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# ACTUALIZATION OF THE PROBLEMS OF DEVELOPMENT OF HIGH-TECH MEDICAL CARE IN RUSSIA

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**ABSTRACT** — Accessibility of high-tech medical care for the population is one of the main indicators of socio-economic development of the state. The current legislative framework of the Russian Federation guarantees every citizen the opportunity to receive high-tech medical care. However, the centralization of state medical organizations with the right to provide this type of medical care makes it difficult for citizens to access it. One of the promising areas of development is the increase of the share of private medical organizations entitled to provide high-tech medical care in remote regions. Active implementation and modernization of information systems will increase the availability of high-tech medical care to the population under state guarantee.

**KEYWORDS** — high-tech medical care, healthcare, state guarantees, information systems, quality of medical care.

## INTRODUCTION

Providing medical care to the population is one of the important tasks of a developed state. There are several models for health care financing. In developing countries, government spending on health care is minimal [1, 8]. A number of World Health Organization programs reduce inequalities in health care delivery. Developed countries spend significant sums on financing medicine [5]. The most promising is the development of a universal health insurance system [11].

Germany is an example of a balanced approach to the allocation of health care costs. The basic principle of German health care is the principle of solidarity. Medical care is available to all segments of the population, regardless of their financial situation. Funding is provided by employee and employer insurance premiums. For unemployed citizens, the insurance policy is fully paid by the state. High-tech medical care is available to all citizens of the country. [6, 13].

In other European countries, health care funding is not as high as in Germany. Most high tech medical procedures are not covered by basic insurance [2, 14].

Canada is an example of significant reductions in administrative health care costs. Canada's Medicare program helps fund emergency physician and hospital services. This increases the availability of basic health care for the entire population of the country. Funding for most modern medical operations requires the involvement of the patient himself [10].

In the United States, the implementation of Medicare for All and the Affordable Care Act (ACA) has led to short-term improvements in the availability of health care for the population. High-tech medical care is paid for by the patient himself or by charitable foundations [4, 7, 21].

The Russian Federation faces a choice of a health financing model. Will it follow the path of Germany, or will she choose the equivalent of Medicare for All? Consider the financing of high-tech medical care in modern Russia.

## DISCUSSION

We tried to analyze the existing experience of financing healthcare and high-tech medical care in Russia. Population health care is one of the fundamental principles laid down in the updated legislative framework of the Russian Federation. One of the main directions of national health care development for the period 2020–2025 is the improvement of the provision of medical care to patients with serious diseases requiring a long and expensive treatment [12].

In Federal Law 323-FZ dated November 21, 2011 *On the Basics of Protecting Citizens' Health in the Russian Federation*, high-tech medical care is defined as *a part of specialized medical care, which includes the usage of new complex and (or) unique treatment methods, as well as resource-intensive treatment methods with scientifically proven effectiveness, including cell technology, robotic technology, information technology and genetic engineering methods, developed on the basis of the achievements of medical science and related branches of science and technology* [18].

Nowadays, federal legislation guarantees the citizens of the Russian Federation providing high-tech medical care for a significant list of diseases at the

expense of the federal budget [20]. At the same time, the use of other sources of financing for the provision of high-tech medical care is not prohibited — the use of personal monetary resources of citizens, as well as of public associations and funds, means provided by non-governmental organizations of various forms of ownership.

The provision of high-tech medical care can be carried out both in medical institutions of the Ministry of Health of the Russian Federation and a number of other ministries and departments, as well as in the framework of the main or additional activities of private medical organizations.

High-tech medical care according to the nomenclature of its types stated in the basic program of compulsory medical insurance is provided by medical organizations included in the Register of medical organizations operating in the field of compulsory medical insurance.

High-tech medical care according to the nomenclature of its types that are not included in the basic program of compulsory medical insurance is provided both by federal state institutions, the list of which is approved by the Ministry of Health, and medical organizations, the list of which is approved at the regional level [9]. Every year, the nomenclature of high-tech medical services funded by compulsory health insurance is expanding. It should be noted that medical institutions that have received the right to provide high-tech medical care can provide it as a part of paid medical service program, which, on the background of a gradual decrease in quotas for compulsory medical insurance, allows a large federal medical institution to receive additional income.

The existing system of high-tech medical care state financing is based on quotas for the guaranteed compensation of the medical institution expenses for integrated nosological units.

This system of medical organizations financing has the following disadvantages:

- the mismatch between the volume of quotas and the real needs of the population, which is especially noticeable in the example of the Far Eastern Federal District [19],
- subjectivity in determining the patient's need for high-tech medical care,
- uneven distribution of institutions eligible to provide high-tech medical care in the region, with their concentration in administrative centers of the federal and regional levels,
- the difficulty of fulfilling all the requirements for a preliminary examination of the patient at the local level.

It should be noted that not only institutions within the jurisdiction of the Ministry of Health of the Russian Federation, but also medical institutions of different departmental subordinations, as well as non-state medical institutions may be involved in the provision of high-tech medical care.

An analysis of Russian medical literature testifies the successful experience of organizing the provision of high-tech medical care in the above-mentioned medical institutions. So according to Shalygin L.S. et al. (2015) the opening of a public-private partnership in the field of *traumatology and orthopedics* on the basis of I.L. Tsivyan Novosibirsk NIITO has significantly increased the availability of high-tech medical care in the field of *traumatology and orthopedics* both in this region and in neighboring ones [16].

Significant progress in improving the efficiency and quality of the provision of high-tech medical care may be due to greater flexibility in the response of non-state medical institutions to the changing needs of the high-tech medical care market [16, 19].

However, the access of a non-governmental medical institution to the provision of high-tech medical care in the framework of financing under compulsory health insurance programs is hampered at the legislative level.

One of the most controversial criteria for admitting a medical organization to a state-guaranteed order for the provision of high-tech medical care is the availability of full-time specialist doctors. In addition, a separate requirement for specialists of commercial medical institutions is a minimum length of service in the provision of high-tech medical care for at least three years.

Another problem of providing high-tech medical care in a non-governmental medical institution is the low cost-effectiveness of the service and poor return on the initial costs of the organization.

It should be noted that the funds received under the compulsory medical insurance program do not cover all expenses of the medical organization for the provision of high-tech medical care — the costs of developing and maintaining innovative medical equipment, etc. are not completely taken into account.

Improving the profitability by increasing the turnover of beds in this case is impossible. At the same time, large budgetary medical institutions can afford to maintain rarely required equipment and specialists, which leads to excessive centralization and reduced availability of high-tech medical care in the regions [3].

One of the possible ways to level the inequality of the population in terms of access to high-tech medical care is the introduction and improvement of

global information systems. Significant progress in this matter has been achieved in M.F. Vladimirovsky Moscow Regional Research and Clinical Institute (MONIKI) under the guidance of A. Gurov. Integration of his pilot projects with the Unified State Health Information System allows to significantly simplify and speed up the process of obtaining high-tech medical care for various categories of the population of the Moscow region [17].

## CONCLUSION

The presented data allow us to conclude that there is no clear understanding of the procedure for financing high-tech medical care in the Russian Federation. Excessive centralization and delays in decision-making do not allow the majority of citizens of the Russian Federation to receive timely high-quality high-tech medical care. This problem can be solved by attracting private medical organizations to provide high-tech medical care using state funding. A promising direction is the creation of public-private partnerships in healthcare.

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