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IMPROVEMENT OF MECHANISMS FOR STATE MANAGEMENT OF CONTINUOUS IMPROVEMENT OF QUALITY OF PROVISION OF MEDICAL SERVICES IN UKRAINE

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Objective. *To substantiate theoretical and methodological principles, develop scientific and practical recommendations for state management of medical services in Ukraine.*

Materials and methods. *There were used such research methods as synthesis, analysis, scientific abstraction when specifying the categorical-conceptual framework of research; system structural analysis when developing the conceptual principles of state regulation of the provision of medical services of appropriate quality and accessibility; discriminant analysis when assessing the cost of public health services in Ukraine.*

Results. *An approach to the formation of a system to improve the efficiency and quality of medical services in Ukraine has been developed. The system of continuous improvement of the quality of medical services has been developed, which combines financial and economic calculations for provided medical services with screening examination of the technology of medical and diagnostic process according to the models of medical services and allows to build a hierarchical management system for financing and quality of medical services.*

Conclusions. *The has been proposed the method of payment for medical services according to the models of simple and complex medical services, which is the most promising for use in conditions of limited financial resources and involves compliance with the following rules.*

Keywords: *model of medical services; screening expert examination technology; medical-diagnostic process; quality of medical service; patient*

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Introduction

The current national system of state regulation of medical services in Ukraine is primarily based on the principles of humanism and social justice. In some countries, the dependence of state regulation of medical services on the state is very significant, and in other countries the participation of the state is reduced to the regulatory function. However, the population of Ukraine is aging, and the share of able-bodied and active people in the country, whose funds form insurance funds, is gradually declining. In addition, the aging population needs pensions and treatment.

In modern society, provision of medical services is one of the most complex elements of state regulation. The most heated discussions are usually related to the problem of market relations, and there arise contradictions between the social mission of the state and personal business motives. In contrast to the usual market of consumer goods and services, physicians act two persons at the same time, both as the party that determines the needs of a patient and as the party that provides and implements them. In addition, the potential consumers of medical services are the poorest, elderly, sick members of society, and not young and healthy ones, which have the main financial resources.

In recent years, in the system of state regulation attempts have been made to implement standards for the provision of medical services, but this work is complicated by the fact that it is impossible to develop common standards for all institutions of Ukraine due to their differences. Staffing and technological support of medical institutions are sometimes so different that the standards used in assessing the quality of medical institutions in one area may not be adapted to use in another area.

We can trace the evolution of views on the development of state regulation in the area of medical services in the fundamental works [1-4], most of which are devoted to the analysis of modern strategies. Transformational changes in the financing model in the area of medical services are described in the scientific works [5-10].

Over the last decade, the issues of finding ways to improve the state regulation of medical services, develop a policy in this area and provide quality medical services have been the subject of scientific studies [11-14].

Fundamental developments in the application of the principle of social justice of the state regulation of the provision of medical services to the population are considered in the works of such scientists as [15-17].

Of course, the availability of a large number of scientific works on this subject is indicative of its relevance, while the influence of the reforms of state

regulation of medical services is insufficiently discussed, which indicates the attitude of scientists to this problem as a secondary one and the lack of ability of the institutions themselves to consider this problem in the expert and scientific environment.

At the same time, despite the rather large total number of works on the problems of state regulation of medical services in Ukraine, in the context of increasing globalization, it is necessary to solve the scientific problems of clarification of the content and model of medical services, development of an approach to state regulation of the provision of medical service of appropriate quality and accessibility, definition of tools for synthesizing models of state regulation of medical services in Ukraine, development of methodological approaches to the creation of a single information and telecommunication system of state regulation of the market of medical services, improvement of the mechanism of formation of integrated operators in this market, development of an approach to estimating the cost of public medical services in Ukraine, development of a mechanism for state guarantee of medical services in conditions of limited financial resources, and development of an approach to forming a system to improve the efficiency and quality of medical services in Ukraine.

