ABSTRACT

Master's dissertation: 96 p., 18 figures, 35 tables, 6 applications, 47 sources.

Topicality. Rapid emergency care plays an important role in everyone's life, since its task is to provide first aid to victims of accidents, persons at conditions threatening to live, and to transport victims to hospitals. The central point of the emergency relief system is the dispatcher station, which is responsible for the coherent and operational work of many lives. However, the dispatcher spends a lot of time working on non-core calls, thus reducing the chances of receiving urgent help for those people who need it urgently. Thus, the task of automation and support of the operation of the ambulance station is an important and worthwhile consideration.

Relationship of work with scientific programs. The work was carried out at the Department of Automated Systems for Information Processing and Management of the National Technical University of Ukraine "Kyiv Polytechnic Institute. Igor Sikorsky" within the framework of the theme "Effective methods for solving the problems of the theory of schedules ", state registration number 0117U000919.

The purpose of the study is to accelerate the work of the dispatcher by reducing the load on it, as well as reducing the number of errors during operation.

To achieve the goal, you must accomplish the following tasks:

– perform an overview of existing automated systems and methods for automating the work of the controller;

– to carry out a comparative analysis of mathematical methods that can be used to automate the work of the controller;

– to determine the mathematical methods by which it is possible to automate the work of the ambulance station;

– to develop a prototype of an automated system designed to automate and support the work of the ambulance station;

– perform an analysis of the results of the testing of the mathematical model.

The object of the research is processes of automation of the activities of health facilities within the framework of medical reform.

The subject of research is ambulance station support system.

The scientific novelty of the results obtained is to develop its own mathematical method to determine the cause of the call and the brigade to go on the challenge, as well as to construct a software architecture based on a number of mathematical methods for the complete automation of the operation of the dispatcher and the ambulance station in general.

Publications Materials of work are published in theses thirteenth international scientific–practical conference "Mathematical and simulation modeling of systems of MODS 2018", «The actual problems of informatization of management decisions» (APIMD 2018), and in the scientific journal USiM 2018 #6.

STATION OF FAST MEDICAL AID, DISPATCHER, DYNAMIC COMPLEX OF THE SCHEDULE, AUTOMATIZATION OF DECISION MAKING, MATHEMATICAL METHODS FOR DEFINITION OF DIAGNOSIS.