

# OPTIMISATION OF FINANCING AND INSURANCE MECHANISMS IN THE HEALTH CARE SYSTEM IN THE CONTEXT OF EUROPEAN PRACTICE

Corina CĂUŞAN<sup>9</sup>

Svetlana GOROBIEVSCHI<sup>10</sup>

## Abstract:

**Actuality.** The concept of the medical system and its systemic approach, analysis of the financing of the health system, etc. - constitute important categories in the study of health services. At the moment, the overall analysis proves that the current financing mechanism is becoming insufficient, and the medical insurance companies declare themselves dissatisfied with the function they perform, respectively, the process of resiliency of the medical system is impossible. These circumstances suggest that the financial management of the health system requires conceptual changes. In the context of the accession of the Republic of Moldova to the EU, public policies and mechanisms for financing and ensuring the health system become particularly current, together with the medical normative acts, which require the revision of the health protection system.

**The objective.** It consists in the resilience of the national public health financing model in the Republic of Moldova through the thorough analysis and synthesis of existing scientific concepts and practices in the world and their adaptation to the national medical culture.

**Research methods.** In order to achieve the stated objective, the authors documented themselves, performed the selection and bibliographic synthesis of information from national and international medicine. Graphical, tabular and comparative analysis methods were used for visual and representative interpretation. Grouping, synthesis, induction and deduction methods were used.

**Results.** Although none of the existing global public health financing models can claim to be universal, analyzing the weaknesses of different public health financing models and the experiences of their use in certain countries have been essential in formulating the optimal model for the Republic of Moldova, which claims to join the EU. The optimal variant of resilience of the medical financing system in the Republic of Moldova is argued to be: completing the Bismark system with elements of the Semashko system. The argumentation of this model emerged from the functional-structural approach and the dialectical interrelations between the functions of the system and the structure of the studied object - the health and social protection system created.

**Originality.** The study of the strengths and weaknesses of each model and the specific experiences of the selected countries was of key importance in formulating the conceptual aspects of financial management in public health. The authors performed a complex analysis of different health systems from different countries of the world and the Republic of Moldova, determining the opportunities and criteria for improving the system of local medical services. The relevance and variability of the obtained results allowed the authors to formulate the essential theoretical and practical foundations in the field of public health and to argue the option of a more efficient financing mechanism for this field in the Republic of Moldova.

**Keywords:** public health, health protection, health systems, public health financing models, health system resilience.

**JEL classification:** A10, A1, H5

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<sup>9</sup> University of European Political and Economic Studies "Constantin Stere" (USPEE), Chisinau e-mail: [kausankorina@gmail.com](mailto:kausankorina@gmail.com).

<sup>10</sup> USPEE, Chisinau. Email: [gsvetic@gmail.com](mailto:gsvetic@gmail.com). ORCID: <https://orcid.org/0000-0003-4600-881X>.

## 1. Introduction

Globalization processes that take place in modern conditions make it possible to develop effective mechanisms of state influence aimed at the development of regions. Important experience has been accumulated worldwide in the training sector and funding models in the context of public health. Many countries are striving to expand free health care coverage, optimize funding sources, in order to increase efficiency. The planning and financing of medical institutions is of exceptional importance for improving the forms and methods of managing the financing and insurance mechanism in the health system, as well as for improving the efficiency of medical institutions. In fact, healthcare is a branch of the country's national economy. Planning also ensures the proportional development of healthcare institutions, eliminates disproportions in providing the population with medical personnel, beds, equipment, improving management forms and methods. All this allows the labor force to fully fit into its function and, at the same time, will allow it to increase labor productivity. The security of modern planning in the medical system, under the conditions of the transition to the principles of the market economy, loses its mandatory functions, acquiring more and more a recommendable character, based on the function of forecasting, which elaborates various types of public health protection programs and the environment. The way of organizing production and human life in space is one of the attributions of a state, aimed at preserving the community and the working capacity of the habitat. However, the choice of the regional development objective and the way to achieve its strategic directions, each country determines it individually, because there are differences in the socio-economic development of the regions. It should be noted that many countries use the principle of decentralization of power. These are mainly functions related to the social sphere: public utilities, medical assistance, education, etc. These are mainly functions related to the social sphere: public safety services, health services, education, etc.

