

SUSTAINABLE FINANCING FOR THE HEALTH SECTOR: BUILDING A RESILIENT HEALTHCARE SYSTEM

Victoria IORDACHI, PhD in economics,
National Institute for Economic Research, Academy of Economic
Studies of Moldova

E-mail: timush_v@yahoo.co.uk

ORCID: <https://orcid.org/0000-0002-9176-3729>

Stela CIOBU, PhD in economics, associate professor,
Academy of Economic Studies of Moldova

E-mail: ciobu.stela@ase.md

ORCID: <https://orcid.org/0000-0002-2542-0955>

DOI: <https://doi.org/10.36004/nier.cecg.III.2024.18.10>

Abstract. Sustainable financing of the health sector is an essential pillar for ensuring a resilient and affordable medical system in the long term. This article explores the multiple facets of sustainable financing, from securing adequate resources and using them effectively, to diversifying funding sources and promoting public health. The importance of equitable access to quality health care and innovative strategies to meet future financial challenges such as an aging population and expensive new medical technologies are discussed. Through an integrated and long-term approach, sustainable financing can transform health systems, contributing to improved population health and economic stability. The Republic of Moldova, a country with different dimensions and resources compared to European states, faces multiple challenges in ensuring access to quality medical services for its citizens. In this context, it is essential that the Republic of Moldova adopts sustainable financing policies that respond to its specific needs and support the development of a resilient medical system. The article analyzes concrete measures and international best practices that can be adapted and implemented in the Republic of Moldova to optimize available resources and ensure efficient and quality medical services. Through a well-founded and future-oriented strategy, the Republic of Moldova can build a health system capable of facing current and future challenges, thus ensuring the well-being and health of its population.

Key-words: Sustainable financing, Resilient medical system, Public health, Financial efficiency, Equitable access to health, Diversification of funding sources, Health policies, Investments in health system

JEL: H51, I18

UDC: 614.2

Introduction. Health systems around the world face a number of issues that underline the need for a sustainable approach:

➤ Increased pressure on resources: The COVID-19 pandemic has exposed and amplified the pressure on health systems, highlighting the lack of resources and rapid response capabilities. Hospitals and health centers were overburdened, highlighting

the need for constant investment and adaptive financial allocations to cope with future health crises.

➤ Inefficiency and inequality of access: Health systems are often characterized by significant inequalities in access to health services. Rural areas and disadvantaged communities are often underrepresented in access to quality care, and inadequate funding contributes to perpetuating this inequality.

➤ Rising costs: Healthcare costs are constantly increasing, especially in the context of an aging population and the emergence of expensive new technologies. Health systems face the challenge of finding the balance between providing quality care and maintaining financial sustainability.

➤ Climate change and the impact on health: Climate change directly and indirectly influences public health, contributing to the increase in the incidence of some diseases and the deterioration of living conditions. These changes impose the need for financing strategies that integrate adaptation and prevention measures in the face of the environmental impact on health.

➤ Innovation and digitization: Emerging technologies such as telemedicine and digital health solutions have the potential to transform healthcare, but require substantial investment and strategic financial planning. Implementing these solutions can improve access and efficiency, but involves significant financial and logistical challenges.

In this context, sustainable financing can not only transform and strengthen the health infrastructure, but also ensure the ability of this sector to respond effectively to emerging crises and to adapt health services to the ever-changing needs of society.

This paper explores the strategies and mechanisms through which sustainable financing can support the building of a resilient health system capable of meeting contemporary challenges and ensuring equitable access to quality health services for all citizens.

In an era marked by global challenges, such as the global COVID-19 pandemic, climate change, and world population growth, they put immense pressure on healthcare systems, amplifying the need for innovative and sustainable financial solutions. Thus, ensuring the financial sustainability of the health sector becomes not only a priority, but an essential necessity for building a resilient health system. Such a system can not only cope with external shocks, but also ensures equitable access to quality health services for all citizens.

In this context, sustainable financing can not only transform and strengthen the health infrastructure, but also ensure the ability of this sector to respond effectively to emerging crises and to adapt health services to the ever-changing needs of society.

The Republic of Moldova, having different dimensions and resources compared to European states, faces significant challenges in ensuring access to quality medical services for its citizens. In this context, it is crucial that the country adopts sustainable financing policies adapted to its specific needs in order to develop a resilient health system.

The article analyzes concrete measures and international best practices that can be adapted and implemented in the Republic of Moldova to optimize available

resources and ensure efficient and quality medical services. It also examines in detail what is involved in implementing sustainability in the health sector, including the financial, organizational and strategic aspects needed to support the development of a robust health system. Through a well-founded and future-oriented strategy, the Republic of Moldova has the opportunity to build a health system capable of facing current and future challenges, thus ensuring the well-being and health of its population.

Literature review. In the context of current challenges and emerging needs of health systems, academic literature and specialized studies emphasize the importance of sustainable financing and building a resilient health system. This section reviews relevant research on the need for sustainability in the health sector, as well as key aspects of funding. Different studies highlight the severe impact of the pandemic on global health systems, underlining their fragility and the need for sustainable financing policies. The crisis highlighted deficiencies in resources and infrastructure, emphasizing the importance of adequate financial reserves and long-term planning (Thomson et al., 2009). Thus, researchers and various specialists recommend investments in prevention, the creation of emergency funds and the development of rapid response plans to build more resilient health systems and able to face future crises (Debie et al., 2024).

