ORGANIZATIONAL AND FINANCIAL MECHANISM
OF PUBLIC MANAGEMENT OF THE HEALTH CARE SYSTEM
IN FOREIGN COUNTRIES

Abstract: The article examines the health care system, selected on the basis of accounting for organizational and financial features: mainly state, mainly social - insurance, mostly private. Most clearly, these health systems are represented in the following countries: predominantly state, characterized by a significant role of the state - (United Kingdom, Greece, Denmark, Norway, Portugal, Sweden, etc.), predominantly social insurance - (Austria, Belgium, Netherlands, Germany, France, Switzerland, Japan), mainly private - (USA, South Korea, and others). The authors conducted a comparative analysis of the health care system in foreign countries. Identified organizational features of the management of the health care system, identified sources of financing health care in three types: budget, insurance, private. On the basis of the analysis made the appropriate conclusions. It should be noted that the study of the organizational and financial mechanism of the healthcare industry in foreign countries is necessary in order to be able to use the experience of countries with the most effective healthcare system in domestic practice.

Keywords: health care system; organizational and financial mechanism of the health care system; health financing; medical reform.

Introduction - The official website of the World Health Organization (WHO) states that the health system is the totality of all organizations, institutions and resources whose main goal is to improve health. The functioning of the health system requires human resources, financial resources, information, equipment and materials, transportation, communications, as well as general management and leadership [1].

The fundamental factor determining the effective and sustainable functioning of health care is the financing of the industry, characterized by volumes, model, and implementation mechanisms.

The problems associated with financing health care are most relevant due to the fact that in the modern world, health protection is viewed as one of the fundamental human rights and health development, as a specific type of economic activity, cannot be limited to any single country. This is due to the fact that the level of development of a particular country’s health has an impact on the entire world space [2, p. 210-215].

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 well-known foreign researchers. Thus, the problems of financing and regulating the state of health care, the inconsistency of the markets of medical services with the conditions of competitive markets, the introduction of health insurance and the implementation of reforms in the health sector are deeply disclosed in the well-known book by Stiglitz, “Public Sector Economics” [3]. The specific properties of medical care as an object of the normative economy, a comparative description of the health care industry with welfare economics norms, an analysis of the inefficiency of the medical services market caused by information asymmetry, demand uncertainty and external effects in health care are reflected in the works. K. Arrow [4, p. 941-973]. T. Getzen outlined in detail the main problems of production and economic analysis of health services; described 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 [5]. The fundamental study of 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 [6].

The purpose of the article is to conduct a comparative analysis of the organizational and financial mechanism of the health care system in foreign countries, to identify the features, as well as the possibilities of using the successful experience of public administration of the health sector in domestic practice.

Results of a research - At the beginning of the article, the models of the health care system studied in the modern literature are highlighted, highlighted on the basis of taking into account its organizational and financial features. A comparative analysis of the practice of the organizational and financial mechanism for managing the health system in foreign countries ends with a logical generalization. The system approach and comparative analysis are used at all stages of the study, including in the process of comparing the existing systems of health financing, organizational management system. To solve the tasks of statistical techniques and methods (collection, analysis and comparison of data). At the same time, the incompleteness of the statistical bases, as well as the lack of generally accepted approaches and methods for assessing the health care system, are a limitation in the proposed study.

The main results of the study:

From the point of view of organizational and financial peculiarities, the following health care systems are distinguished: predominantly state-run, predominantly social-insurance, predominantly private.

Predominantly state, characterized by a significant role of the state (Great Britain, Greece, Denmark, Ireland, Spain, Italy, Norway, Portugal, Sweden, etc.). The basic example of this system is the N. Semashko system, created in the Soviet Union, which was modified in Great Britain. And used in this country since 1944. Financing is carried out mainly from the part of the public resources that comes from tax revenues to the state budget. This model is traditionally based on the system of public medical institutions.

Mostly social insurance (Austria, Belgium, the Netherlands, Germany, France, Switzerland, Japan, some Latin American countries) when funding is made on a trilateral basis: at the expense of budget allocations, contributions from employers and the workers themselves, which implies the existence of compulsory health insurance.

Predominantly private (USA, South Korea, and others, began to approach this group of Azerbaijan and Georgia), mainly based on private medical practice with the payment of medical services at the expense of the patient.

Practically in no country in the world, these systems do not function in their pure form, since they are not only constantly modified, but each country, based on the economic situation, determines which system to prefer in a certain period of development of the state [7, 23-27].

Consider the experience of countries in which the above models received the most vivid embodiment.