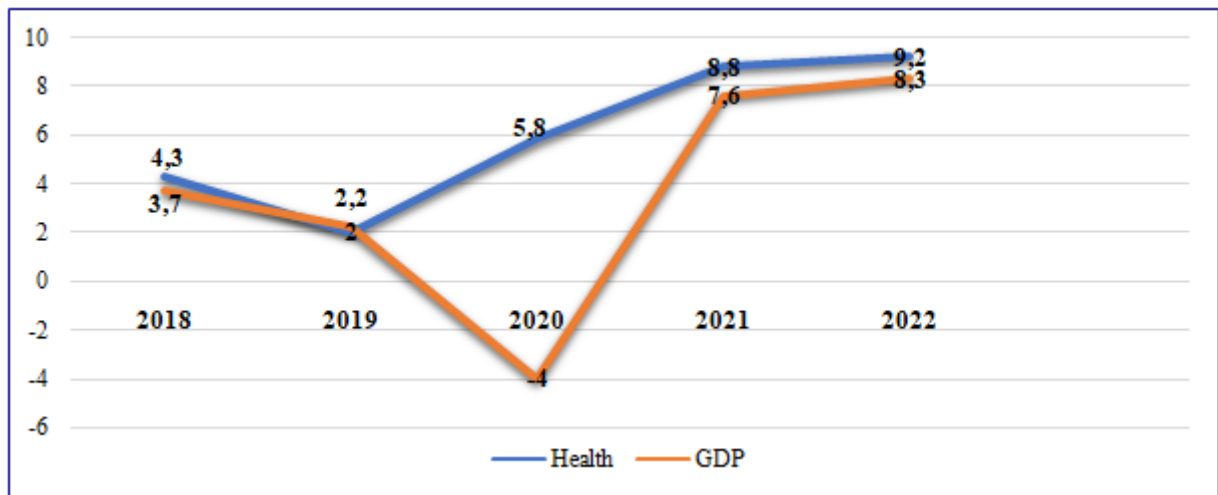
A coherent health services market was created in the Republic of Moldova. The introduction of compulsory healthcare insurance, despite the difficulties, contributes to the safety of the healthcare system in an unstable economic situation. Mandatory Medical Insurance Funds ensure the collection and accumulation of insurance contributions and payments, their intended use for financing medical assistance for Moldovan citizens. The new system ensures the provision of a minimum of free medical assistance within the territorial programs of compulsory medical insurance, allows the establishment of non-departmental quality control of the medical and diagnostic process, to begin the restructuring of medical assistance, in accordance with the needs of the population to move to a more rational use of resources within medical (IM) and preventive (IMP) institutions.

The facts prove that the functioning of the mandatory health care insurance system has qualitatively changed the system of financial relations between the state and medical institutions.

The recent prosperity on a global scale is one of the causes of the problems faced by governments in the field of health insurance: as countries develop economically, the population tends to spend an increasing part of the GDP on health services. Figure 1 shows the percentage of GDP withdrawals for the years 2018-2022.

The authors mention that the higher the GDP withdrawals, the higher the quality of medical services, having a primary impact on public health and quality of life.

In the opinion of Cristina Copăceanu, it is mentioned that, «The increasing expectations affect the general level of demand for medical services, but also their structure, everywhere in the world the reforms in the field of health, however, are particularly complex. Financing the health care system has become a major problem, and the search for more effective tools and techniques is something characteristic of most health care systems both nationally and internationally»[1,p.8].