Other studies provide a systematic review of inequalities in access to health services in low - and middle-income countries (LMICs), as influenced by factors such as income, geographic location and socio-economic status (Langlois et al., 2015). Disadvantaged populations, including those in rural areas and marginalized communities, have limited access to quality care, which contributes to health disparities (Riley, 2012). Thus, the authors emphasize that a lack of financial resources is a key factor in perpetuating these inequalities (Frazier et al., 2023). Limited funding leads to a lack of adequate infrastructure, a shortage of medical personnel and unequal access to medicines and treatments. These deficiencies affect the ability of health systems to provide equitable and quality care for all citizens. emphasizing the financial impact on equity in care.

Some authors suggest that in order to improve access to care, strategic interventions aimed at both increasing financial resources and optimizing their use are needed (Frazier et al., 2023). Policies should focus on developing health infrastructure in disadvantaged areas, training and retaining health personnel, and ensuring equitable distribution of resources (Ogugua, Olorunsogo, Muonde, Maduka, & Omotayo, 2024). At the same time, to address inequalities in access to health services, it is essential to develop and implement financing strategies that ensure the efficient and equitable allocation of resources. These strategies may include the creation of specialized funds for disadvantaged areas and the development of public-private partnerships to mobilize additional resources (Asamani, Alugsi, Ismaila, & Nabyonga-Orem, 2021).

Other studies analyze the impact of climate change on public health, highlighting how extreme climate events and environmental degradation affect the

health of populations globally (Costello et al., 2009). The authors argue that to meet these challenges it is essential to adopt sustainable financial strategies that integrate adaptation and prevention measures. Sustainable financing is presented as a crucial element in building resilient health systems able to cope with the effects of climate change, such as rising temperatures, floods and the spread of infectious diseases.

Papers that examine various innovative financing models to ensure sustainability in health systems deserve attention. Models analyzed include results-based financing mechanisms and resilience funds. The authors explore both the advantages and disadvantages of each model, discussing how these approaches can help optimize financial resources and improve the efficiency of health systems. Studies also provide recommendations for adapting and implementing these models according to the national context, emphasizing the importance of customizing financial solutions to meet the specific needs of each health system (Atun, Knaul, Akachi, & Frenk, 2012).

The existing literature highlights the importance of adopting sustainable financing policies to build a resilient health system. The studies highlight that to meet current and future challenges, it is essential to integrate financing strategies that address both inequalities in access to services and the impacts of climate change and emerging technologies. The implementation of innovative and adaptable financing models can contribute to the creation of an efficient and equitable health system, capable of responding to the needs of the community and ensuring the well-being of the population.

Research methodology. A variety of research methods have been used in the development of this article to ensure a comprehensive and rigorous approach to the topic, facilitating robust conclusions and relevant recommendations. Thus, by means of content analysis, relevant information from documentary sources and specialized literature was investigated and synthesized. The comparison served to highlight the differences and similarities between the different models and practices in financing health systems. The explanatory method was used to interpret and explain the reasons and consequences of various aspects of health financing. At the same time, the method of data interpretation and description was used.

Main results. Reconfiguration of Health System Financing in the Context of Global Sustainability. In the current global context, ensuring the sustainability and efficiency of medical services is an urgent priority. The Sustainable Development Goals (SDGs) of the United Nations (UN) have positioned health at the center of the agenda, highlighting the need for universal access to quality medical services. To achieve these goals, it is crucial to reconfigure the financing of the health system, taking into account the influence of socio-demographic and environmental factors. Thus, universal access to quality medical services is one of the fundamental pillars of the Sustainable Development Goals (SDGs) and implies the implementation of appropriate policies and strategies regarding the financing of the health system. The experience of some countries that have managed to move in this

direction can provide valuable guidance for other states in the process of reconfiguring their health system financing. A notable example is that of Nordic countries such as Norway, Sweden and Denmark, which have implemented predominantly publicly funded universal health insurance systems. These countries have succeeded in ensuring universal access to quality health services through efficiently managed health funds that cover a wide range of health services, from primary care to complex treatments.

Canada's universal health insurance system is another relevant example. It is based on the principle of equal access to medical services for all citizens and permanent residents, with majority public funding and administration at the provincial level. Although it faces some challenges, such as waiting times for certain procedures, the Canadian health care system has been able to provide extensive medical coverage and treatment for a wide range of conditions.

On the other hand, there are also examples of countries that have adopted hybrid models of financing the health system, where the public and private sectors cooperate to ensure universal access to health services. For example, in European countries such as the Netherlands and Switzerland, compulsory health insurance is managed by private entities but regulated by the state to guarantee universal coverage and access to essential medical services.

Reducing health disparities is another pillar of health policies in the current global context. Reconfiguring the financing of the health system can play a significant role in reducing discrepancies in access to health services between different socio-economic and geographic groups.

The experience of countries that have addressed these disparities through specific policies and initiatives can provide valuable lessons for other states.

In Nordic countries such as Sweden and Finland, social and health policies focused on equality of opportunity have helped reduce health disparities. These countries invest in social inclusion programs, education and affordable housing, which has a positive impact on the health of the population, especially those from disadvantaged groups.

