



Managing Quality in Hospitals

¹Dr. T. Sreenivas, ²Mr. N. Suresh Babu

¹Professor, Department of Business Management, Yogi Vemana University, Kadapa – 516005, Andhra Pradesh, Email: tallurus@gmail.com

²Research Scholar (Part – Time), Department of Commerce and Business Administration, Acharya Nagarjuna University, Guntur – 522510, Andhra Pradesh, Email: nsb.mgc@gmail.com

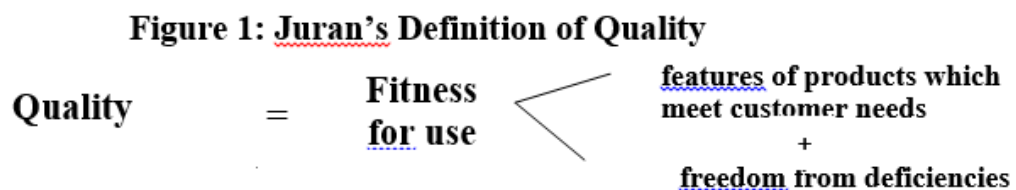
ABSTRACT

Quality encompasses not only the end product delivered to the consumer but also the systems, processes, and personnel involved in its production and delivery. Currently, health organizations face four primary challenges: escalating healthcare costs; an increasing dependence on technology; the necessity to reduce expenses while enhancing quality to meet the standards set by international regulatory bodies; and, importantly, the obligation to address patient needs, which compels hospitals to uphold high-quality services. Quality is defined as the measure of something in relation to similar entities. The Institute of Medicine (IOM) characterizes healthcare quality as "the degree to which health services for individuals and populations enhance the likelihood of achieving desired health outcomes and align with contemporary professional knowledge." This paper aims to illuminate the concept of quality, explore its relationship with healthcare, examine dimensions of quality management within the healthcare sector, and discuss measures for quality improvement in healthcare.

Key Words: Quality, Healthcare, System, & Quality Management System (QMS)

Introduction

Deming was the pioneer of the concept of "customer-orientation," while Juran combined this principle with the idea of fulfilling specified requirements to articulate his perspective on quality as "fitness for use." This perspective encompasses two key components: "product features that satisfy customer needs" and "absence of deficiencies" (IHI, 2021).



Source: IHI Working Paper, 2022

Quality is not solely defined by the end product delivered to the consumer; it also encompasses the systems, processes, and personnel involved in the production and delivery of that product. This highlights the importance of quality management, which requires a continuous pursuit of excellence. Organizations must ensure that all their efforts align with their objectives, maintaining and enhancing their standards to outpace competitors (De & Mudgal, 2023).

Medical referrals predominantly originate from hospitals, particularly in the context of patient healing and rehabilitation. One key expectation among healthcare consumers is that the quality of services provided by hospitals correlates with patient satisfaction. The level of quality offered by healthcare institutions serves as a reflection of a nation's commitment to the well-being of its citizens (Agustina et al., 2022).

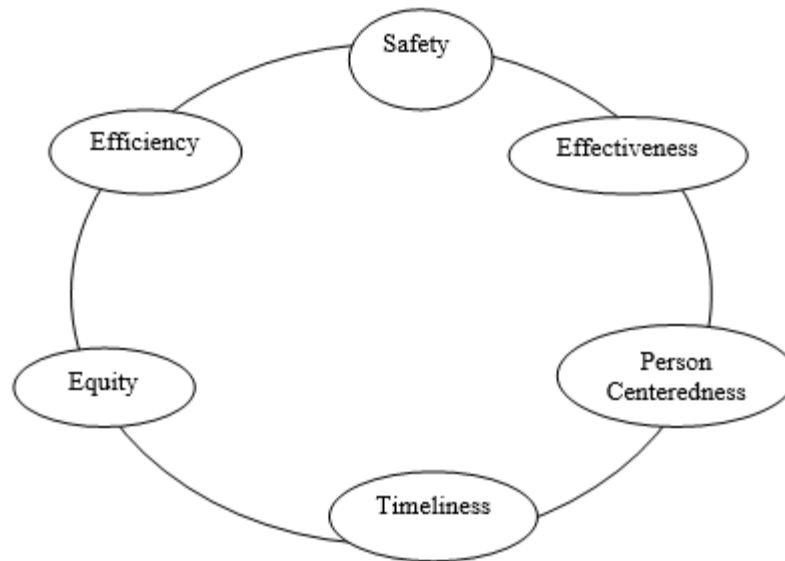
In recent years, quality control has emerged as a critical issue for healthcare organizations. The effective management of healthcare services hinges on the relevance and necessity of prioritizing the quality of medical care. This is particularly important given the theoretical and practical challenges faced in health policy and management. Despite numerous reform efforts over the decades, the healthcare system remains entrenched in outdated management practices from the 20th century (Mukhambetov and Yerdavletova, 2019).

