation of medical services, incompatibility of medical services markets with competitive markets, the introduction of health insurance and the implementation of health care reforms is presented in the well-known public-sector economy book by J. Stiglitz [4]. The specific properties of medical care as an object of the normative economy, a comparative characteristic of the health care industry with welfare economics norms, analysis of the inefficiency of the medical services market caused by information asymmetry, demand uncertainty, external effects in the health sector are reflected in the studies of K. Arrow [5]. T. Gettsen described in detail the main problems of production and economic analysis of health services; described the means of stimulating and developing the organizational structure of the health system based on an analysis of the relevant financial flows; highlighted the determinants of changes in public spending on health, and also analyzed the influence of the government on public and private health [6]. A fundamental study of the implications and implications of the economic crisis for reforming the European health care system was published in 2015 by experts from the WHO Regional Office for Europe and the European Observatory on Health Systems and Policies [7]. The problems of the specificity of competition in the field of healthcare, the degree of its influence on the quality of medical care, social welfare and consumer choice were examined in their works by T. Rice [8], D. Dranov and M. Satterthwaite [9], A. Enthoven [10], M Porter and E. Theisberg [11] et al.

Problems of the organization of the health care system in Kazakhstan are the subject of scientific analysis of many famous scientists. A theoretical study of the essence of public health management, the development of scientifically-based proposals and recommendations for improving legislation at the initial stage of the formation of the Republic of Kazakhstan were proposed by G. Utibaev [12]. Issues of state regulation and management of the health care system of the Republic of Kazakhstan at the present stage of development have been studied by A. Rakhimbekova [13] and Ryskulova M. [14]. Evaluation of the current state and substantiation of the main directions of reforming the health care system in Kazakhstan are reflected in the works of S. Orynbasarova [15].

**Results of a research** - According to the results of the study, the authors identified the institutional and organizational features of public administration of the health care system:

Kazakhstan belongs to the state of the unitary type, the health care system can be characterized as centralized, state-controlled.

The state health administration is carried out by the President of the Republic of Kazakhstan, the Government of the Republic of Kazakhstan, and the Ministry of Health of the Republic of Kazakhstan. At the regional level, health management is carried out by local executive bodies, in the person of a state institution, the oblast health department.

Regarding the regulatory framework, the main legislative act regulating this industry is the Code on Health and the Healthcare System. The Code of the Republic of Kazakhstan "On the health of the people and the health care system" formed 18 principles of state policy [16]. From the basic principles of public policy and healthcare management, we can single out the most significant ones: classifying public health, safety, efficacy, and quality of medicines as factors of national security; ensuring equal rights of citizens to receive safe, effective and high-quality medical care; prioritization of preventive focus in the activities of the health system:

The first principle is a priority, since the protection of public health is one of the main factors of national security.

The second management principle contains not only the proclamation of the rights of citizens in the field of health protection, but also the obligation to provide them with guarantees from the state.

The third principle of accessibility of medical care to the population follows from the social nature of the Republic of Kazakhstan and is the legal ability of every citizen to receive medical care regardless of their social and property status.

The fourth principle - the preventive direction of health care should be the main priority of health care management.

Strategic planning is critical in a management system. Strategic planning is carried out through strategic development plans developed by the Ministry of Health of the Republic of Kazakhstan. The last strategic plan identifies the following priority areas of health development for 2017-2021: improving the health of citizens through the creation of a modern and effective health care system.

The key instrument of public administration is the state program for the development of health care in Kazakhstan "Densaulyk" for 2016-2019. This program is aimed at consolidating and developing the achieved results and solving problems in the field of health care in accordance with the new challenges, and will also become the basis for the planned development of the industry until 2050. The main objective of the program was determined to promote public health to ensure sustainable socio-economic development of the country. Based on this, the main tasks are:

- Development of the public health system.
- Improving disease prevention and management.
- Improving management and financing of the system health care.
- Ensuring the rational use of resources and infrastructure optimization [3].

**Application functionality** - We will analyze the main indicators of the health care system for 2013-2017.

Analysis of the natural movement of the population allows to assess the basic characteristics of the current state of the health care system, as well as to identify the key problems of its functioning. In turn, an organized system of management of the healthcare sector allows reducing the mortality rate of the population and increasing the key indicator of the efficiency of the healthcare system for the population's expected life expectancy. Figure 1 presents a graph characterizing the vital statistics.

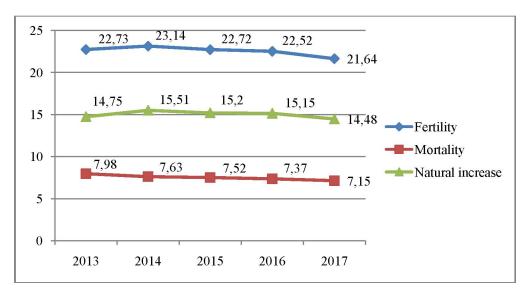


Figure 1 - Indicators of the natural movement of the population of the Republic of Kazakhstan for 2013-2017

In 2017, the birth rate was 21,64 per 1000 population, which is (4.7%) lower compared to 2013. The death rate of the population at the end of the analyzed period decreased by 10.4% and amounted to 7.15

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per 1,000 people in 2017. According to the World Health Organization, on a scale of indicative indicators for estimating birth and death rates (Table 1), Kazakhstan has a low mortality rate of 7.15 and an average birth rate of 21.64 per 1000 population [17].