The need for theoretical, methodological and practical solutions to the outlined problems confirms the relevance of the article, its importance, scientific novelty, and determines the objective, tasks, subject and object of research, testing and practical implementation.

Objective

The objective of the study is to substantiate the theoretical and methodological principles, develop scientific and practical recommendations on improving the mechanisms of public administration for provision of medical services to the population in Ukraine.

The following tasks are set in accordance with the objective:

- to propose an approach to estimating the cost of public health services in Ukraine;
- to improve the approach to the formation of the system of improving the efficiency and quality of medical services in Ukraine.

Materials and methods

The theoretical basis of the study was the works of scientists, studies in the field of public administration, laws and regulations that establish the legal and

organizational foundations of public relations in the system of state regulation of medical services in Ukraine.

In accordance with the set tasks, there have been used such methods of study as synthesis, analysis, scientific abstraction – when specifying the categorical-conceptual framework of the study; system structural analysis – when developing conceptual principles of state regulation of the provision of medical services of appropriate quality and accessibility; discriminant analysis – when assessing the cost of public health services in Ukraine.

The information and factual basis of the study was the laws of Ukraine, decrees of the President of Ukraine, regulations of the Cabinet of Ministers of Ukraine; analytical materials of the Ministry of Health of Ukraine, reporting and analytical information of the State Statistics Service of Ukraine; analytical reviews of the World Bank, the European Investment Bank and other international financial organizations; results of scientific studies in the area of public administration of provision of medical services to the population in Ukraine.

Research results and discussion

Planning of work on quality control of medical services provides for formation of normative level of an integrated indicator of quality of medical services, possible intervals of its variation for the given institution and establishment of optimum levels of criteria of efficiency of medical divisions.

Carrying out of screening examination of technology of medical and diagnostic process allows to detect cases of deviations from normative level and to form lists of expert cases for carrying out examination of quality of provision of medical services.

The introduction of continuous automated screening examination of the technology of medical and diagnostic process in the practice of health care involves the need to formalize the information in the primary accounting documentation and create an automated medical history. Cloud automated processing of these documents and comparison of the information reflected in them with models of simple and complex medical services allow to define integrated normative indicators of an estimation of technology of medical and diagnostic process by types of medical and preventive institutions (hospital, polyclinic, day hospital, home care) throughout the territory.

In order to simplify and accelerate the use of screening examination of the technology of medical and diagnostic process in assessing the quality of medical services, forms of inpatient automated medical history and outpatient slip have been developed. According to these forms of documents the continuous

automated examination of technology of medical and diagnostic process on all cases of the address of patients both in a hospital, and in polyclinic is carried out. In the process of automated processing of epicrisis (they reflect the entire volume of medical and diagnostic care provided in the hospital) and outpatient slips (they reflect the entire volume of outpatient care) the taken diagnostic and therapeutic measures are compared with models for both primary and related diagnoses. As a result of such comparison coefficients of conformity of actually performed diagnostic and medical procedures and the ones, which are necessary according to the models, are determined, actually reached and optimum criteria of efficiency, and also results of treatment are estimated.

