



Review Article

Quality management in healthcare: The pivotal desideratum

Anubha Aggarwal^{a,*}, Himanshu Aeran^b, Manu Rathee^c^a All India Institute of Medical Sciences, Rishikesh, India^b Department of Prosthodontics Seema Dental Colleges, Rishikesh, Uttarakhand, India^c Department of Prosthodontics, Post Graduate Institute of Dental Sciences, Pt. B.D Sharma University of Health Sciences, Rohtak, Haryana, India

ARTICLE INFO

Keywords:

Continuous quality improvement

Health care organization

Quality

Total quality management

ABSTRACT

Health care is very complex sector and delivery of service is the fragmented care. Quality can be a common paradigm to address the need of all groups in health care. Quality improvement is the process approach to the organization's operational challenges. The initiative to address the quality in health care has become a global phenomenon. A quality revolution for delivery of service with patient at the center and services around it is the demand of the time. This article comprehensively reviews the quality management in health care service and aims to sensitize the health care professionals towards achieving total quality.

1. Introduction

A Health Care Organization (HCO) is a complex organization by nature owing to the intangible outcome of service and a blend of diverse professional personnel. Quality management in healthcare is a critical requirement in health sector. The principles of quality have been implicit in health care. However, quality is not a physical attribute service. Use of the term 'Health Care Service' in place of 'Medical Care' further defines the field and puts it as an entity that can be assessed, monitored and improved. A quality healthcare system can be defined as "one that is accessible, appropriate, available, affordable, effective, efficient, integrated, safe, and patient related".¹ Health care is delivered by practitioners in allied health services, dentistry, midwifery, obstetrics, medicine, nursing, optometry, pharmacy, psychology and other care providers.

Quality management in health care is a wide term. Initially it was perceived as directing the healthcare personnel to what to do. However, its current interpretation is to manage the process of care.² It refers to observing the organizational functions as an interaction of procedures and processes that can be addressed individually and collectively. Although various models have been put forth, however, the concept of triad of structure, process and outcome proposed by Donabedian remains the foundation of quality assessment today.³

Quality management has emerged as the dire need more fiercely than ever in light of the new definition of the quality with patient satisfaction as the outcome of service. The quality of services being provided to patients is highly crucial. The traditional view of quality control aimed at defect detection while the current concept aims at the defect prevention, continuous process improvement, and outcome

driven system guided by patients' needs. Hence there is a crying need to bring about a paradigm shift in quality of health care delivery.⁴ The authorities need to step forward to get involved in quality.⁵ Currently, the quality has been addressed more in medical field than in the allied fields such as dentistry and nursing and also more in the developing country context.

2. Quality

'Quality' has different definitions, ranging from traditional to those that are strategic. The American National Standards Institute (ANSI) and American Society for Quality (ASQ) defines quality as the totality of features and characteristics of a care or service that bears on its ability to satisfy given needs. W Edwards Deming, the father of concept of TQM has defined quality as a strategy aimed at the needs of the customer. This strategic definition has received widest international acceptance. Joseph M Juran, another authority on quality, has defined quality as conformance to requirements.

Quality is a unit less value system interpreted as diverse viewpoints. It has been conceived as superiority of excellence or lacing patient care and service defect or conformance to requirements i.e. zero defects. The precise meaning of quality of care in HCO is ambiguous. It involves more than the earlier perception of 'clinical quality'. The technical component is also included. The content quality in health care is determined and evaluated by the expectations of the health care professionals. The delivery quality of the health care service is determined by the patient satisfaction, is based on the patient expectations and linked with training and human interpersonal relations.⁶

* Corresponding author at: All India Institute of Medical Sciences, Rishikesh, Uttarakhand, India.
E-mail addresses: drhimanu@yahoo.com (A. Aggarwal), ratheemanu@gmail.com (M. Rathee).



Fig. 1. Quality Control Flow Chart in Health Care Organization.

2.1. Quality in health care

Medicine is a learned profession and it decides its own content quality. The focus for quality in health care is on simple preventive maintenance rather than total service maintenance. Donabedian proposed the use of triad of structure, process, and outcome to evaluate the quality of health care.³ The structure component includes the infrastructure, skill and qualifications of health care professionals and administrative systems to deliver the health care. The process encompasses the individual components of care and their interactions. The outcome is the recovery, restoration of function, and survival.

To understand quality the key features are reliability, assurance and responsiveness. The seven pillars of quality as presented by Donabedian are efficacy, efficiency, optimality, acceptability, legitimacy, equity, and cost. According to the Institute of Medicine, services are of quality, when they are safe, effective, patient centered, timely, efficient, and equitable.⁷

Quality management in health care has observed a paradigm shift from expecting errors and defects to considering that perfect patient experience is achievable. Philip Crosby supports the same principle that the system for causing quality is prevention and not the appraisal. Literature indicates that the cause of death for a large number of patients in hospitals is medical negligence and nosocomial infections. These deaths can be easily avoided by incorporating quality assurance programs.

System designs are important but are not enough in health care management. High value clinical care results from the most efficient expenditure of resources to achieve an established high level of clinical quality. Six Sigma design produces a yield of virtually zero defects. No single model has been established as superior to others in quality management. However, any mechanism would work if top management and the team are committed to quality.

Patient satisfaction is the desirable outcome of quality assurance program that requires patient-centered care delivery and also compliance with the standards and efficient protocols. The Institute of Medicine defines patient-centered care as a type of care that is

respectful of and representative to individual patient preferences, needs, and values ensuring that patient values guide all clinical decisions. Another approach is the shared decision-making where clinicians and patients make decisions together using the best available evidence.

