



Optimization Of Medical Records And Implementation Of Electronic Systems In Healthcare

Mamatkhanova G.M.

Fergana Medical Institute Of Public Health, Fergana, Uzbekistan

Ismailov S.I.

Fergana Medical Institute Of Public Health, Fergana, Uzbekistan

Copyright: Original content from this work may be used under the terms of the creative commons attributes 4.0 licence.

ABSTRACT

In this article, the authors give an idea of the importance of analyzing large amounts of data on the development of information systems in health care, and the importance of statistical data collected by them in the system of the Ministry of Health, as well as the accurate, reliable filling and storage of documents by medical personnel in any health department.

KEYWORDS

Statistics, medical documentation, information, report form, electronic system.

INTRODUCTION

On the way to the development of the health care system, it is necessary to solve a number of complex problems. Leading healthcare organizers note that the accumulated problems in the industry are: lack of a clear and precise development strategy based on the

basic values of the new society; underdevelopment of market mechanisms, ineffective management, technical and technological backwardness, difficulties in monitoring and evaluating the performance of the system, health authorities and

organizations, poor informatization and undeveloped communication networks, staff shortage, disinterest of health workers in the results of work, etc. [1, 3, 9, 11].

STUDY METHODS

When choosing literature, first of all, they stopped at a more extensive fundamental source and moved further in the direction from the general to the particular - from the basic provisions to more specific ones.

The results of the study of literary materials

It should be noted that the duties of medical workers in any department of a health care facility include clear, competent filling out and maintaining documentation [3, 7, 9, 10, 12].

At the same time, medical documentation is rather heterogeneous, it has different forms and different approaches to the assessment of parameters, which complicates the entire system and creates systemic prerequisites for errors.

Consequently, this, in turn, requires a comprehensive study of the state of medical documentation, since such studies have not yet been conducted in Uzbekistan, and in the CIS countries scientific work on the study of medical documentation is single and non-systemic [3, 4, 6, 7, 17].

At the present stage, the development of health information systems (HIS) is becoming one of the important directions in health care reform as an important component of health management.

The introduction of e-Health (e-Health) is an urgent task for many countries of the world, including Uzbekistan [1, 4, 6, 13, 19].

The main problem is that the ready-made developments on satellites used by developed countries cannot be simply transferred and used in our republic, since any information system is tied to a specific control system. This means that the development of satellites should be carried out in each country according to its own model; it is only possible to use the experience of development accumulated in this direction by the leading states [9, 14, 15, 19].

As part of the state program for the development of the National Information System and the creation of the "Electronic Government" system for the period 2013–2020, the government and the government adopted an action plan for the creation of the "Electronic Healthcare" system, which will become one of the integral parts of the National Information System and the "Electronic Government" system [1, 4, 8, 15].

The main goal, the creation of an integrated information system, is to ensure the preservation of the health of the population by increasing the efficiency and controllability of the treatment and diagnostic process, rationalizing the use of funds, improving the quality of medical care.

The system will be created "Electronic polyclinic" such services and services as "Electronic patient card", "Electronic registration" with the system "Electronic queue", "Electronic pharmacy" with the system "Electronic prescription", "Electronic order". Development of telemedicine, mobile medicine (mobile services, m-Health), e-education (in particular, on healthy lifestyles, healthy eating, etc.) is planned [3, 5, 7, 10].

Filling out documents, accounting work, collecting medical statistics and reporting make up a significant part of the activities of a medical organization. This is true both in terms of the importance for achieving the goals of the organization's activities, and in terms of labor costs. Keeping records also requires from all involved employees of a medical organization (doctors, nurses, statisticians, etc.) a significant amount of work on filling out documents, recording examinations and examinations performed, and generating reports [9, 11, 12, 15, 16].

The relevance of the tasks of automation of accounting and reporting in the primary care is due to the fact that accounting work and reporting form a significant part of the activities of a medical organization, both in terms of achieving the goals of the organization's activities and in terms of labor costs.

Over the past years, Uzbekistan has been undergoing continuous and profound healthcare reform processes, regulated by a number of government documents.

According to the Action Strategy for five priority areas of development of the Republic of Uzbekistan in 2017-2021, it is planned to raise the provision of medical care to the population to a qualitatively new level and further reform the primary health care system.

Many authors state that any modern medical information system is designed primarily to ensure the provision of quality medical care (CMH) [4, 6, 17, 18].