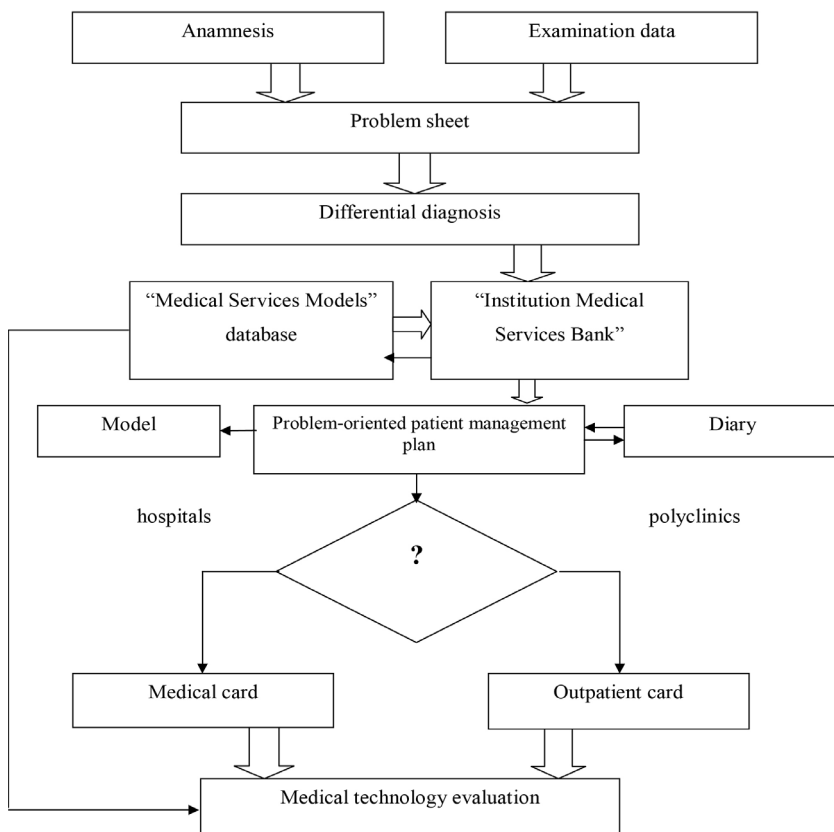


Fig. 1. Block diagram of screening examination of the technology of medical and diagnostic process

The formation of proposals for management influences includes the issuance of recommendations for the analysis of certain sections of the work, which characterize the quality of medical services.

The formation of expert characteristics occurs when analyzing data from the “inpatient medical cards” and “inpatient epicrisis” for hospitals and “outpatient cards” and “outpatient slips” for polyclinics and comparing them with the models of integrated medical services.

The block diagram of the screening examination of the technology of medical and diagnostic process is shown in Fig. 1.

The assessment consists of the analysis of: the condition of a patient at the time of admission; possibilities to ensure establishing correct diagnosis in treatment and prevention institutions (TPI) (resource assessment); the degree of possibility for the doctor to use resources for establishing diagnosis (qualification of the doctor, ability to choose the right methods and techniques of differential diagnostic, availability of equipment, etc.); methods, indicators that allow to register the objectivity of establishing correct diagnosis (expert assessments, the frequency of discrepancies between the diagnoses of the polyclinic, hospital and pathological anatomical diagnosis, change of diagnosis by the end of treatment, etc.); forecast of the outcome of patient management.

Such examination allows to collect statistical information on the actual amount of performed work regarding nosology and frontline workers, to identify possible deviations from the models that do not affect the effectiveness of treatment, to establish a regulatory level of an integrated indicator of quality of provision of medical services and to systematically adjust the models.

The formed results of screening examinations are expert cases requiring further examination with the participation of experts in the assessment of both medical technologies and material and human resources of the institution.

When selectively assessing the quality of medical care, an expert works with a list of defects identified in the provision of medical services, both for continuous and for selective examination. All identified defects are included in the table of defects in the provision of medical services of the “Act of expert opinion”.

The level of quality of patient care is set by the standards of organization of work of paramedics.

The validity of complaints of patients about violations of ethical and deontological relations is determined by supporting written documents (written complaints of patients).

Violation of the sanitary-epidemiological conditions are established by the relevant documentation of the sanitary and epidemiological authorities. The in-

validity of the refusal of medical care is determined by the relevant documents (written complaint of a patient about the refusal of a service).

Gross defects in execution of documentation, which affect the assessment of the condition of a patient, terms and results of treatment are determined by the requirements for filling and registration of medical records.

Inaccuracy of information in the accounting documentation is detected by interviewing patients, medical staff.

Unreasonable referral of a patient to the intensive care unit or lack of treatment in it if indicated are determined by an expert on the basis of analysis of medical history.

Assessment of cases of re-hospitalization is carried out by studying the previous and current medical history.

