

DOI: [10.55643/fcapter.5.58.2024.4496](https://doi.org/10.55643/fcapter.5.58.2024.4496)
Yana Volkova

 PhD Student, State University of Trade and Economics, Kyiv, Ukraine;
 ORCID: [0000-0001-6531-7728](https://orcid.org/0000-0001-6531-7728)
Olha Diachenko

 Candidate of Economy Sciences, Associate Professor of the Department of Public Management and Administration, State University of Trade and Economics, Kyiv, Ukraine;
 e-mail: o.diachenko@knu-te.edu.ua
 ORCID: [0000-0002-2012-8496](https://orcid.org/0000-0002-2012-8496)
 (Corresponding author)

Natalia Novikova

 D.Sc. in Economics, Professor of the Department of Management and Marketing, Kyiv National Linguistic University, Kyiv, Ukraine;
 ORCID: [0000-0001-5219-9494](https://orcid.org/0000-0001-5219-9494)
Viktoriiia Khmurova

 Candidate of Economy Sciences, Associate Professor of the Department of Management, State University of Trade and Economics, Kyiv, Ukraine;
 ORCID: [0000-0002-6398-6351](https://orcid.org/0000-0002-6398-6351)

Received: 22/07/2024

Accepted: 11/10/2024

Published: 31/10/2024

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ANALYSIS OF MODERN APPROACHES TO FINANCIAL SUPPORT OF HEALTHCARE FACILITIES IN UKRAINE

ABSTRACT

The purpose of the study is to analyze modern effective approaches to the financial support of healthcare institutions, which have been successfully implemented in the leading countries of the world, in order to form a unique model of their financing in Ukraine. The uniqueness of the model is ensured by taking into account the institutional features of modern Ukrainian reality. The article analyzes the financial instruments for providing healthcare under various models of financing the healthcare system, which are used in global practice. The process of reforming the healthcare system in Ukraine was studied, which made it possible to establish changes in the financing of healthcare. The components of the healthcare institution's budget are given. The main advantages and disadvantages of approaches to financing healthcare in Ukraine are determined. The volume and structure of expenditures of the Consolidated Budget of Ukraine on healthcare, as well as the main results of the activities of medical care providers covering all regions of Ukraine, were analyzed. The problems of financing healthcare facilities at the local level in Ukraine, which negatively affect the availability and quality of medical services, have been identified. The need to develop a mixed model of healthcare financing in Ukraine through a rational partnership between state medical institutions and the private sector is substantiated. Taking into account the identified problems and needs, a comprehensive approach to improving the financing of healthcare facilities through the introduction of mandatory health insurance and the development of public-private partnerships in the form of facility management, including resource optimization and technological innovations, is proposed.

Keywords: healthcare, healthcare facility, medical institution, medical services, medical service provider, medical guarantee program, financial support, financing

JEL Classification: I15, I18, H75

INTRODUCTION

Healthcare facilities are one of the largest expenditure items of the healthcare system. Thus, in low- and middle-income countries, public medical institutions consume from 30% to 50% of the healthcare budget [24]. The key factors in the effectiveness of the work of health centres are the mechanisms of procurement of medical services, as well as approaches to financial support of their activities. Financial provision of healthcare affects the functioning of the entire healthcare system. The reliability of funding sources and methods of resource allocation affect not only the protection of medical institutions from financial risks but also the level of efficiency of service provision. Facilities with limited funding often provide lower-quality services, which is reflected in treatment outcomes. Therefore, understanding approaches to the financial provision of healthcare is an important area of research.

Today, the issue of financing healthcare in Ukraine is becoming extremely urgent due to the full-scale invasion of Russia. The problem has been complicated by the significant destruction of medical facilities, the growing demand for types of medical care that were not in demand before, as well as the migration of the population and medical personnel.

LITERATURE REVIEW

The analysis of scientific publications on the financial support of healthcare facilities gives reasons to claim that in the publications of foreign and domestic researchers, this issue is considered in terms of individual regions, based on the specifics of the economic development of countries.

Thus, D. Baxter and Carter B. Casady [1] are sure that public-private partnerships will contribute to increasing the efficiency of resource allocation in decentralized healthcare facilities. At the same time, the authors distinguish three business models of public-private partnership in the field of healthcare: the infrastructural model, that is, the construction and/or reconstruction of healthcare infrastructure; a discrete model of clinical services, which involves expanding the possibilities of providing clinical services; an integrated model that combines infrastructural and clinical models. D. Havrychenko, O. Kozyrieva, T. Popova, and L. Sergiienko [6] also emphasize the importance of public-private partnerships at the state and regional levels of management to strengthen the financing of healthcare in Ukraine.

B. Kocić, O. Popović and N. Vasić [14] based on the results of a comparative analysis of the financing of the healthcare systems of the European Union countries, it has been proven that today the most effective model of financial provision of healthcare is a combined one, which combines mandatory health insurance and private, which makes it possible to significantly overcome the deficit of budget funds.

A. Kairu, S. Orangi, B. Mbutia, J. Ondera, N. Ravishankar and E. Barasa [12] analyzed the cost structure of medical institutions and concluded that insufficient financing of healthcare facilities leads to inefficient allocation of resources. Institutions spend most of their resources on existing obligations, such as staff salaries, neglecting other resources, such as medical supplies, which negatively affects the efficiency and quality of service delivery.

