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Abstract

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HEALTH SYSTEM REFORM IN UKRAINE AND FOREIGN EXPERIENCE OF FINANCING MODELS

Inroduction. Due to the fact that the reform of the healthcare system in Ukraine is in transition phase at the moment and, in addition, from April 1, 2020 changes are introduced at the second level of healthcare, it is advisable to describe the current state of medical reform in Ukraine, plans and prospects for further implementation and development, as well as the establishment of the features of various health financing systems and comparing the level of expenditures on the medical industry between countries, experience of which should be taken into account.

Materials and Methods. The article uses the reports of the Ministry of Health of Ukraine and the analytical materials of medical experts. In addition, when analyzing various models of financing the health system and their features, quantitative indicators of expenditures of the countries surveyed are used. A comparison is made of the level of expenditures on the health care system between Ukraine and some European countries: Great Britain, the Czech Republic, Poland and Germany.

Discussion. The main achievements of the first stage of the health care reform and plans for further changes are described. The strengths and weaknesses of each model of financing the health system are identified. It is proved that the level of government spending on the health care system in Ukraine is the smallest among the other countries examined, but one of the largest in terms of payments out of pocket. In addition, a model has been established for financing the health care system in Ukraine, which most fully meets it in modern conditions.

Key words: reform of the health care system, models of health care financing, expenditures on the health care system in Ukraine, health care costs in some European countries.

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Резюме

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РЕФОРМА СИСТЕМИ ОХОРОНИ ЗДОРОВ'Я В УКРАЇНІ ТА ЗАРУБІЖНИЙ ДОСВІД МОДЕЛЕЙ ФІНАНСУВАННЯ

Актуальність. У зв'язку з тим, що реформа системи охорони здоров'я в Україні перебуває у перехідному періоді на даний момент, окрім цього з 1 квітня 2020 року впроваджуються зміни до другої ланки медицини, то є доцільним провести опис сучасного стану медичної реформи в Україні, плани та перспективи щодо її подальшого впровадження та розвитку, а також встановлення особ-

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ливостей різних систем фінансування охорони здоров'я та порівняння рівня витрат на медичну галузь між країнами, досвід яких доцільно взяти до уваги.

Матеріали та методи дослідження. У статті використані звіти Міністерства Охорони Здоров'я України та аналітичні матеріали медичних експертів. Окрім цього, при аналізі різних моделей фінансування системи охорони здоров'я та їх особливостей, використовуються квантитативні показники витрат оглянутих країн. Проведено порівняння рівня витрат на систему охорони здоров'я між Україною та деякими країнами Європи: Великобританією, Чеською республікою, Польщею та Німеччиною.

Результати дослідження. Описано головні здобутки першого етапу реформи системи охорони здоров'я та плани щодо подальших змін. Встановлено сильні та негативні сторони кожної моделі фінансування системи охорони здоров'я. Доведено, що рівень витрат держави на систему охорони здоров'я в Україні найменший з-поміж інших оглянутих країн, але один з найбільших з точки зору виплат з власної кишені. Окрім цього, встановлено модель фінансування системи охорони здоров'я в Україні, яка найбільш повно відповідатиме їй в сучасних умовах.

Ключові слова: реформування системи охорони здоров'я, моделі фінансування охорони здоров'я, витрати на систему охорони здоров'я в Україні, витрати на систему охорони здоров'я в деяких країнах Європи.

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Introduction

In any country, choosing the best healthcare model is crucial to ensure a more efficient use of resources and to improve the quality and accessibility of care. Ukraine is not an exception in this regard, having inherited from the USSR a medical system, also called the "Semashko system", which provided for the financing of health facilities by the number of beds, which did not stimulate quality and service, but prolonged hospitalization and excessive use of limited resources. At that time, when there were a lot of people in the villages, and in the cities there were no private medical institutions that created competition for the state, this model was justified, but over time it showed its financial inefficiency in the conditions of the realities of the Ukrainian state. Indeed, the WHO and other international organizations single out the provision of financing as the main function of the healthcare system in any country in the world, because the absence of an effective model for providing the healthcare system with financial resources means that the state does not have leverage to manage it effectively and to improve the health of the population, that is the main goal of this system [1].

Thus, the shortcomings of the previous model led to the reform of the healthcare financing system, which was one of the key in terms of the Government's priority actions for 2016 [2], and became the main trigger for initiating comprehensive changes in this vital area.

The aim of the article was to analyze the current state and reform the healthcare system of Ukraine based on the world-wide models of healthcare systems.