Table 1 – Indicators for assessing the levels of natural movement (in %)

Estimated level	Fertility	Mortality			
Low	below 15 ‰	below 9 ‰			
Middle	15 – 25 ‰	9 – 15 ‰			
High	over 25	over 15 ‰			
Note - compiled by the authors according to the World Health Organization					

The analyzed birth and death rates determined the following dynamics of natural increase. In 2017, the natural population growth rate was 14.48, which is (1.8%) less than in 2013 (Figure 1).

One of the main criteria characterizing the effectiveness of health care management are the indicators of maternal and infant mortality. Table 2 presents the dynamics of infant and maternal mortality rates for 2013–2017.

Table 2 - Maternal and infant mortality rates

Indicator	2013	2014	2015	2016	2017
Maternal mortality	13,1	11,7	12,5	12,7	12,7
(per 100,000 live births)					
Infant Mortality (per 1000 live births)	11,30	9,76	9,39	8,59	7,93

Note - compiled by the authors according to the statistical compilation "The health of the population of the Republic of Kazakhstan and the activities of health organizations"

In 2017, the maternal mortality rate decreased to us by 3.1% compared with 2013, and at the end of the analyzed period it amounted to 12.7 deaths per 1,000 live births. There are positive trends in the annual decline in infant mortality from 2013 to 2017, infant mortality has decreased by 29.8% [18].

According to the Ministry of Health of the Republic of Kazakhstan, the main causes of maternal and infant mortality are:

- insufficient integration of health services and continuity between the levels of medical care;
- low level of intersectoral and interdepartmental cooperation, especially in the issues of creating a healthy lifestyle and improving the quality of the social, psychological and ecological environment;
- ineffective implementation of informational, educational and preventive measures on joint responsibility of the population for their own health [19].

Table 3 – Key indicators of the health care system of the Republic of Kazakhstan

Indicator	2013	2014	2015	2016	2017	Rate of increase 2017/2013 (%)
Number of hospital organizations	1008	911	901	853	877	-12,9
Number of outpatient organizations	3796	3163	3149	3126	3273	-13,8
The incidence per 100,000 people of the relevant population	53954.5	52031,5	52410,7	56773.4	57896.9	7,3
Number of doctors	53809	52756	52398	53335	56570	5,1
Number of doctors per 10,000 population	31,4	30,3	29,7	29.8	31,2	-0,6
Number of nursing staff	135908	136273	138851	142734	152591	12,3
Number nursing staff per 10,000 population	79,2	78.2	78,6	79,7	84.0	6,1
Number of hospital beds per 10 thousand people	68,3	60,4	58,0	55,9	54,8	-19,8
The proportion of health care expenditures in GDP, in%	3,6	3,7	3,6	3,4	3,5	-

Note - compiled by the authors according to the data of the Statistical Compendium "The health of the population of the Republic of Kazakhstan and the activities of health organizations

Over the period 2013-2017, both the number of hospital organizations (12.9%) and the number of outpatient organizations (13.8%) decreased, while the incidence rate per 100,000 people of the relevant population increased by 7.3%. With the reduction in the number of hospital organizations, there has been a decrease in the number of hospital beds by 10. thousand people (19.8%).

As for the staffing of the health care system: the number of doctors increased by 5.1%, but the number of doctors per 10,000 population remained almost unchanged, it should be noted that the number of nursing staff increased by 12.3% in absolute numbers and per 10,000 population by 6.1%.

The reduction in the number of medical institutions and the reduction in the number of medical beds did not lead to the optimization of human resources for health, in particular, there is a shortage of doctors per 10,000 population, the reason for which lies in the low wages. low level of social security of doctors, etc.

At the end of 2017, all expenditures on health care - both public and private sector, amounted to 3.5% of GDP. Since 2013, this figure has varied from 3.4% to 3.7%. For comparison, in the group of countries with income levels, to which Kazakhstan belongs, the same indicator is 6.3%, in OECD countries - 9.3% [18].

In order to improve the efficiency of the functioning of the health care system, government agencies have taken the following measures:

The concept of e-health development for 2013-2020 has been approved. This concept should help improve the quality of medical services and strengthen public health by providing all the necessary resources, artifacts, equipment and software, legislative and policy initiatives, training activities and other mechanisms to achieve the vision of E-Health in the Republic of Kazakhstan [20].

In order to improve the efficiency of financing medical services, medical reform is currently underway. Medical reform is based on enhancing the financial sustainability of the health system based on the joint responsibility of the state, the employer and every citizen. In this regard, in 2015, the Law "On Compulsory Social Health Insurance" was adopted. As an integral system, these changes will take effect in 2020.