According to the World Health Organization (WHO), quality is defined as the provision of a comprehensive array of diagnostic and therapeutic procedures tailored to achieve optimal health outcomes. This should be aligned with the latest advancements in medical science while ensuring the lowest possible costs for equivalent results, minimizing iatrogenic risks, and maximizing patient satisfaction regarding procedures, outcomes, and interpersonal interactions within the healthcare system (Shar, 2023).

Quality and TQM in healthcare

The notion of quality improvement in healthcare emerged in the 1850s. During this period, nursing pioneer Florence Nightingale articulated that maintaining proper hygiene and sanitation standards was crucial for lowering the mortality rates of soldiers during the Crimean War. This assertion reinforced the idea that implementing quality assurance measures could enhance patient satisfaction and mitigate risks associated with healthcare. The healthcare industry necessitates distinct and specialized quality management practices, distinguishing it from traditional business and industrial sectors. One primary reason for this distinction is the ongoing interactions between patients and healthcare providers, such as doctors and nurses. Additionally, healthcare professionals must not only fulfill the needs of their primary clients (patients) but also address the expectations of third parties (such as family members or other stakeholders) who finance the healthcare services. Figure 2 illustrates the six essential dimensions of Total Quality Management (TQM) within the healthcare sector, all of which must be present to facilitate improvements in the quality of healthcare services and processes.

Figure 2: Six Main Dimensions of TQM in the healthcare sector



Source: World Bank Report, 2022

Currently, health organizations face four primary challenges: escalating healthcare expenses; a growing dependence on technology; the necessity to lower costs while enhancing quality to meet the standards set by international regulatory bodies; and, importantly, addressing patient needs, which demands that hospitals uphold superior service quality. The objective of hospital quality management systems is to deliver exceptional healthcare services, and these challenges drive health planners to establish a system capable of effectively managing healthcare in a quantifiable manner (Al-Shdaifat, 2015).

Identification of critical dimensions of provider-perceived Quality Management in hospitals

Considering the relevance of TQM in health care, an instrument that identifies the operating elements of TQM in hospitals from the viewpoint of the health-care service providers is developed and validated in the present study. The following are the critical factors of provider-perceived TQM in hospitals that have been identified:

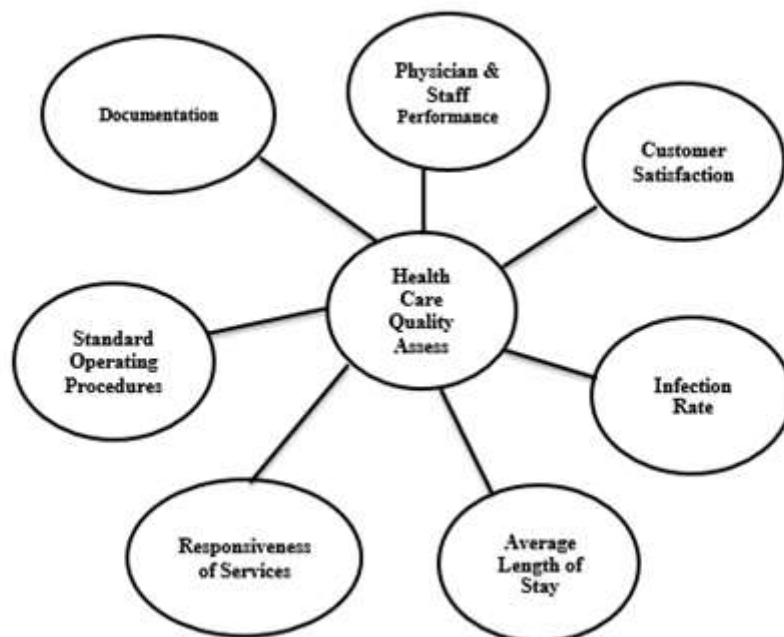
1. Top management commitment and leadership (TM).
2. Human resource management in the hospital (HR).
3. Employee involvement (HRE).
4. Process management (PM)
5. Hospital facilities and infrastructure
6. Patient focus (PF).
7. Employee focus (EF).
8. Measurement of hospital performance (MH).
9. Hospital information system (HIS).