MATERIALS AND RESEARCH METHODS

According to the literature, an analysis of existing models of health systems in different countries of the world is carried out. The features of these systems, certain advantages and disadvantages are highlighted. A study was made of the current state of the health care system of Ukraine and further directions and prospects for its reform and development. The article uses the reports of the Ministry of Health of Ukraine and the analytical materials of medical experts. Furthermore, when analyzing various models of financing the health system and their features, quantitative indicators of costs of the countries

surveyed are used. A comparison is made of the level of expenditures on the health care system between Ukraine and some European countries: Great Britain, the Czech Republic, Poland and Germany.

RESEARCH RESULTS AND DISCUSSION

In Ukraine, as in many other countries of Eastern Europe, health care costs account for more than 7 percent of GDP, while Ukraine, with its low GDP, is at the end of all European countries in terms of absolute per capita health spending. The budget includes about 3 - 4% of the costs of the health care system in general, with an extremely low indicator compared to other European countries, especially given the fact that the state is committed to providing the population with free medical care. However, almost half of healthcare costs come from the pockets of patients [3]. In this regard, already in the month of November 2016, the Government of Ukraine adopted a decree "On approval of the Concept of health system financing reform No. 1013-p", which stated that "The purpose of the health system financing reform is to create and introduce a new financing model that provides for clear and transparent state guarantees regarding the volume of free medical care, the best financial protection of citizens in case of illness, effective and fair distribution of public funds and reduced informal payments; creating incentives to improve the quality of medical care for the population by state and municipal health care institutions" [2]. On the basis of the new concept of financing the health care system, the Verkhovna Rada adopted the Law "On State Financial Guarantees of Medical Services for the Population" [4] on October 19, 2017, which entered into force on January 30, 2018. After that, the Ministry of Health began to introduce reforms and today have already taken place following changes [5]:

- financing mechanisms for medical institutions providing primary medical care (family doctors, therapists and pediatricians are doctors, which Ukrainians should contact first of all) on the principle of "money follows the patient";
- created the National Health Service of Ukraine (NHSU) - the only national customer of medical services;
- the process of autonomy of medical institutions has begun and is being established;
- the principles of procurement of medicines have changed: since 2015, public procurement has been carried out with the involvement of specialized international organizations. This saved almost 39% of the allocated funds. Today, Ukraine is fully provided with vaccines, which are necessary in accordance with the vaccination calendar;
- the "Affordable Medicines" program was implemented: almost 6,7 mil Ukrainians received medicines according to more than 28 million prescriptions in the amount of UAH 130 mil;
- the process of developing a public health system has begun, which lays the foundation for reorienting health care from a treatment policy to a policy of strengthening and maintaining human health;
- a pilot project for the development of emergency medical care was launched in 6 regions of Ukraine, for which an additional UAH 1 billion was allocated;
- also, within the framework of decentralization, a program of medical guarantees will be financed at the state level, while local budget funds will be allocated to ensure the operation of the system, as well as to the implementation of local health development programs [6];
- at the same time, the requirements for training medical personnel have intensified, so when entering a medical specialty, the passing grade of entry exams ("ZNO") for each subject should be at least 150, and when entering a magistracy it is necessary to pass a foreign language [6].

Medical reform in Ukraine over the past two years has become the most effective among all economic government reforms. Changes in this area were felt both by ordinary Ukrainians, who have the opportunity to freely choose a doctor in any of the medical institutions, regardless of their form of ownership, and primary care physicians, whose salaries increased several times. Today, more than 80% of Ukrainians have chosen their doctors and 76% of them are satisfied with the quality of services [5].

Starting from April 1, 2020, the second stage of medical reform will begin in Ukraine. The principles of secondary care reform are as follows [7]:

- the patient chooses a doctor, and the doctor's work is paid by the NHSU;

- there is a certain list of services, the payment of which is guaranteed by the state;
- to receive secondary medical care, the patient must have a signed declaration with a family doctor;
- free secondary care is provided only at the referral of a family doctor to a specialist, and the patient chooses his independently, as well as a medical institution. If a patient receives a referral from a doctor for a planned operation, he or she selects a surgeon and a medical facility where he or she wants to be operated. The NHSU will pay money for the operation to the institution chosen by the patient. The same applies to childbirth;
- at the same time, the patient will have to pay for his money a visit to the doctor without a referral. An exception is ambulance. A person will receive it anyway;
- in order to receive funding from the NHSU, secondary medical institutions must create communal non-profit enterprises, have licenses, computers, equipment and professional personnel. Only then, they will be able to conclude an agreement with the NHSU.

Today, significant experience has been accumulated in the world in the field of building and optimizing financing models and organizing healthcare. Thus, the leading countries are consistently expanding the coverage of the population with free medical care, streamlining sources of financing and methods of allocating funds, ways of managing the health system in order to increase its effectiveness and eliminate duplication of costs. Despite the fact that none of the existing models of health care in the world can claim universality, an analysis of the parameters of these models, their strengths and weaknesses, as well as generalization of the experience of specific countries can be important for optimizing and improving the implemented model of financing the health system in Ukraine. Therefore, it is proposed to consider the main financing models of this system.

