## THE ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN MEDICINE

## Rajaboev Shahboz Shodiyevich

Assistant teacher of the Department of "Information Technologies", at the Samarkand Institute of Economics and Service, Uzbekistan

## Qurbonov Pahlavon Sirojiddin oʻgʻli

Assistant of the Department of "Biophysics and Information Technologies" Fergana Medical Institute of Public Health, Uzbekistan

Abstract: Information technology in medicine allows high-quality monitoring of patients' condition. Keeping electronic medical records allows reducing the time spent by clinic staff on preparing various forms. All information about the patient is presented in one document available to the medical staff of the institution. All information about the results of examinations and procedures is entered directly into the electronic medical card.

Keywords: IT, life, medicine, storage and transfer, healthcare.

Information technology is now used everywhere. It is clear that such an important area of human life as health cannot be left aside. The latest digital developments have a positive impact on the development of the most promising ways of organizing medical care for the population around the world. At the same time, effective construction of IT infrastructure is gaining importance. Many countries have been actively using innovations in the field of medicine for a long time. Information technology (IT) is ubiquitous in the modern world. Healthcare is no exception. Modern IT developments have a positive effect on the development of new ways of organizing medical care for the population. Many countries have been actively using new technologies in the health sector for a long time.

Conducting teleconsultations for patients and employees, sharing information about patients between different institutions, remote recording of physiological indicators, monitoring operations in real time - all this is provided by the introduction of information technologies into medicine. This brings healthcare information to a new stage of development, positively affecting all aspects of its activity. The introduction of IT in the healthcare sector allows to increase the

quality of service, significantly speed up the work of employees and reduce the costs of providing services to patients.

Information technologies in the field of medicine and healthcare help to solve the following tasks:

- keeping records of patients in the clinic;
- remote monitoring of their condition;
- storage and transfer of results of diagnostic tests;
- monitoring the correctness of prescribed treatment;
- conducting distance education;
- mentoring inexperienced employees.

Information technology in medicine allows high-quality monitoring of patients' condition. Keeping electronic medical records allows reducing the time spent by clinic staff on preparing various forms. All information about the patient is presented in one document available to the medical staff of the institution. All information about the results of examinations and procedures is entered directly into the electronic medical card. This allows other specialists to evaluate the quality of prescribed treatment, to identify inaccuracies in diagnosis.

The use of IT in medicine allows doctors to conduct online consultations at any convenient time. It increases the availability of medical services. People can get skilled help from experienced doctors remotely.

This is especially true for people who:

- living in geographically remote areas;
- has a disability;
- caught in an emergency;
  - located in a limited space.

Thus, patients or doctors do not have to travel long distances for consultation. With the help of modern information technologies, the doctor can assess the patient's condition, examine him and get acquainted with all the results of his examination. Such consultations are necessary not only for patients with physiological problems. Interviews also allow people who need psychiatric or

psychological help. Audiovisual communication allows the doctor to communicate with the patient and provide him with the necessary assistance. Today, medical information systems are actively developing, which allows institutions to work more efficiently and quickly. Today, in Russia, the government is focusing on the informatization of health care.

Informatization of health care is a very broad concept, which includes activities aimed at informing specialists about the world's scientific achievements in the field of medicine with the help of IT. Thus, it is an effective way to train and improve the skills of hospital and polyclinic staff. №3 2022 143 With such technologies, doctors can quickly get information about new developments and discoveries that help them work more efficiently. This problem is especially relevant for medical workers working in remote settlements. Introducing innovative technologies to medicine is quick and easy. The interface of such systems is open and intuitive even for unprepared users. Clinic staff can quickly master the operation of these new technologies. It helps developers understand all the nuances of product performance.

After completing the training, which requires a minimum of time, medical personnel will have:

- work with information resources;
- holding a teleconference;
- work in local and global computer networks;
- use support systems.

Today, it is planned to create a national telemedicine system within the framework of healthcare informatization in Russia. With the right approach, this technology not only significantly improves the quality of medicine, but also helps reduce costs. For example, doctors do not have to pay for attending scientific conferences. They will be able to participate in such events remotely. Modern IT capabilities in healthcare allow to have a positive impact on all aspects of medical care.

New technologies help quickly:

- registration of operations on income and expenses
  - control over warehouses;

- formation of applications for delivery of medicines;
- control of medication consumption;
- writing off materials, preparations;
- creation of reporting documents and submission to higher authorities.

Information technologies are actively used in the field of education in medicine. Distance seminars allow students of universities and medical schools to get the necessary knowledge. Such technologies allow young specialists to participate in the lectures of well-known doctors, gain new knowledge and experience. All these possibilities are now available for Russian clinics. The RoboMed unified medical system is the future of your facility. Your staff will work more efficiently, make more profit and keep pace with Western clinics. We help you implement this technology in your business. In addition, we will train your employees to work with the system as soon as possible. If any questions arise during the operation of RoboMed, our highly qualified staff will quickly answer them and help solve the problems that have arisen. When you purchase this system, you will be assigned a personal service manager who will help you at any time, inform you about new software features and available updates.

By widely introducing new pedagogical technologies such as modern communication technologies, electronic textbooks and multimedia tools in the textbook educational processes, it serves to improve and fundamentally change teaching in the medical schools of our country, in a word, it serves to raise a mature generation. The textbook is intended for professors and teachers of medical universities and research scientists, senior and junior researchers, students studying in this direction, as well as specialized medical colleges. and representatives of the younger generation studying in academic lyceums can also use it.