In addition to specific policies, collaboration between the public and private sectors can also play an important role in reducing health disparities. For example, public-private partnerships for the provision of health services in marginalized communities can ensure access to quality health care for disadvantaged groups.

Promoting sustainability in the health system is essential to ensure continuous and quality delivery of health services, avoiding excessive financial pressures and dependence on uncertain sources of funding (Gera, Narwal, Jain, Taneja, & Gupta, 2018).

The experience of countries that have implemented effective policies and strategies in this regard can provide valuable guidance for other states in their efforts to ensure sustainable financing of their health system.

A notable example is that of Nordic countries such as Norway and Sweden, which have adopted models of health care financing based on taxes and social contributions. These countries are constantly investing in human resources and

medical infrastructure, thus ensuring the provision of quality medical services in the long term. Moreover, they encourage innovation and research in the field of health, promoting the development and implementation of new medical technologies and practices, which contributes to increasing the efficiency of the health system (Perera, 2021).

In New Zealand, the government has placed particular emphasis on ensuring sustainable financing of the health system through efficient resource allocation and cost management policies. For example, a medical technology and drug assessment framework has been adopted to ensure judicious use of resources and avoid excessive expenditure (Roemer, 1993).

In Singapore, the healthcare system benefits from a mixed funding model involving individual and government contributions. Over the years, the Singapore government has implemented health savings and investment policies such as "MediSave" and "MediShield Life", which allow citizens to save for future medical costs and provide coverage against major financial risks associated with medical care (Roemer, 1993).

In conclusion, promoting sustainability in the health system requires the implementation of effective policies and strategies for financing and resource management. The experience of various countries in this area can provide models and examples of good practice for other states in their efforts to ensure a sustainable and quality provision of health services.

Various measures can be adopted to reconfigure health system financing in line with the Sustainable Development Goals (SDGs). Thus, the ways of reconfiguring the financing of the health system in the context of the SDGs can be mentioned:

1. Investments in Prevention and Health Education represent an effective strategy for reconfiguring the financing of the health system in the light of the SDGs, having a positive impact on the health of the population and on the costs associated with medical care. Therefore, the instruments by which the financing system can be reconfigured are:

➤ Reducing avoidable diseases: Investing in prevention programs, such as vaccinations, screening for chronic diseases and promoting a healthy lifestyle (eg: balanced diet, regular physical activity), can help reduce avoidable diseases and their complications. For example, Nordic countries such as Denmark and Finland have implemented school-based health education programs that promote healthy eating and physical activity for young people, thereby reducing the risk of obesity and chronic disease among adults.

➤ Increasing investments in prevention activities: Investments in prevention can reduce costs related to the treatment of diseases. For example, vaccination against infectious diseases can prevent outbreaks and reduce the costs associated with treating and managing these diseases. Another effective strategy is screening for early detection of diseases such as cancer and diabetes, which allows for early interventions and appropriate treatment, thereby reducing long-term treatment costs.

➤ Mental health promotion: Investments in mental health programs and the promotion of mental well-being can reduce the costs associated with the treatment of

mental disorders and improve the quality of life of the population. For example, New Zealand has implemented counseling and support programs for young people and adults, which have reduced suicide attempts and lowered costs associated with the treatment of mental disorders.

➤ Improving the quality of life: Investments in health education can improve the quality of life of the population by promoting healthy behaviors and adopting a balanced lifestyle. For example, Sweden has implemented workplace health promotion programs that have reduced absenteeism and increased employee productivity, thus contributing to economic growth and improved population health.

2. Extending Health Insurance Coverage: It is a crucial measure for reconfiguring the financing of the health system in accordance with the principles and objectives of the SDGs. This strategy can ensure access to essential health services for all members of society and help increase the coverage and effectiveness of the health system. Thus, systems that provide universal health insurance guarantee access to medical services for all citizens of a country, regardless of their socio-economic status. A notable example is the UK's healthcare system, known as the National Health Service (NHS), which provides free or low-cost healthcare to all its residents. This approach ensures extensive and equal coverage for all citizens, helping to reduce health inequalities. Also, in some countries, the social insurance system is used to provide medical coverage. For example, in Germany, the social insurance system (Gesetzliche Krankenversicherung - GKV) provides health insurance for the majority of the population. Employers and employees contribute to the insurance funds, and the government covers the costs for those who cannot pay the insurance premiums. This system ensures access to basic and specialized medical services for the majority of German citizens. In recent years, some countries have taken steps to expand health insurance coverage. For example, in the United States, the Affordable Care Act (Obamacare) expanded access to health insurance for millions of Americans through the insurance exchanges and Medicaid expansion. While this system has encountered some criticism and implementation issues, it has helped reduce the number of people without health insurance and increase access to health care for vulnerable populations (Mayes & Berenson, 2008). Expanding health insurance coverage is therefore a key measure for reconfiguring health system financing in light of the SDGs, providing access to essential health care for all members of society and contributing to reducing health disparities.

3. Improving the Efficiency and Transparency of the Health System: Implementing effective management practices and rigorous monitoring of expenditures can contribute to more efficient use of resources and reduce the risk of corruption and abuse. The instruments by which the financing system can be reconfigured are:

➤ Implementation of effective management practices: An effective administration of the health system can reduce the waste of resources and improve the quality of medical services. For example, Iceland is recognized for the efficient use of its limited health resources by implementing systems to manage costs and allocate resources according to the needs of the population. Rigorous monitoring of

expenditures: Careful monitoring of expenditures can help identify and eliminate inefficiencies in the health system. For example, in Australia, the Australian Health and Welfare Authority constantly monitors and evaluates the performance of the health system, identifying areas where savings and improvements can be made. The Netherlands is an example of a country that has managed to improve efficiency and transparency in its healthcare system. Through integrated IT systems and rigorous monitoring of the performance of medical institutions, the Netherlands has managed to reduce costs and improve the quality of medical services.

