

ORGANIZATIONAL AND ECONOMIC ASPECTS OF SERVICE ACTIVITIES IMPROVEMENT OF HEALTH-CARE AGENCIES

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The article deals with the trends of health-care services development on the basis of informational system economic monitoring created with the aim of satisfying the requirements to management decisions validity and quality, that will make it possible to reach the effective use of natural resources by various establishments for health preservation of country's population in the complex hierarchical structural system of health-care management.

The development of health-care system, functioning in the complex conditions of market relations transformation, meets high requirements to the validity and quality of management procedures, including economic monitoring and direct decision-making. The range of problems included into the organizational management personnel of health-care objects sphere of activity, increases simultaneously.

The management decisions developed in social and economic systems are meant to cope with problem situations. In the process of expansion of problem sphere of health-care establishments management in common, and in the process of providing medical services particularly the quantity increases considerably and the structure of data flows changes. The problem of research and description of decision-taking infotainment model in medical services management is considered.

In the light of innovative development of national economics, in the process of considering different variants of decision-taking infotainment, it is believed to be reasonable to discuss complex systems that make it possible to combine the possibilities of the simplest information and modeling systems and carrying automated expert judgment, using the unified informational management fund. Such systems use the name of decision-taking system support. They are oriented not on all the stages of organizational management but, basically, support the final stage of the procedure, speaking precisely, the process of decision-taking system support. In this case such important aspects as informational and model validity, procedures of forming and support in topical state of informational system fund, procedures of incoming data flow filtration are left without attention.

The system of processes models of medical services, which will allow determining and uniting various aspects of process essence from the methodologically grounded positions and includes 4 types of models: structural, functional, informational and mathematical, should be examined in the article.

The structural model of medical service is determined by the conception of life-cycle medical service and, practically, depends not only on the accepted regulations and official standards of providing the services but also from the qualification of medical team. For instance, the speed of patient's recovery much depends from the diagnostic phase and definite diagnosis, well-timed chosen methodic of treatment and other factors.

A system graph of the process of medical service aid, reflecting basic elements of this process and their interaction, can be taken as a structural model of the process of medical service aid.

In the process of providing medical services in accordance with different functional purposes of medical services, it is believed to be quite reasonable to distinguish the following elements: to consult a doctor - first-time investigation - preliminary diagnosis statement - physical instruments examination - final diagnosis - the choice of treatment mode - treatment - amelioration - prevention.

Functional model of the process of medical services provision can be built with the help of methodology SADT in the way of IDEE-diagrams.

The following basic problems are solved:

- ◆ the analysis of the functions and operations implemented by the system in the sphere of medical services;

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- ◆ the description of specifications of requirements and functions projected by a health-care system;

- ◆ the projecting of production processes, provision and personalization of medical services.

The information model is built on the basis system graph and functional model, which will form the basis of program module of management information system in the future. Informational model is aimed at revealing inner and outer data flows of various stages of medical service processes, determining the structure of the database developed by information system of decisions-taking support.

Various economic and mathematical models as mathematical programming, balance methods, graph models, probabilistic model can be used in the process of mathematical model building of treatment and diagnostic decisions-taking process.

However, taking into consideration the specifics of health-care sphere, it is extremely important to rely on the professional knowledge formalization conception based on the unified performing various professional methodic of diagnostics and allocations by sum-total of mul-

titude of medical aid process characteristics. Professional knowledge is represented as a combination of equivalent objects with definite relations between them; the conception supposes knowledge representation form independence from their contempt and based on the suggested aggregate assessment of patients' state parameters value. Modeling of medical aid process, in such a case leads to consequence transforming into the models of operations and actions implemented during this process.

While speaking about the specific of health-care establishments work, it should be mentioned that in the process of functioning in the health-care system on its various management levels periodic changes in the aims, processes, resources, requirements can occur and, thus, the process of all management stages support, especially, decisions-taking, should be considered to be continuous.

1. Afonichkyn A.I., Mikhalenko D.G. Management Decisions in Economic Systems. SPb, 2009. 2. See.: IB; Vynogradov K.A. Health Care Management Improvement on the Regional Level with the Informational Technologies Use: Thesis of PhD in Medicine, M., 2005; Kizylov A.N. Conceptual Aspects of Economic Decisions Forming and Taking. M., 2000.

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