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DOI: 10.32702/2306-6806.2022.9.94

FINANCING MECHANISMS OF OPHTHALMOLOGICAL CARE IN UKRAINE: CURRENT STATE AND MAIN PROBLEMS

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МЕХАНІЗМИ ФІНАНСУВАННЯ ОФТАЛЬМОЛОГІЧНОЇ ДОПОМОГИ В УКРАЇНІ: ПОТОЧНИЙ СТАН ТА ОСНОВНІ ПРОБЛЕМИ

Changes in the current healthcare system began with the reform in 2018. During this time, it was possible to transform the primary level of medical care, to introduce the concept of a family doctor in all public and most private healthcare facilities, and to expand the pool of family doctors. Further reform of the healthcare system involves the development of powerful and high-quality specialized medical care. Since the most important and complex treatment usually takes place at the secondary and tertiary levels of medical care, it is clear that a lot of effort and resources are required to maintain high-quality services and access to them. Also, during changes to any system, its weaknesses are revealed, which must be strengthened or completely eliminated.

Therefore, the main goal of the study was to analyze the organization of specialized medical care for cataract and glaucoma, in particular, the mechanisms of financing specialized medical care and state financial guarantees of medical care for the population with ophthalmic diseases, both in public and private healthcare facilities.

In order to study the above-mentioned issues, the main regulatory legal acts that are governed by the Ministry of Health of Ukraine, the National Health Service of Ukraine, the Cabinet of Ministers of Ukraine and other government institutions were analyzed. Also, in order to reach research questions, the requirements and specifications of the packages of the Programme of Medical Guarantees 2020—2022 were considered.

The results of the analysis showed that the treatment of cataract and glaucoma is carried out both on an inpatient and outpatient levels, including 1-day hospitalization. The state financial guarantees of medical care that the government offers to the public do not currently cover all the needs of patients with cataract and glaucoma. Also, most ophthalmic services are provided in private healthcare facilities due to the availability of a wider range of ophthalmic services and quality treatment.

Further directions of research will concern a deeper and more detailed analysis of the conditions of financial guarantees of ophthalmic services offered in the public and private sectors.

Зміни в сьогочасній системі охорони здоров'я почалися з реформи у 2017 році. За цей час вдалося трансформувати первинний рівень медичної допомоги, впровадити поняття сімейного лікаря в усі державні й більшість приватних закладів охорони здоров'я, й розширити штат сімейних лікарів. Подальше

реформування системи охорони здоров'я передбачає розбудову потужної та якісної спеціалізованої медичної допомоги. Оскільки на вторинній та третинній ланках медичної допомоги, зазвичай, відбувається найбільш важливе і складніше для здоров'я пацієнта лікування, то однозначно для підтримання якісних послуг і доступності до них вимагається багато зусиль та ресурсів. Також під час змін будь-якої системи виявляються її слабкі сторони, які повинні бути підсилені або зовсім еліміновані.

Тож основною ціллю дослідження було проаналізувати організаційні та фінансові механізми надання спеціалізованої медичної допомоги на прикладі офтальмологічної допомоги, зокрема — лікування катаракти та глаукоми, як в державних, так і приватних закладах охорони здоров'я.

Тож основною ціллю дослідження було проаналізувати організацію спеціалізованої медичної допомоги при катаракті та глаукомі, зокрема механізми фінансування спеціалізованої медичної допомоги та державні фінансові гарантії медичного обслуговування населення з офтальмологічними захворюваннями, як в державних, так і приватних закладах охорони здоров'я.

В результаті дослідження вище зазначених питань було проаналізовано основні нормативно-правові акти, якими керуються МОЗ України, НСЗУ, Кабінет Міністрів України та інші урядові установи. Також задля розв'язання дослідницьких питань було розглянуто вимоги та специфікації пакетів Програми медичних гарантій 2020—2022 рр.

Результати аналізу показали, що лікування катаракти та глаукоми проводиться як стаціонарно, так і амбулаторно, в тому числі й госпіталізацію 1-го дня.

Показано, що державні фінансові гарантії медичного обслуговування, які Уряд пропонує для населення наразі не покривають всіх потреб пацієнтів з катарактою та глаукомою. Також більшість офтальмологічних послуг надаються у приватних закладах охорони здоров'я через доступність до більшого спектра офтальмологічних послуг та якісного лікування.