➤ Combating corruption and abuse: Transparency in the financing and management of the health system can help reduce the risk of corruption and abuse. For example, Norway is recognized for a transparent and well-managed healthcare system, which has reduced the risk of corruption and improved trust in the healthcare system.

In conclusion, we mention that the reconfiguration of the financing of the health system in the light of the SDGs is essential for ensuring the sustainability and efficiency of medical services at the global level.

By addressing socio-demographic and environmental factors and adopting appropriate financing and management strategies, it is possible to achieve significant progress in achieving the goals of sustainable development in the field of health:

- This reconfiguration of financing is crucial to meet the growing needs of changing populations and to ensure universal access to quality health care.
- By adapting health systems to demographic and environmental developments, we can create a system that is more resilient and better prepared to face future challenges.
- Investments in prevention, education and health promotion can help reduce the burden on the health system and increase the quality of life for all citizens.
- By effectively managing resources and promoting transparency, we can ensure that every dollar invested in the health system brings maximum benefit to society.

Thus, reconfiguring the financing of the health system in accordance with the principles of the SDGs is a crucial step towards a future where health is a global priority and accessible to all.

Organization and financing of the healthcare system in the Republic of Moldova: major challenges. The organization of the health system in the Republic of Moldova focuses on two horizontal dimensions: the expansion of population coverage and the diversification of medical services included in the Single Program of Compulsory Medical Insurance.

However, development in the vertical direction has been neglected for a long time. An essential priority is the involvement of the population in the financing of the health system, by creating incentives in this regard. The national medical system faces multiple constraints, and one of the most significant is the provision of sufficient financial resources.

Since 2009, public spending on health has not grown at the same rate as the growth of the Gross Domestic Product (GDP). As a percentage of the Gross Domestic

Product (GDP), these expenditures have not undergone significant changes over the same period, with some fluctuations over the years, remaining around 6% in 2000 and reaching 5.4% in 2023. As a result, the commitment to allocate 12% of the government budget to health was never realized (Ministry of Finance, 2023). Government spending, after an initial increase in the first years of implementation of compulsory health insurance (AOAM), began to decline as a percentage of GDP, and the percentage of the government budget allocated to health was gradually reduced.

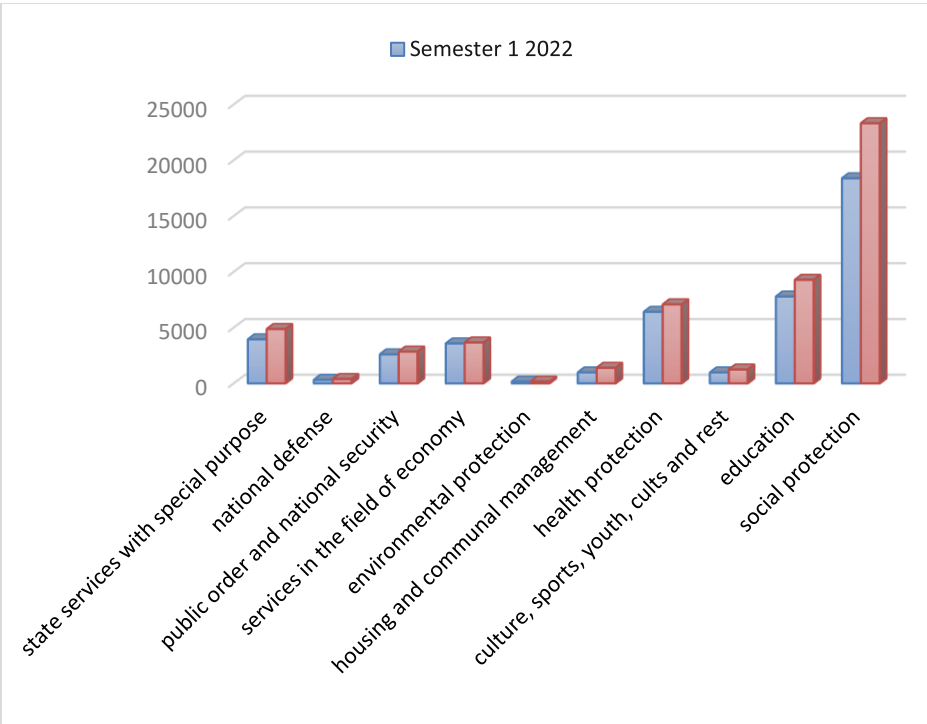


Figure 1. **The evolution of national public budget expenditures in the first semester of 2022 – the first semester of 2023 (by functional groups, million lei)**
Source: (Ministry of Finance, 2023)

From figure 1 we can see that in the first quarter of 2023, health expenses increased by 665.3 million lei, compared to the same period last year, amounting to 7076.0 million lei (Ministry of Finance, 2023).

