

**ZRÓWNOWAŻONY  
ROZWÓJ  
W ZARZĄDZANIU  
I FINANSACH  
PERSPEKTYWA COVID-19**



# ZRÓWNOWAŻONY ROZWÓJ W ZARZĄDZANIU I FINANSACH PERSPEKTYWA COVID-19

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# ACCOUNTING AND CONTROL IN MEDICAL INSTITUTIONS AND DIRECTIONS OF THEIR IMPROVEMENT

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Nataliya Loboda\*, Odarka Chabaniuk\*\*

**Abstract.** The domestic accounting system in the public sector must meet current global requirements for information transparency. Accounting should provide analytical support for decision-making processes in the system of public administration and local (territorial) self-government. It allows the use of accounting information to assess the effectiveness of the medical institution. This became possible due to the modernization of accounting of budgetary institutions and its harmonization with world standards. The material and technical base of medical institutions, as well as large-scale measures in the field of public medicine (eg, control of tuberculosis, cancer, AIDS, COVID-19), in the field of research and development, should be funded from the state budget in the framework of the implementation of state target programs in order to ensure the targeting and indication of sources of resources for the implementation of the planned activities.

**Keywords:** accounting, control, medical institutions, medical services, health care, cost

## Introduction

The domestic accounting system in the public sector must meet current global requirements for information transparency. Accounting should provide analytical support for decision-making processes in the system of public administration and local (territorial) self-government. It allows the use of accounting information to

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assess the effectiveness of the medical institution. This became possible due to the modernization of accounting of budgetary institutions and its harmonization with world standards.

Improvement of legislative regulation for the last period a number of normative-legal acts have been adopted, in particular, a number of National regulations (standards) of accounting in the public sector have been adopted.

Over the last decade, interest in the problems of organization and management in health care has grown significantly around the world and in Ukraine in particular. One of the reasons for such attention of researchers and practitioners in the field of public health is the regular integration processes taking place in health care systems, the consolidation of structures that to some extent ensure the preservation and improvement of public health: maternity hospitals, clinics, insurance and pharmaceutical companies, government agencies, social protection institutions, etc. There are processes aimed at the prospect of change, both at the level of national health care systems and internationally:

- health insurance,
- state order in the field of medical care,
- automation of medical institutions with the transition to funding depending on the volume and quality of medical services they provide,
- optimization of the treatment network.

Given the priority of economic components of state development, the nature of health care as part of the social structure of society is also manifested in the fact that institutions and entities of the health care system ensure economic stability and as medical structures play an important role in productivity. and the health of the nation.

Health care is financed from the State and local budgets of Ukraine, health insurance funds, charitable foundations and any other sources not prohibited by law. Budget funds allocated to health care are used to provide the population with a guaranteed level of health care, funding for state and local health programs and basic research on these issues. The amount of budget funding is determined on the basis of scientifically sound standards per capita.

According to the provisions of the Budget Code of Ukraine, health care facilities and, accordingly, financial resources to ensure their functioning are clearly delineated between the levels of budgets. Thus, from the regional budgets are spent on specialized and emergency medical care, from the budgets of districts and cities of regional importance – on primary (inpatient and outpatient) medical care.

## The health care system in statistical terms

The legislation of Ukraine stipulates that medical care must be free of charge on the spot and during the provision of such care. In practice, the financing and payment of medical services is more complex. The main sources of funding and support for health services are:

- state and local budgets,
- private financing,
- Direct payments of the population,
- international assistance programs,
- charitable funds,
- insurance funds.

In order to ensure the provision of quality medical services with limited financial resources, it is necessary to use them rationally and effectively, and only a detailed analysis of the activities of medical institutions and constant monitoring can ensure this.

The health care system plays an important role in ensuring the well-being of citizens. However, in Ukraine this system does not fully meet the needs of consumers of medical services. Ukraine is ahead of most European countries in the number of medical institutions per 100 thousand population. Thus, in Ukraine there are 5.2 hospitals per 100 thousand population, in Germany – 4.5, in the Czech Republic – 3.8, in Poland and Hungary – 2 health care facilities.

In the Lviv region, this figure has hardly changed over the past five years and is 4.6 medical facilities per 100 thousand population. Lviv region is the leader in the number of registered medical institutions and doctors in the electronic health care system. As of May 2019, 165 medical institutions and 1,886 doctors are registered in the system. 76.3% of the population of the region chose their doctor and signed the declaration.