10. Errors, safety and risk management (EM).
11. Service culture (SC).
12. Continuous improvement (CI).
13. Benchmarking (BM).
14. Union influence (UI).
15. Governance and social responsibility (GS) (Mayuri & et al. 2008).

Relationship between Quality and Health Care

Health care encompasses the diagnosis, treatment, and prevention of diseases, illnesses, injuries, and various physical and mental impairments affecting individuals. It is provided by a range of professionals, including those in allied health, dentistry, midwifery, obstetrics, medicine, nursing, optometry, pharmacy, psychology, and other health care roles. This field includes the delivery of primary, secondary, and tertiary care, as well as public health initiatives. Quality in health care is defined as the standard of a service when compared to similar services. The Institute of Medicine (IOM) characterizes health care quality as the extent to which health services enhance the likelihood of achieving desired health outcomes and align with contemporary professional knowledge. The quality of technical care is determined by the effective application of medical science and technology, ensuring that health benefits are maximized while minimizing associated risks. Various parameters or indicators exist to evaluate health care quality, with patient satisfaction being the most critical measure of the quality of services rendered (Guptha & Rokade, 2016).

Figure 3: Parameters Helpful to Judge Quality in Health Care



Source: *Khushboo Sabharwal Gupta, Varsha Rokade, 2016*

Some Quality improvement models for hospitals

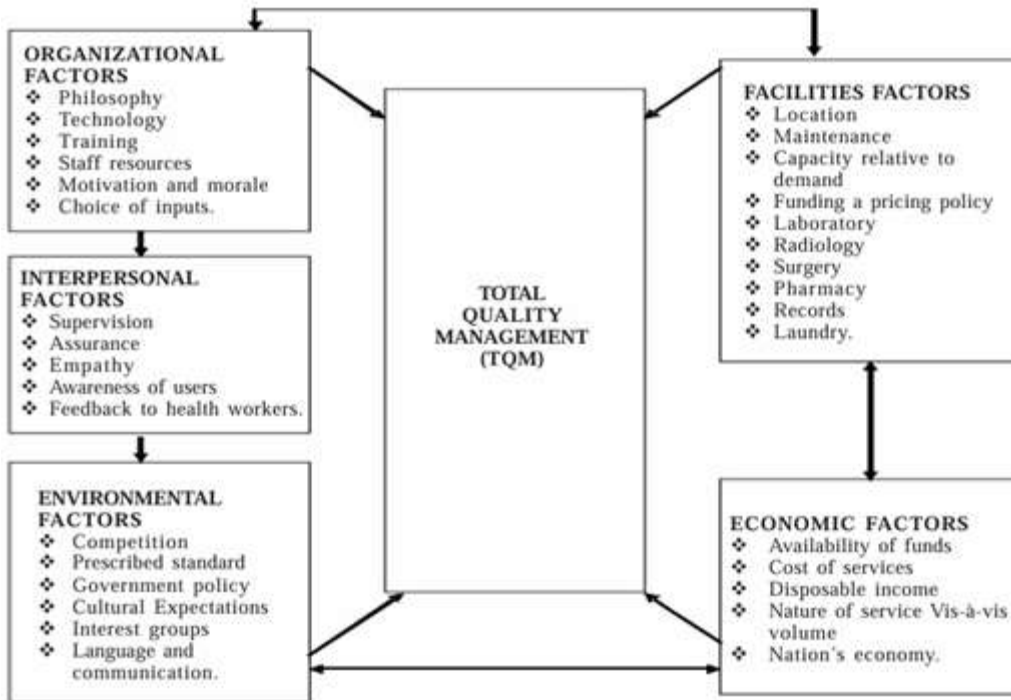
For hospitals, effective process management is of utmost importance, particularly as it pertains to acute patient care. Typically, change management models are implemented to guarantee the provision of high-quality care (Grazier, 1999). The expectation is that by engaging in collaborative quality improvement efforts, hospitals can enhance their understanding and control over quality-related challenges, thereby improving the delivery of patient care throughout the change process. This paper explores a range of quality improvement strategies, as previously discussed, spanning from incremental to discontinuous improvements, to examine comprehensive quality enhancement initiatives across the organization.