In the Republic of Moldova, the term "health expenses" includes all funds used for the procurement of medical goods and services, whether provided by public or private institutions. These expenditures include both public and private funds, known as personal expenditures of the population. In the Republic of Moldova, in 2020, under the conditions of a share of public expenditures in GDP below 5%, out-of-pocket payments represent 31% of total health expenditures. Although these out-of-pocket payments have decreased from 47% in 2000, they remain significant in the total expenditure in the health sector, being well above the average of the European Union countries (15.5%), although in decline National Bureau of Statistics (BNS, 2022). Informal payments are widespread in the Republic of Moldova, and this aspect

reduces people's trust in the health system and increases the costs of medical services for beneficiaries.

The funds managed by CNAM (the National Medical Insurance Commission) face underfunding, which leads to limiting the access of public medical and sanitary institutions to resources for development and modernization. Currently, health insurance contributions in the Republic of Moldova are insufficient to cover the demand for medical goods and services.

The lack of clear criteria for the selection of medical service providers in the contracting process within the FAOM (mandatory medical assistance insurance funds) affects the quality of the medical services provided and the development process of these institutions.

Currently, about 1.6 million people (1,605,831 people) are insured by the state, of which (CNAM, 2023):

- 929 441 – children, pupils, students, residents
- 476 531 - pensioners
- 132,254 – disabled people
- 24 148 – people from disadvantaged families
- 16,476 – unemployed registered with the territorial agencies
- 18 327 – other categories

For the purchase of medical services, CNAM contracts, as a rule, about 455 medical institutions, including 357 public and departmental medical and sanitary institutions.

The main share in the total FAOM expenses in the reporting period is held by the basic fund, intended for the payment of medical and pharmaceutical services, in accordance with the concluded contracts - 98.7%, followed by the administration fund - 0.8%, the prevention measures fund - 0.3% and the public PSM development and modernization fund - 0.2% (situation of 2023).

The financial resources accumulated in the basic fund are used to cover the expenses necessary to implement the Single Program of Mandatory Medical Care Insurance (National Public Budget, 2023).

The financing of the Public Medical-Sanitary Institutes (IMSP) from the CNAM Development Fund is carried out annually on the basis of projects. These financial means are mainly used for the purchase of medical equipment, means of transport, the implementation of new heating technologies, treatment of medical waste, water supply and hygiene, the modernization and optimization of buildings and infrastructure, as well as the implementation of information systems and technologies.

From the state budget, the most is spent on the following areas (situation in 2023) (National public budget, 2023):

- Branch development programs - 1,428.5 million lei
- Current maintenance of budgetary institutions - 788.2 million lei
- Implementation of capital investment projects - 84.9 million lei
- Research, development and innovation projects - 46.5 million lei

Also, the lack of a developed private health insurance system and an adequate legislative framework to stimulate it are major challenges to a significant improvement of the health system in line with Western models.

The alarming situation of the infrastructure and equipment in public medical and sanitary institutions in the Republic of Moldova is confirmed by recent studies. The lack of a strategic vision and a sustainable funding mechanism aggravates this situation, and the technical development of these institutions is significantly affected.

Limited access to central development funds and constant underfunding lead to reduced capacity to improve infrastructure and the provision of lower quality health services. Urgent action is crucial to address these shortcomings and ensure a sustainable and efficient health financing system. In the context of the aging of the population and the increase in the demand for medical services, the sustainability of the system is threatened. Recent statistical data indicate an increase in morbidity among the population while its total number is decreasing.

According to the demographic forecast of the Demographic Research Center for the years 2019-2040, the demographic decline is predicted to continue at a rapid pace in the coming decades. According to the low scenario, the annual rate of decline will increase from 1.6% to 2.3%, and the population will decrease to 1754.6 thousand (by 34.5%) by 2040. Under the conditions of a reduction significant migration, the improvement of population health indicators and the increase of fertility, the dimensions of the demographic decline could be reduced (Găgăuz, O. Et al., 2021).

If this trend is not reversed in the near future, the number of elderly people will exceed that of young people, which will lead to a significant increase in the demand for medical services and, implicitly, in the need for financing.

We observe that the aging of the population, from the perspective of health care, raises two categories of significant problems. The first involves reconfiguring the healthcare system in the future to adequately respond to the increased demand generated by the aging process. The second category of problems refers to the increase in expenses for medical care within the public health system, as well as the increased pressure on the financial resources of families for care at home or in institutions.

We believe that a policy aimed at meeting the health needs of the elderly must be incorporated into health policy aimed at the entire population. As people in the younger age groups today will become the elderly of the future, it is essential to anticipate and manage the needs of this population segment. In this context, the growing demand for health care and social assistance needs to be properly managed.

In addition to the increasing demand for medical and social care, we must also take into account the typology of diseases specific to these categories of people, as well as the difficulties associated with carrying out daily activities. The emergence of cognitive disorders and the need to care for them add additional pressure on the health system and family budgets.

The costs of caring for the elderly are significant, especially given that many of these patients suffer from multiple conditions at the same time. Thus, current

health policies aim to control expenditure, taking into account both medical, socio-economic and human aspects.

A particularly significant phenomenon, which will inevitably influence the functioning of health systems and which is already deeply felt in medical institutions, is the massive migration of specialists to other countries with higher incomes. This migration of medical personnel leads to financial losses and reduces the efficiency of health systems in their countries of origin.