Patient satisfaction, a blurred term that lacks a clear and agreed-upon definition, is a multidimensional entity and is subjective to great extent.² Majority of the studies to understand the intricacies of relationship between the three key components of service quality have been carried out in the developed country context, which cannot be generalized in the developing country context due to culture differences. The overall quality of the service provided is one of the key factors that patients consider important when choosing a dentist.⁸

Tools can be utilized to continually improve the effectiveness of quality management system. These include internal quality audit, subject feedback and corrective/preventive actions to meet applicable standards. IT-Integrated Health Management Information System and committed leadership facilitates the implementation. The four-step quality model, the plan-do-check-act (PDCA) cycle, also known as the Deming Cycle, is the most widely used tool for continuous quality improvement (CQI). (Fig. 1) Other methods are Six Sigma, Lean and total quality management (TQM). The Kano model has been adopted to identify patient requirements or enhance their satisfaction with healthcare services. Well defined protocols following standard operating procedures and continually trained staff are the internal measures to control quality, while accreditation is the external evaluation of quality.

2.2. Total quality management

The aim of the quality assurance programs in HCOs is to implement a system that is capable of managing the health care service to deliver a high quality service in a measurable way. The answer lies in TQM, a system that can address all the challenges of the organization. Total Quality Management (TQM) is defined as a management philosophy concerned with people and work processes that focuses on customer satisfaction and improves organizational performance.⁹ It encompasses

Content Quality and Delivery Quality both. It decreases burden of errors, ensures optimal utilization of infrastructure and medical personnel and manages quality control.

The key principles of TQM are customer focus, obsession with quality, scientific approach, long-term commitment, teamwork, continual improvement systems, education, and training, freedom through control, and unity.¹⁰ It addresses not only the direct medical services of diagnosis and treatment but indirect operations as administration and purchase also. The nurses are the main personnel that contribute to achieve the success of implementation of this program.¹¹

The TQM implementation is strengthened by the specific quality department.¹² Various instruments have been developed to measure the healthcare service quality. Improved quality benefits all, reduces cost and it identifies problems before they actually cause harm. TQM helps reduce quality waste and imparts a continuous improvement of quality services and the employees. Research on the implementation of TQM has been limited, particularly in developing countries including India.¹³

2.3. Conclusion

Health care is a sacred and scientific enterprise and not fundamentally a commercial one. The competent authorities should enforce the responsibility for ensuring high quality standards and quality of care in healthcare facilities. The authority should consider shaping the curricula to ensure training of future professionals to increase patient satisfaction. To gain the desired momentum, HCOs need to initiate a new Quality Movement to achieve total quality in health care service. It is the need, the challenge and the future direction.

References

1. Park K. Health care of the Community. In: Park K, ed. *Park's text book of preventive and social medicine*. 20th ed. Jabalpur: Banarsidas Bhanot; 2009:780–800.
2. Salehi A, Janati A, Nosratnejad S, Heydari L. Factors influencing the inpatients satisfaction in public hospitals: a systematic review. *Bali Med J*. 2018;7(1):17–26.
3. Donabedian A. Evaluating the quality of medical care. *Milbank Memorial Fund Q*. 1966;44(3)(suppl):166–206, Reprinted in *Milbank Q*. 2005;83(4):691–729.
4. Rathee M. Quest for quality: pivotal paradigm for healthcare transformation. *J IDA North West Delhi Branch*. 2016;3(2):55–56.
5. Rana BK, Behera NS, Nair SB. QCI - medical laboratory program journey of quality in public medical laboratories": an experience through program evaluation. *J Nat Accred Board Hosp Healthcare Providers*. 2014;1:7–11.
6. Mandeep, Chitkara N, Goel S. Study to evaluate change of attitude toward acceptance of NABH guidelines: an intra-institutional experience. *J Nat Accred Board Hosp Healthcare Providers*. 2014;1:52–55.
7. Donabedian A. *Explorations in quality assessment and monitoring*. Vol. I. *The definition of quality and approaches to its assessment, 1980*; Vol. II. *The criteria and standards of quality, 1982*; Vol. III. *The methods and findings of quality assessment and monitoring: an illustrated analysis*. Ann Arbor: Health Administration Press; 1985.
8. Ungureanu Marius-Ionuț, Mocean Floarea. What do patients take into account when they choose their dentist? Implications for quality improvement. *Patient Preference Adherence*. 2015;9:1715–1720.
9. Sadikoglu E, Olcay H. The effects of total quality management practices on performance and the reasons of and the barriers to TQM practices in Turkey. *Adv Decis Sci*. 2014;17.
10. Aggarwal A, Aeran H, Uniyal S, Nautiyal A. Quality assurance in dentistry: a need in Indian scenario. *Int J Oral Health Dentistry*. 2015;1(4):172–176.
11. Lee PM, Khong P, Ghista DN, Mohammad MosadeghRad A. The impact of organizational culture on the successful implementation of total quality management. *TQM Mag*. 2006;18(6):606–625.
12. Al-Shdaifat Emad A. Implementation of total quality management in hospitals. *J Taibah Univ Med Sci*. 2015;10(4):461e466.
13. Murti A, Deshpande A, Srivastava N. Service quality, customer (Patient) satisfaction and behavioural intention in health care services: exploring the Indian perspective. *J Health Manage*. 2013;15(1):29–44.