

The application of quality management conception in medical facilities¹

Introduction

The special achievements in studies on quality improvement in health care are attributed to the United States, where in 1951 The Joint Commission on Accreditation of Healthcare Organisations (JCAHO) was established. Already after a few years all types of medical facilities were within the scope of the organisation. The Joint Commission on Accreditation of Healthcare Organisations dealt with the requirements for the health care facilities, guidelines of conduct in specific clinical situations, and the accreditation system elaborating [1].

The problem of providing service quality is one of the most fundamental for modern health care functioning. Nowadays, the quality of health care has become a priority for both health managers and people involved in the wider health policy. Currently, the most common sets of standards and indicators for assessing the medical services quality are those developed by the above-mentioned American organisation JCAHO.

Management of medical services quality

According to the definition developed by the JCAHO, the quality is a degree in which each service provided to the patient in accordance with the current state of knowledge, raises the probability of obtaining the desired outcome of care and reduces the likelihood of adverse effects appearance.

Management of medical services quality is an interdisciplinary issue. The term “quality” refers both to the correctness of the service provision in light of current medical knowledge and standards, as well as factors relevant to the patient. This approach determines the quality of health services in two dimensions: technical (from the point of view the entity providing health services) and functional (in the patient’s opinion).

The technical quality includes all the elements necessary to manufacture the final product, so anything that affects the result of operational processes, such as medical equipment, security, knowledge and professional skills of employees, used medical technologies, applied procedures and instructions or accepted standards. The technical quality is difficult to assess by the patients and therefore the functional quality, determined by the contact between provider and recipient has become an important issue. Therefore, the functional quality is a consequence of patient’s medical service assessment and constitutes the sum of his experiences in relation to a specific therapeutic entity. Thus, medical service meets the quality expectations of patients, if it takes into account both described the dimensions of quality - technical (professional activity) and functional (professional relationships).

Comprehensive quality management in medical entities

As the foundation of the quality management philosophy in every organisation is considered so-called Total Quality Management (TQM). TQM is the most complete concern’s dimension not only to provide, but also to improve quality. Comprehensive quality management must include the entire organisation. The condition of the proper system functioning is efficiency in the entire health care facility management, and thus efficient use of available resources to achieve specific goals. Implementing the TQM concept should include:

- focus on customer satisfaction,
- leadership, mission and objectives of the organisation,

¹ Artykuł recenzowany.

- quality cost conduct,
- participation of all members of the organisation in implementing the concept of TQM,
- methods of process measure introduction,
- striving for continuous improvement of product and process,
- identification, analysis and solving problems using techniques and methods for quality management support [2].

In everyday practice of medical entity, the comprehensive quality management is a continuous improvement of the organisation efficiency, attention to patient's safety and satisfaction, but first of all a change of management philosophy in which the main place should take activities aim at improvement of providing services quality.

At the basis of an efficient quality management occurs the Deming cycle (PDCA cycle), which includes the following elements:

- *Plan*, which determine the actions necessary to provide the highest quality services. Planning typically includes identifying and collecting information about these areas of the organisation, which a quality improve will have the greatest impact on the final results.
- *Do* - implementation of all elements of the agreed plan, involving all members of the therapeutic entity.
- *Check* - assessment whether introduced new actions were consistent with the agreed plan, whether they were effective, and what steps should be taken to improve them.
- *Act* - correction and improvement of the realised processes.

Another important model of Total Quality Management is an EFQM model, created by the European Foundation for Quality Management. The model consists of the following criteria:

- The quality of service from the patient's point of view (building positive relationships with patients, monitoring the level of patient satisfaction).
- Safety of treatment (minimisation the risk of error making, care for the safety of staff).
- Clinical Effectiveness (provision of services based on guidelines and standards).
- Focus on results.
- Social Responsibility (responding to the society expectations, health promotion, care for the environment).
- Partnership (the integration of therapeutic entity with the local community and other organisations in the health sector).
- Staff (care for the culture of the organisation, the involvement of personnel in assigned duties, identification with the philosophy of the organisation).
- Leadership (definition precise objectives and values of the medical entity, the involvement of management in improving quality and increasing patient's satisfaction with offered services) [3].