In the Republic of Moldova, a constant decrease in medical personnel is observed. Thus, in 2022 the number of doctors decreased by more than 13% compared to 2003, this trend also being attested by specialty (NBS, 2023).

The medical workforce shortage increased in 2022, bucking a trend of at least a decade. The medical system primarily lacks family doctors, anesthesiologists and radiologists.

In the absence of medical staff, doctors work overtime, and hospitals employ retirees.

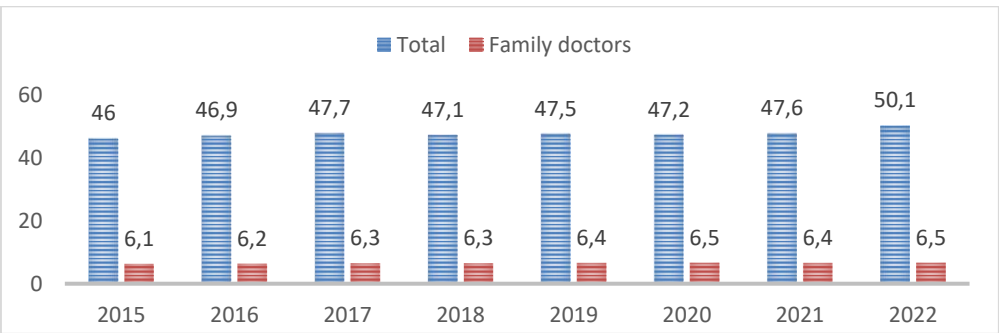


Figure 2. **The number of doctors per 10,000 inhabitants**

Source: (NBS, 2023)

For 10,000 inhabitants in 2022, there were 6.5 family doctors and 50.1 doctors in total according to the data presented by the National Bureau of Statistics (see figure 2). A precarious situation can also be seen at the district level, where the number of medical personnel involved is decreasing year by year. This phenomenon is the consequence of massive depopulation in all regions, districts and localities.

The population is concentrated in Chisinau and the central districts. In particular, the decrease of the population from the last decade in the districts of Basarabeasca, Cimişlia, Donduşeni, Soroca and Nisporeni, as well as in the municipality of Bălţi, is highlighted.

The deficit of labor resources is already felt, and the demographic projections confirm the long-term risks that compromise the provision of economic growth, the improvement of the living standards of the population and the reduction of inequalities in the distribution of incomes. At the same time, the phenomenon of population aging will intensify the tendency of the decrease of taxpayers to the formation of the public budget and the increase of the number of retirees as applicants for social insurance and specialized services.

Developing strategies and professional training programs to attract the inactive population into the economic circuit, strengthening skills for all ages, ensuring the increase in the level of education of the population and the degree of concordance of qualifications with the current requirements of the labor market, increasing the level of participation in economic activities, of labor productivity and the level of technology are some of the directions that are required.

Optimizing the financing of the health system in the Republic of Moldova for a sustainable future. It is necessary to implement some structural reforms in the health system, with an emphasis on the efficiency of public spending and the improvement of the quality of medical services. Reforms should take into account non-medical factors affecting the health system and focus on including them in the decision-making process.

The implementation of structural reforms in the health system is crucial to ensure financial sustainability and improve the quality of medical services. These reforms should focus on the following aspects:

- Making public spending more efficient: A first priority should be to identify and eliminate inefficiencies in the health system that lead to a waste of resources. This may involve optimizing administrative processes, reducing bureaucracy, strengthening public procurement and implementing effective systems for monitoring and evaluating expenditures.

- Increasing access to quality medical services: Reforms should aim to improve access to medical services for all citizens, regardless of socio-economic status or geographic location. This can be achieved by expanding medical infrastructure in underserved areas, improving the provision and qualification of medical personnel, and promoting medical practices based on scientific evidence.

- Inclusion of non-medical factors in the decision-making process: It is important to recognize that health is influenced by a number of non-medical factors, such as education, environment, socio-economic conditions, etc. Reforms should therefore integrate these factors into the decision-making process and promote collaboration between different sectors to improve population health.

- Consolidation of sustainable financing: To ensure sustainable financing of the health system, it is necessary to diversify sources of income and increase the efficiency of collection and use of funds. This can be achieved by promoting private health insurance, increasing contributions to health insurance funds and exploring other sources of revenue, such as external financing and public-private partnerships.

- Effective governance and regulation: Reforms should aim at strengthening the governance and regulatory system in health to ensure effective implementation and monitoring of health policies and programs. This may include establishing a clear legislative and institutional framework, promoting high ethical and professional standards, and involving civil society and other stakeholders in decision-making and reform monitoring.

In the context of the demographic decline in the Republic of Moldova, it is crucial to adopt health sector financing policies that respond to the specific needs of

the population, including the increased needs generated by the aging of the population. In this regard, the following recommendations are welcome:

➤ Allocation of additional resources to long-term care services: The government should pay special attention to the financing and expansion of long-term care services to meet the increased demand generated by the increase in the number of elderly people. The allocation of additional funds for the development and modernization of infrastructure and equipment in these institutions could improve the quality and accessibility of services.

➤ To combat the exodus of doctors and qualified medical personnel from the country, financial incentive programs should be introduced and strengthened for medical personnel who remain in the country and choose to work in the field of elderly care. These programs could include competitive salaries, performance bonuses and professional development facilities.