Подальші напрями дослідження будуть стосуватися глибшого і детальнішого аналізу умов фінансових гарантій офтальмологічних послуг, які пропонуються у державному та приватному секторах.

Key words: management of ophthalmological care, organization of the healthcare system, programme of medical guarantees, financing mechanisms, cataract treatment, glaucoma treatment.

Ключові слова: менеджмент офтальмологічної допомоги, організація системи охорони здоров'я, програма медичних гарантій, механізми фінансування, лікування катаракти, лікування глаукоми.

FORMULATION OF THE PROBLEM

Currently, Ukraine is in the process of reforming the healthcare financing system at the level of secondary and tertiary outpatient and inpatient care, which began in early 2020 [1]. Active processes of reforming the healthcare system currently provide citizens of Ukraine with equal access to both basic and highly specialized modern and quality medical services. It is assumed that such a transformation of the system as a result will make it possible to completely orient the system to the patient and his/her needs.

The transformation of the healthcare system also involves changes in the funding paradigm of the health care system through the introduction of new financial mechanisms at the level of specialized and highly specialized medical care, namely ambulatory (outpatient) and in-hospital (inpatient) levels. Such changes can provide financial protection to the public against excessive spending or enormous and unreasonable out-of-pocket costs. The reform provides for the implementation of cost-effective methods of payment for healthcare providers, including ophthalmology. In the transition period, payment for the services of suppliers is used the global budget, with a gradual transition to payment based on diagnosis-related groups (DRGs). To date, with the support of international donors, including the World Bank, measures have been implemented to adapt the Australian DRG system; and a system of clinical coding of treated cases at the level of service providers is also being introduced [2; 3].

Even though specialized medical care is currently at the stage of reform and change, there may still be issues that significantly affect the availability of services and their quality. Financial support from the state for both patients and healthcare facilities can affect the availability and implementation of quality medical services.

ANALYSIS OF LATEST PUBLICATIONS

The literature was searched through the EBSCOhost, Google Scholar, and PubMed databases. Also, the source base of this primary analysis is documents of the resolution and materials of the Cabinet of Ministers of Ukraine, the National Health Service of Ukraine (NHSU), and the main legislative framework of the Ministry of Health of Ukraine (MoH). The following search terms were used: "healthcare reform in Ukraine", "organization of the healthcare system in Ukraine", "National Health Service of Ukraine", "program of medical guarantees", "ophthalmology in Ukraine" and "financial mechanisms of the healthcare system in Ukraine". The literature search was limited to Ukrainian language and publication dates from 2016 to 2022. Thus, it were analysed packages of the Programme of Medical Guarantees of 2020, 2021, 2022 as follows: "Surgery for adults and children in hospital", "Outpatient secondary (specialized) and tertiary (highly specialized) medical care for adults and children, including medical rehabilitation and dental care", "Surgical operations for adults and children as a one-day hospitalization" [4—6]. A bibliosemantic, structural-logical, comparative, and analytical methods were used.

THE AIM OF THE RESEARCH

The purpose of the study is to review the organization of the healthcare system in Ukraine, in ophthalmology particularly, over the past 5 years to outline the main gaps in the organization of the system of medical services, the financial mechanism of healthcare and accessibility to quality and free ophthalmic services.