Figure 4 illustrates three distinct quality improvement strategies that hospitals may adopt. Hospitals that focus solely on continuous improvement through Total Quality Management (TQM) are categorized as Model 1. Model 2 incorporates radical innovation via Business Process Reengineering (BPR), while Model 3 integrates both continuous improvement and innovation to enhance healthcare delivery processes. The interruptions in the arrows are designed to represent the progression of process implementation.

: Chua & Goh,

Adeoti (2008) identified the key variables to be considered under each of the factors as shown in Figure 5.

Figure 5: TQM determinants schema



Source: Adeoti(2008)

Role of the Quality System in a Healthcare Facility

The fundamental purpose of any quality system is to ensure that the needs of the customer (patient) are fully satisfied. Several key components that contribute to meeting patient requirements include ensuring patient safety, the conduct of staff towards patients, the provision of accurate and timely treatment, adherence to treatment protocols, soliciting and adequately responding to patient feedback, comprehensive record-keeping, delivering quality care at reasonable prices, maintaining clear communication with patients regarding services, implementing best practices for appointment scheduling and service delivery, providing dependable diagnostic and laboratory support, and offering reliable ancillary services such as canteen, ambulance, and pharmacy. Additionally, creating a safe and pleasant environment, demonstrating technical competence, and exhibiting courtesy and a positive attitude among staff are essential (Sharma, 2012).

Table 1: Factors influencing the quality of healthcare

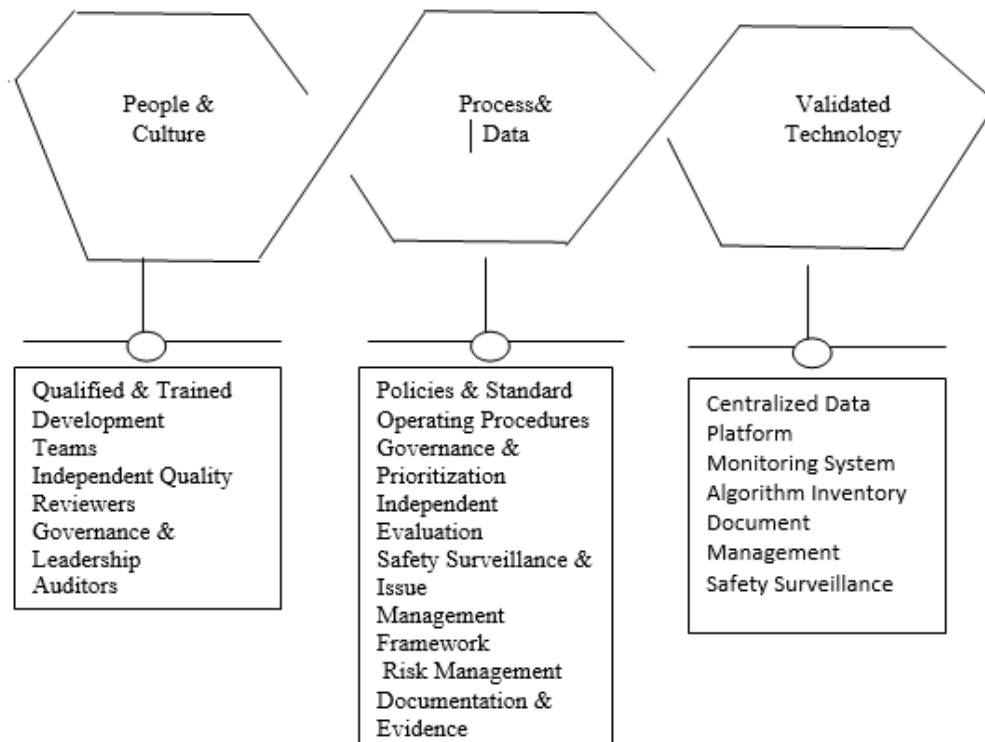
Sl.No.	Category	Themes
1.	Patient related factors	Patient socio-demographic variables Patient cooperation Type of patient illness
2.	Provider related factors	Provider socio-demographic variables Provider competency Provider motivation and satisfaction
3.	Environmental factors	Healthcare system Resources and facilities Leadership and management Collaboration and partnership development