According to O. Posylkin and O. Hladkova [23], the managers of healthcare facilities do not always take into account all important aspects that affect their financial support. With this in mind, the authors have highlighted the most important external and internal factors that affect the financial and economic condition of healthcare facilities, contributing to the effective formation of the necessary financial resources, and ensuring their further development. According to the results of the comparison of methods of financing healthcare in different countries, the need to introduce a financing system based on mandatory medical insurance in Ukraine to improve financial support for healthcare is emphasized.

In the work of V. Chorna [3], a comparison of the financing of the healthcare spheres of Ukraine and the countries of the European Union was made. Directions for improving the continuation of the reform in the field of healthcare are proposed, including: automating the activities of medical service providers and strengthening the role of local self-government bodies in the financial provision of healthcare.

I. Konieva [15] considers the problem of managing the financial support of medical institutions. The author analyzed the sources of funding for healthcare facilities, and the positive effects of the medical reform on the financing of healthcare facilities have been proven. The necessity of diversification of the sources of formation of financial resources of healthcare facilities was emphasized.

A separate area of research is the determination of the effectiveness of healthcare facilities and the assessment of their financial sustainability. In particular, in the works of S. Zhukevych, N. Karpysyn, O. Sheger [29] and P. Hurzhyi [9], the factors affecting the financial sustainability of healthcare facilities were determined, and an algorithm for its evaluation was developed. The most widely used methodical approaches to determining the financial stability of enterprises have been adapted to healthcare facilities, which makes it possible to assess their financial and economic activity and financial independence, as well as the effectiveness of the management of state and self-raised funds.

In the study of N. Romanchenko and T. Kozhemiakina [26], conclusions were made about the positive impact of the transformational changes that took place in the sphere of healthcare in Ukraine on the financing of healthcare. At the same time, attention is focused on the uneven distribution of assets of medical institutions in the regions of Ukraine. It is proposed to transform the standard approaches to the analysis of the use of assets by enterprises, taking into account the specifics of the medical industry, in order to evaluate the effectiveness of the activity of healthcare facilities.

In the work of T. Petrova-Gotova and I. Ivanova [21] a system of economic indicators is proposed for the comprehensive analysis of the results of the activities of healthcare facilities with the aim of obtaining information about their financial and economic condition, clarifying the reasons that determine it, forecasting possible development trends medical institutions and determining policy directions that will lead to the improvement of their financial support.

The study of M. Petryna, M. Muratova, O. Kushlyk and V. Kochkodan [22] is devoted to determining the level of influence of the budget deficit on the material and technical support of healthcare facilities of Ukraine. The authors analyzed the

state of equipment of healthcare facilities. It was established that most institutions do not have modern diagnostic equipment or are equipped with equipment purchased during the Soviet Union, which indicates the moral obsolescence and physical wear and tear of the existing equipment. It was found that during the pandemic, almost 20% of the existing material and technical base was updated at the expense of subventions from the state budget to local budgets.

O. Nikoliuk, O. Rodina and M. Kerlan [19] summarized theoretical and methodological approaches to the management of healthcare financing. The importance of the distribution of management of hazardous waste at three levels is emphasized: state, regional, and territorial. It was concluded that a patient-oriented approach should be followed at different levels of management for a real assessment of the needs of healthcare financing.

The article by I. Ivanova and T. Petrova-Gotova [11] presents the results of a pilot survey of heads of medical institutions at different levels regarding their views on planning financial resources, the quality of provided medical services, and the problem of funding shortages. Analyzing the obtained data, the authors came to the conclusion that the current healthcare system in Bulgaria does not meet current and future needs. Considering the speed and scale of projected demographic and epidemiological changes, the inefficiency of the current system and future economic challenges, the Bulgarian healthcare system needs significant reform.

AIMS AND OBJECTIVES

The purpose of the study is to analyze approaches to financial support of healthcare facilities in Ukraine. To achieve the goal, the following tasks must be solved:

- description of basic healthcare models used in global practice;
- determination of changes in modern approaches to the financial support of healthcare facilities in Ukraine as a result of reforming the industry;
- conducting an analysis of the structure and dynamics of expenditures of the State Budget of Ukraine on healthcare, the main results of the activities of medical care providers;
- determination of additional sources of financial support for healthcare facilities in Ukraine.

METHODS

The information base of the research is publications of foreign and domestic scientists, statistical data, and comments of experts in the field of healthcare. The statistical base was created based on the updated data of the State budget web portal for citizens, the State Statistics Service of Ukraine, the Ministry of Finance of Ukraine, and the National Health Service of Ukraine. Methods of system analysis and synthesis were used in the study of approaches to the financial support of medical institutions under various models of financing the healthcare system, statistical and economic methods were used to analyze the structure and dynamics of the State Budget of Ukraine's expenditures on healthcare, of the main results of the activities of medical care providers, abstract and logical - for substantiating theoretical generalizations and formulating conclusions.

RESULTS

The model of the healthcare system used by the country plays a decisive role in the financial provision of healthcare. In world practice, depending on the sources of funding, four basic healthcare models are distinguished: the Beveridge model (National Health Insurance model), the Semashko model (budget model), and Bismarck model (social health insurance model) and the private healthcare model.

