



Enhancing the Activity of the Dermatovenereological Service Based on Modern Information Technologies

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ABSTRACT: This work was carried out to analyze the equipment of medical organizations of the dermatovenereological profile with computer equipment and software. To obtain conclusions, we used questionnaire data obtained from regional medical organizations of the dermatovenereological profile.

Key words: Dermatovenereological service, information technologies.

Introduction

Relevance: health Informatization is one of the main guidelines of the new social policy, the implementation of which will be of key importance for the formation of an effective health model.

At the same time, the lack of training of personnel of medical organizations, the lack of a unified information infrastructure, as well as a number of other significant factors did not allow us to achieve the strategic goal of developing health Informatization and solve the problems of effective use of information resources (Кузнецов П.П., Столбов А.П., 2005). The planned introduction of a single electronic medical record will provide universal access to the patient's personal data that characterize all aspects of providing medical and social care. This will significantly increase the availability and quality of specialized medical care (Whited JD., 2016; 2008; Feroze K., 2018; Стародубов В.И. и соавт., 2009; Kanthraj G.R., 2010; Armstrong A.W., 2012).

A distinctive feature of the current stage of development of health Informatization is the preservation of the possibility of using previously developed specialized software products and medical information systems (Симаков О.В. и соавт., 2011).

Evaluation of the resource potential of the healthcare organizations to "dermatology" profile in a number of specialized medical organizations introducing telemedicine technologies to medical institutions activity of dermatovenereological profile at the present stage is not accompanied by the preceding study of the relevant capabilities from specialized medical organizations. The lack of a clear algorithm for interaction between medical organizations in the provision of telemedicine services also makes it difficult to use them.

These aspects determine the relevance of improving the organization of rendering and increasing the availability of specialized dermatovenereological care to the population.

Aim: The work consists in the development of criteria for the effectiveness of informatization of medical organizations of the dermatovenerological profile.

Materials and methods: to analyze the equipment of medical organizations of the dermatovenerological profile with computer equipment and software, we used questionnaire data obtained from regional medical organizations of the dermatovenerological profile.

The questionnaire to assess the level of development of information and technological infrastructure of healthcare organizations dermatovenereological profile included blocks of questions about the medical organization of dermatological profile, characteristic of technological and information infrastructure, status information use of information and telemedical resources and information security. The questionnaire to assess resource capabilities for the use of modern telemedicine technologies included blocks of questions about the availability and quantity of a videoconferencing system, an audio-visual subsystem, a computer subsystem, and opportunities for organizing a telemedicine center. The algorithm of information interaction between national and regional medical organizations of dermatovenereological profile is developed and justified on the basis of the results of their own research, taking into account the data of domestic and foreign studies.

Results and discussions: Results of the analysis of the equipment of regional medical organizations of the dermatovenereological profile with personal computers and software. The level of Informatization of these medical organizations is insufficient. The highest level of development of information and telecommunication technologies was revealed in the territory of Samarkand. Based on the results of the analysis of the power of computer equipment, it was found that the most common type of computer equipment was personal computers of the "Pentium IV and higher" type (on average, 32.5 ± 4.2 computers per medical organization). The results of the analysis of communication technologies showed that the most common was broadband access to the Internet using high-speed digital subscriber access technologies (28.1% of the studied equipment). This was followed by modem communication technologies

(4.2% of the studied equipment). The least common network technologies were a dedicated line with transmission via fiber or twisted pair wire (2.4% of the studied equipment).

The most common software in specialized medical organizations were office and antivirus programs installed in 80% and 70% of available personal computers, respectively. Accounting software is installed in 21% of computers, legal systems are installed in 19% of computers, and HR software is installed in 6% of computer hardware.

Based on the results of the analysis of special software of medical organizations of dermatovenereological profile, it was found that medical information systems designed to support medical decision-making are available in less than one per medical organization. At the same time, the number of automated information systems used for economic and statistical accounting and resource management of these organizations is 3 and 2 per medical organization, respectively.