The health care facilities of Ukraine employ a large number of medical workers – 227 thousand or 45.5 doctors per 10 thousand population, in the region – 40.3 doctors per 10 thousand population, compared to 2000, this figure decreased by 2.4% (2013–2014). Since the adoption of the Budget Code, the number of medical workers has increased and the number of inhabitants has decreased, and since labor costs account for more than 70% of total expenditures on the industry and financial resources are determined by the number of inhabitants, the structure of expenditures deteriorates.

However, in 2015–2018 the number of workers in medicine has decreased sharply, the industry is in dire need of qualified personnel, especially in border areas (Ofitsiyni sait LODA).

Preserving the health of the population of Ukraine is an important medical and social problem. Recently in our country there is a tendency to deteriorate demographic indicators. Over the last 20 years, the number of children and adolescents has decreased by 20%, which indicates a narrowing of the reproduction base of the population in the future.

Expenditures on health care have the largest share in the social security of democratic countries, which indicates the exceptional role of the social function of the state. Thus, in Ukraine in 2020, more than 9% of all budget expenditures are allocated for health care, and in Lviv region – about 10% (Ofitsiyni sait LODA).

However, budget funding alone is not enough for the normal interaction of the health service with other industries operating under the laws of the market, despite the fact that from year to year the financial resources for the industry are growing. According to some estimates, about 2/3 of the country's market turnover is in the shadow sector. These financial flows bypass the tax system, which severely limits the ability to increase spending on health care and control its development.

Analysis of the qualitative structure of expenditures on health care in Lviv region in 2017–2018 shows that the largest share is accrued wages (up to 75%), and the share of capital expenditures remains at more than 0.8% (Ofitsiyni sait LODA)]

A characteristic feature of the industry is the presence of a significant number of vacancies, which indicates the retention of staff without the appropriate workload. More than 150 positions have been vacant for several years now.

### **Accounting activities in the medical field**

The increase in research on accounting reform at the level of medical entities indicates an increase in interest in this problem. In their works, domestic scholars seek to achieve optimal theoretical justification of approaches to the organization of accounting in the budget sphere. Leading scientist O. Doroshenko in his research argues that chief accountants should not only state the results of the budget, but also make adequate management decisions on the targeted and effective use of budget funds in accordance with their functional purpose (Doroshenko, 2013).

Thus, N. Martsenyak, L. Gizatulina and N. Sushko consider the specifics of accounting reform through the prism of the possibility of combining national provisions (standards) of accounting in the public sector with international standards



and their harmonization with public finance statistics and the system of national accounts of Ukraine. Scientists rightly argue that along with the standardization of the national accounting system, taking into account international standards, quality staffing (especially by chief accountants) is an important prerequisite for the effective functioning of accounting in the public sector (Duhiienko, 2011).

The domestic accounting system in the public sector of the economy should:

- meet current global requirements for information transparency,
- sufficiently provide accounting and analytical support for decision-making processes in the system of public administration and local (territorial) self-government,
- enable the use of accounting information to assess the effectiveness of the institution.

A significant role in addressing these issues should be played by the modernization of accounting of budgetary institutions and its harmonization with world standards.

National legislation in this area of regulation is unstable, the regulatory framework is constantly changing, because in the process of its formation, some regulations are adopted, others are repealed or their provisions are reflected in other regulations by duplication. At the same time, in recent years there have been some positive developments in this area. To improve the legislative settlement, a number of normative legal acts have been adopted recently.

Legislative support in this area, despite the extensive system of regulations, needs further improvement through not quantitative but qualitative development and harmonization with international standards.

During the analysis of financial and economic activities of health care institutions it is necessary to determine the factors influencing the price of medical services. The price of medical services is a monetary expression of value, a market parameter that characterizes the economic relations between sellers and buyers in relation to the purchase and sale of services and goods. The price system is a set of types of prices, the interaction of which ensures the efficient functioning of a market economy.

In general, pricing is the process of forming prices, determining their level and finding their optimal combination. Pricing solves the main tasks in the field of health care: expanding the market for health services and ensuring the balance of supply and demand for medical services.