The main source of funding according to the Beveridge model is state and local budget funds (approximately 8–11% of GDP) [13]. Under this model, basic medical services are provided free of charge, while other types of medical services require voluntary health insurance. This model is used in Great Britain, Greece, Denmark, Ireland, Spain, Italy, Portugal, Sweden, Finland, New Zealand, and Cuba [5].

The healthcare system based on the Semashka model is financed exclusively from the state budget and is characterized by the absence of private health insurance. Control of the healthcare system is carried out by state bodies through centralized planning. Patients can use medical services only in their area of residence. The Semashka model was used in former socialist countries.

In Bismarck's model, financing is carried out at the expense of insurance contributions of employees and employers to independent health insurance trust funds. The state is responsible for the organization and regulation of insurance protection, which covers more than 70% of the funding. Public spending on healthcare is, as a rule, somewhat higher than in the Beveridge model - 9-13% of GDP [25]. Medical services are provided by both public and private HCPs financed under contracts. Patients have the freedom to choose insurance companies and providers of medical services. This model is common in countries such as Austria, Belgium, Canada, the Netherlands, Germany, France, Switzerland, and Japan.

The private healthcare model provides for the provision of medical services to the population mainly at the expense of private insurance. The state is released from the obligation to provide citizens with access to medical services. However, government financial assistance programs for medical services are available for individuals with no or low income [18]. This model is found in the USA, Israel, and North Korea.

In practice, each country has a healthcare system that is uniform for most citizens and combines, as a rule, the characteristics of different financing models. The analysis of scientific research shows that countries in which financing of the healthcare system is carried out mainly at the expense of the budget strive for decentralization of management of financing systems and commercialization of healthcare. Countries dominated by the market model of financing, on the contrary, seek to expand budget financing.

From the moment of gaining independence in Ukraine, for many years there was a socialist model of healthcare financing by M. Semashka, which the country adopted from the USSR. According to this system, the financial support of healthcare facilities was provided at the expense of budget funds based on the number of hospital beds and the area of medical infrastructure, and not depending on the volume and quality of medical services. Approaches to planning the financial provision of healthcare facilities have hardly changed since Soviet times and did not take into account the regional features of the provision of medical services. In addition, there were no incentives for the rational use of financial resources of healthcare facilities and cost control.

The normative approach to planning, characteristic of the Semashka model, led to unnecessary hospitalizations and excessive lengths of stay in hospitals [16]. Empty hospital beds, idle infrastructure, and doctors who did not have enough patients were often financed. Preference was given to inpatient treatment even when it was not necessary, leading to additional financial costs. Special emphasis was placed on narrow-profile doctors, which was not always appropriate [21]. The situation was complicated by the lack of a single patient-oriented medical information management system. All this led to the creation of an ineffective system of spending budget funds that did not meet the requirements and needs in the field of healthcare [8].

In 2017, the reform of the healthcare system began in Ukraine, which radically changed the mechanism of its financing, including approaches to the financial support of healthcare. Medical institutions were reorganized by turning them into communal non-commercial enterprises. These enterprises have the opportunity to enter into contracts with the National Health Service and receive direct funding from the budget for the actually provided medical services, while the state withdraws from the funding of medical institutions through itemized estimates. Contracts for the provision of medical services are concluded within the limits of the funds provided by the healthcare budget for the relevant period, based on the cost and volume of medical services ordered by the state or local self-government bodies. According to the principle "the money follows the patient", funds are allocated only for resources that are used to treat patients. As a result, there is a reduction in the number of hospital beds, if they are not used. Thanks to this, local authorities can merge, change or re-equip hospitals.

The basis of the system is a new model of relations without a conflict of interests, which delimits the functions of the customer (payer) and the service provider (autonomous healthcare providers). Funds for a guaranteed package of medical services are concentrated in a single national fund. The unification of medical institutions into a single space is taking place, which erases the artificial borders between the budgets of regions, cities, and districts. The state pays for services where the patient receives them, ensuring extraterritoriality. Patients get the opportunity to freely choose a medical institution and doctor. This creates incentives for health centres to improve the quality and efficiency of work, improves the conditions for providing services, and increases the income of medical workers. Institutions that provide services of inadequate quality will not have sufficient demand for them from patients and therefore are forced to close.

Territorial communities of Ukraine become the founders and owners of medical institutions, thanks to which their role in the field of healthcare is strengthened. The state plays the role of the main purchaser, ensuring a certain volume of medical services on a competitive basis. Residents of communities receive means to control the quality of medical care. Relations between the state, communities and patients are becoming more transparent. There is a clear demarcation of the functions

of the state and communities in the field of healthcare, which prevents their duplication, and the management of medical institutions becomes maximally decentralized [7].

The autonomy of healthcare facilities implies independent responsibility for the organization of its activities, including the formation of income, expenses and assets. In this context, it is important to note that the operating cycle of healthcare facilities is different from the cycle of, for example, an industrial or commercial enterprise [28]. Before starting the provision of medical services, a medical institution must create the necessary funds and attract qualified personnel. This feature is a requirement of the National Health Service of Ukraine (NHSU) when concluding contracts for the financing of medical services under various packages of medical guarantees.

