



## TECHNOLOGICAL PROCESS MEDICINE

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<b>Received:</b> September 4 <sup>th</sup> 2022 <b>Accepted:</b> October 4 <sup>th</sup> 2022 <b>Published:</b> November 8 <sup>th</sup> 2022	The main subprocesses of the technological process and the tasks of medical technology are considered. It is also shown that medical technology belongs to the systemic areas in science and management of an interdisciplinary area in medicine.
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Technology is the body of knowledge that can be used to produce goods and services from economic resources. Technology includes methods, techniques, mode of operation, sequence of operations and procedures; it is closely related to the means, equipment, tools, materials used. Modern technologies are based on the achievements of scientific and technological progress and are focused on the production of a product: material technology creates a material product, information technology (IT) - an information product.

The purpose of the work: to study the main tasks of the technological process and medical technology.

The technological process is the extraction, transportation and processing operations themselves, which are the basis of the production process. Technical control in production is also part of the technology. Technologies are developed by technologists, engineers, designers, programmers and other specialists in the relevant fields [1].

The main sub-processes of the technological process are private technological processes and their main distinguishing features are:

1. Taken separately, a particular technological process is based on clinical concepts common to it (for example, taking an electrocardiogram). A private technological process, as a rule, takes place within one workplace (for example, an operating table).

2. A private technological process cannot provide the full range of actions that allow you to receive medical care in a particular case.

3. A private technological process implies innovations, both theoretical and practical, aimed at its improvement. Thus, a particular technological process is the level of crystallization of new theoretical positions and inventive solutions in

clinical medicine.

4. A particular specialty corresponds to a particular technological process (a specialist in radiation diagnostics, a surgeon, an ophthalmologist, a laboratory assistant, etc.).

Medical technology is a branch of social technology. The subject of medical technology is medical technological processes [2]. Based on the provisions of the general theory of technology, the main tasks of medical technology are:

1. Design of medical technological processes.
2. Rationing of medical technological processes.
3. Optimization of models of medical technological processes, for example, in terms of reducing the cost of their implementation.
4. Metrological support of medical technological processes.
5. Monitoring compliance with the technological regimes of the treatment and diagnostic process.
6. Examination of the quality of medical care.
7. Study of the effectiveness of medical care.
8. Analysis of the impact of the labor process infrastructure in a medical institution on medical technological processes.

In turn, the design of medical technological processes is an independent section of clinical medicine.

A medical technological process is a system of interconnected necessary and sufficient evidence-based treatment and diagnostic measures, the implementation of which allows the most rational way to carry out treatment and ensure the achievement of maximum compliance of scientifically predicted results with real ones while minimizing costs.

Medical technology is an organic element of



the general theory of technology, which, in turn, is part of the general theory of systems. Thus, medical technology belongs to the systemic areas in science and management - an interdisciplinary area in medicine [3], the main principles underlying it.

1. Objectivity in the creation and improvement of medical technology. Medical technology can only be based on data obtained by scientific methods.

2. Expediency and the presence of a goal-forming criterion. Any medical technology must have a specific goal and criteria for evaluating its achievement.

3. Dualism. Medical technology should be considered as a system "technological process - man". This confirms the presence and relationship of the objective and subjective components of technology.

4. Emergence. The introduction of a technological process, consisting of a complex of technological operations and the work of the "technological team" that implements it, gives a new quality inherent in the entire system of patient treatment.

5. Empirical control. Only the results of the practical use of medical technology can serve as a criterion for its effectiveness.

6. Multivariance. A technological problem cannot have only one solution.

7. The source of creation and improvement of medical technology is the contradiction between the cost of treatment and the requirement to improve its quality.

8. Composition. Modern technology and individual technological processes have become so complicated that it is not always possible to cover them as a whole. Therefore, they are usually analyzed and described in parts, the degree of detail of which depends on a number of circumstances and, above all, on the purpose and purpose of the processes themselves. Synthesis (connection) of the parts of the technological process with the definition of relationships (parameters) between them is the most important principle of research in technology.

9. The principle of decomposition into constituent parts. It is thanks to the principle of decomposition of any process into its constituent elements that the prerequisites for its scientific improvement are created. Without taking into account this principle, i.e., without scientific technology, it is impossible to combine various branches of knowledge with practical activity. In other words, technology is the link that connects theory with practice. Therefore, the main attention

should be paid to the study of the structure of the technological process.

10. Openness. It is possible to make clarifications and additions to any medical technology.

11. Adaptability. Medical technology should be able to bring it to specific conditions, if this does not contradict its essence.

Conclusions: Private technological processes and their main distinguishing features, main tasks and principles of medical technology have been studied.

#### REFERENCES

1. Назаренко Г. И., Осипов Г. С.. Основы теории медицинских технологических процессов. Ч. 1. — М.: ФИЗМАТЛИТ, 2005. - 144 с.. 2005
2. Кудрина В.Г., и др.. Эффективность обучения медицинских работников информационным технологиям. - М.: ИД «Менеджер здравоохранения», 2013. - 244 с. - 2013 год
3. Конюхов В.Н.. Основы телемедицинских систем - 2012 год