The quality of medical care is understood as a set of characteristics reflecting the timeliness of medical care, the correct choice of methods of prevention, diagnosis, treatment and

rehabilitation in the provision of medical care, the degree of achievement of the planned result. Most often, the issue of organizing medical services is approached through an examination of the quality of medical care already provided, rightly believing that such a retrospective assessment of medical care allows us to identify not only defects in the provision of medical services, but also to develop ways to prevent them [4, 13, 17, 18].

Analysis of the requirements for modern medical information systems of medical organizations (MIS MO) [6] shows that they clearly define the need for MIS functionality aimed at providing information to all of the above components - the characteristics of the IMS. However, the actual issues of organization and quality control of medical care are not considered in the mentioned document. At the same time, almost simultaneously, the Ministry of Health of the Russian Federation points to the traditionally used forms of statistical documents as a source of information for assessing the availability and quality of medical care [11, 12, 14].

Some authors note that when conducting expert events, regardless of the direction, medical documentation is assessed: including filling out the appropriate registration form, the quality of records characterizing the patient's health, the correct choice of diagnostic techniques, the adequacy of the prescribed treatment and its timing. "Obligations of medical organizations" defines the requirements for medical organizations to maintain medical records: keep medical records in the prescribed manner and submit reports by types, forms, within the time frame and in the amount established by the authorized federal executive body [7, 9, 11, 12].

The assessment of the maintenance of medical records is also provided for by the current legislation when exercising control over the examination of temporary disability by various subjects of external, both departmental and non-departmental control. It is believed that the domestic system of information support in the field of morbidity and preventive work fully, and in some sections in part, meet modern tasks in protecting public health. The annual summary of data on morbidity, causes of death of various groups of the population, based on the widespread state registration of each case of seeking medical care and mandatory registration of each case of death, suggests that this system in terms of content and quality generally meets modern requirements population health monitoring systems [8, 9, 10, 20].

Annually, aggregate data on the incidence of the population by classes, groups of diseases and individual diseases, diagnoses established for the first time in medical and preventive establishments (LPI), in each reporting calendar year, allow to follow the dynamics of the levels and structure of morbidity. Primary registration is carried out by doctors of health care facilities, and a summary of institutions is made by staff members of statistical departments. Therefore, no special funds are spent or planned [9, 10].

Lack of a unified conceptual model for health monitoring at the republican level; Low level of automation. Although most health care institutions have computers, the level of saturation (the ratio of the number of hardware and software to the amount of information processed) and the quality of computers are relatively low, especially in rural areas. When building health monitoring systems, this can become one of the main

obstacles to technology replication. The weak side of the monitoring system is, first of all, the weakness of using its capabilities, the weakness of coordination of its activities and the often low level of information support of this monitoring system [13, 14, 16].

It should be noted that many authors who have conducted research in the above areas describe the fact that using modern methods of information processing, it is possible for a foreseeable period of time to move from the existing system of collecting and processing information to a full-fledged system for monitoring public health. Take as the basic frequency of collection of information once a month (except for emergency information - for example, about outbreaks of infectious diseases).

The main collection technology is to determine not a set of statistical forms, but the protocols of information exchange of subjects of the monitoring system, approved by the coordinating body, to determine a system for the development and revision of information exchange protocols.

Information exchange protocols should provide for a clear structuring of information in socio-economic, gender and age, chronological and geographical sections, ensure the collection of both statistical information approved by the Ministry of Health and information that allows for preventive work with the population, to assess the economic and medical efficiency of the system [5, 14, 20].

Thus, in this article we have raised issues related to the health information system as a whole. The above should contribute to improving the quality of both the provision of medical care and the maintenance of

registration forms. Improving the quality of medical records, in turn, should lead to a decrease in claims from the subjects of external departmental and non-departmental control in this section of the activities of medical organizations.

CONCLUSIONS

1. Practical experience shows that the use of medical documents approved by the current orders of the Ministry of Health, in order to solve emerging problems, when drawing up accounting and reporting documents, should be agreed by leading experts, taking into account the opinions of specialists working in the system of practical health care, that is, in primary care.
2. The medical staff of polyclinics should be trained to create an operating electronic polyclinic system of primary health care institutions, for which it is considered important to thoroughly familiarize themselves with the instructions for maintaining paper registration and reporting medical forms.
3. The main problem arising in the implementation of electronic systems is the lack of a regulatory framework for electronic methods of maintaining medical records, which will ensure their legal status and effective use in medicine and healthcare, i.e. the existing regulatory documentation simply does not consider electronic methods of documentation, therefore, for to ensure the legal basis for maintaining electronic documents, it is necessary to revise the huge volume of regulatory documents adopted and in force in recent years.