Great Britain. An example of a developed European country in which the budget model of financing the health care system operates is the United Kingdom. The UK health care system is represented by the National Health Service, which consists of four public medical systems - the National Services of England, Northern Ireland, Scotland, and Wales. Moreover, each of the systems functions separately from each other, respectively, the responsibility for the work of each service is borne by the government of the administrative and territorial part of Great Britain, on whose territory the health service operates. Financing of the UK health care system is mainly due to public funds from tax deductions to the state budget - 85%. In addition, sources of funding can be the funds of the private health insurance system - 15%, as well as funds for obtaining paid medical services.
Centralized financing of the health care system allows you to restrain the increase in the cost of medical services. Under this system, the entire population of the country have equal opportunities in obtaining medical care. The National Health Service provides prevention services, primary health care and specialized care to all Englishmen. However, not all types of services are included in the list of free services, some of which, if necessary, the patient must pay for themselves in full, others require co-payments of citizens, that is, provided that the cost of medical services is shared [8].

Mostly the public health system is also characteristic of the Scandinavian countries, as an example, consider the health system in Norway.

The Norwegian health management structure has three subordinate levels: the central authority (the country's parliament, the ministry of health), five medical-territorial districts (administrative-territorial units covering several municipalities, also called provinces, or “county”) and municipalities (called communes). At the same time, the central authorities are responsible for the development and implementation of the regulatory framework, budget allocation, and the medical and territorial districts (five) and the municipalities (431) organize medical care and services. In particular, the country's parliament is the state legislature, and the Ministry of Health is responsible for the health sector at the national level, setting Norway’s health policy, and responsible for organizing reforms and implementing bills [9].

An important component in the organization of health care is its financing. For example, in Norway, the opening of own oil fields of birth made it possible to ensure high public spending on health. The main sources of funding for health care are the state budget, 73%, 12% from social insurance funds, 15% are co-payments of patients who come from the provision of paid medical services. services (Fig. 2). [10, p 24-28]
It is known that the main determinant of the level of financing of health care is the percentage of expenditure in the field of health care on the size of the gross domestic product per capita. In Norway, this figure is 10%. In addition, given that Norway has one of the highest per capita GDPs in the world, per capita health care expenditures in absolute terms are also significantly higher than in most countries.

Consider the social insurance model of the health care system on the example of Germany and France. Germany is a classic example of a social insurance model. One of the main principles of the state health care system in Germany is the division of managerial powers between the federal government, the state and the legalized organizations of civil society. Thanks to the federalist traditions of Germany, as well as the legacy of the Bismarck social security system, the modern health care system in Germany is extremely decentralized, competences are divided between three levels: federal, regional (state) and corporate (there is a system of medical associations). However, different levels of government do not have a dominant role in the direct provision of medical care. These powers are delegated by legislation to local governments. In Germany, there are a number of specific subjects - medical associations and their associations, for example, the German Medical Assembly, representing the interests of doctors and patients. Main functions: control of the activities of medical institutions, representation of interests [11].

Financing. Since 2009, medical insurance has become mandatory for all German citizens (previously, some groups of the population might not have medical insurance, although in fact there were few such people). There is a competition between non-profit, non-state health insurance funds (the so-called “SHI” statutory health insurance scheme) implementing compulsory health insurance programs and structures implementing voluntary health insurance programs. (Private health insurance (PHI)). In Germany, the situation was as follows: compulsory medical insurance - 60%, voluntary medical insurance - 10%, state budget - 15%, personal media properties - 15% [12].

![Diagram of health financing in Germany](image)

**Figure 3 - Sources of health financing in Germany (in %)**

France is characterized by a private model of health care with state regulation of compulsory health insurance programs (MMI). The highest public health authority in France is the Ministry of Health and Welfare. The form of health management is decentralized. Regional health authorities are responsible for the organization of inpatient and outpatient care in both public and private hospitals. The medical services market is developed, private insurance plays an important complementary role.

In France, institutions of various forms of ownership are combined with a predominance of private ones. Payment of medical services in hospitals is made by the method of CMC and the global budget, outpatient care is paid by the method of payment for the service and the result. Social insurance in France was introduced in 1946, thus, the availability of medical care was provided to the general population. Currently, the system of financing health care in France is as follows: Compulsory medical insurance - 50%, voluntary medical insurance - 20%, state budget - 10%, personal funds - 20% (Figure 4) [7].

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62
A striking example of a private health care system is the United States of America (USA). The US healthcare system should be represented by the following structural elements, where the guarantors of providing medical care are the health insurance system — public and private: state health insurance programs, a network of public hospitals for military personnel, local, municipal and county programs, mandatory private health insurance for employees, self-payment of medical expenses by citizens.