**Figure 1. Real annual growth in health expenditure per capita and GDP, in European middle-income countries, 2018-2022[11,13].**

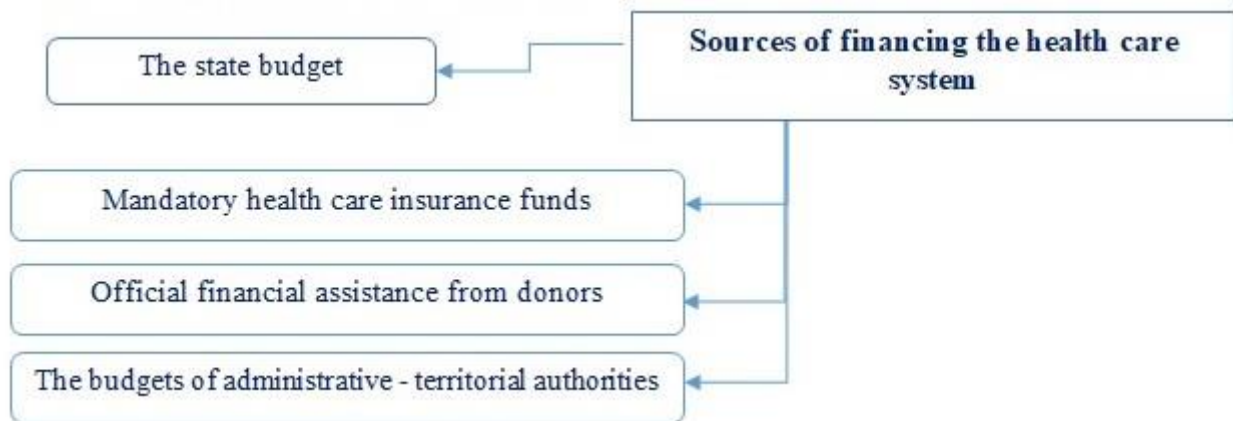
Source: [www.numbeo.com/health-care/rankings\\_by\\_country.jsp?title=2022-mid&region=150](http://www.numbeo.com/health-care/rankings_by_country.jsp?title=2022-mid&region=150)

<https://www.numbeo.com/health-care/>

It should be mentioned that the authors analyzed various theoretical-methodological views regarding the nature of the financing mechanism of the health care system. Thus, the approach to the notion of financing mechanism is related in correlation with the concept of financial mechanism which, in specialized literature, is treated as a much broader category.

The authors agree with the opinion of Cristina Copaceanu, "The financial mechanism represents a system of managing financial relations by the bodies with financial functions by means of financial levers, instruments and methods, based on the economic laws and normative acts of the state"[1, p.9], with which the authors of the article generally agree.

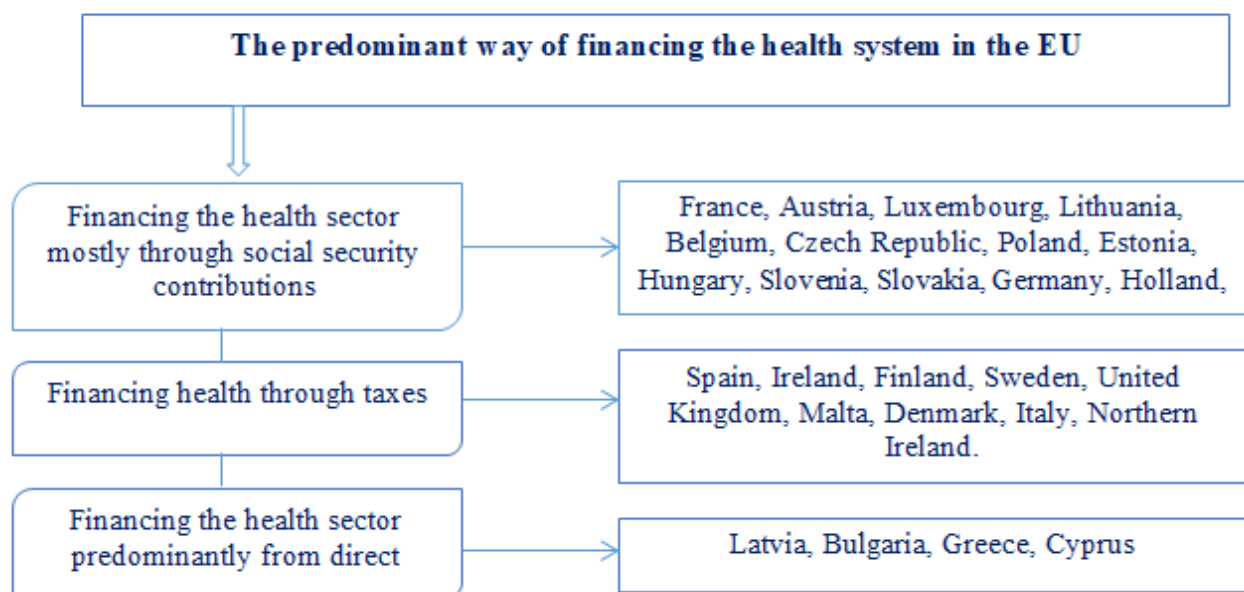
But, in order to identify the opportunities to make the financing mechanism of the health system more efficient and to confirm definitively the opinion of the scholar, it is proposed to study the financing systems in the European Union, fig.2.



