MEDICAL INFORMATION STANDARDS

M.R. Malikov
Samarkand State Medical Institute
Assistant of the Department of Information Technology S.S. Nabiyeva
Head of the Department of Information Technologies Associate Professor

L.E. Shukurov
Master student Samarkand State University Republic of Uzbekistan, Samarkand
E.mail: sevar0887@mail.ru Tel: +998904506108

Abstract The article describes the consideration of a wide range of issues related to the standardization of the field of medical informatics. Almost all existing standards of medical informatics are not obligatory, but recommendatory.

Key words Medical informatics, standard, component, technique, structure, system.

Introduction

Basic concepts and definitions

A standard is a sample, a standard, a model, taken as the source for comparison with other similar objects.

A standard is a guarantee of the invariability of the quality of a product or service.

It should be borne in mind that the concept of a standard includes a lot of components. This becomes clear when considering the goals of creating and implementing standards:

- Protection of human rights (patient, consumer of medical services).
- Safety and effectiveness of products and services.
- Guarantee of the quality of the product or service.
- Compatibility of products and services.
- Improving understanding and perception.

if the goal of the standard as a whole can be considered the protection of the rights and interests of a person (producer and consumer), then healthcare is the protection of human health (patient).

In a broad sense, the standardization process is understood as the development and use of uniform norms, rules and requirements. There is an opinion that standardization in medicine is a consequence of referring health care as a whole to a branch of the national economy, and medical art - to the category of services, a kind of technological process. It should really be borne in mind that health care, being focused on a person and implying

constant contact with him, is distinguished by a super-high integration of the sectors of the national economy. This means that standards should target not only people in white coats and their patients, but also manufacturers of pharmaceutical and other medical products.

Typical processes (procedures) for the provision of medical services (the main target processes are diagnostic, preventive, therapeutic and rehabilitation; infrastructure general functional processes - the organization of management, various auxiliary work to ensure the implementation of targeted medical procedures, the processes of medical education, education, education and agitation).

Medical information (baseline medical information, including subjective symptomatic information; current medical information, including objective summarized diagnostic medical information obtained using tools; information on promoting health services and healthy lifestyles).

Medical supplies (medicines, biological products, consumable auxiliary medical supplies).

Medical equipment (medical equipment, devices and apparatus; medical instruments and supplies; special medical transport).

Buildings and structures (buildings of polyclinics, hospitals, inpatient and mobile hospitals; air purification systems, etc.).

Typical processes for organizing communications between parties interacting in the provision of medical services and health insurance (communication between patients and health workers; patients and insurance companies; medical institutions and insurance companies).

Improving understanding and perception of medical information is one of the most important objects of standardization, as it implies the possibility of achieving all the previous goals.

The standard in information is to improve its understanding of perception, the entire educational process, including the development of methodological documents and curricula, the continuity of the transfer of experience and its competent generalization, accreditation, certification, etc. With this in mind, it is the creation of a single information language that can become legal the priority of the whole process of standardization in healthcare.

When compiling a standard, not a single expert, even the most qualified and knowledgeable, can be completely objective.

It is known that there are several principles for setting standards:

- by law;
- government decree or decree;
- the precedent established during the trial;
- as a result of universal approval due to a long history of use or acceptance;
- as a result of the agreement of the interested parties (for example, specialists, manufacturers).

According to A. Donabedian, the standards represent either what the leading experts, representing the most significant scientific evidence, considered the most acceptable practice, or a derivative of the average experience of doctors in a given community.

Methods

Ideally, an information standard should be established as a result of an agreement between the parties concerned (government officials) and reinforced by administrative decisions (government orders and decrees). Unfortunately, we have to admit that in some cases there is a practice of creating "standards" by administrative decisions without the involvement and participation of wide circles of the professional community and, moreover, without taking into account the socio-economic aspects of the application of the requirements laid down in the standard.

The successful introduction of a national information standard into practice is possible if its place in practice is determined if the document itself meets the highest requirements. The development of an information standard is a complex process that includes many aspects:

- identification and formulation of the problem; - search and analysis of the validity of published data; - overview of current practice;- no doubts about safety; - the participation of all stakeholders (both government agencies and medical workers at all levels, and patients); - in the absence of evidence for the formulation of recommendations - onsensus / expert agreement; - openness, "transparency" of the process of creating a standard: public opinion and comments; the final decision of the experts; dynamic control (monitoring) of application practice and regular revision of source documents.

Conclusion

The standard is finally determined by its official approval and acceptance by manufacturers and consumers.

Recognition results from:

- High quality standard;
-Strict adherence to established development and revision processes;
- Systematic monitoring of the degree of accuracy of compliance with the standard in practice;
- Transparency of the processes of creation, approval, monitoring;

- Independence from the specific interests of individual groups.

Literature

1. Sakiev T., Nabieva S. Architecture of the medical information system. International Scientific Journal Theoretical & Applied Science. Section 4. Computer science, computer injineering and automation. Issue: 05 Volume: 61. Published: 14/05/2018. p. 35-39

2. Brian Dixon “Health Information Exchange: Navigating and Managing a Network of Health Information Systems”, Academic Press, vol. 1, 2016, 376 p.

3. Qarshiev A.B. S.S. Nabieva, A.Sh. Egamqulov Medical information Systems // Internotianal Scientific Journal Theretical & Applied Science Issue 04, Vol. 72, 2019 y.

4. V. V. Bogoslovsky, “Prediction of productivity, adaptation capacity of species and hybrids of the silkworm for enzyme systems and proteins spectra the Text.: dissertation of candidate of biological Sciences,” / V. V. Theological, Stavropol, 2009.

5. S.A. Feylamazov, "Information technologies in medicine: A manual for medical colleges", Makhachkala: DBMK, 2016, -163p.

6. Karshiev A., Nabieva S., Nabiyeva I. Medical information systems. International Scientific Journal Theoretical & Applied Science. SECTION 4. Computer science, computer injineering and automation. Issue: 04 Volume: 72. Published: 30/04/2019. p.505-508

7. Sakiev T., Nabieva S. Typical processes of AWP. International scientific and practical journal "Theory and Practice of Modern Science" Issue No. 7 (25) (July, 2017).

8. Scott Coplan "Project Management for Healthcare", Information Technology McGraw-Hill, Education; vol. 1, 2011, 288 p.

9. Sakiev T., Nabieva S. Principles of computer design. International scientific and practical journal "Theory and Practice of Modern Science" Issue No. 7 (25) (July, 2017).

10. Primova H. Sakiev T., Nabieva S. Development of medical information systems. XIII International scientific and technical conference "Dynamics of Systems, Mechanisms and Machines" November 2019, Omsk, Russia. (Scopus).