The mechanism of price formation is a process of analysis of economic situation by economic entities and development on this basis of the price policy that provides achievement of the set purposes. The system of price regulation is a set

of regulators that influence the movement of prices and provide on this basis favorable conditions for the effective functioning of the market system.

Prices for medical services offered by a medical institution in a market economy are determined by a number of external and internal factors. External factors include: the regulatory role of the state in prices and pricing; characteristics of medical services and solvency of the population; the level of competitive prices that has developed in the market of medical services; market characteristics of this type of medical services. The internal factors that determine the price include: the level of fixed and variable production costs of the medical institution; priorities of the goals set by the medical institution.

All medical services provided by a medical institution according to their complexity and scope can be divided into two groups: simple medical services and complex (complex) medical services. A simple service consists of several procedures. For example, such a simple service as a doctor's consultation includes the procedure of applying to the registry, receiving payment, issuing a referral to a doctor, examination of a patient by a doctor, filling out an outpatient card, issuing certificates.

A complex service can include a preventive examination to issue a certificate of health to the drivers of the vehicle. In this case, the patient should be examined by several specialists, each of these examinations can be considered as a simple service. To determine the cost of a simple service, it should be divided into separate procedures, determine the cost of each procedure and summarize the results.

Economic data for calculating the cost of medical services are: the number of staff units, payroll and accruals; the area of the premises occupied by the medical institution (department); all material costs in accordance with the codes of economic classification of expenditures (KEKV) of current legislation; cost of equipment; depreciation deductions (depreciation), calculated in accordance with accounting data.

Improving the mechanisms of public funding and streamlining the use of available resources in medical institutions are, of course, important tools to ensure the effectiveness of health care and provide quality health care to the population. Meanwhile, the cost of medical care is constantly rising around the world. The reason for this is primarily the introduction of new technologies for disease prevention and treatment, high-tech and science-intensive equipment, new drugs and more. Currently, no country in the world has time to ensure the growth of funding at a rate that corresponds to the rate of increase in the cost of medical services.

The purpose of forming the cost of medical services is timely, reliable and complete determination of the actual costs associated with the provision of a particular

service, as well as control over the use of material, labor and financial resources. The calculation technology is quite complex and depends on many components.

The ability to correctly calculate the cost of medical services taking into account all components will improve the financial performance of the medical institution, will be the basis for more effective management and, accordingly, improve the technical condition of medical equipment.

Cost determination is a process that helps determine the cost of providing a particular unit of service. Such a unit can be a single service or several services. After determining the cost of the service, it is used in conjunction with other factors in the process of determining the price that is set for such a unit and all similar units. Cost calculation first involves identifying the number of types of services provided by the medical unit, and then determining the scope of each type of service.

### **Financing of medical institutions as an institutional problem**

The basics of the legislation of Ukraine on health care declare that financing of this sphere in Ukraine is carried out at the expense of the state and local budgets, charitable funds and any other sources which are not forbidden by the legislation. Public health facilities are financed from the budget. All public health care institutions are budgetary organizations, so they are financed either from the state budget – state and departmental institutions (subordinate to ministries and departments), or from the local – municipal institutions (subordinate to local authorities and local governments).

The division of target programs into classes, types, groups according to the classification characteristics was considered by a number of researchers of program-target management. Despite this, a generally accepted classification of target programs has not yet been established. Social (socially oriented) programs are aimed at solving problems of social nature, increasing the level of material and spiritual needs, improving performance and improving lifestyles, changing the nature and facilitation of working conditions, transforming the principle of social justice, reducing differences and converging living standards of different groups and strata population, improving distribution relations, social security. Socially oriented ones include targeted programs related to the development of culture, education, health care, physical culture and sports, housing needs, improving the demographic situation, solving problems of resettlement, migration, protection of socially vulnerable groups.

Social rehabilitation of participants in the anti-terrorist operation in eastern Ukraine and prosthetics for victims of the anti-terrorist operation is carried out in hospitals for war veterans and other health care facilities. This is a difficult task for healthcare facilities. Hospitals are staffed with qualified personnel with sufficient experience in the rehabilitation of combatants, but there are not enough medicines and medicines purchased at the expense of the general fund. Volunteers, charitable foundations, international organizations, etc. provide significant assistance in creating a proper supply of medicines.