**Figure 2. Sources of financing the health care system**

Source: developed by the authors

As we see from fig. 2, the health financing mechanism represents a combination of public and private resources. Since public spending cannot increase significantly in the future due to high public deficits, the main challenge for policymakers is to bring more money into the system from private sources. Another important aspect in the financing mechanism of the health care system is its financing sources, which are represented in figure 2.



**Figure 2. Classification of countries according to the method of financing the health system**

*Source: developed by the authors*

- The participation rate of the institution and the employee is political dependence of the executive and the economic potential (additional resources);
- Insurance contributions are collected by CNAS, an institution independent of the government;
- Health policies are established by the Ministry of Health and the Insurance Companies;
- Insurance companies select the models for providing health services, payment models, conclude contracts with hospitals, polyclinics, medical offices.

The second model, known as the Bismarck model, is often defined as a regulated health insurance system. It is based on the principles of a mixed economy, combining a market for medical services with a developed system of state regulation and social guarantees. Compulsory health insurance programs cover all or almost all of the population, and the state co-finances the insurance funds. As in the budget model, the state covers more than 70% of the costs of medical services, but total public expenditure on medical services tends to be somewhat higher than in the budget model, already reaching 9-13% of GDP. The decisive role in the distribution of funds is played by non-profit or for-profit private insurance funds or companies, the role of the market in meeting the needs of the population in terms of medical services is high, and patients have considerable freedom in choosing insurance companies and providers of services. The form of management of health services within the social insurance model can be described as decentralized, as a result of the large number of actors on the insurance market.

**Table 1.*****The advantages and disadvantages of the Bismarck system***

<b>Advantages of the Bismarck system</b>	<b>Disadvantages of the Bismarck system</b>
1. Health programs in accordance with policies in the field	1. High administrative costs
2. Personalized, stable transferred funds	2. Health services are for: - insured persons - disadvantaged groups
3. Allocate health services according to need	3. Cost control of health services with execution
4. Supports the rights of the insured	
5. Cash flows visible on the components of the system, and the provision of services performed have an efficient and timely model	
6. Reduce "good risks" with "bad risks"	

*Source: developed by the authors*

The model, known as the Beveridge model, is characterized by a significant role of the state. Tax revenues are the main source of financing. Health services are provided free of charge to the entire population. The share of total expenditure from public sources in GDP is usually 8-11%. Private insurance and co-payments play a complementary role.

The main way of financing is the state budget. Health service providers receive funding from the budget under the control of private management companies.

The role of the state is both to acquire and to provide services, ensuring that the majority (70% and above) of health care costs are covered. The management of the healthcare system is highly centralized. Most health services are provided by public hospitals and private doctors, but the market tends to play an ancillary role.

The state authorities strictly control most elements of the market of medical rights and services, establish the conditions of admission and access to the market, set the compensation lists and guarantee the control over the volume of medical services through the tariff and price policy. The quality of health services is controlled by professional medical organizations in the form of authorization of medical institutions and licensing of doctors. The level of co-payments under such a system is insignificant.

