



MEDICAL AND ORGANIZATIONAL ASPECTS OF PROVIDING EMERGENCY MEDICAL CARE TO THE POPULATION OF THE REPUBLIC OF UZBEKISTAN AND ISSUES OF ITS FURTHER IMPROVEMENT

Aslanov Ilkhom Nurilloevich

Republican Center for Emergency Medical Care Director of the Tashkent City Branch

Tel: +998914014413 ilhom197504@mail.com

Raimdzhonov Jasur Tadjimurotovich

Republican Center for Emergency Medical Care Tashkent City Branch, Deputy Director for Work with District Stations and Quality Control of Emergency Medical Care Services

Tel: +998 9 33856803

Islamov Faizullo Nurullaevich

Republican Center for Emergency Medical Care Deputy Director for ICT work and general issues of the Tashkent city branch

Tel: +9989 97891857 fayzullodoctor1992@gmail.com

The relevance of the problem. Over the past 6 years, within the framework of the implementation of measures for the fundamental reform and improvement of the healthcare sector of the Republic of Uzbekistan, special attention is paid to significantly improving the quality of state-guaranteed services for the provision of emergency medical care to the population, primarily to increasing the efficiency and effectiveness of the ambulance service. In particular, as a result of the implementation of measures defined by the Decree of the President of the Republic of Uzbekistan dated March 16, 2017 No. UP-4985 "On measures to further improve the emergency medical care system", Resolutions of the President of the Republic of Uzbekistan dated March 16, 2017 No. PP-2838 "On measures to further strengthen the material and technical base and organization of the emergency medical care system", dated January 25, 2018 No. PP-3494 "On measures to accelerate the improvement of the emergency medical care system", dated October 16, 2018 No. PP-3973 "On measures to improve the ambulance service in the Republic of Uzbekistan" and dated June 16, 2022 No. PP-283 "On improving the system of providing emergency medical care to the population" The Republican Center for Emergency Medical Care and 14 of its regional branches were created on the basis of the emergency medical care service and medical vehicle fleets, and a unified vertical management system of emergency medical care, the organizational foundations of the functioning of the emergency medical care service have been optimized, its funding has been increased many times over, centralization of drug provision and targeted allocation of funds for service units have been ensured.

During 2017-2023, about 240 units of specialized vehicles were purchased for the country's emergency medical service (EMS), and thus, for the first time in the modern history of Uzbekistan, the regions' needs for vehicles were fully met and its vehicle fleet was almost completely updated. Since 2020, the phased introduction of an automated emergency medical service management system has begun, and its full implementation is planned by the end of 2023. 192 additional support points for the deployment of ambulance teams in remote, hard-to-reach settlements with the purchase of 192 units of special medical vehicles for these purposes, including those with high cross-country capability.

Since 2018, a system of centralized provision of district ambulance teams with medicines and

medical products has been introduced through the territorial branches of the Republican Scientific Center for Emergency Medical Care, and since 2022, the Republican Center for Emergency Medical Care and 14 of its regional branches have been created as an independent administrative organization, as a result of which it was possible to increase the cost of one call for medicines by 20 times compared to the same indicator in 2016. A radical improvement in the material and technical base and drug provision of the EMS service has noticeably affected the significant increase in calls to line 103: if in 2016 the number of calls to the EMS service was 7.2 million, then in 2022 this figure increased to 1.3.2 million calls per year .

Since 2019, the newly created "Emergency Medical Care Development Fund" under the Ministry of Health of the Republic of Uzbekistan has been operating, which is designed to promptly resolve emerging problems in logistical support, timely and regular renewal of the service's vehicle and aircraft fleet, medical equipment, improving communications and information transfer, conducting proper service maintenance, purchasing spare parts and consumables, conducting targeted educational programs for medical specialists and engineering and technical personnel.

By the Decree of the President No. PP-4290 of 16.04.2019, the Regulation on public-private partnership in the healthcare sector was approved, which opens up new opportunities for attracting additional investments in infrastructure projects of the emergency medical service.

Undoubtedly, these measures serve the goals of further improvement and development of emergency medical care, rational use of available material, technical, financial, economic and human resources, increasing the efficiency of the healthcare system as a whole, based on scientifically based methods and approaches.

