

**THE ROLE OF ELECTRONIC MEDICAL RECORDS IN DIGITIZING THE
HEALTHCARE SYSTEM**

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<https://doi.org/10.5281/zenodo.7858082>

***Abstract.** This scientific article discusses the problems that arise with the widespread introduction of the electronic health system, and based on the analysis of these problems, solutions are presented. When studying the topic, together with an in-depth study of the scientific works of domestic and foreign scientists, with a wider coverage of the article, the general statistics of registration for medical examination through the portal of the United Interactive State Services were analyzed. Based on the findings, the role of electronic health records is widely reported.*

***Key words:** Digital economy, digital technologies, e-health, telemedicine, Unified interactive portal of public services, information and communication technologies, electronic medical record, medical care system, information and organizational service systems.*

As a result of the use of information and communication technologies in the healthcare system, necessary measures are being implemented to achieve such qualities as efficiency, stability, speed and accuracy. Especially, based on the digital medicine experiences that are becoming popular in the world practice, the implementation of tasks in this direction in the republic is gaining special importance. In the Development Strategy of Uzbekistan for 2022-2026, the goal of "Organization of primary medical services in the regions based on the principle of "one step"" is defined, according to which it is planned to expand the possibilities of providing remote medical services to the population in the republic using modern information technologies[1]. As a result of the measures taken in our country, the efficiency, quality and convenience of providing medical services to the population is increasing.

However, insufficient implementation of information and communication technologies in the health care system, the fact that the large volume of medical documents are kept in paper form does not allow to quickly monitor the execution of the decisions and ensure their effective implementation, determines the urgency of the problem.

The work of many foreign scientists is devoted to the study of electronic health problems. Among them, O.V.Simakov and V.A.Kondratev's scientific research on "Development of electronic health care in the CIS countries" [2] analyzed the problems of using ICT in health care, the results of state programs for the introduction of ICT in health care, and the achievements made. available opportunities and shortcomings are comparatively studied. N.W. Shakel and M.S.Ablameykolar, in turn, made a critical analysis of the foreign experience in the implementation of the electronic health system and focused their research on the study of the field on the example of the Republic of Belarus[3].

State programs for digitization of the healthcare system are being adopted in our republic, scientific work is being carried out by representatives of the medical field. However, despite the ongoing work, there are still some problems regarding the implementation of the electronic healthcare system in our Republic. This scientific article is devoted to the consideration of these problems and the study of their solutions.

Based on the topic of research, the scientific works of foreign and domestic scientists who conducted scientific research within the scope of the topic were studied, and methods such as statistical analysis and comparative analysis were used in the research process to observe, analyze, compare, and carry out their analysis.

E-health is an interdisciplinary field that encompasses information technology, bioengineering, medical treatment, and healthcare, and refers to health services and information delivered or enhanced by information technology. The goal of electronic health is to provide services in cooperation in the field of health, to combine regional health resources and improve the quality of health care, to work effectively with medical data using information and communication technologies.

The birth-death information system has been improved. Also, the pregnancy registration system was digitized, and the "IT-Med" mobile application of medical information systems was launched. The system of audio screening and immunization of children was digitized in the system of the Ministry of Health in the past period of 2022. Currently, some electronic systems are being used in the health sector (Figure 1).

For the electronicization of the health care system in the Republic of Uzbekistan, first of all, the literacy of medical workers and patients in the use of information and communication technologies is of great importance. At this point, 335 types of services have been introduced in the Unified interactive state services portal. In September 2022, the number of users registered on the portal is 2.2 million. 55.6 million applications were sent through the portal[4]. According to the statistics of the single interactive public services portal, the average number of applications for doctor appointments exceeds 3,000. This means that the level of people's ability to use information and communication technologies has increased (figure 2).