***The Beveridge National Health System has the following characteristics:***

1. Source of financing through taxes, general charges - public budget
2. Operation: - the government is the payer of health services - the budget (global income) is: divided, distributed according to destinations, according to criteria of social importance (according to education, health, defense, public order) - the amounts due to the Ministry of Health are distributed on administrative areas. The Beveridge National Health System has the following advantages and disadvantages are reflected in Table 2.



**Table 2.****Advantages and Disadvantages of the Beveridge healthcare system**

<b>The advantages of the Beveridge system</b>	<b>Disadvantages of the Beveridge system</b>
1. Health programs in accordance with policies in the field	1. Waiting lists for the staggered payment of therapeutic acts, for diseases and categories of patients
2. Payment of the service is made after the administration of the therapeutic act	2. The medical staff has no incentives and is not motivated
3. Risk groups have priority	3. Cost control of health services with execution

*Source: developed by the authors*

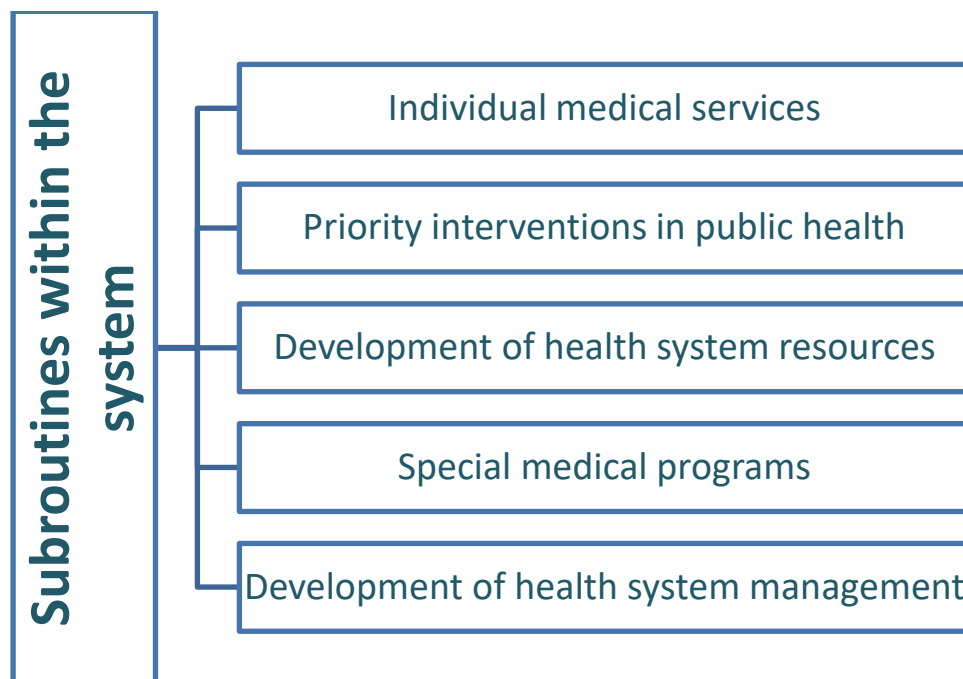
European countries where the Beveridge system works: Great Britain, Sweden, Norway, Iceland, Finland, Denmark, Greece, Italy, Portugal, Spain.

The centralized Semasko-type health insurance system still works in countries that had a centralized economic system in Central and Eastern Europe.