Financial support for communal non-commercial healthcare enterprises can be provided from various sources: the state budget of Ukraine, local budgets, funds of legal entities and individuals, and other sources that are not prohibited by law (Figure 1).

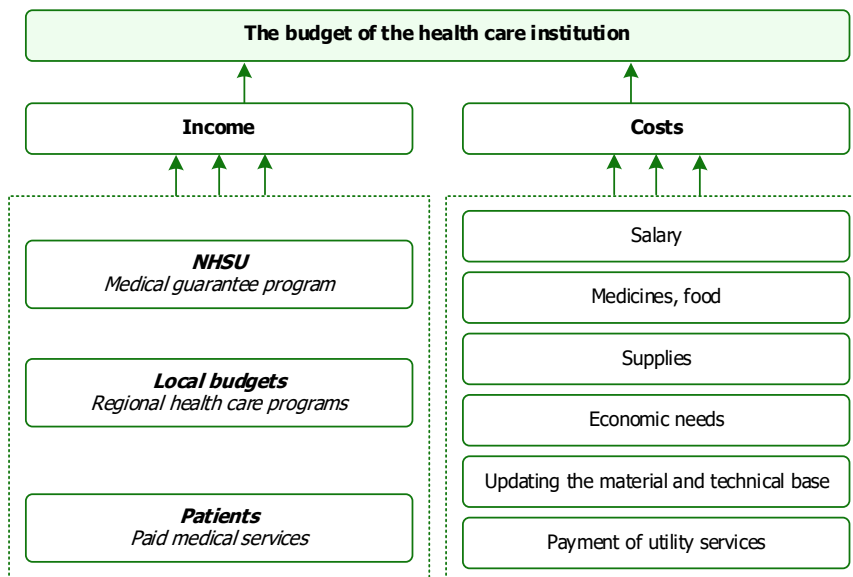


Figure 1. Components of the healthcare facilities budget.

The main source of funding for healthcare facilities and private entrepreneurs who have a license to practice medicine and have concluded an agreement with the NHSU for medical care of the population under the Program of Medical Guarantees (PMG) is the NHSU. Healthcare facilities and private entrepreneurs have the right to independently dispose of the funds received from the National Health Service, determining their use, provided that the funds are primarily directed to ensuring the quality of medical services. The State budget may also provide for transfers to local budgets, such as additional subsidies to cover the costs of maintaining healthcare facilities, which are used to pay for utility services and energy sources.

Local self-government bodies can finance various programs for the development and support of communal healthcare facilities. This includes modernization and renewal of the material and technical base, carrying out capital repairs and reconstruction of premises, and increasing the salaries of medical workers and rehabilitation specialists ("local incentives" programs). They can also fund local community health programs, public health programs, and other health programs.

Additional sources of financing of healthcare from individuals and legal entities can be payment of provided medical services by insurance companies; payment by employers of medical services provided to their employees; funds or other property provided by charitable organizations; cash receipts from the provision of paid services outside the boundaries of contracts with NHSU and PMG; funding from international organizations. Also included in this list are payments from patients for service services, such as improved wards, and services provided to other healthcare providers and doctors-private entrepreneurs, such as accounting, training, etc. However, in order to maintain the status of a non-profit organization, the provision of service services to other health centres and public health centres must be recorded in the statute. Health centres can direct the funds received from legal entities and individuals to improve the quality of medical care [17].

Despite the concerns of medical professionals about the reduction of healthcare costs, the transition to a new funding model has not led to a decrease, but even an increase in the amount of funding for the industry. This is confirmed by the analysis of the volumes of expenditures of the State Budget of Ukraine on healthcare (Table 1).

Table 1. Expenditures of the State Budget of Ukraine on healthcare, 2015-2023. (Source: calculated by the authors based on the official data from the State Statistics Service of Ukraine, Ministry of Finance of Ukraine and State budget web portal for citizens)

Group	Unit	2015	2016	2017	2018	2019	2020	2021	2022	2023
State budget of Ukraine	UAH billion	576.91	684.88	839.45	985.85	1075.12	1288.12	1491.21	2705.42	4014.42
▪ including healthcare	UAH billion	11.45	12.46	16.73	22.62	38.57	124.92	171.02	184.27	179.31
	part, %	1.98	1.82	1.99	2.29	3.59	9.70	11.47	6.81	4.47
Local budgets	UAH billion	280.08	350.52	496.09	570.58	566.26	478.11	569.47	495.58	670.64
▪ including healthcare	UAH billion	59.55	63.04	85.66	93.23	89.82	50.87	33.11	31.01	38.16
	part, %	21.26	17.98	17.27	16.34	15.86	10.64	5.81	6.26	5.69
Consolidated budget of Ukraine	UAH billion	679.87	835.83	1056.97	1250.19	1372.35	1595.40	1845.37	3201.01	4685.06
▪ including healthcare	UAH billion	71.00	75.50	102.39	115.85	128.38	175.79	204.12	215.28	217.47
	part, %	10.44	9.03	9.69	9.27	9.35	11.02	11.06	6.73	4.64
Gross domestic product of Ukraine	UAH billion	1979.46	2383.18	2982.92	3558.71	3974.56	4194.10	5459.57	5191.03	6537.83
Expenditures of the consolidated budget on healthcare in GDP	part, %	3.59	3.17	3.43	3.26	3.23	4.19	3.74	4.15	3.33