Duplication in the examination of planned patients is determined by the data recorded in a referral to the hospital and a medical history.

Assessment of the degree of completeness of the technology of medical and diagnostic process is carried out according to the models of integrated medical services. The mandatory minimum of standard examination and treatment means procedures, services with frequency of their application of 95-100%. Incomplete volume of examination and treatment is established by an expert taking into account the models and result of the disease.

At detection of defects of medical and diagnostic process of outpatient-poly-clinic link it is necessary to use the models of medical services of clinic and preventive care according to the described technique.

In case of non-compliance with the requirements for treatment results specified in the models, and/or non-compliance with the normative term of treatment, as well as in case of impossibility to provide it to the patient (death, unauthorized leave, etc.), payment for medical care is made at the actual cost, and with that:

- payment for medical care in case of unreasonable excessive delay of a patient in the hospital is not made;
- payment for the treatment of comorbidities of one system in the hospital is based on the actual costs in accordance with the provision on medical care quality control;
- payment for exceeding the terms of treatment for the underlying disease in connection with concomitant pathology is not made;
- payment for expensive medical services, as well as services that are not included in the model, is made at the actual cost of the institution only in cases of their validity and the presence of permission to perform them issued by the expert commission of the medical institution;

- payment for medical care to a patient hospitalized based on the conclusion of the expert commission of the relevant public health department in the absence of indications, is made with the consent of the insurer;
- the cost of treatment of complications, which were not diagnosed during treatment (in the hospital, polyclinic, day hospital) and lead to the need for a second course of treatment in the institution, are referred to the internal costs of the institution;
- treatment of complications not related to the technology of providing medical services and leading to re-hospitalization is paid on a general basis;
- the costs of the medical institution for the treatment of recurrences of the disease, which lead to re-hospitalization due to mistakes made during the previous provision of medical services, are referred to the internal costs of the medical institution.

The structure of the claim system for payment for medical services is shown in Fig. 2. Procedure of making bills for medical services and the procedure for presenting them for payment is as follows.

The analysis of compliance with the standards of medical technologies can only give an indirect assessment of one of the components of the quality of medical services – the implementation of the technology of medical and diagnostic process. The assessment of the work of a doctor in providing medical services is based on the comparison of the measures taken with the standards of medical technologies, which should be a list of mandatory diagnostic and therapeutic actions of the doctor in different nosological forms at a certain stage of treatment.

The assessment of the quality of provision of a medical service to a patient at all stages of treatment and diagnostic process is a time-consuming task that requires a single methodological approach. The use of only medical process standards, however detailed, does not allow to assess all the variety of pathological manifestations of a disease due to such individual characteristics of the patient as sex, age, the presence of comorbidities, intolerance to certain drugs, etc.

However, this does not exclude the possibility of a continuous automated screening examination allowing to obtain one of the elements of a comprehensive assessment of the quality of medical services at the initial stage of the examination and based on its results to form expert cases for examination with the involvement of experts.

Medical efficiency (effectiveness) is assessed by the following criteria: requirements for treatment results; achieving favorable results of treatment of a patient; discrepancy of outpatient, inpatient, pathological and anatomical diagnoses; presence of complications.