The characteristics of the Semasko system are expressed through the source of financing: taxes, general fees that form the state budget, and the control of the sale-purchase process is done at the territorial level through centralized programming and staged execution. The author reflects that access to medical services seems free, but it is erroneous (it is not paid by the patient). If we talk about the medical staff that they are not motivated, they do not obtain additional data through work and the competition is absent, so this means that the system is also ineffective. The author mentions that the quality of the therapeutic act is affected by financial insufficiency and lack of motivation. Bârliba, I. (2008), Georgeta Sinitchi, (2008), emphasizes, "The health system in Romania is the modified revision of the Bismarck model, having influences of the model of Semasko and Beveridge"[1, p.9]. After the accession of the Republic of Moldova to the EU, it is necessary to implement a solidarity mechanism, according to which health cannot be abandoned to market mechanisms. The predominant way of financing the health system in the Republic of Moldova is reflected by the financing of the majority health sector through social insurance contributions. The basic idea of the health system in the Republic of Moldova is the creation of a basic package of medical services, established by a framework contract concluded between the medical units and CNAM (German model, BISMARCK. but it must be refined, having also components of other systems of financing in our country, a system of financing the medical act composed of public and private resources will be created, which will be based on equal opportunities for medical services and ensuring social equity in the issue of payments for services provided.

In the case of the Republic of Moldova, the main private resources must be private health insurance and co-payments. Studying the funding sources of the health care system allowed the identification of the expenses of this system. Therefore, the main share of the amount of financial resources, intended to finance the sub-programs in the health sector, annually, belongs to the means transferred from the state budget, which constitutes 58% (2022), followed by the compulsory medical assistance insurance premiums in percentage size and those in fixed amount (40%). The budgets of the administrative-territorial units contribute 2-3% of the sector's financial resources. Currently, the per capita expenditures in health do not exceed 230 euros, while in neighboring countries they are 3-4 times higher, and the average in the EU is 15 times higher. The sources of financing the health care system require radical changes, this has also been proven by the pandemic period. The systems were not ready to reflect correct algorithms of coherent healthcare. The negative was the loss of wills, and its impact on life expectancy and quality.

Currently, the health care system is represented by the general program Public health and medical services, which includes 5 subprograms, reflected in figure 3.



**Figure 3. The subprograms identified within the healthcare system in the Republic of Moldova**

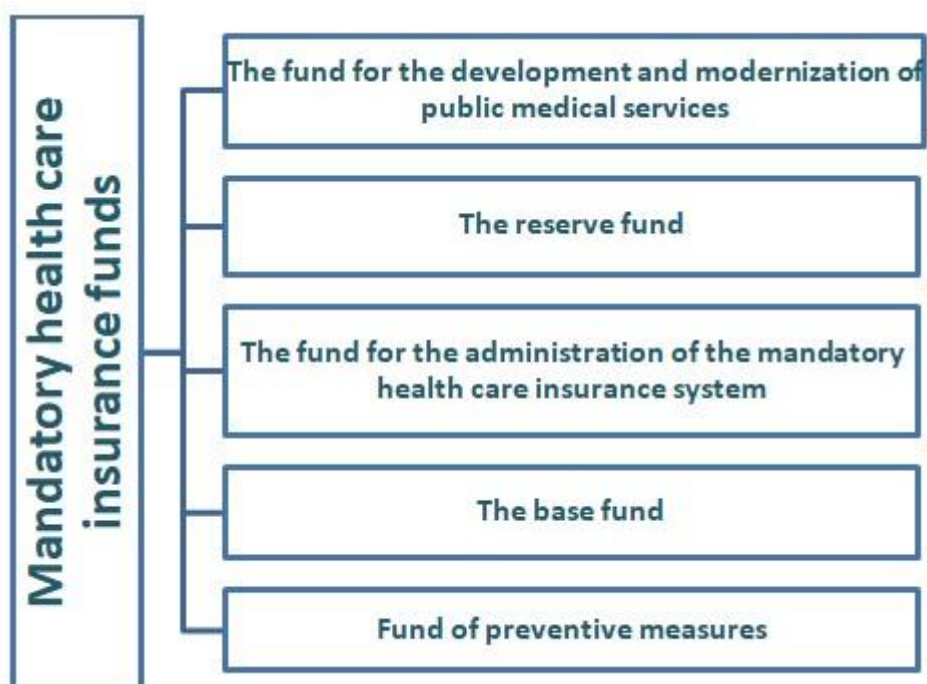
Source: developed by the author, [10].[www.cnam.md](http://www.cnam.md)

The health care system is manifested as a system of state and public, socio-economic and medical measures aimed at preventing and treating diseases, improving the external environment, improving people's living and working conditions, preserving and strengthening the health of society and of each of its members to further reduce morbidity, disability and mortality. At the same time, the current state of health care, in the conditions of the spread of epidemic diseases, is characterized by the insufficient supply of resources, the low efficiency of health care institutions, the inadequate quality of health care against the background of the high supply of the population with medical personnel and beds of hospital.