Work is underway to develop a unified infrastructure of the health system based on the strategic goals of the industry, standards for design, construction, equipping of health facilities and ensuring the quality of medical services. Regional long-term plans for the development of health infrastructure for 2018–2025 were approved by level of medical care, taking into account the specifics on the ground and the population's need for specific types of medical care.

In order to improve the personnel policy in the country, a National Policy on Human Resources for Health has been developed. The national policy of HRH management is the basis for the development of legislative, normative legal acts, tools and methods for the improvement and sustainable development of personnel policy, determining the effectiveness of the health system of the health care country.

Conclusions - Thus, according to the results of the conducted research, the current trends in the public administration of the health care system of the Republic of Kazakhstan can be characterized as follows:

Market relations in healthcare will open up prospects for developing the competitiveness of medical organizations and improving the level and quality of medical services provided, and will also give impetus to the development of medical services [21].

The general state of public administration in the health care system can be described as stable: the regulatory framework is being improved, strategic planning is being implemented, target-oriented management is being improved, and public administration bodies are taking measures to improve the efficiency of the health care system.

The analysis shows that the health care system in Kazakhstan is developing at a high rate, and health indicators are improving. However, there are indicators lagging behind internationally-established standards, in 2017, total spending on health care amounted to 3.5% of GDP, in the group of countries with income levels, which include Kazakhstan, the same figure is 6.3%, in OECD countries - 9.3%. In this regard, it is necessary to constantly improve the system of public administration in order to improve the quality of medical services and achieve world-class indicators of developed countries.

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## ҚАЗАҚСТАН РЕСПУБЛИКАСЫНЫҢ ДЕНСАУЛЫҚ САҚТАУ ЖҮЙЕСІН МЕМЛЕКЕТТІК БАСҚАРУДЫҢ ЗАМАНАУИ ҮРДІСТЕРІ

**Аннотация.** Мақала қазіргі даму кезеңінде Қазақстан Республикасының денсаулық сақтау жүйесінің мемлекеттік басқару сұрақтарын зерттеуге арналған. Авторлар денсаулық сақтау жүйесінің көрсеткіштеріне салыстырмалы-салғастырмалы талдау жүргізіліп, денсаулық сақтау жүйесінің мемлекеттік басқару ерекшеліктерін анықталды. Жасалған талдаудың негізінде сәйкес тұжырымдар жасалды.

Мемлекеттің элеуметтік-экономикалық дамуы жағдайында денсаулық сақтау жүйесінің институционалдық өзгеруі оның әртүрлі салаларын: заңнамалық базаны, басқаруды және қаржыландыруды, кадрларды даярлауды, медициналық білім беруді, медициналық қызметтердің сапасын қамтамасыз етуді, денсаулық сақтаудың ақпараттық жүйесін дамытуды және т.б. қамтиды. Зерттеу барысында авторлармен статистикалық әдістер мен тәсілдер пайдаланылды (деректерді жинау, талдау және салыстыру).

Зерттеудің нәтижелеріне сәйкес денсаулық сақтау жүйесін орталықтандырылған, мемлекетпен бақыланатын деп сипаттауға болады. Мемлекеттік органдармен халыққа медициналық қызметтерді ұсынудың қолжетімділігін және сапасын арттыру мақсатында жаңа басқару әдістерін енгізуге бағытталған шаралар жүзеге асырылып жатқанын атап өткен жөн.

**Түйін сөздер:** сөздер: мемлекеттік басқару, денсаулық сақтау, денсаулық сақтау жүйесі, қаржыландыру, міндетті әлеуметтік медициналық сақтандыру.

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### СОВРЕМЕННЫЕ ТЕНДЕНЦИИ ГОСУДАРСТВЕННОГО УПРАВЛЕНИЯ СИСТЕМОЙ ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ КАЗАХСТАН

**Аннотация**. Статья посвящена исследованию вопросов государственного управления системой здравоохранения Республики Казахстан на современном этапе развития. Авторами выявлены особенности государственного управления системой здравоохранения, проведен сравнительно-сопостовительный анализ показателей системы здравоохранения. На основании проведенного анализа сделаны соответствующие выводы

Институциональные преобразования системы здравоохранения в условиях социального-экономического развития государства охватили ее различные сферы: законодательную базу, управление и финансирование, подготовку кадров, медицинское образование, обеспечение качества медицинских услуг, развитие информационной системы здравоохранения и т.д.. При проведении исследования авторами были использованы статистические приемы и методы (сбор, анализ и сравнение данных).

Согласно результатам исследования систему здравоохранения можно охарактеризовать как централизованную, контролируемую государством. Следует отметить, что государственными органами осуществляются мероприятия, нацеленные на внедрение новых подходов управления с целью улучшения доступности и качества предоставления медицинских услуг населению.

**Ключевые слова:** государственное управление, здравоохранение, система здравоохранения, финансирование, обязательное социальное медицинское страхование.

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