The most frequently mentioned benefits associated with the introduction of total quality management in medical entities include: streamlining workflow, operating costs reducing, rational using of resources, increase of patient's satisfaction, reducing risk of error, increase employee engagement, conflict prevention and the competitiveness of the facility increase. The usage of the total quality management concept in health care facilitates the modern management system implementation and further the organisation improving. This objective is met by obtaining a view of the whole organisation, identification the organisation's strengths and areas for improvement, a possibility of the undertaken activities effectiveness verification and increase of employee involvement in continuous improvement.

Evaluation of the health services quality

The health care quality consists of many dimensions that could be evaluated, such as the effectiveness (provision of services based on current scientific information) and efficiency (use of economic analysis of the applied therapies), safety, availability of services, adaptation of health services offer to the current needs of patients and ensuring equal access to medical services for all patients.

The quality of medical services is usually assessed using a variety of indicators and criteria relating to specific standards. An indicator is a measurable component of medical procedure, and the criterion is an index of medical care, existence of which can be confirmed or excluded in each individual case [4].

The classic dimensions of health services quality evaluation determine PATH model (PATH - Performance Assessment Tool for Quality Improvement in Hospitals), developed by World Health Organisation. The basic PATH model's indicators include:

1. Clinical efficiency and safety:

- the percentage of caesarean section in childbirths,
- compliance with antibiotic prophylaxis standards (planned procedures for colon surgery, invasive cardiology, vascular arthroplasty),
- mortality rate (acute myocardial infarction, stroke, community acquired pneumonia, hip fracture, coronary artery bypass),
- percentage of readmissions due to: acute myocardial infarction, stroke, community-acquired pneumonia, hip fracture, coronary artery bypass, asthma, diabetes,
- percentage of under one day treatment among the patients (cataract, knee arthroscopy, inguinal hernia, curettage of the uterine cavity, tonsillectomy, cholecystectomy, tubal ligation, surgical treatment of varicose veins),
- percentage of admissions after one-day course treatment (apply for the above procedures),
- percentage of readmissions in the anesthetic and intensive care wards.

2. Efficiency (productivity and effectiveness):

- average length of stay (acute myocardial infarction, stroke, community acquired pneumonia, hip fracture),
- usage of the operating theatre (the number of procedures in a definite period of time).

3. Personnel and security:

- expenses for training,
- absence from work,
- overtime,
- medical staff's needle-stick injuries,
- cigarette smoking among employees.

4. The needs of the environment:

- percentage of mothers breastfeeding at discharge from hospital,
- continuation of medical care.

5. The orientation on the patient:

- patient's expectations [5].

All above-mentioned elements are equivalent, based on the safety of care and focused on the patient are currently considered as an integral part of quality management process.

Quality management systems in health care

In general, medical facilities in Poland surrender oneself to external review for compliance with ISO 9001 norm or for compliance with accreditation standards designed by Quality Monitoring Centre in Health Care.

The family of ISO 9000 norms consists of several standards, technical specifications and reports supporting the basic standards, containing guidance on specific issues relating to the quality management system. The problem of quality in organisations and the development of documents concerning the issue is taken up by the Technical Committee 176 (Technical Committee 176 - ISO / TC 176), established by the International Organization for Standardization ISO (International Organization for Standardization).

Essential role for organisations wishing to be certified has ISO 9001 norm, containing guidelines for compliance with which quality management systems are authenticated. PN-EN ISO 9001:2009 norm is a system of general requirements relating to establishment, documentation, implementation and support a quality management system and continually improve its effectiveness. Other standards have a complementary character.

In contrast to the ISO or EFQM norms, accreditation was established to assess the specificity of health care and allows to aggregate information about the national healthcare system and to identify its problems. As the external evaluation of the hospital, stimulates the internal actions of an individual - initiates or improves the functioning of continuous quality improvement. An inherent element of the accreditation

system is self-esteem, essential to adapt existing practices to the requirements of the accreditation standards [6].