Regarding the US healthcare management system, the organizational structure of medical care is characterized by a decentralized system of health management with the separation of powers between the federal center and the states. As the federal executive body is represented by the US Department of Health and Human Services, which through 27 units implements and monitors social programs such as Medicare (health insurance for the elderly and disabled) and Medicaid (designed to pay for medical services provided to certain categories of people) low income). The state regulates the activities of insurance companies, the volume of medical services under the state programs. As part of private insurance plans, the scope of medical services is regulated by insurance companies. Quality control is carried out through accreditation and licensing of doctors who are under the authority of professional medical unions and associations [13].

It should be noted that the US healthcare system is predominantly private. The main source of financing is private insurance - 40%, personal funds - 20%, programs for the elderly and the poor - 40% (Figure 5).
In the presence of a high proportion of the uninsured, which is almost 16% of the country’s population, hospitals are forced to provide emergency care and invoice generated at free market prices to those who cannot pay for it. The need to pay treatment bills in the absence of health insurance is the leading cause of US bankruptcy. With the growth of insolvent debtors, hospitals are forced to raise tariffs to cover their costs at the expense of solvent patients. So there is a galloping unregulated rise in prices for medical services. One of the reasons for the increase in costs is that American economist A. Enthoven cites insufficient motivation for savings among medical service providers, since market demand creates supply. Here there is an excess supply of services against the background of information asymmetry. As a result, a third of the money spent on health care is spent inefficiently [14, p.50].

An example of a mixed health financing system, with several levels of protection to provide benefits to citizens and permanent residents, is Singapore. Singapore’s healthcare system is recognized by experts as one of the best in the world. The World Bank recommends that countries adopt Singapore’s experience in the health sector, taking into account differences in income, demographics and the current health financing system. In achieving such outstanding successes in Singapore’s healthcare, scientists identify two key points: political stability and the compulsory health insurance system with an emphasis on personal responsibility. The main functions of public administration of the health system are assigned to the Ministry of Health of Singapore. The Ministry of Health carries out state policy and is also responsible for planning, financing, staffing. The state is actively pursuing a policy of promoting a healthy lifestyle, taking preventive measures and developing the medical care system, thereby motivating the population to become aware of responsibility for their health. [15, c 62-79].

In Singapore, a serious control over the quality of medical services is organized. The function of monitoring the safety and quality of medical products and devices is performed by a special organization, the Health Science Authority, whose criteria for assessing quality and safety comply with standards adopted in the United States and Europe.

At the time of independence, the state had a health system organized on the basis of the British model: free of charge for the population medical care provided by a network of public hospitals [16, c 51], but with the acquisition of Independence of the country, Singapore switched to the compulsory medical social insurance system. Singapore offers universal medical insurance for citizens, with a financing system built on a combination of the principles of individual responsibility and universal affordable medical care. Through the use of market mechanisms to promote competition and transparency and the development of technologies for better quality medical services, Singapore has achieved excellent health outcomes, with national health expenditures of about 4% of GDP [17].

The health financing system in Singapore has five levels: The first level of protection available to all citizens of Singapore is provided by the state, paying up to 80% of the costs in case of emergency care. The second level of protection is Medisave (MediSave), introduced in 1984 as part of the National Health Program. MediSave is a national medical billing system that helps people keep a portion of their income to pay for future hospitalization, surgical care and some types of outpatient care, with the obligatory opening of a medical savings account calculated on an individual basis, the size of which allows virtually all Singaporeans to pay their share treatment costs. Under this scheme, each employee contributes 8–10.5% of the monthly salary, depending on the age group, to a personal MediSave account. The percentage of accumulation is 2.5–4%, which exceeds inflation in the country.

The third level is Medishield. Its goal is to help individuals with chronic illnesses that require long-term care, which over time can empty a MediSave account. As a rule, all citizens of Singapore automatically fall under the MediShield Life program, but they can voluntarily refuse to open this account. Opening such an account must be no later than 75 years.

The fourth level - Eldoshield (ElderShield), approved in 2002, is the state’s response to a sharp increase in the population over working age. As a rule, all citizens of Singapore, as well as persons with permanent residence are included in this program upon the occurrence of 40 years. The premium is paid before the onset of 65 years, with the ability to transfer funds from the Medisave account.