As a result of changes to the budget introduced in 2020 due to the impact of the COVID-19 pandemic, the share of the state budget for healthcare amounted to more than 11%. In 2023, spending of the Consolidated Budget of Ukraine on healthcare amounted to 3.33% of GDP. This is significantly lower than the level of spending in the countries of Central Europe but exceeds the average indicators for countries with a low level of development and developing countries. The share of total budget expenditures directed to healthcare is about 5% less than in the countries that are members of the Organization for Economic Cooperation and Development. In addition, the amount of financing of the healthcare sector does not reach the minimum share of budget expenditures established by law (5%). This leads to a chronic lack of funds for the industry and creates a legal conflict with a number of regulations that guarantee citizens the right to medical care. The planned amount of expenditures laid down in the State budget for healthcare in 2024 has been increased to UAH 239 billion.

The war significantly affected the financing of the healthcare system. Today, in Ukraine, the healthcare sector is financed mainly from the consolidated state budget. While humanitarian and donor funding mechanisms are already in place, they need to be further strengthened to overcome fragmentation and incoherence in procurement and service delivery processes.

Attention is drawn to the fact that since 2020, the structure of expenditures of the Consolidated Budget of Ukraine on healthcare by sources of financing has undergone significant changes. There was a significant increase in the share of funds from the state budget and a decrease in the share of funds from local budgets (Figure 2). This is a consequence of the coronavirus pandemic when local budgets lacked funds due to the closure of businesses [27], as well as the withdrawal of the military tax on the income of individuals from local budgets [20].

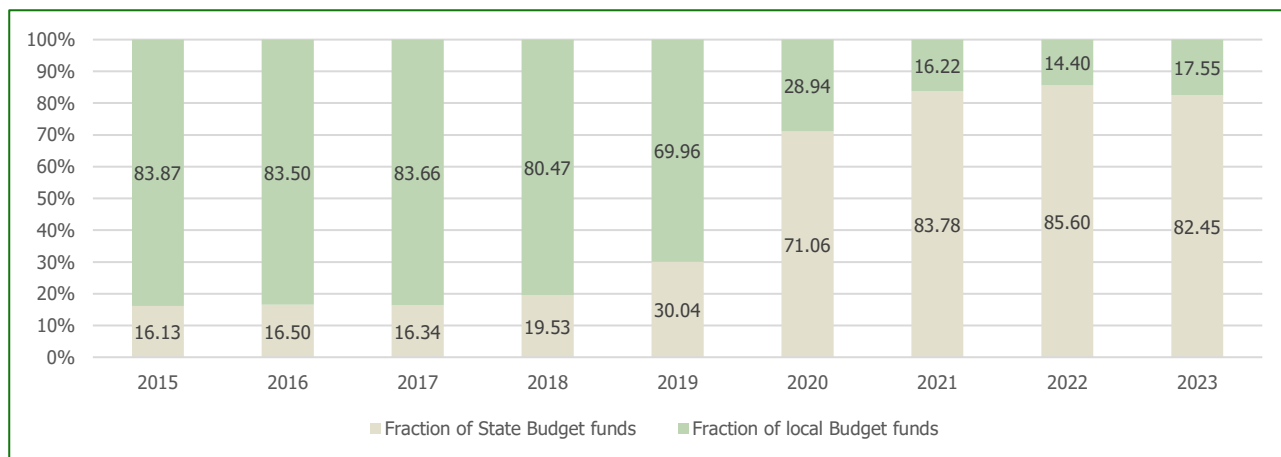


Figure 2. Structure of expenditures of the Consolidated Budget of Ukraine for healthcare by sources of financing, 2015-2023.

In 2023, according to the contract with the National Health Service, 3,706 providers of primary healthcare (PHC) and special healthcare (SHC) were added to medical services, which is 390 more than in 2022. The largest number of medical service providers was recorded in the Western region of Ukraine. At the same time, the number of providers in the Central region by all forms of ownership increased significantly. At the same time, the number of communal healthcare facilities in the Eastern and Southern regions decreased (Table 2).

Table 2. The number of PHC and SHC providers with a contract with NHSU by form of ownership by interregional departments, 2022-2023. Note: Northern department – Chernihiv, Sumy, Kharkiv, Poltava regions; Central department – the city of Kyiv, Kyiv, Zhytomyr, Vinnytsia, Cherkasy regions; Eastern department – Dnipropetrovsk, Donetsk, Zaporizhzhia, Kirovohrad, Luhansk regions; Southern department – Mykolaiv, Odesa, Kherson regions; Western department – Ivano-Frankivsk, Zakarpattia, Lviv, Rivne, Ternopil, Volyn, Khmelnytskyi, Chernivtsi regions. (Source: calculated by the authors based on the official data from the National Health Service of Ukraine).