Today, one of the fields in which information technology has actively entered is medicine. Computer hardware is widely used for diagnosis, treatment and preventive examinations. For example, computer tomography, nuclear medical diagnosis, ultrasound diagnosis, X-ray studies based on microcomputer technologies are among them. Operation of robots, checking health status through mobile phone applications, conducting laboratory analyzes at home through technical devices.

First of all, the responsibility in medicine is not fully assigned to the technique. Monitoring the process, confirmation of the diagnosis remains the responsibility of the doctor. Secondly, a doctor who wants to achieve success in his field makes more friends with technology, tries to use its possibilities to the fullest. Then his bread will not be half, but his work will be more productive with the help of technologies, his customers will increase, and his reputation will increase.

## REFERENCES

- 1. Ahmadovich, R. A. ., Tulkinjonovna, T. N. ., & Shodiyevich, R. S. . (2023). Statistical Analysis of Word Formation by Affixation between Two Languages. Best Journal of Innovation in Science, Research and Development, 2(4), 213–218. Retrieved from <a href="https://www.bjisrd.com/index.php/bjisrd/article/view/150">https://www.bjisrd.com/index.php/bjisrd/article/view/150</a>
- 2. Tursinxanov Nurlan Mustafaevich, & Rajaboev Shakhboz. (2022). SYSTEM FOR ANALYZING AND PROCESSING DATA ON UNIVERSITY STAFF BASED ON A FUZZY CONTROLLER WITH A FIXED KNOWLEDGE BASE. Open Access Repository, 8(03), 16–21. <a href="https://doi.org/10.17605/OSF.IO/9X7YF">https://doi.org/10.17605/OSF.IO/9X7YF</a>
- 3. Rajaboyev, S. (2023). Ta'limni axborotlashtirish sharoitida web-dizayn kursini flipgrid dasturining imkoniyatlaridan foydalanish.
- 4. Shodiyevich, Rajaboev Shahboz, Rajabboyev Shohzod Shodiyevich, and Usmonov Sunnatillo Berdiqul o'g'li. "ACCOUNTING ISSUES IN THE DIGITAL ECONOMY." CENTRAL ASIAN JOURNAL OF MATHEMATICAL THEORY AND COMPUTER SCIENCES 4.6 (2023): 80-84.
- 5. Shodiyevich R. S., Shodiyevich R. S., Berdiqul o'g'li U. S. ACCOUNTING ISSUES IN THE DIGITAL ECONOMY //CENTRAL ASIAN JOURNAL OF MATHEMATICAL THEORY AND COMPUTER SCIENCES. 2023. T. 4. №. 6. C. 80-84.
- 6. Ulugbekovich K. D. et al. Trends of Fast Development of the Service Sector in Uzbekistan //Gospodarka i Innowacje. 2023. T. 35. C. 554-563.
- 7. Shakhboz R. USING MODERN TECHNOLOGIES TO INCREASE THE EFFECTIVENESS OF TEACHING COMPUTER SCIENCE BASED ON DISTANCE EDUCATION //Journal of Advanced Scientific Research (ISSN: 0976-9595). 2023. T. 3. №. 7.
- 8. Shodiyevich, R. S., Shodiyevich, R. S., & o'g'liU. S. B. (2023). ACCOUNTING ISSUES IN THE DIGITAL ECONOMY. CENTRAL ASIAN JOURNAL OF MATHEMATICAL THEORY AND COMPUTER SCIENCES, 4(6), 80-84. Retrieved

- from <a href="https://cajmtcs.centralasianstudies.org/index.php/CAJMTCS/article/view/475">https://cajmtcs.centralasianstudies.org/index.php/CAJMTCS/article/view/475</a>
- 9. Toʻlqinjanovna T. N., Shodiyevich R. S. Word Formation by Affixation //INTERNATIONAL JOURNAL OF BUSINESS DIPLOMACY AND ECONOMY. 2023. T. 2. №. 5. C. 217-222.
- 10. Qurbonov P., Ataxonov S., Sharofiddinov S. MASOFAVIY TA'LIMNI TASHKIL ETISHNING USLUBIY ASOSLARI //Евразийский журнал математической теории и компьютерных наук. 2022. Т. 2. №. 13. С. 43-47.
- 11. Mirzakarimov , B., & Qurbonov , P. (2023). TIBBBIYOTDA MASOFAVIY TA'LIMNI TASHKIL ETISHNING DIDAKTIK TA'MINOTINI YARATISH TEXNOLOGIYALARI. Research and Implementation. извлечено от https://ferteach.uz/index.php/rai/article/view/745
- 12. Qurbonov P., Xoldarova G., Rasulova F. TIBBIYOTDA KOMPYUTER TOMOGRAFIYASI VA UNDAN SAMARALI FOYDALANISH //Наука и инновация. 2023. Т. 1. №. 2. С. 35-39.
- 13. Qurbonov, P., Minavarjonov, S., & Raxmonaliyeva, F. (2023). TIBBIYOT XODIMLARINI MASOFADAN O'QITISHDA AVTOMATLASHGAN DIDAKTIK TA'MINOTNING UMUMIY TUZILISHI. Евразийский журнал математической теории и компьютерных наук, 3(3), 52–55. извлечено от https://in-academy.uz/index.php/EJMTCS/article/view/11562
- 14. Pahlavon Q. TIBBBIYOTDA MASOFAVIY TA'LIMNI TASHKIL ETISHNING MAQSAD VA VAZIFALARI //GERMANY SCIENTIFIC REVIEW OF THE PROBLEMS AND PROSPECTS OF MODERN SCIENCE AND EDUCATION. 2022. T. 1. № 2. C. 24-28.