Possible areas for further development of accounting, in addition to automated information processing, are the development at the industry level of methodological recommendations for accounting for paid services, which are defined as income. Improving the formation of revenue estimates (general and special funds) will lead to a change in financial security and allow the institution at its discretion to use part of the financial resources at their disposal, to make priority budget expenditures, which will prevent cash gaps in budget execution.

In our opinion, they need a special study of the problem of legal and personnel support of state policy in this sector of the economy, study of the experience of foreign countries in solving these problems and the possibility of its application in Ukraine.

Particular attention should be paid to human resources issues when reforming public sector accounting, as high-quality staffing, especially by chief accountants and other accountants, is an important prerequisite for the effective functioning and recognition of public sector accounting at the international level.

The methodological principles of formation in accounting and reporting of new objects of accounting, which were not inherent in the public sector, namely investment, operating real estate, need further elaboration. An important need is the development of primary documents for cost accounting, the order of reflection in the accounts, and so on. It is necessary to review and improve operations to account for the cost of treatment of various diseases, including those that have a complex and lengthy treatment process (COVID-19, tuberculosis, cancer).

Control in budgetary institutions is a set of measures carried out by authorized bodies in order to verify the legality, expediency and efficiency of the institution's use of budget funds and the direction of their use. The need for effective fight against crime necessitates control in budgetary institutions at the present stage of development of the Ukrainian economy.

The emergence of internal control in budgetary institutions is justified by:

- using scientific theory, it plays a public role in providing practical recommendations to budget managers at all levels;

- detecting imbalances and negative phenomena, control makes it possible to eliminate them and prevents recurrence, as well as contributes to the rational organization of financial and economic relations and the optimal use of budgetary resources;
- control in budgetary institutions takes place in the activities of all budgetary institutions and organizations without exception, each time aiming to ensure their effective and lawful activities, counteract the criminal intentions of officials, prevent misuse or inefficient spending of budget funds;
- control in budgetary institutions involves systematic monitoring of the financial condition of an individual institution or organization, the quality of services provided by them, the efficiency of use of budgetary resources, the legality of spending budget funds, etc.;
- based on the results of control in budgetary institutions and organizations develop measures that promote more efficient use of budgetary resources and spending of budget funds, compliance with the principle of social justice in the staff of the budgetary institution (Dikan, 2013).

The objective basis for improving accounting in public sector institutions should be the maximum use of computer facilities and modern information technology that can provide information on all aspects (budget, financial, management) and ensure the ability to control operations.

The accounting system should provide the ability to forecast and determine the strategy of budget execution and analysis of their dynamics. Improving the quality of information reflected in accounting is one of the key points of accounting reform in the public sector. Improving the methodology, methodology and organization of accounting in public sector institutions is essential to strengthen control over the socio-economic return of all types of resources and improve the quality of their performance.

In modern conditions, the organization of accounting in public sector institutions is undergoing significant changes in the direction of ensuring their compliance with International Accounting Standards of the public sector and the possible unification with the accounting of business entities. The result of the reform should be a unified system of organizational and information support of accounting, aimed at ensuring the transparency of public financial flows and the targeted use of budget funds. Healthcare is a component of the social sphere. The state should pay attention to the development of this component of the social sphere at all stages of functioning. There is often a lack of funds to fully meet the needs of the population in medical care, in particular, subsidized regions need additional investment in medical facilities being built on their territory.

In addition, the material and technical base of medical institutions, as well as large-scale measures in the field of public medicine (control of tuberculosis, cancer, AIDS), in particular, in the field of research and development, should be funded by the state budget in the framework of the implementation of state target programs in order to ensure the targeting and indication of sources of resources for the implementation of the planned activities.

At the same time, the use of targeted programs as a way to invest in the health sector allows for an even distribution of state budget funds allocated between regions, depending on the incidence rates in these regions and the capabilities of local budgets.

Automating the accounting of expenditures for the treatment of various types of diseases as a significant part of expenditures in medical institutions involves the use of the functionality of the program "Sail-Budget" or other programs that provide accounting of expenditures and printing of accounting forms.

The computer system provides automated execution of accounting tasks in both routine and dialog modes. When using the dialogue mode, the efficiency of accounting, control and analysis increases, it is possible to obtain the necessary reference and analytical data during the reporting period, and not only by its value.

At the same time, the amount of information that is regularly provided to users is significantly reduced and limited only to data that is necessary and sufficient to perform certain management work. Additional information is available upon request.