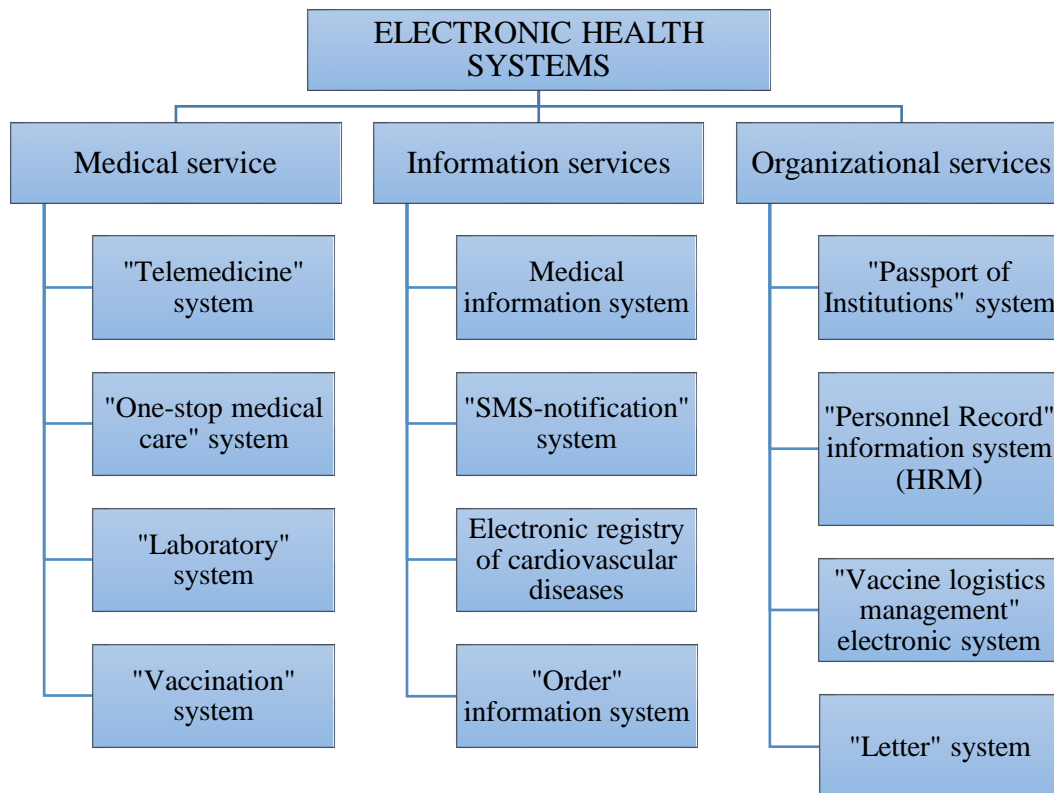


Figure 1. Electronic systems are being used in the health sector

Source: compiled by the author based on the study of scientific literature.

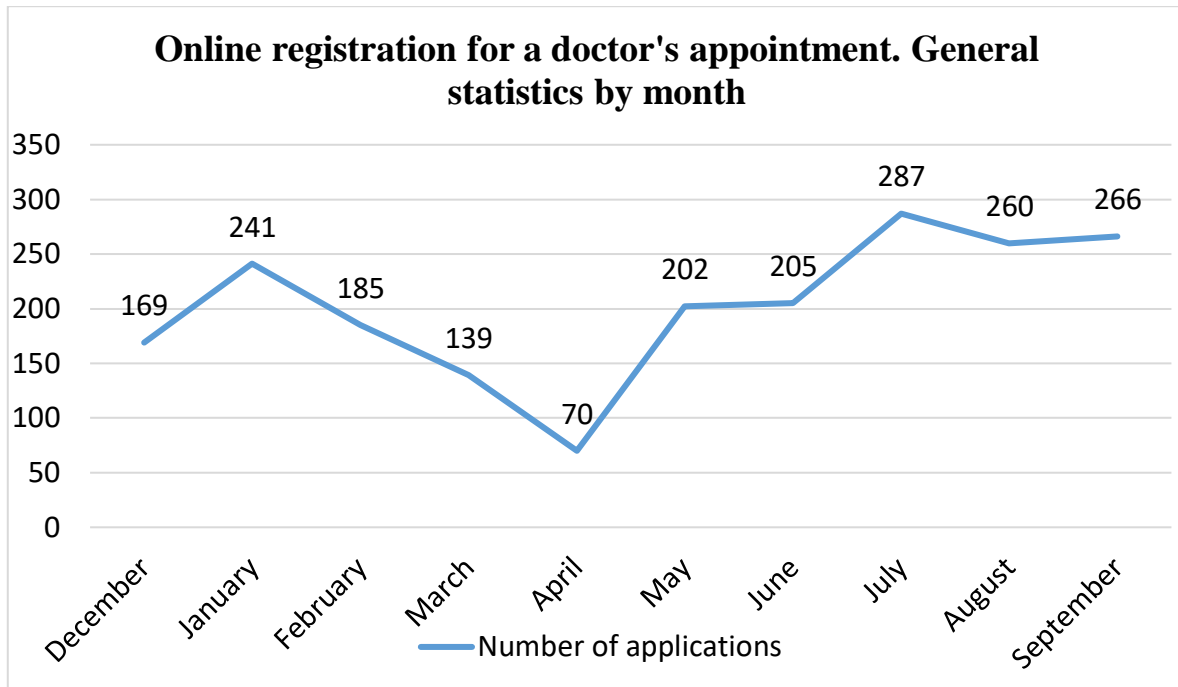


Figure 2. Monthly general statistics of doctor's appointments through the unified interactive public services portal (between 2021-2022)

Source: compiled by the author based on the study of scientific literature.