Objective of the study. Improving the efficiency and quality of work of the Emergency Medical Service (EMS) of the Republic of Uzbekistan by optimizing its organizational structure, improving the regulatory, organizational, methodological, logistical and financial and economic foundations of the service.

Research objectives:

1. Study of the effectiveness of the existing organizational and methodological foundations of the emergency medical service (EMS) and conducting a critical analysis of the service in all regions of the Republic of Uzbekistan and the world for 2001-20 22 from the standpoint of the cluster approach. Critical analysis of the activities of the dispatch service, Call centers and mobile teams of the EMS in the regions of the Republic of Uzbekistan in comparison with similar developed services in the world from the standpoint of optimizing activities
2. Study of business processes and information flows in order to clarify the criteria for optimizing the time regulations for servicing calls to the emergency medical service, improving the quality of work of each individual unit (dispatch service, operations department, emergency medical service team, transport, communications, drug supply, instrumental supply) and a separate structural unit of the emergency medical service (station, substation, emergency medical service department, regional emergency medical service) in the conditions of functioning of the automated control system of the emergency medical service.
3. Development and implementation of algorithms for interaction between internal units of the emergency medical care service and other bodies of the Republican Emergency Medical Care Service (REMS), primary and other healthcare organizations, emergency response services and other government agencies.
4. Creation of an automated information and communication system for close interaction in the exchange of information between the duty and dispatch units of the EMP service with emergency response services of other ministries and departments, ensuring immediate notification and coordinated accelerated response of EMP teams and other emergency response services in the event of threats to human life and health, fires, road accidents, public order disturbances, as well as accidents, incidents and emergencies;
5. Evaluation of the effectiveness of the existing regulatory, organizational, methodological and material-technical base for the development of a cluster system for organizing emergency medical care in the emergency medical service. Development of substantiated recommendations and approval of regulations for improving the regulatory, organizational, methodological and material-technical base for the development of a cluster system for organizing emergency medical care in the emergency

medical service.

6. Development and implementation of unified technological requirements and medical and economic standards for call dispatching and provision of emergency medical care through scientific analysis of the activities of the dispatch service, call centers and mobile emergency medical care teams.
7. Improvement of medical-social and financial-economic mechanisms and algorithms for rating the quality of activities and stimulation of labor of emergency medical service workers, taking into account its integration with other components of a single medical cluster.
8. Creation and implementation of a system for monitoring the activities of emergency medical services and information support for assessing the quality of emergency medical services with mandatory integration with the automated control system of this service and the automated control system of the unified coordination and dispatch center (UCDC).

Scientific novelty and practical significance of the expected research results. For the first time An effective automated information and communication system will be created for close interaction in the exchange of information between the duty and dispatch units of the EMS service with the emergency operational services of other ministries and departments, ensuring immediate notification and ensuring a coordinated accelerated response of the EMS teams and other emergency operational services in case of threats to life and health of people, fires, road accidents, public order violations, as well as accidents, accidents and emergency situations. The business process and information flows will be optimized in order to improve the quality of work of each individual link of the EMS, the existing regulatory, organizational, methodological and material and technical base of the EMS will be improved. A comprehensive analysis of the economic parameters of the EMS will be carried out, taking into account the specifics of its functioning and the cluster system of organizing the EMS, for the first time in the practice of organizing the EMS of the Republic of Uzbekistan, a multi-channel system of financing the service will be introduced. Practical proposals will be developed to ensure the stability of financial support for the services responsible for providing emergency medical care to the population. For the first time, algorithms for rating the quality of activities and stimulation of labor of emergency medical service employees will be introduced as an objective assessment of the activities of emergency medical service units and material incentives for its employees.

Scope of application of the results of scientific research. The results of the dissertation will be implemented in the daily practical activities of the emergency medical care service of the Republic of Uzbekistan. The first experience of implementing public-private partnership and cluster system of organizing medical services to the population can be used and taken into account in other areas of the country's healthcare system. Scientific findings and practical recommendations should be reflected in the curricula on healthcare management and emergency medical care of medical universities.