Department	2022				2023					Absolute deviation, 2023/2022			
	Municipal healthcare facilities	Private entrepreneur doctors	Private facilities	Total	State healthcare facilities	Municipal healthcare facilities	Private entrepreneur doctors	Private facilities	Total	Municipal healthcare facilities	Private entrepreneur doctors	Private facilities	Total
Northern	423	106	48	577	–	427	111	59	597	4	5	11	20
Central	385	90	98	573	5	509	157	145	816	124	67	47	243
Eastern	501	120	69	690	–	472	155	77	704	-29	35	8	14
Southern	292	111	37	440	–	286	134	43	463	-6	23	6	23
Western	702	237	97	1036	1	713	289	123	1126	11	52	26	90
Total	2303	664	349	3316	6	2407	846	447	3706	104	182	98	390

During the war in Ukraine, the occupiers purposefully destroyed objects of medical infrastructure. As of mid-July 2024, 214 objects from medical institutions were completely destroyed and are not subject to restoration, 1,636 objects are damaged. Thus, it was already possible to completely restore 524 objects of healthcare facilities, and another 361 objects were partially restored [10].

Despite the war in Ukraine, the implementation of the PMG continues. As of July 17, 2024, the number of medical care providers working under a contract with the National Health Service is 3,593, of which 2,173 are communally owned, 22 are state-owned, 508 are private, and 890 are self-employed physicians [4]. Medical service providers concluded 5,683 contracts for a total amount of UAH 142 billion. Among the regions of Ukraine, the largest number of medical service providers working under PMG is located in Dnipropetrovsk, Odesa, Lviv, Kharkiv regions, and the city of Kyiv. These same regions are the leaders in terms of the number of concluded contracts, as well as in terms of the volume of financing under PMG (Table 3).

Table 3. Distribution of current contracts for medical care of the population under PMG by regions of Ukraine (as of July 18, 2024). (Source: calculated by the authors based on the official data from the National Health Service of Ukraine)

Region	Number of providers	Number of contracts	Number of types of service groups	Number of service groups (specifications)	Amount of contracts, UAH billion
Vinnytsia	176	288	41	872	6.47
Volyn	90	154	41	560	4.81
Dnipropetrovsk	295	458	45	1444	13.65
Donetsk	82	118	38	407	2.32
Zhytomyr	130	212	41	698	4.99
Zakarpattia	145	211	41	593	4.26
Zaporizhzhia	105	154	41	475	4.64

(continued on next page)

Table 3. Continued

Region	Number of providers	Number of contracts	Number of types of service groups	Number of service groups (specifications)	Amount of contracts, UAH billion
Ivano-Frankivsk	159	257	42	794	5.78
Kyiv	171	270	42	866	6.01
Kirovohrad	117	181	39	633	3.90
Luhansk	23	30	25	82	0.16
Lviv	248	400	44	1224	11.41
Mykolaiv	94	157	42	624	3.50
Odesa	263	381	42	1117	8.30
Poltava	147	243	40	894	5.56
Rivne	157	242	42	707	5.14
Sumy	129	222	42	702	4.70
Ternopil	124	222	40	686	4.24
Kharkiv	221	360	42	1076	8.67
Kherson	39	64	37	202	1.31
Khmelnyskyi	129	215	41	737	5.34
Cherkasy	105	165	42	676	5.13
Chernivtsi	92	173	41	560	4.06
Chernihiv	91	153	42	585	3.89
Kyiv city	261	353	43	1024	13.54
Total	3593	5683	1016	18238	141.78

As a result of the full-scale invasion, Ukraine's healthcare sector suffered significant losses, and millions of Ukrainians were forced to live in conditions of limited access to medical services. The provision of timely and high-quality medical care has become significantly more difficult, especially in the zones of active hostilities and on the frontline territories. Therefore, the first priority is to restore access to medical services for Ukrainians. For this, it is important to coordinate the efforts of local and international partners, involving various sectors and organizations to create an integrated approach to recovery, which will contribute to the improvement of healthcare infrastructure: the restoration of destroyed medical facilities, providing them with the necessary equipment, expanding access to medical services through mobile medical teams and telemedicine for remote and affected regions. There has already been progress in the implementation of pilot projects, including the establishment of resilience centres, mobile hospitals and pharmacies, especially in recently liberated areas.

The modern model of financing healthcare in Ukraine should provide clear state guarantees regarding medical care, provide better financial protection for citizens in case of illness, promote efficient and fair distribution of public resources and reduce informal payments. Also, such a model should stimulate competition between medical institutions, introducing contractual relations between the customer and the service provider, which would make the use of public funds more efficient, and the transparency and accountability of the use of public finances should increase.

However, despite the fact that Ukraine's transition to a new model of the healthcare system contributed to the growth of financial revenues in the field of healthcare, at the local level there are certain difficulties with the financial support of medical institutions. An uneven distribution of funds between regions is observed. Medical facilities in rural areas usually receive less funding compared to urban ones, which is why they are often in an unsatisfactory condition and unable to provide an adequate level of medical services. Due to limited financial resources, local budgets cannot always allocate sufficient funds for the maintenance of medical institutions, which leads to a lack of funds for the modernization of medical equipment, the purchase of medicines, and the repair of premises. There is also inefficient or untargeted use of budget funds, which is caused by weak governance and corruption at the local level. All this leads to limited access to quality medical care and negatively affects the work of the healthcare system in general. In order to solve these problems, a comprehensive systemic approach to the formation of a unique model of financing in Ukraine is necessary, which, in our opinion, should be built on the basis of public-private partnerships in the form of facility management and the introduction of mandatory medical insurance. We strongly believe that such a unique model, built taking into account all the institutional

features of the modern Ukrainian reality, will contribute to the stability and availability of medical services in all regions of the country.