THE MAIN MATERIAL AND RESULTS

An overview of healthcare financing mechanisms in Ukraine

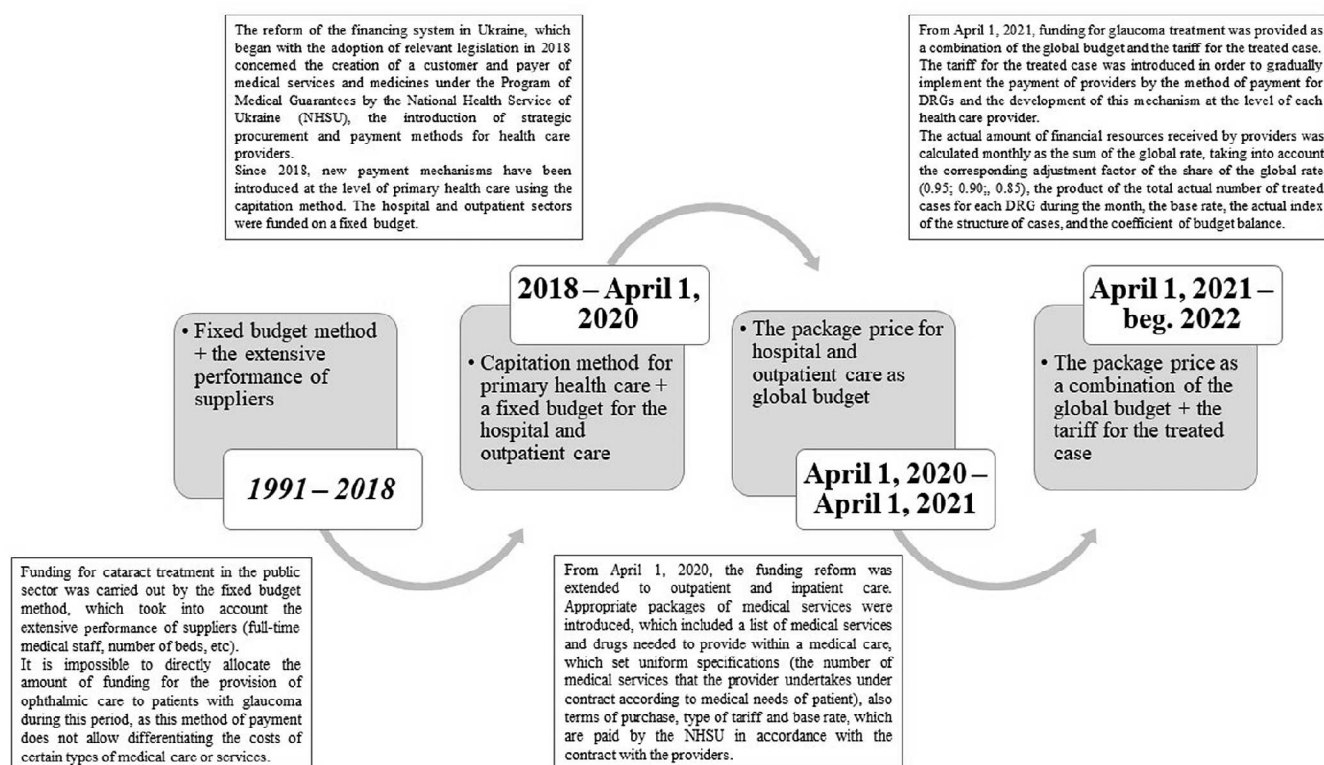


Fig. 1. The scheme of healthcare financing mechanisms in Ukraine in the period from 1991 to 2022

Source: built by the author based on data analysis [4–7].

Until April 1, 2020, the financing of ophthalmological treatment in the public sector was carried out according to the fixed budget method, which was calculated taking into account extensive indicators of the activity of providers as full-time medical staff positions, number of beds, etc. It is impossible to allocate the amount of funding for the provision of medical care to patients with ophthalmological diseases during this period, since this method of payment does not allow distinguishing expenses by individual types of medical care or additional services provided.

For the period 2010–2014, all sectors of healthcare were financed according to the mechanism of interbudgetary transfers, the amount of which was calculated as a share of the state budget and distributed to each administrative unit based on the capitation formula, using the population size and the difference in the provision of services, in addition to specific coefficients for different regions or rural area [7]. Also, the network of hospitals is usually a relatively closed system within each region of Ukraine, and historically, the system of inpatient medical care in Ukraine includes mono-speciality and multi-speciality hospitals that provide care at the secondary and tertiary levels, including ophthalmological ones.

Since 2015, in connection with fiscal decentralization, new rules for financing the industry have been established, and such a financial instrument as a medical subvention has been introduced. The government allocated funds for healthcare to administrative units using the medical subvention mechanism. Before reforming, general medical subventions covered disease prevention, primary medical care, outpatient and inpatient medical services. The size of the medical subvention was calculated as a share of the state budget and was distributed to each administrative unit based on the capitation formula, using the population size and adjusting coefficients that take into account the difference in the cost of providing medical care, the specifics of providing medical care in mountainous areas [7].