REFERENCES

1. Asadov D.A., Durmanov B.D., Ismailov S.I. Reforming the healthcare system in Uzbekistan // Problems of social hygiene, healthcare and the history of medicine abroad. - № 5. - Moscow. - (Sep 2003). 2003. - S.54-57.
2. Boyko E.L. Digital healthcare / E.L. Boyko // Bulletin of Roszdravnadzor. - 2018. - № 3. - P. 5-8.
3. Gaidarov G.M. Sociological aspects of problems in organizing the activities of outpatient clinics / G.M. Gaidarov G.M., I.S. Kitsul, N.Yu. Rostovtseva // Healthcare. 2004. -№ 3 -C. 139-149.
4. Gusev S.D., Gusev N.S., Bochanova E.N. Information support for the provision of quality medical care using medical information systems. Physician and information technology. - 2016.
5. Dyukareva A.M. Experience in optimizing the activity of the polyclinic / A.M. Dyukareva, Yu.A. Lengin. // Healthcare. 2003. -№10. -S.39-45.
6. Zarubina T.V. Topical issues of implementation of information technologies in healthcare / T.V. Zarubina // Bulletin of Roszdravnadzor. - 2018. - № 3. - P. 20-25.
7. Zingerman BV, Shklovsky-kordi N. E. Electronic medical record and principles of its organization. Physician and information technology. - 2013.
8. Iskandarov T.I. Basic principles of a new international statistical classification of diseases and health problems // Med. Uzbekistan journal - 2000 - № 3. P. 2-4.
9. Ismailov S.I., Durmanov B.D., Dzhamalutdinova I.Sh. Standardization of the concepts of the health statistics base. // Healthcare. - Discussions. - № 9. - Belarus, Minsk. - 2003. - S.31-34.

10. Ismailov S.I. Improving the system of primary registration of morbidity in outpatient and hospital institutions. // Medical journal of Uzbekistan. - № 2. - 2005. - P.7-8.
11. Orlova TS Accounting forms in the system of statistical, departmental and non-departmental quality control of medical care of a health care institution (for example, the Kostroma region) / TS Orlova // Zam. ch. doctor.-2012.- № 5.-C. 18-28.
12. Basic requirements for the design of a medical card of an outpatient patient / M. Ya. Podluzhnaya, S. P. Shilova, L. D. Araslanova, G. E. Korshunova // Health Manager. - 2008.-№7.-C. 60-65.
13. Lutskiy M.A. Rational management of health care facilities based on the integrated application of information monitoring and models of end results / M.A. Lutsky, Ya. E. Lvovich, V.M. Frolov // Management in biomedical social and economic systems: Interuniversity. Sat. scientific. tr. Voronezh: RANS, VSTU, VIVT, 2012.S. 97-104.
14. Murashko M.A. Information systems for innovative development of control (supervision) in the health sector / M.A. Murashko, A.I. Panin, K.G. Pospelov // Bulletin of Roszdravnadzor. - 2018. - № 3. - P. 9-19.
15. Normative and reference information in the construction of e-health in Russia: a look at the problem / V.I. Starodubov, T.V. Zarubina, K.V. Sidorov, S.L. Shvyrev, S.E. Rauzin, Yu.I. Koroleva // Doctor and Information Technologies. - 2017. -№ 2. - S. 19-28.
16. Frolov V.M. Optimization of the volume of service and resource provision of a medical institution based on medical information monitoring / V.M. Frolov // System analysis and control in biomedical systems: Journal of practical and theoretical biology and medicine. M., 2013. Volume 12, № 1. S.241-244.
17. Aaronson JW, Murphey-Cullen CL, Chop WM, Frey RD. Electronic medical records: the family practice resident perspective. Fam. Med. 2001 Feb; 33 (2): 128-32.
18. Adams WG, Mann AM, Bauchner H. Use of an electronic medical records improves the quality of urban pediatric primary care. Pediatrics. 2003 Mar; 111 (3): 626-32.
19. Aydin CE, Forsythe DE. Implementing computers in ambulatory care: implications of physician practice patterns for system design. Proc. AMIA Annu Fall Symp. 1997; 677-81.
20. Baund RH. Conceptual search in electronic patient record. Medinfo. 2001; 10 (pt1): 156-60.