The accreditation of hospitals functions in Poland since 1998. It is developed and run by the Centre for Accreditation Monitoring Centre for Quality in Health Care (CMJ) in Krakow on the basis of leading accreditation institutions in the world formulas. The Accreditation Council and Accreditation Centre are responsible for a realisation of the accreditation program. Accreditation Council is the superior body that determines accreditation policies, approves standards, and delivers the accreditation decisions [7]. Accreditation Centre deals with the coordination and conducts accreditation visits. A granting or refusal of accreditation should be based on the visitation report which assess the compliance of the solutions implemented in medical entities with the standards defined in the program.

Conclusions

Management of medical services quality is an interdisciplinary issue. In the concept of quality are included both the correct provision of medical services in the light of current knowledge and existing standards, and values relevant to the patient.

For many years there is a discussion in the word concerning the costs of the various types of health care systems functioning, availability to health care services and their quality. Nonetheless, it seems relatively easy to determine the cost of the system, or a specific therapeutic entity, therefore evaluation and comparison of the provided services quality is a very complex issue, sometimes even difficult to realisation.

The reason of this situation is that the quality of health care can be perceived from different points of view and what is more, the same level of quality is often variously assessed. The quality of care is differently perceived by patients, insurers, medical staff or governmental institutions. Due to the significant differences occurred in the assessment of health services quality by various stakeholders, it is essential to develop some standards common for all medical facilities, and to verify their application in daily practice.

The selection of quality evaluation systems for health care providers should be based on an analysis of the benefits which can be obtained for both the facility and the patients. Many hospitals in Poland has successfully implemented both systems simultaneously - the certification and accreditation, because accreditation standards as a relatively detailed requirements designed for hospitals, can provide the basic conditions which should be included in the procedures and instructions developed during the quality management system consistent with ISO standards implementation. The introduction any of the quality assessment systems in a medical facility organises the whole organisation, facilitates responsibility enforcement and reduces a risk of medical errors making.

Zastosowanie koncepcji zarządzania jakością w podmiotach leczniczych Streszczenie

Jakość opieki zdrowotnej determinowana jest przez wiele czynników. Od kilku lat zapewnienie odpowiedniej jakości usług zdrowotnych stało się priorytetem zarówno dla menedżerów ochrony zdrowia, jak i decydentów różnych szczebli polityki zdrowotnej. Placówki medyczne mają możliwość zastosowania różnego rodzaju systemów zarządzania jakością, spośród których najczęściej wykorzystywanymi są certyfikacja i akredytacja.

Celem artykułu jest zaprezentowanie modeli kompleksowego zarządzania jakością stosowanych w placówkach medycznych, wskazanie etapów ich wdrażania oraz zalet wynikających z wprowadzenia systemów zarządzania jakością.

The application of quality management conception in medical facilities Abstract

There are many factors determining a health care quality. For several years, providing quality of health services has become a priority for both health care managers and decision-makers at different levels of health policy. Health care facilities are able to apply various types of quality management systems, among which the most popular are certification and accreditation.

This article aims to present a comprehensive quality management models used in medical facilities, its implementation stages indication and the benefits result from a quality management systems introduction.

References

- 1) The Joint Commission on Accreditation of Healthcare Organizations, www.jointcommission.org, 22.03.2012.
- 2) Urbaniak J.: *Jakość w marketingu*, Oficyna Wydawnicza Sami Sobie, Poznań, 1999, s. 73.
- 3) Europejska Fundacja Zarządzania jakością: *Kryteria modelu EFQM*, www.efqm.pl, 27.03.2012.
- 4) Tomasiak T.: *Podstawy poprawy jakości w medycynie rodzinnej*, Zdrowie i Zarządzanie, Kraków, 2002, s. 39.
- 5) PATH: *Performance assessment Tool for Quality Improvement in Hospitals*, World Health Organization, 2007, s. 7, www.euro.who.int, 27.03.2012.
- 6) Centrum Monitorowania Jakości: *System akredytacji szpitali*, www.wsparcieakredytacji.cmj.org.pl, 25.03.2012.
- 7) Centrum Monitorowania Jakości: *Zasady systemu akredytacji w Polsce*, www.wsparcieakredytacji.cmj.org.pl, 25.03.2012.