The reform of the health care financing system in Ukraine, which began in 2018, concerned: 1) the creation of a customer and payer of medical services and medicines

under the medical guarantee program of the National Health Service of Ukraine; and 2) implementation of strategic procurement and payment methods for healthcare providers. Accordingly, new legislation was updated and adopted as the Law of Ukraine "On State Financial Guarantees of Medical Services of the Population" dated October 9, 2017 No. 2168-VIII and a number of other normative acts [8]. This law introduces in Ukraine a national procurement organization, the National Health Service of Ukraine, has been established. It became the central executive body that implements state policy in the field of state financial guarantees for healthcare servicing of the population. Activities of the NHSU are directed and coordinated by the Cabinet of Ministers of Ukraine through the Minister of Health. Also, in case of the reform, the economic status of many healthcare facilities is changed to non-profit enterprises; so, they gained, so called, financial and managerial independence from the government [8]. Moreover, new payment mechanisms have been introduced at the level of primary medical care using the capitation method and at the level of specialized care, the sectors of which were financed on the basis of a fixed budget.

The NHSU proposed the concept of healthcare packages and the practice of establishing guarantees for medical care — the program of state guarantees of medical care — "Program of Medical Guarantees". Each package includes a description of what is funded, the requirements for the provision of services, as well a list and volume of medical services and medicines that are paid from the state budget based on uniform national tariffs. So then, in 2020, the PMG included 32 packages in 2020, and 36 packages in 2021. Priority services by the Program were as follows: 1) treatment of acute cerebral stroke and acute myocardial infarction; 2) care at childbirth and in complex neonatal cases; 3) instrumental examinations for early diagnosis of cancer [1]. A special approach was applied to the priority services, which includes increased requirements for the facility, corresponding with increased tariffs and payment for service provision. For many types of healthcare, the NHSU pays not for a single service, but for a set of services (global budget or capitation, as for primary healthcare).

Starting from April 1, 2020, the financing reform was extended to secondary (outpatient and inpatient) care level. Appropriate packages of medical services were developed and implemented, which included a list of medical services and medicines necessary for the provision of such services, within the limits of a certain type of medical care, to which uniform specifications are established (the scope of medical services that the provider undertakes to act under the contract in accordance to the patient's medical needs), procurement conditions, type of tariff and base rate, the payment of which is provided by the NHSU in accordance with the contract with the supplier.

Nowadays, the main payment mechanism from public sources for both public and private glaucoma providers (if they signed contract with the NHSU) is by the Programme of Medical Guarantees.

To sum up, the main 4 periods in ophthalmological care can be traced in the financing of providers of medical services from public sources in 1991–2022 (Fig. 1):

1. From 1991 to April 1, 2020 — all healthcare providers were funded through a fixed budget, which was intended to cover the total cost of services provided during one year and was based on historical information about the provider's costs.

2. From April 1, 2020, to April 1, 2021 — payment of medical service providers is carried out through a single purchaser — the National Health Service of Ukraine under the Programme of Medical Guarantees paid from public sources to all levels of healthcare.

3. From April 1, 2021 — cataract and glaucoma services are paid from both public sources by "mixed method": the global budget (85%-95%) and the payment for the relevant DRG (5%-15%). The share of the global rate and the treated rate is determined annually by the government. The weighting factor of the DRG for the Package "C15: Surgical treatment of glaucoma and complex operations for the treatment of cataracts" is 0.593. This DRG is part of the Package "Surgical operations for adults and children in hospitals" of the Programme of Medical Guarantees by the National Health Service of Ukraine. Therefore, the description of DRG fully complies with the specifications of the Package.

4. From 2022, it is planned to include a new Package "Surgery services for 1-day (hospitalization)" within the Programme of Medical Guarantee. The introduction of a separate package will allow the use of best practices in healthcare and reduce the length of stay of the patient in the hospital.

Medical care for cataract and glaucoma provided within the Programme of Medical Guarantees

Cataract and glaucoma are provided as both inpatient and outpatient (including 1-day hospitalization) care.

Inpatient care is provided within the Programme of Medical Guarantees of the NHSU under the Package "Surgery for adults and children in hospital" [4–6]. The patient has the opportunity to receive such services for free of charge [9–11]:

- medical services for prevention;
- examination by an anaesthesiologist and anaesthesia during diagnosis;
- surgery procedures;
- laboratory tests and blood tests;
- electrocardiography and x-ray;
- ultrasound, histological or cytological examination (in case of suspicion of tumours);
- consultations with doctors of other specialties;
- medicines and medical products from the National List and purchased at the expense of various programs;
- medical rehabilitation.