It can be seen from the statistical data that online registration for doctor's appointments has increased compared to the beginning of the year. This can be assessed by the increased level of people's ability to use information and communication technologies. Of course, it is of great importance to provide medical institutions with the necessary technical means to use electronic health services. However, in order to be able to use them correctly, knowledge and skills are required.

Electronic health records and electronic medical records are advantages of modern medical information technology. Although the two terms, electronic health record and electronic medical record, are often used interchangeably, electronic health records are chronologically closer and have the ability to include more information than electronic medical records. Electronic health records capture information from all physicians involved in a patient's care and allow for the transfer of that information as needed.

Drawing on the experience of developed countries, electronic records are increasingly being used in the US to replace outdated and unreliable paper systems in place in many medical facilities. This allows for safer and more efficient use of health care. This will facilitate the work of not only doctors, but also patients who use various health services. Especially in emergency situations where a person's medical information and medical history are needed, such as accidents, natural disasters and terrorist attacks, the availability of patient information is of great help.

With the goal of widespread adoption of electronic health records and electronic medical records, the US government is actively encouraging the use of electronic records by offering incentive programs. If health care providers can demonstrate that they are using electronic health records and not neglecting them.

Learning and teaching to apply the experience of developed countries opens the way to great opportunities in the medical field, because electronic health records and electronic medical records have several advantages (figure 3):

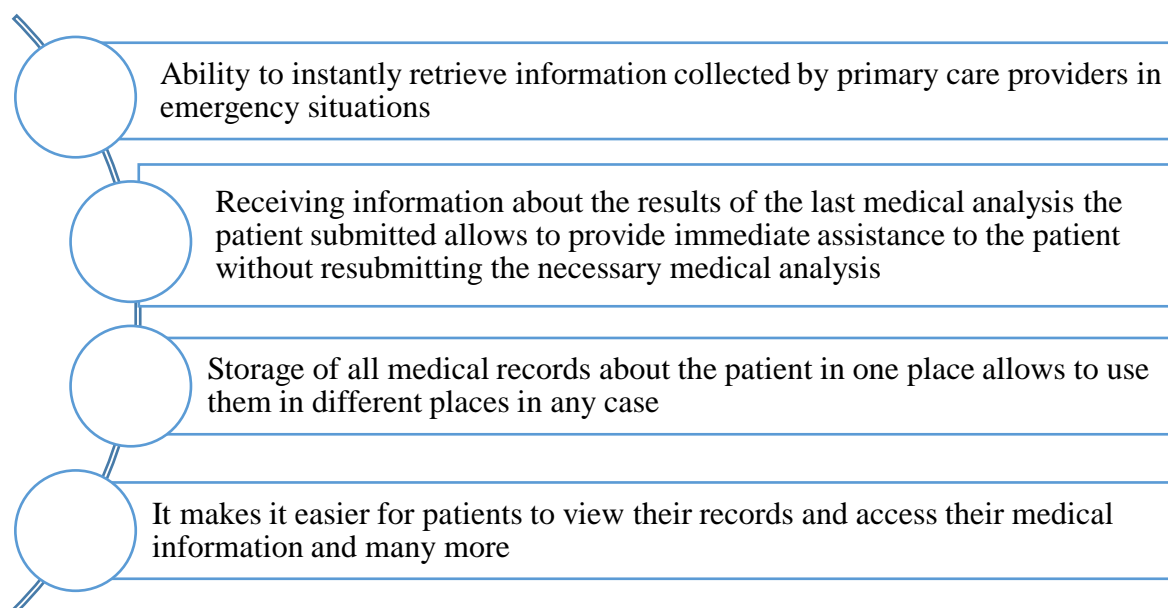


Figure 3. Electronic health records and electronic medical records advantages

Source: compiled by the author based on the study of scientific literature.

Of course, when considering the benefits of electronic medical records, the issue of security also comes to the fore, and it is appropriate to work together with the relevant agencies dealing with information security in our Republic on this issue.

In conclusion, it can be said that in order to develop the electronic healthcare system in our Republic:

- it is necessary to increase the literacy of medical workers in the use of information and communication technologies;
- step-by-step transition to electronic health records, encourage employees who use electronic health records in the work process
- encourage patients who come to family polyclinics
- rural medical centers, hospitals providing patients with extensive information about electronic health records
- studying the experience of developed countries in the transition to the electronic health system, etc., will contribute to the wide implementation of the electronic health system

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**INTERNATIONAL SCIENTIFIC AND TECHNICAL CONFERENCE
“DIGITAL TECHNOLOGIES: PROBLEMS AND SOLUTIONS OF PRACTICAL
IMPLEMENTATION IN THE SPHERES”**

APRIL 27-28, 2023

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