In today's context, all models of health care can be divided into three types [8]:

1. Budget (state).
2. Insurance (social insurance).
3. Private (non-state or market).

A characteristic feature of the first model, also known as the Semashko-Beveridge model, is the significant role of the state. The main source of funding is tax revenue. The share of total expenditure from public sources in GDP is usually 8-11%. Private insurance and co-payment play a complementary role. The state plays the role of both buyer and provider of services, providing coverage for most (70% and above) of health care costs [9]. Management of the healthcare system is highly centralized. Most medical services are provided by public health institutions and private doctors. The state tightly controls most aspects of the market for medical goods and services, establishes rules for admission and market access, draws up reimbursement lists, and, through tariff policy and pricing, controls the volume of medical services.

Among the strengths of this model are:

- high coverage of the population with free medical services;
- lower costs compared to the other two models;
- higher efficiency in addressing major strategic health issues.

Weaknesses include:

- significant dependence of health financing sources on economic conditions;
- availability of queues for medical services as a result of mostly single-channel budget funding;
- monopoly of public health care institutions and insufficient protection of the consumer from poor quality medical services.

This model includes the following countries: United Kingdom, Ireland, Denmark, Portugal, Italy, Greece and others [8].

The second model, known as the Bismarck model, is often defined as a system of regulated health insurance. It is based on the principles of a mixed economy, combining the medical services market with a developed system of state regulation and social guarantees. As in the budget model, the state covers more than 70% of the costs of medical services, but the total public spending on health care, as a rule, is slightly higher than in the budget model, amounting to 9-13% of GDP [9].

Private non-profit or commercial insurance funds play a decisive role in the distribution of funds; patients have significant freedom in choosing insurance companies and service

providers. The form of healthcare management in the social insurance model can be characterized as decentralized for a large number of players in the insurance market. Primary care is provided by private family doctors. The role of the state in regulating the market for medical services is significant, but less than in budget system.

The positive aspects include:

- high coverage of the population with free medical services;
- flexibility in the accumulation of resources and less than in the budget model, dependence on the availability of financial resources;
- a clear separation of the functions of financing and providing medical services;
- more structured than in the budget model, the distribution of funds.

The negative sides can be considered:

- higher than in the budget model, the share of health care expenditure relative to GDP;
- availability of queues for medical services, as a result of mostly single-channel funding from the state health insurance fund.

This model includes the following countries: Germany, France, Japan, Austria, Belgium, Poland, the Czech Republic and others [8].

The private healthcare model is characterized by the provision of health services, mainly on a paid basis: at the expense of private insurance and personal funds of citizens. There is no single state health insurance system; the market plays a key role in meeting the needs for health services. The state undertakes only those obligations that are not satisfied with the market, that is, it covers medical care for socially vulnerable categories of citizens - the unemployed, the poor and the retired.

In the private model, more than 50% is financed from private funds [9]. The money is accumulated in private commercial insurance funds, and then goes to medical institutions. Thanks a great number of private insurance companies, the level of competition in the healthcare market is very high, which has a positive effect on their quality, but only for the financially well-off part of the population. The share of total health care expenditures in GDP is higher than in the budget and insurance models, but there is no adequate improvement of key indicators of public health.

The role of the state in regulating the market of medical goods and services is less significant than in the budgetary and social insurance systems. The state controls the admission of medical technologies to the market, the activities of insurance companies, deals with the protection of competition.

The positive aspects include:

- a wide range of healthcare facilities;
- lack of queues for medical care;
- high incomes of doctors and other medical professionals..

Among the negative points are:

- lack of a unified national health care system;
- the dominant role of private medicine;
- lack of access to medical services for the majority of the population;
- very expensive medical services.

The following countries use the private model: USA, Israel, South Korea and so on [8].

It is proposed to examine in more detail the experience of financing the health care system in some European countries: such as the UK, because it is precisely on the British model that the Ukrainian Ministry of Health is trying to restructure the health care system, the Czech Republic and Poland, since these countries had similar problems at the beginning, but were able to successfully implement the changes, Germany, as this state is one of the most successful in the field of medicine, its experience can be a useful source of information.

Great Britain. The costs of the British medicine are mainly covered by the British National Health Service - NHS. Public spending on health makes up 7.7% of GDP, total - 9.4%. The budget of the United Kingdom includes about 18.9% of total expenses for medical expenditure. Those people who do not have private health insurance and are not residents of the country must pay for their treatment, which costs about 150% of the tariffs established by the NHS, and free of charge - there is only emergency assistance and treatment of some infectious diseases.