The module "Sail-Budget" is designed for computer accounting in budgetary institutions of any level and provides: the formation of complete and reliable information about financial and economic activities for the needs of internal and external users and contractors; registration of primary documents and preparation of annual, quarterly, monthly reports of the budgetary institution.

The main advantages of this complex include: intuitive interface – ease of use for users of different levels of training, original design, the ability to choose the type of interface; wide functionality – the possibility of computer implementation of all areas of accounting of the budgetary institution; combination of accounting and management capabilities with communication capabilities of technology – provides the construction of accounting "from the primary document" and automation of business processes of varying complexity; availability and the possibility of phased implementation – a relatively low purchase price.

Type of service, phased implementation depending on the capabilities of the customer in the following sequence: personnel accounting, payroll, accounting, applications for work, printing and reading barcodes, etc.

The Parus-Budget system has various complete sets which define its functional possibilities. The basic set represents the minimum functional set of system and allows: to prepare economic and payment documents; to keep records of fixed assets and intangible assets, to revalue and calculate depreciation on them; to keep records of material values, food products, low-value and perishable items at places of storage in value and quantity in terms of materially responsible persons; keep cash records; to keep records of mutual settlements with institutions and organizations, settlements in the order of planned payments; to keep records of expenses in terms of cash and actual expenses of the institution; receive monthly reports on the movement of funds on accounts in the form of memorial orders, circulating information on the movement of material values, books of cash and actual expenditures of the institution; receive the book *Journal-Home*, the formation of financial and budgetary reporting.

The strategic importance of health care for the development of Ukraine's economy, strengthening state security and improving public health, as well as given the need to take urgent measures to comprehensively address the problems of this area, reform should include financial, economic, organizational and managerial, normative – legal aspects and mechanisms of optimization of accounting of expenses of activity of medical institutions.

## Conclusions

The urgent need in modern conditions is to reform the public sector of the economy. The reform also envisages changes in the methodology of accounting, the introduction of management accounting, the transformation of accounting in Ukraine to international practice as a whole and in terms of objects of accounting. That is why in the public sector of Ukraine and in medical institutions the National Accounting Regulations have been introduced, the Chart of Accounts has been updated, the accounting terminology of budget accounting and the accounting methodology have been changed.

In order to avoid misuse of funds and the most accurate detection of errors, it is necessary to strengthen the internal control and responsibility of officials for preventing violations in the accounting of expenditures of the medical institution according to their actual assessment. Thus, the improvement of theoretical and practical principles of accounting for non-financial assets should be carried out in the direction of expanding its management capabilities, adapting as much as possible to practical needs arising in the process of making management decisions on fixed assets and their efficiency.

The main ways to improve the organization of accounting in medical institutions is the rationalization of each form of documents and registers of accounting, and methods and methods of collecting, processing and summarizing accounting information, adapted to modern conditions.

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### KSIĘGOWOŚĆ I KONTROLA W INSTYTUCJACH MEDYCZNYCH ORAZ KIERUNKI ICH DOSKONALENIA

**Streszczenie.** Krajowy system rachunkowości w sektorze publicznym musi spełniać globalne wymagania dotyczące przejrzystości informacji. Rachunkowość powinna stanowić analityczne wsparcie procesów decyzyjnych w systemie administracji publicznej i samorządu lokalnego (terytorialnego). Ma to pozwolić na wykorzystanie informacji księgowych do oceny efektywności placówki medycznej. Jest to możliwe dzięki modernizacji rachunkowości instytucji budżetowych i jej harmonizacji ze światowymi standardami. Baza materialno-techniczna placówek medycznych, a także zakrojone na szeroką skalę działania z zakresu medycyny publicznej (np. zwalczanie gruźlicy, nowotworów, AIDS, COVID-19) w zakresie badań i rozwoju powinny być finansowane z budżet państwa w ramach realizacji państwowych programów celowych dla zapewnienia źródeł środków na realizację planowanych działań. Głównymi sposobami usprawnienia organizacji księgowości i kontroli w placówkach medycznych są racjonalizacja dokumentacji i rejestrów księgowych oraz metody zbierania, przetwarzania i podsumowywania informacji księgowych, dostosowane do współczesnych warunków.

**Słowa kluczowe:** rachunkowość, kontrola, placówki medyczne, usługi medyczne, ochrona zdrowia, koszty