Source: Ali Mohammad Mosadeghrad, 2014

Quality Management System (QMS) in Healthcare

The essential elements of a Quality Management System (Fig. 6) include People & Culture, Process & Data, and Validated Technology. These components serve as the driving force behind HCO's strategic initiatives aimed at merging research rigor with clinical excellence into a unified framework, thereby addressing the AI translation gap.

Figure 6: Primary components of a Quality Management System (QMS)



Conclusion

Total Quality Management (TQM) represents a management philosophy or culture characterized by eight essential components: cultural transformation, senior leadership, continuous improvement, customer focus and satisfaction, employee involvement, collaboration, systematic processes, and training. The literature review for this study commenced with a definition of TQM within the context of healthcare, followed by an exploration of the benefits associated with its application in a hospital environment. Successful implementation of TQM can yield numerous advantages for hospitals, such as enhanced quality, cost reductions, prevention of errors, increased staff morale, and improved patient satisfaction. However, these benefits will not materialize unless TQM is effectively executed within the hospital. This can be achieved by developing implementation frameworks that are straightforward and incorporate the key elements of TQM.

References

1. Sampath B, Rakover J, Baldoza K, Mate K, Lenoci-Edwards J, Barker P. Whole System Quality: A Unified Approach to Building Responsive, Resilient Health Care Systems. IHI White Paper. Boston: Institute for Healthcare Improvement; 2021.
2. Dewi Agustina, Arini Fajriani, Alwi Safriansyah Lubis, Dina Anggreini, Fitri Amja Yani, Nyak Firzah (2022), Improving Health Service Quality Management in Hospitals (Literature Study), *Majalah Kesehatan Indonesia*, Volume 3, Issue 2, pp. 55–60, DOI: 10.47679/makein.2022101.
3. Temirkhan Mukhambetov and Farida Yerdavletova (2019), The Strategic Model of Quality Management in Health Care Organization, *International Journal of Innovation, Management and Technology*, Vol. 10, No. 3, doi: 10.18178/ijimt.2019.10.3.85.
4. Upama De , Shivangi Mudgal (2023), Towards the Future: Highlighting Quality in Healthcare Industry, *Future Health*; 1(1):87-91.
5. Moukhafi Sahar (2023), Evolution of Quality Management and Quality of Care Management, *Global Journal of Medical Research*, Volume 23, Issue 7.

6. EmadA.Al-Shdaifat (2015), Implementation of total quality management in hospitals, *Journal of Taibah University Medical Sciences*(201510(4),461- 466.
7. Mayuri Duggirala, Chandrasekharan Rajendran and R.N. Anantharaman (2008), Provider-perceived dimensions of total quality management in healthcare, *Benchmarking: An International Journal* Vol. 15 No. 6, pp. 693-722.
8. Khushboo Sabharwal Gupta, Varsha Rokade¹, Importance of Quality in Health Care Sector: A Review, *Sage Journal of Healthcare Management*, 18(1), 2016, pp. 84 – 94.
9. Clare Chow-Chua and Mark Goh (2000), Quality Improvement in the healthcare industry: some evidence from Singapore *International Journal of Health Care Quality Assurance*, 223-229.
10. Johnson Olabode Adeoti (2011), Total Quality Management (TQM) Factors: An Empirical Study of Kwara State Government Hospitals, *Ethno Med*, 5(1): 17-23.
11. Ali Mohammad Mosadeghrad (2014), Factors influencing healthcare service quality, *International Journal Health Policy Management*, 3(2), 77–89. 2014.
12. Karun Dev Sharma (2012), Implementing Quality Process in Public Sector Hospitals in India: The Journey Begins, *Indian Journal of Community Medicine*/Vol 37, Issue 3.