The exact list of medical services covered by the NHS is not legally defined, as it is based on cost-effectiveness analysis. The NHS does not fully cover the costs of citizens and health insurance holders for dentistry, ophthalmology, travel vaccinations and prescription drugs. Patients pay for these services on a co-payment basis. However, there is a certain list of categories of population who do not pay extra for specialized medical services. These include, for example, children

under 16 (or under 18 if they are full-time), low-income families, pregnant women, people with certain chronic illnesses, people over 60 [10].

Private voluntary health insurance in the UK is an additional tool and makes it possible to get medical help faster (usually in hospitals and outpatient clinics with large queues for free services) or to offset some of the costs of dentistry.

The share of paying for medical services by patients from their own pockets in the UK is small and accounts for 15% of all medical expenses. This part mainly includes payment for conducting a medical examination upon employment, for obtaining medical insurance or travel insurance [10].

Czech Republic. In this country, the health insurance system is compulsory and covers all residents of the country. Health insurance accounts for about 80% of the health care system's funding, covering the costs of diagnostic and therapeutic care, assistance to the chronically ill, medication and medical technology, transportation of patients. Health insurance is funded through collective contributions and public funding (for persons who are insured but not economically active). Contributions are as follows: for employers - up to 9% of paid wages; for employees - up to 4,5%; and for the state - up to 13.5% of the minimum wage. In addition to health insurance, about 15% comes from the private sector and 5% is subsidies and administrative expenses that are covered by the state budget. Overall, the Czech spending on the health care system is approximately 7.5% of GDP, which is an average among EU countries [11].

Poland. As for Poland, to get medical care you need to be insured in the National Health Fund or have insurance in another EU country. Insurance is required. If a person works, the employer pays for it about 9% of the income. If you work for yourself - pay insurance yourself. In case you are unemployed, but the spouse is working, his/her insurance extends to you. Children receive medical services at school, even if their parents are illegal. The remaining residents of Poland should take out voluntary insurance. 98% of Polish residents have various forms of insurance, however, only a lot is covered on paper, and much less in practice, according to the WHO report [12].

Poland spends about 4.5% of GDP on health. In different years, 86-91% of money for health comes from the National Fund, and the voivodship governments pay the rest. In particular, public health and emergency care costs are borne by local budgets. At the same time, state funding provides only a total of 70% of the costs of the health care system, and 30% of the costs go directly from the pockets of citizens. They spend money on drugs and outpatient services (diagnostics, counseling, rehabilitation), co-payments for treatment and informal payments to doctors [12].

Germany. This state is a classic example of an insurance model. Health spending - 10.6% of GDP; the system is funded by contributions from workers and employers. The size of all contributions averages 13.52% (13.92% in eastern lands). The employee always pays 6.76% (in the East - 6.96%) of his salary, the employer pays the same percentage on average, but this rate is different for different lands and funds from 4.75 - to 7.5%. Approximately 60% of the funding comes from compulsory or voluntary contributions, 21% from general taxes, 7% from private insurance, and the remaining 12% is covered by direct payments from patients [9]. The German health care system managed to reach all segments of the population and provide them with equal access to a large volume of modern medical services. The majority of the population considers this system very or quite effective. The reason for this success is seen in the decentralized decision-making mechanism and an effective negotiation system between service providers and payers (sickness funds) at the national and local levels. However, the system has some significant problems. An aging population poses a threat to the stability of the social security mechanism based on the current contributions of the working generation. Given the increase in health care spending and its level - both per capita and as a share of GDP - the healthcare system in Germany is one of the most expensive in the EU [9].

In this manner:

- there are no specific models in any country in its pure form. No model is versatile;
- each model has only one dominant source of funding;
- in budgetary and insurance models, the state provides more than 70% of all expenses;
- the most important factor in the sustainability of systems is the coverage of the population with free medical services, the lack of duplication of costs, the

efficiency of resource consumption and the availability of medical services;

- none of the countries can provide all public health needs from public funds without private insurance and / or the principle of co-payment.

So, the experience of other countries shows that most countries are constantly improving health financing systems. The biggest challenges facing states: an aging population and the emergence of new expensive treatments, lead to the need to increase funding for medicine. At the same time, developed countries are increasingly paying attention to prevention – after all, this is the most effective method of maintaining the health of citizens.

Since Ukraine is reforming its health financing system later than other Central and Eastern European countries, it has a chance to learn from these countries' experiences and avoid their mistakes. However, it seems that no country can avoid finding the right, final solution without trying different models.

Conclusions

Nowadays, there is no model of the health system that could implement the concept of maximally satisfying the needs of the population and, at the same time, not be highly costly for the population and for the state. For the existing material and technical level and social situation of Ukraine, the most suitable model would be an insurance model of the health care system.

Conflict of interest

The authors declare no conflict of interest.

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