The tariff for medical services provided by the specifications, as a combination of the global rate and the rate per treated case, is 4563.64 UAH / 148 EUR (2020); 4896.79 UAH / 152 EUR (2021).

Outpatient care for all nosologies, including cataract and glaucoma, is part of the Package "Outpatient secondary (specialized) and tertiary (highly specialized) medical care for adults and children, including medical rehabilitation and dental care" within the Programme of Medical Guarantees [4–6]. This Package includes medical services as follows [9–11]:

- medical services for prevention;
- diagnosis, determination of treatment methods, recommendations and patient navigation;
- ophthalmological examinations: ophthalmometry (keratometry), ophthalmoscopy, refractometry, dioptrometry, perimeter of the visual field, other studies according to the needs of patients;

- appointment and correction of drug treatment;
- surgeries procedures (1-day hospitalization);
- medicines and medical products from the National List of Essential Medicines and purchased at the expense of various programs;

- medical rehabilitation.

The services are financed on the basis of the global budget rate per case — 49.43 UAH / 1.5 EUR (2020); 143.24 UAH / 4.4 EUR (2021).

Outpatient care of 1-day hospitalization is a part of the Package "Surgical operations for adults and children as a one-day hospitalization" of the Programme of Medical Guarantees [6].

- The package price includes [11]:
- medical services for prevention;
 - examination by an anaesthesiologist and anaesthesia during diagnosis;

- surgery procedures (only 1-day hospitalization);
- laboratory tests and blood tests;
- po-surgery anaesthesia;
- providing recommendations to the patient on further medical and rehabilitation treatment in an outpatient level and tactics of action in the development of any side effects;
- drugs and medical products from the National List and purchased at the expense of various programs;
- hospitalization of the patient in the specialized inpatient department in case of side effects.

The services under the Package are financed from public sources on the basis of the global budget rate per treated case — 7506.00 UAH / 225 EUR (2022). If the funds of the Package do not cover treatment, then surcharges for services come from out-of-pocket expenses.

Thus, medical treatment and surgery for cataract and glaucoma are covered by packages of the Programme of Medical Guarantees. Some laser treatment for glaucoma is not included in the package specifications, so public and / or private providers who have signed contracts with the NHSU may not include laser treatment as patients care from public sources. However, if ophthalmic care public programs are in place in a particular region, such programs may partially or completely cover treatment. Private providers who have not signed contracts with the NHSU conduct services only through fee-for-service. Currently, ophthalmology services are almost entirely concentrated in the private sector, mainly due to the quality of these services and availability, despite the higher costs expected for services in such facilities. Since patients mostly choose private facilities for cataract and glaucoma treatment, perhaps that is why the state does not prioritize the expansion of guarantees for free services, because the quality of ophthalmic services or staff may not be satisfactory in most public facilities.

Moreover, there is no issue of co-payment by the patient for the cost of cataract and glaucoma care and medicines provided in Ukrainian legislation. If a provider, who has a contract with the NHSU for the provision of medical services under medical packages, offers the patient to cover the cost of medicines or services (consultation, diagnosis, surgery, etc.) at their own expense, the patient may complain to the NHSU, which may result in penalties for

the provider or even termination of the contract with the NHSU.

CONCLUSIONS AND FUTURE PERSPECTIVES

The healthcare system of Ukraine is currently both in a state of reform and in a state of crisis due to military operations. It faced and will face certain challenges before building a high-quality and modern system. However, over the past five years, it was possible to develop the primary level of medical services and to structure health care facilities according to all reform requirements. Specialized medical care is also currently being actively developed and supported in the reform process, a program for reimbursement of medicines and some medical services has been implemented, as well as a program of medical guarantees has been implemented so that patients can receive some medical care and services free of charge, and the state can compensate facilities and specialists for these costs. However, the above-mentioned reimbursement and support programs for the population and institutions need further refinement and constant revision, including the expansion of these programs to new nosologies. In our opinion, considerable attention should be turned to the packages of the Programme of Medical Guarantees in ophthalmology, which is mostly covered by the private sector and remains a major financial burden for patients as they pay for services as out-of-pocket. Thus, the direction of our further scientific research will be to find out to what extent packages of Programme of Medical Guarantees fully cover ophthalmic care services.

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Стаття надійшла до редакції 09.09.2022 р.