Fifth level - MediFund is a fund to provide support to low-income citizens for the purchase of medical services. Receiving resources from it is possible when proving that the income is less than the established minimum. To finance medical services, interest earned on the fund’s capital is used [18, p 177-178].
Today, the problems of functioning of health care are in the constant focus of attention of the world community, monitoring of the main indicators, characteristics and directions of development of health care is carried out.

For example, the World Health Organization (WHO), continuously monitors the state of national health systems. The share of gross domestic product allocated to health needs and maintaining public health is a significant indicator in the global practice of the health system. Figure 5 shows the comparative characteristics of countries analyzed by the size of health financing as a percentage of GDP. First place in terms of the share of health expenditure relative to GDP is occupied by the USA - 16.8. Germany and France (11.2-11.1 %) shared the second place after the United States in terms of the share of health expenditure relative to GDP. Norway ranked third (10%). In the UK, the corresponding figure is 9.9%, in Singapore -4.3% [19]. It is necessary to pay attention to the fact that WHO has set the desirable minimum of health care expenditure as a percentage of GDP - at least 5%.

![Diagram showing health expenditure as a percentage of GDP in 2017](image)

**Figure 6 - The share of health care expenditures relative to GDP in 2017**

Consider the rating of the effectiveness of the health care system in the analyzed countries. The world-famous rating agency Bloomberg has published a rating of countries with the most effective health care system in 2017 (Table 1).

<table>
<thead>
<tr>
<th></th>
<th>Great Britain</th>
<th>Norway</th>
<th>Germany</th>
<th>France</th>
<th>USA</th>
<th>Singapore</th>
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</thead>
<tbody>
<tr>
<td>Total expenses (% from GDP)</td>
<td>9.9</td>
<td>10.0</td>
<td>11.2</td>
<td>11.1</td>
<td>16.8</td>
<td>4.3</td>
</tr>
<tr>
<td>Cost of medical services ($)</td>
<td>4,356</td>
<td>7,464</td>
<td>4,592</td>
<td>4,026</td>
<td>9,536</td>
<td>2,280</td>
</tr>
<tr>
<td>Lifetime</td>
<td>81.0</td>
<td>82.3</td>
<td>80.6</td>
<td>82.3</td>
<td>78.7</td>
<td>82.7</td>
</tr>
<tr>
<td>Assessment</td>
<td>46.5</td>
<td>58.9</td>
<td>38.3</td>
<td>55.5</td>
<td>29.6</td>
<td>85.6</td>
</tr>
<tr>
<td>Place in Rating</td>
<td>35</td>
<td>11</td>
<td>45</td>
<td>16</td>
<td>54</td>
<td>2</td>
</tr>
<tr>
<td>Note – compiled by authors</td>
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According to a study of the rating agency Bloomberg, a country with an effective health care system is Singapore - 85.6. The average life expectancy of citizens is 82.7, the cost of medical services is $2,280, the level of spending on health care is 4.3%. The second position is occupied by Norway - 11th place in the ranking, France is in 3rd place - 16th position in the health efficiency rating, the United Kingdom, Germany, and the United States ranked 35th, 45th and 54th. Attention should be paid to the fact that among the countries with a developed economy, the US spends the most on health care with the worst result with an efficiency rating of 29.6.
Thus, the indicator of life expectancy is disproportionate to the choice of sources of financing, the amount of resources allocated, which means, firstly, differences in the efficiency of spending money, secondly, the presence of other factors affecting the life expectancy of the population.

Based on a study of the organizational and financial mechanism of health systems in developed countries, the authors identified the main points:
- Each country mainly uses one of the financing models, but is not limited to other sources of financing;
- The state system of financing health care provides the majority of the population with free medical services, with the lowest cost compared to other models;
- The advantages of the socially insurance model of the health care system include the following: high compared with the budget model, the role of competitive mechanisms in improving the quality of medical services;
- The advantage of the private model of financing health care is a wide choice and high quality of services, high salaries for medical personnel. The disadvantages of the functioning of this health care system are the galloping unregulated rise in prices for medical services, low coverage of the population with the basic volume of medical care.

**Conclusions** - The study of the organizational and financial mechanism of the healthcare industry in foreign countries is necessary in order to use the experience of countries with the most effective system.

It should be noted that the system of financing health care in Kazakhstan is mainly based on the budget model. Currently in Kazakhstan, measures are being taken to reform the health care system. The main object of innovation in this area is the system of financing medical services - the transition from the budget model to the social insurance one.