➤ To reduce the burden on the health system and improve the general health of the population, the government should allocate funds for prevention and health promotion programs. These could include nutrition education programs, screening campaigns and programs to promote a healthy lifestyle.

➤ The government should ensure that funds allocated for the health sector are spent efficiently and transparently and corrupt practices are eradicated. Transparent allocation of resources and the fight against corruption can contribute to improving access and quality of health services.

By implementing these recommendations, the Republic of Moldova could improve the sustainability and efficiency of its health system, ensuring access to quality services for all citizens, including the growing elderly population.

We are aware that the implementation of the reform in the healthcare system in the Republic of Moldova can be hindered by various barriers, and taking into account the experience of other countries can provide valuable clues for overcoming these obstacles.

First of all, the Republic of Moldova faces limited financial resources for health, and the implementation of reforms may be slowed down by the lack of necessary funds. To overcome this barrier, Moldova could learn from the practice of other countries that have promoted public-private partnerships in the field of health or implemented innovative financing mechanisms, such as special health taxes or voluntary contributions.

A relevant example is Spain, which has implemented public-private partnerships in the field of health to complement public financing and improve access to medical services. In Spain, the health system is mainly financed by public funds, but there is also a private health insurance sector that offers additional services and healthcare options for those who wish to pay for them. This diversification of funding sources has allowed the improvement of access to medical services and their quality in Spain, providing additional opportunities for those who wish to benefit from private medical services. Moldova could learn from this practice and explore similar ways to promote public-private partnerships and diversify sources of health financing.

Second, medical staff and other stakeholders may resist change because of fear of loss of privileges or uncertainty about new policies or procedures. Moldova could learn from the experience of other countries that have actively involved medical staff and other stakeholders in the decision-making process and promoted awareness and education campaigns to gain their support for reforms.

A good example is Canada, which has actively involved health workers and other stakeholders in developing health policies and promoting reforms in its health system. Through professional organizations of physicians, patient associations and other interested groups, Canada was able to develop a framework for collaboration and consultation that enabled the identification of real needs and priorities in the health care system. This approach has ensured broad and sustained support for health reforms and helped improve access to and quality of health care in Canada.

Moldova could learn from this practice and actively involve medical personnel and other stakeholders in the decision-making process to obtain the necessary support for health reforms.

Fragmentation and lack of coordination between different levels and sectors of the health system can be another impediment in the process of implementing reforms, which can lead to inefficiencies and redundancies. Moldova could learn from the practice of other countries that have strengthened health governance and coordination through clear institutional mechanisms and structures, such as regional or national health authorities.

A relevant example in this regard is Sweden. Sweden has a decentralized health system, where regional authorities have a significant role in the provision and management of health services at the local level. However, there is also an institutional structure at the national level that coordinates general health policies and directives.

The regional health authorities in Sweden are responsible for managing hospitals, home care services and other health services at the regional level. They work together with local authorities and healthcare providers to ensure access to quality services for all citizens in the region.

The implementation of a more efficient and fair system of collecting health insurance contributions is essential for improving the financing of the health system. This system should aim to reduce tax evasion and provide greater coverage of the population. To achieve this, the following should be considered:

- **Modernization of the Contribution Collection System:** The implementation of modern technologies and effective payment monitoring practices could reduce tax evasion and improve the collection of funds needed to finance the health system.

- **Introduction of a Progressive Income Tax:** A system of progressive taxation, based on income, could ensure a fairer distribution of the financial burden according to the contributory capacity of citizens. Thus, those with higher incomes would pay higher contributions, while those with lower incomes would have reduced financial burdens or could benefit from tax exemptions or reductions.

Similar practices implemented in other countries, such as Sweden or Germany, have demonstrated that a progressive taxation system can be effective in ensuring

fair financing of the health system and in guaranteeing access to medical services for all citizens, regardless of their social status -economic.

Thus, the Swedish tax system includes a progressive income tax, where those with higher incomes pay higher tax rates than those with lower incomes. These funds are used to finance public services, including their health system, which provides access to high-quality medical services for all citizens.

In Germany, the tax system also includes a progressive income tax, with increasing tax rates for higher incomes. Tax revenues are used to fund public health insurance, which provides health coverage for all residents, including those with lower incomes.

Discussion and conclusions. The conclusions that emerged from the conducted research emphasize the need for better structured and more efficient financing in order to develop a resilient and sustainable health system in the Republic of Moldova:

➤ Adequate and sustainable funding is essential to create a resilient health system capable of responding effectively to both day-to-day needs and future challenges. In the case of the Republic of Moldova, optimizing the allocation of resources is crucial to improve access and quality of medical services.

➤ Increasing investments in health infrastructure, in the education and training of medical personnel, but also in technological innovation can strengthen the ability of the health system to deal with crises and provide quality care. In the Republic of Moldova, public and private investments must be aligned to support the transition to a more efficient and fair system.

➤ Implementing effective partnerships between the public and private sectors can attract financial resources and expertise, contributing to the creation of a more sustainable system. In Moldova, such partnerships could facilitate the development of prevention and primary health care programs.

➤ A resilient health system requires transparent and responsible management of funds. Increasing public trust in health institutions in Moldova can be achieved by implementing strict mechanisms for monitoring and reporting the use of resources.