The growing interest in the economic problems of medical care and their characteristics in recent years is explained by the fact that health is becoming an increasingly valuable factor in the life and well-being of society, and the prevention and treatment of diseases is becoming more and more expensive. In this sense, the ongoing reform of public health (medical assistance) aims to introduce economic methods of managing medical assistance in the Republic of Moldova under the conditions of the existence of different forms of ownership. The task of the contemporary economy of public health is to formulate such a system of knowledge that focuses on the full satisfaction of this need at an acceptable level of funds allocated by society for the development of health protection and the medical care system.

Health insurance is a way, by which many of the countries with medium or high incomes cover a significant proportion of their expenses in the health care sector. Based on the analysis of international practice, it was determined that there are two major types of health insurance: social insurance, respectively, private insurance.

In the case of the Republic of Moldova, the main private resources must be private health insurance and co-payments. In the Republic of Moldova, the form of private medical financing is at an early stage, but this does not mean that it should not be developed. The purpose of the formation of medical insurance allocations is oriented towards increasing the quality of medical services. The funds of the mandatory medical assistance insurance are reflected in fg.3.



**Figure 4. Funds of the mandatory medical assistance insurance in the Republic of Moldova.** Source: developed by the author based on CNAM information, 2023,[10],[www.cnam.md](http://www.cnam.md) (visited 22.05.2023)

The authors are of the opinion that no matter how important the factors dependent on the hospital environment, the way of organization and the quality of medical services are, we cannot deny the importance of prophylactic factors and the permanent care of citizens until the moment of illness. This modality is paramount in the context of health.

**Results** The funding models presented also require the elucidation of advantages and disadvantages. In this sense, they were studied by the authors to evaluate which financing system is more effective for the healthcare system in the Republic of Moldova. «Most health systems in Europe use a mix of revenues for the sustainable financing of services. Even if the difficulty of the choice does not lie in choosing one type of financing or another, but rather in identifying an optimal mix, adapted to the socio-economic particularities, it is important to know the advantages and disadvantages of different systems of financing health expenses»[2,p.118].In conclusion, analyzing the financing aspects of the health systems in the experience of developed countries, we will specify, basically, the health systems are influenced by Europeanization and, in general, by the internationalization of economic, social and political life.

Health systems are defined by the dominant mode of financing, and those used in Europe are the following: the Bismarck system, the Beveridge-type national health system, the Semasko-type centralized health insurance system, the private health insurance system. In our country, a system of financing the medical act composed of public and private resources was created, in order to be based on equal opportunities for medical services and to ensure equity in the issue of payments for the services rendered. The authors mention that each state in Europe has developed its own financing mechanisms. And in this context, we conclude that all systems rely on a combination of funding sources, but most of them are controlled by the state (directly or indirectly). “Under the current conditions, a mixed Bismark-Semaško health care budget-insurance model operates in the Republic of Moldova, which requires certain additions and optimizations” [9,p.94].

## Conclude:

1. Health systems in the European Union are financed by public contributions and direct contributions. The main objective of the systems is extended by methods: to distribute the costs of



health services between sick and healthy people, totally moderate the costs according to the resources available to each state.

2. No health system is exclusive to the state, and Primary Health Care combines private liberal medicine with public medicine in most European Union countries.

3. The countries of the European Union have a consensus, a mechanism of solidarity according to which health cannot be abandoned to market mechanisms.

4. In the case of the Republic of Moldova, the main private resources must be private health insurance and co-payments. In our country, a system of financing the medical act composed of public and private resources will be created, which will be based on equal opportunities for medical services and ensuring equity in the issue of payments for services provided.