When developing a system of compulsory health insurance should consider the following factors:
- the limited public resources that can be sent to the system. In addition to compulsory medical insurance, the state needs to finance the system of medical education, medical research institutes, the system of medical institutions that provide socially important medical care, the introduction of modern medical technologies and investments;
- undesirability of increasing the tax burden on employers;
- negative experience of the compulsory health insurance fund;
- the lack of reliable statistics to establish the level of insurance premiums, there is a high probability that the level of insurance premiums will be insufficient to cover a basket of many services [20].

The choice of health care reform in favor of compulsory social-health insurance was influenced by the fairly successful practice of its use in such developed countries as Germany, France, Singapore, etc. Also, the main direction of the reform is the modernization of the social and labor sphere, based on the joint responsibility of the state, the employer and the citizen. As for economic factors, the main goal was to attract additional sources of financing for health care. Obligatory medical insurance can be one of the levers of increasing economic interest, responsibility of the organization of health care and medical workers for the final result of their activities [21]. 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.

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**ШЕТ ЕЛДЕРДЕГІ ДЕНСАУЛЫҚ САҚТАУ ЖУЙЕСІН МЕМЛЕКЕТТІК БАСКАРУДЫҢ ЫЙЫМДАСТЫРУШЫЛЫҚ-ҚАРЖЫЛЫҚ МЕХАНИЗМІ**

**Annotatio**. Макаляда ұйымдық-қаржылық ерекшеліктерді есепке алу негізінде денсаулық сақтау жүйесі кеңістырылған: ұйымдық басқару, елсеметтік-сактандыру басқару, меншік басқару.

Денсаулық сақтау жүйесінің керсеткіштері айрықша айқын келсе мемлекеттерде көрсетілген: мемлекеттің манызды рөлімен сипатталған мемлекеттік басқару – (Үлебритания, Грекия, Дания, Калория, Великобритания, Норвегия).
Норвегия, Португалия, Швеция және т.б.), елелергі айналығы-сақтандыру бағытпда — (Австрия, Бельгия, Нидерланды, Германия, Франция, Швейцария, Япония), меншік бағытпда — (АҚШ, Оңтүстік Корея және т.б.). Авторлармен шет елдердегі дәнсаулық сатқау құймесін салыстырмалы-саластырмалы тақдау жүргізіледі. Дәнсаулық сатқау құймесі бақырауды ұйымдастырууды ерекешеліктері анықталып, дәнсаулық сатқау саласы қарқындылығы қозғалғанушы түрі: бюджеттік, сатқандырмалы, жеке сөз сапасы. Жүргізілген таңдау негізінде сәйкесінше қорытындылар қарады. Ата оттегі, әйелдің шет елдердің дәнсаулық сатқау құймесі қарқындыларын ұйымдастырып-шығарып-қарқындылық механизмін зерттегі келешеді алғашқы елдердің негізгілік орын токірібісін Оңтүстік дәнсаулық сатқау саласына көздену қажеттілігінен туындып отыр.

Түрін сөздер: дәнсаулық сатқау құймесі, дәнсаулық сатқау құймесін қызмет етуінің ұйымдастыруы-шығарып-қарқындылық механизмі, дәнсаулық сатқандыру қарқындылығы, медициналық реформа.

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ОРГАНИЗАЦИОНАЛЬНО-ФИНАНСОВЫЙ МЕХАНИЗМ ГОСУДАРСТВЕННОГО УПРАВЛЕНИЯ СИСТЕМОЙ ЗДРАВООХРАНЕНИЯ В ЗАРУБЕЖНЫХ СТРАНАХ

Аннотация. В статье исследуются системы здравоохранения, выделенные на основе учета организационно-финансовых особенностей: преимущественно государственная, преимущественно социальное-страховая, преимущественно частная. Наиболее четко данные системы здравоохранения представлены в следующих странах: преимущественно государственная, характеризующаяся значительной ролью государства — (Великобритания, Греция, Дания, Норвегия, Португалия, Швеция и др.), преимущественно социальное-страховая — (Австрия, Бельгия, Нидерланды, Германия, Франция, Швейцария, Япония), преимущественно частная — (США, Южная Корея, и др.). Авторами проведен сравнительно-сопоставительный анализ системы здравоохранения в зарубежных странах. Выявлены организационные особенности управления системой здравоохранения, определены источники финансирования здравоохранения по трем видам: бюджетные, страховые, частные. На основании проведенного анализа сделаны соответствующие выводы. Следует отметить, что изучение организационно-финансового механизма отрасли здравоохранения в зарубежных странах необходимо с целью возможности использования опыта стран с наиболее эффективной системой здравоохранения в отечественной практике.

Ключевые слова: система здравоохранения; организационно-финансовый механизм функционирования системы здравоохранения; финансирование здравоохранения; медицинская реформа.

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