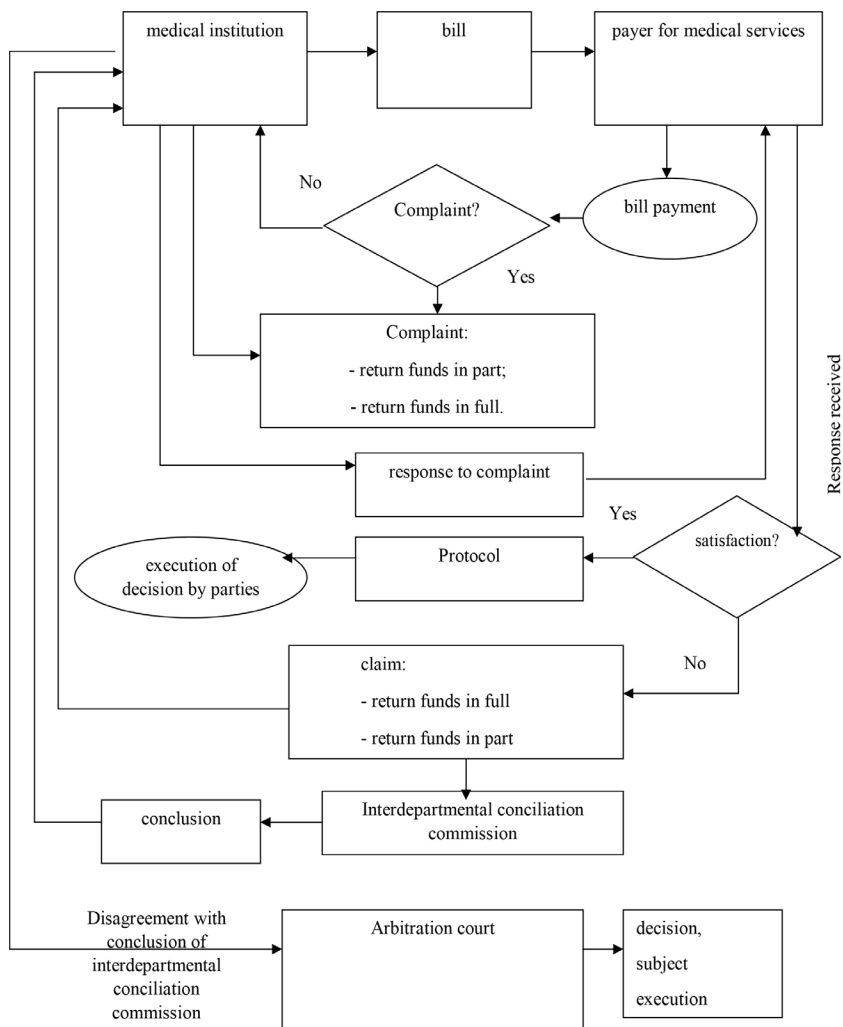


Fig. 2. Algorithm of the claim system for payment for medical services

Achieving optimal results of inpatient treatment involves the possibility of discharging the patient for work or outpatient treatment. The objectivity of assessment is achieved due to the availability of developed classifiers containing criteria for treatment outcomes and models of integrated medical services.

The discrepancy of diagnoses is established based on the data of outpatient and inpatient services and separately based on clinical and pathological-anatomical diagnosis. Both complete and partial discrepancies are determined, and penalty points are assigned depending on them.

When establishing fines for complications (including postoperative) and the fault of medical workers, in their occurrence, it is necessary to take into account factors that depend on the activities of a doctor. The latter may include the specifics of a disease, age, severity of the condition of patient, the term of medical treatment.

Thus, the analysis of methods of payment for medical care demonstrated that there is neither an ideal nor the worst method of payment for medical care, but there is a better method in these conditions and for specific purposes. Each method affects economic efficiency differently, and regulated competition between providers of medical services enhances the positive effect of any payment method.

Conclusion

The assessment of the quality of provision of a medical service to a patient at all stages of treatment and diagnostic process is a time-consuming task that requires a single methodological approach. The use of only medical process standards, however detailed, does not allow to assess all the variety of pathological manifestations of a disease due to such individual characteristics of the patient as sex, age, the presence of comorbidities, intolerance to certain drugs, etc.

But this does not exclude the possibility of a continuous automated screening examination allowing to obtain one of the elements of a comprehensive assessment of the quality of medical services at the initial stage of the examination and based on its results to form expert cases for examination with the involvement of experts. There has been developed an approach to the formation of a system to improve the efficiency and quality of medical services in Ukraine, namely: introduction of the institute of public-private partnership, which is based on the project approach, budget planning and organizational and economic tools; use of screening expert examination technology of medical and diagnostic process according to the models of medical services.

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