Based on the analysis, an algorithm for conducting telemedicine consultations between national and regional medical organizations of dermatovenereological profile was developed for practical use (Figure 1).

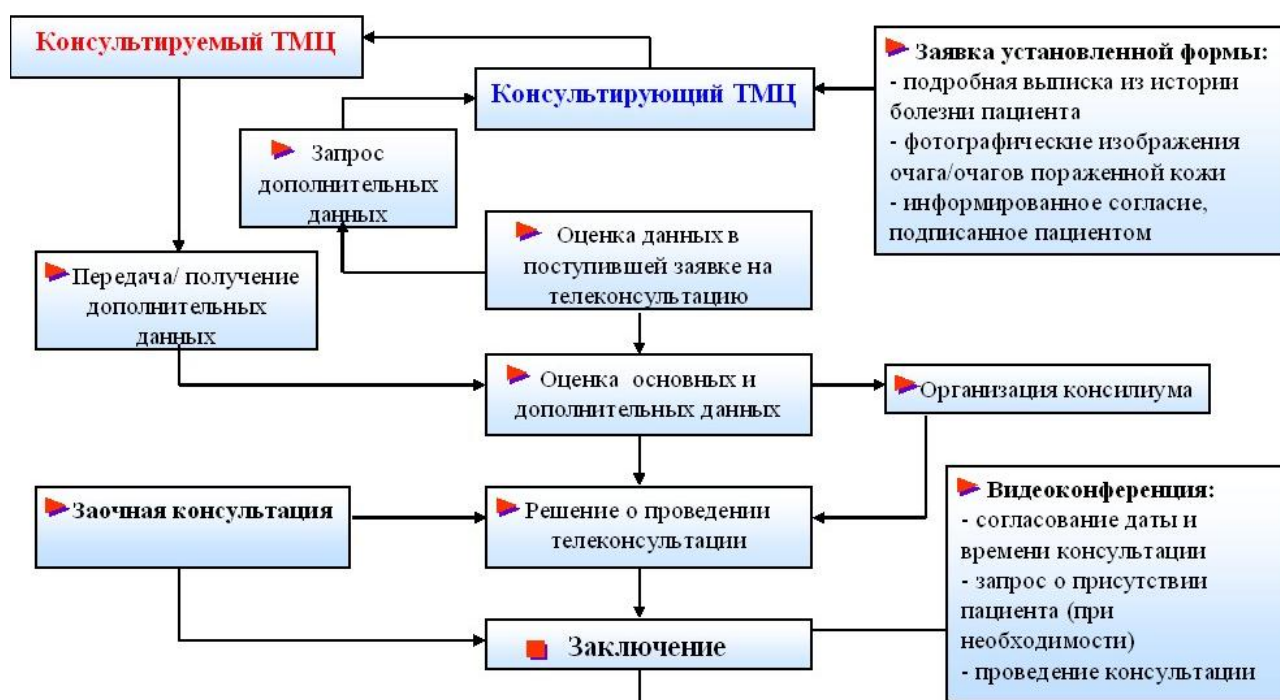


Figure1 Algorithm for conducting telemedicine consultations between national and regional medical organizations of dermatovenereological profile.

Conclusion:

1. Regional medical organizations of dermatovenerological profile have insufficient equipment with computer equipment and medical software.
2. In order to increase the availability and quality of dermatovenerological care to the population, an algorithm for information interaction on telemedicine consultations has been developed and implemented in the practical activities of medical organizations with a dermatovenerological profile. The implemented algorithm determines the procedure for conducting telemedicine consultations and the requirements for organizing them.
3. Additional equipment of medical organizations of dermatovenerological profile with modern computer equipment, medical software and trained personnel.
4. Connecting medical organizations of dermatovenerological profile to broadband Internet access (for the implementation of telecommunications systems).
5. Integration of medical information and telecommunications systems of medical organizations of dermatovenerological profile into a single information space that meets modern requirements.
6. Organization of distance learning process for dermatovenerologists on issues of information interaction in the provision of specialized dermatovenerological care.

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