Mandatory health insurance must be provided by insurance companies that have the appropriate license. The effectiveness of such insurance is ensured by the creation of insurance pools that combine funds to redistribute the risk of treatment costs among a large number of insured persons. The more contributions the insurer collects, the more sustainable the system becomes, as it is able to cover the unforeseen costs of new cases. Thus, mandatory health insurance, if necessary, guarantees the coverage of additional costs for medical services that are not provided for by state funding. Another approach to the introduction of mandatory health insurance involves the creation of a special fund based on contributions from employers interested in the health of their employees, the employees themselves, and the state. The administrator of the funds can be the NHSU, which has information about the possibilities of various healthcare facilities to provide certain services. The state, for example, can assume the obligation to pay contributions for children, students and pensioners.

It is expedient for Ukraine to introduce such a form of public-private partnership as facility management. Today, a significant part of budget funds is spent on providing non-core functions of medical institutions, such as major repairs, and purchase and maintenance of medical equipment. Facility management will allow you to reduce the costs of maintaining real estate and improve the quality of service by engaging support staff (for example, cleaners, electricians, and cafeteria workers) and making wholesale purchases of consumables, food products, and construction materials. With such an approach, all non-core functions of healthcare facilities are outsourced. Facility management is carried out in two ways. The first method involves full outsourcing of all non-core functions to a specialized management company by concluding a property management contract. The second method consists of the outsourcing of certain functions through the conclusion of several subcontracts [2]. The main advantage of facility management is that medical workers and the institution's administration can fully focus on their key duties — the organization and provision of medical services. Thus, facility management can become an effective way of saving budget funds, reducing the costs of maintaining real estate in healthcare and increasing the quality of medical services.

Part of the innovative approach in facility management should be the use of digital technologies, which will allow for increased cost control, improved monitoring of equipment conditions, and speed of response to emergency situations. Thus, building management systems (BMS) will allow centralized management and monitoring of all engineering systems of the building and will provide automation and optimization of resource consumption. Digital facilities management platforms (Computer-Aided Facility Management and Computerized Maintenance Management Systems) will help manage workplaces and resources and provide planning, control and tracking of equipment maintenance and repair. Virtual copies of physical objects (Digital Twins) will make it possible to simulate different scenarios of building use, predict breakdowns and carry out preventive maintenance. Automation of work processes using artificial intelligence and machine learning will allow for analyzing resource consumption, which will contribute to reducing losses and energy efficiency. Mobile apps for facility managers and maintenance staff will allow you to more effectively manage repair requests, monitor maintenance status, and access building plans and documentation from a mobile device. Big data analytics will allow analyzing information from various sources, predicting service costs for making informed management decisions. Augmented reality technologies will help technical personnel work with systems without the need to be physically on-site, virtual reality - to conduct inspections of buildings in a digital environment. The implementation of digital facility management technologies will ensure the comfort of the medical facility, its smooth operation and high quality of service, and will increase the efficiency of the management of healthcare facilities.

As additional and unplanned resources that can be used in accordance with the needs of a specific healthcare facility, funds from territorial community savings funds, charitable funds, donations from legal entities and individuals, income from paid medical services, and other sources permitted by law can be considered.

This highlights the need to develop a mixed model of healthcare financing. The transition to a more effective system of providing medical services is possible through a rational combination of public and private medical institutions and the introduction of state partnerships in this area. This practice creates a synergy of efforts to ensure the effectiveness of healthcare financing.

DISCUSSION

Financing of healthcare is carried out using various methods: estimated, program-targeted and payment for medical services provided. Each of them has its advantages and disadvantages. Estimated financing, which is the most common in Ukraine, allows you to forecast costs in accordance with the regulations of the Ministry of Health of Ukraine and control

their intended use. However, this method does not contribute to the effective redistribution of financial resources to improve the provision of medical services and does not stimulate the improvement of healthcare facilities, since funding is based on the very existence of the institution, and the salary of the staff depends on the time worked.

The program-target method allows more efficient use of financial resources due to the clear definition of goals and objects of funding, as well as the personal responsibility of the management of health centres for achieving results. The disadvantage of this method is the dependence on the availability of budget funds - in the event of a lack of them, funding of medical programs may be suspended or stopped altogether.

As a result of active hostilities unleashed by the Russian Federation on the territory of Ukraine, the healthcare sector faced the problem of population redistribution. Significant internal migration has not yet led to the re-signing of declarations with primary care doctors at the place of actual residence, which does not allow to fully reflect the redistribution of funding between regions of Ukraine at the level of primary healthcare.

It is appropriate to take into account different models for creating a healthcare system in Ukraine that will be fair and accessible to all citizens.