***Note:** The article was developed within the framework of Subprogram 030101 „Strengthening the resilience, competitiveness, and sustainability of the economy of the Republic of Moldova in the context of the accession process to the European Union”, institutional funding.*

REFERENCES

- Accesul populației la serviciile de sănătate. Rezultatele studiului pe gospodării. (2022). Statistica. https://statistica.gov.md/files/files/publicatii_electronice/acces_servicii_sanatate/Acces_servicii_sanatate_2022.pdf
- Asamani, J. A., Alugsi, S. A., Ismaila, H., & Nabyonga-Orem, J. (2021). Balancing equity and efficiency in the allocation of health resources-Where is the middle

- ground? *Healthcare* (Basel), 9(10), 1257.
<https://doi.org/10.3390/healthcare9101257>
- Atun, R., Knaul, F., Akachi, Y., & Frenk, J. (2012). Innovative financing for health: What is truly innovative? *Lancet*, 380. [https://doi.org/10.1016/S0140-6736\(12\)61460-3](https://doi.org/10.1016/S0140-6736(12)61460-3)
- Biroul Național de Statistică al Republicii Moldova (BNS). (2023). *Anuarul statistic al Republicii Moldova*. https://statistica.gov.md/ro/anuarul-statistic-al-republicii-moldova-editiile-2002-2023-9877_59482.html
- Bugetul public național pentru anul 2023. (2023). Ministerul Finanțelor. <https://www.mf.gov.md/sites/default/files/Bugetul%20cetatenilor%20pe%202023.pdf>
- Compania Națională de Asigurări în Medicină (CNAM). (2023). *Raport privind executarea fondurilor asigurării obligatorii de asistență medicală în anul 2023*. <http://cnam.md/wp-content/uploads/2024/06/Raport-executarea-FAOAM-2023-ROM-final.pdf>
- Costello, A., Abbas, M., Allen, A., Ball, S., Bell, S., Bellamy, R., Friel, S., Groce, N., Johnson, A., Kett, M., Lee, M., Levy, C., Maslin, M., McCoy, D., McGuire, B., Montgomery, H., Napier, D., Pagel, C., Patel, J., & Patterson, C. (2009). Managing the health effects of climate change: Lancet and University College London Institute for Global Health Commission. *Lancet*, 373, 1693-1733.
- Debie, A., Nigusie, A., Gedle, D., Khatri, R. B., & Assefa, Y. (2024). Building a resilient health system for universal health coverage and health security: A systematic review. *Global Health Research and Policy*, 9(2). <https://doi.org/10.1186/s41256-023-00340-z>
- Frazier, T. L., Lopez, P. M., Islam, N., Wilson, A., Earle, K., Duliepre, N., Zhong, L., Bendik, S., Drackett, E., Manyindo, N., Seidl, L., & Thorpe, L. E. (2023). Addressing financial barriers to health care among people who are low-income and insured in New York City, 2014-2017. *Journal of Community Health*, 48(2), 353-366. <https://doi.org/10.1007/s10900-022-01173-6>
- Găgăuz, O., Buciuceanu-Vrabie, M., Pahomii, I., Știrba, V., Tabac, T., & Grigoraș, E. (2021). *Populația Republicii Moldova la 30 ani de independență: provocări principale și politici necesare*. Chișinău, INCE.
- Gera, R., Narwal, R., Jain, M., Taneja, G., & Gupta, S. (2018). Sustainable development goals: Leveraging the global agenda for driving health policy reforms and achieving universal health coverage in India. *Indian Journal of Community Medicine*, 43(4), 255-259.
- Langlois, É. V., Miskurka, M., Zunzunegui, M. V., Ghaffar, A., Ziegler, D., & Karp, I. (2015). Inequities in postnatal care in low- and middle-income countries: A systematic review and meta-analysis. *Bulletin of the World Health Organization*, 93(4), 259-270G. <https://doi.org/10.2471/BLT.14.140996>
- Mayes, R., & Berenson, R. (2008). *Medicare Prospective Payment and the Shaping of U.S. Health Care*. <https://doi.org/10.1353/book.3236>

- Ministerul Finanțelor. (2023). *Raportul privind executarea bugetului public național și a componentelor acestuia în simestrul I al anului 2023*. www.particip.gov.md
- Ogugua, J., Olorunsogo, T., Muonde, M., Maduka, C., & Omotayo, O. (2024). Developing countries' health policy: A critical review and pathway to effective healthcare systems. *International Journal of Science and Research Archive*, 11, 371-382. <https://doi.org/10.30574/ijsra.2024.11.1.0069>
- Perera, D. (2021). A review of the Norwegian health care system. *International Journal of Scientific and Research Publications (IJSRP)*, 11, 1-10. <https://doi.org/10.29322/IJSRP.11.08.2021.p11602>
- Roemer, M. I. (1993). National health systems throughout the world. *Annual Review of Public Health*, 14, 335-353. <https://doi.org/10.1146/annurev.pu.14.050193.002003>
- Riley, W. J. (2012). Health disparities: Gaps in access, quality and affordability of medical care. *Transactions of the American Clinical and Climatological Association*, 123, 167-172.
- Thomson, S., Foubister, T., Figueras, J., Kutzin, J., Permanand, G., & Bryndová, L. (2009). *Addressing Financial Sustainability in Health Systems*. <https://www.researchgate.net/publication/255601028> [Addressing Financial Sustainability in Health Systems](https://www.researchgate.net/publication/255601028)