5. The most important factor of the sustainability of the systems is the coverage of the population with free medical services and the absence of duplication of expenses, the efficiency of spending resources and the accessibility of medical services.

6. In the contemporary conditions of rapid changes in health care management, the financing mechanism of the health care system requires a redefinition, which in the author's opinion reflects the set of actions to ensure, distribute and control financial resources for a long-term perspective, based on contributions, taxes and co-payments, which will contribute to the achievement of the strategic objectives of the medical service providers. These ways of financing the health care system are used by most European countries and are accepted by the author as positive.

7. No country can meet all health care needs from public funds without private insurance and/or co-payments.

8. In modern conditions, the economy of the health care system, aims to perform economic analyses, planning, and forecasting of medical assistance. The analysis of each health program involves the disclosure of the economic content and its purpose, the determination of the effectiveness - the costs and results of the medical service system (the cost of medical care, the prevention of economic damage caused by morbidity, accidents, disabilities, mortality, etc.).

9. The relationship between the economy and health requires a developed health system, by becoming an organic part of the country's economy, providing direct intangible benefits and satisfying the most important needs of the population and their families.

10. "The optimal variant of the resilience of the medical financing system in the Republic of Moldova is argued to be: the completion of the Bismark system with elements of the Semashko system" [9,p .94].

## Bibliography

1. Copaceanu, C. (2015) *Eficiența mecanismului de finanțare a sistemului ocrotirii sănătății în Republica Moldova*. Autoreferatul tezei de doctor în științe economice, Chișinău: ASEM, 35 p.
2. Bârliba, I., Geo Sinitichi (2008) *Sisteme de finanțare, Practica Medicală-REFERATE GENERALE* (revistă) – Vol. 3, NR. 3 (11), Iași, 2008 p.116-120
3. Comisia europeană (CE). *Drepturile dumneavoastră de securitate socială în Germania*.  
[Disponibil la: http://ec.europa.eu/employment\\_social/empl\\_portal/SSRinEU/Your%20social%20security%20rights%20in%20Germany\\_ro.pdf](http://ec.europa.eu/employment_social/empl_portal/SSRinEU/Your%20social%20security%20rights%20in%20Germany_ro.pdf) (accesat la 13.02.2023)

4. Doboș, C. (2008) *Finanțarea sistemelor de sănătate în țările Uniunii Europene. România în context European. Calitatea Vieții, XIX* (1-2), p. 107-123.
5. Perrot, A (1995) – *Ouverture a la concurrence dans les reseaux – Rapproche strategique de l'economie de reseaux*, Rev. Economie et Previsions, no. 119.
6. Pineault, R., Daveluy, C., (1995) – *La planification de la sante: concepts, methodes, strategies*, Editions Nouvelles.
7. Organizația Mondială a Sănătății (2000) – *Raport asupra stării de sănătate mondială, 2000. Sistemele sanitare: îmbunătățirea performanței*, Geneva: OMS.
8. Robinson, R. (1993) – *Economic Evaluation and Health Care – Cost and cost-minimization analisys*, BMJ, 307: 726-728.
9. Caușan, C., Gorobievschi, S., Radu, G., (2023) “Criterii și metode de poziționare a țărilor lumii după dezvoltarea sistemelor de sănătate”, *One Health & Risk Management* , p. 94. Available at: <https://journal.ohrm.bba.md/index.php/journal-ohrm-bba-md/article/view/552> (Accessed: 10.10.2023).
10. [www.cnam.md](http://www.cnam.md) (accesat la 22.05.23)
11. [www.numbeo.com/health-care/rankings\\_by\\_country.jsp?title=2022-mid&region=150](http://www.numbeo.com/health-care/rankings_by_country.jsp?title=2022-mid&region=150)
12. <https://www.numbeo.com/health-care/>
13. [https://www.numbeo.com/health-care/indices\\_explained.jsp](https://www.numbeo.com/health-care/indices_explained.jsp)