The conducted research emphasizes both positive changes and existing problems of financing healthcare institutions in Ukraine in the context of medical reform. Emphasis is placed on the use of a complex system approach to the formation of a unique model of financing healthcare institutions in Ukraine, which should be built on the basis of public-private partnership, the introduction of mandatory medical insurance, as well as the use of facility management and modern digital technologies. We strongly believe that such a unique model, built taking into account all the institutional features of the modern Ukrainian reality, will contribute to the stability and availability of medical services in all regions of the country. Medical insurance in Ukraine faces many challenges caused by both internal and external factors. War increases the need for effective insurance systems that can provide citizens with access to quality medical care without significant financial burden. At the same time, such problems as the instability of legislation, financial restrictions and corruption significantly complicate the process of reforming the system.

The issue of costs for the implementation of these measures is debatable. The costs of implementing mandatory health insurance can be significant, but they can be compensated by improving access to health services, reducing the financial burden on citizens and medical institutions, and more effective management of medical costs in the long term. The cost justification for facility management and proposed digital technologies can be justified by the potential long-term benefits, such as reduced operating costs, increased energy efficiency, improved quality of healthcare services, and overall improvement in healthcare facility management. These are prospects for further research.

CONCLUSIONS

Healthcare facilities play a key role in maintaining the health of the population, so their financing and provision of resources should be a priority of national policy. The problem of financial support for healthcare in Ukraine is extremely urgent due to the large-scale restructuring of the industry, which is taking place in the conditions of crisis and deficit of budget funds caused by military actions. The management of health centres should constantly work on cost optimization while ensuring the necessary financing of their activities.

Medical institutions direct their activities to achieve the established goals, performing their inherent functions. Such activity develops in accordance with certain laws and requires state administration, the participation of local self-government bodies and the management of the institutions themselves. Effective management should be based on understanding and using the economic laws of development. In order to perform their functions, medical institutions need full coverage of costs from various sources of funding. The field of medical services needs additional funding for the implementation of strategic projects.

The medical reform launched in Ukraine made it possible to transform healthcare financing by defining a guaranteed package of medical services and concluding agreements with family doctors, creating a basis for the implementation of a medical insurance model, which will provide additional financial resources for financing healthcare.

In the course of the study, the influence of medical reform on the financing of healthcare in Ukraine was examined in detail. The results indicate positive changes in the financial provision of healthcare facilities: functioning on a market basis, the use of rational management of financial flows, increased autonomy and the ability to be self-supporting and self-financing, and the possibility of obtaining the status of an enterprise. As a result, the activities of medical institutions

should become more efficient, targeted and responsible, which would increase their competitiveness. However, the financing of healthcare facilities at the local level faces certain problems, in particular, regional disparities in financing, dependence on local budgets, and ineffective management of the property of medical facilities. This complicates access to quality medical care and the effective functioning of the healthcare system. Problems of financing medical institutions at the local level require a comprehensive approach to their solution. Such approaches, in our opinion, can be the development of public-private partnerships in the form of facility management and the introduction of mandatory medical insurance. This will allow combining the resources of the state and the private sector to improve the financing and management of healthcare facilities and will ensure sustainability and availability of medical services in all regions of the country.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

FUNDING

The Authors received no funding for this research.

CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

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Волкова Я., Дьяченко О., Новікова Н., Хмурова В.

АНАЛІЗ СУЧАСНИХ ПІДХОДІВ ДО ФІНАНСОВОГО ЗАБЕЗПЕЧЕННЯ ЗАКЛАДІВ ОХОРОНИ ЗДОРОВ'Я В УКРАЇНІ

Метою дослідження є аналіз сучасних дієвих підходів до фінансового забезпечення закладів охорони здоров'я (ЗОЗ), які успішно імплементовані в провідних країнах світу, для формування унікальної моделі їх фінансування в Україні. Унікальність моделі забезпечена врахуванням інституційних особливостей сучасної української дійсності. У статті проаналізовано фінансові інструменти забезпечення ЗОЗ за різних моделей фінансування системи охорони здоров'я, які використовують у світовій практиці. Досліджено процес реформування системи охорони здоров'я в Україні, що дозволило встановити зміни у фінансуванні ЗОЗ. Наведено складові бюджету закладу охорони здоров'я. Визначено основні переваги та недоліки підходів до фінансування ЗОЗ в Україні. Проаналізовано обсяги та структуру видатків Зведеного бюджету України на охорону здоров'я, а також основні результати діяльності надавачів медичної допомоги, що охоплює всі регіони України. Визначено проблеми фінансування закладів охорони здоров'я в Україні на місцевому рівні, які негативно впливають на доступність і якість медичних послуг. Обґрунтовано необхідність розвитку змішаної моделі фінансування охорони здоров'я в Україні через раціональне партнерство держа-

вних медичних закладів і приватного сектора. З урахуванням виявлених проблем і потреб запропоновано комплексний підхід до покращення фінансування ЗОЗ через запровадження обов'язкового медичного страхування та розвиток державно-приватного партнерства у формі фасиліті-менеджменту, включаючи оптимізацію ресурсів і технологічні інновації.

Ключові слова: охорона здоров'я, заклад охорони здоров'я, медичний заклад, медичні послуги, надавач медичних послуг, програма медичних гарантій, фінансове забезпечення, фінансування

JEL Класифікація: I15, I18, H75