



Key Parameters for Healthcare Quality

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Authors' contributions

This work was carried out in collaboration among all authors. Author FA draft the concept. Author FA also did the literature research with input from Sadaf Anwar. Author FA critically reviewed and approved the drafted document. All authors read and approved the final manuscript.

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ABSTRACT

Over several decades, a wealth of expertise and experience in improving the quality of health care has accrued globally. Despite this wealth of expertise, the challenge that is often faced by country level policymakers in both high- and low-medium income countries is to know which quality policies are being implemented. The goal of this report is to highlight and critically evaluate quality metrics published in the literature for healthcare establishments. Its goal is to present an integrated quality model that combines both technical and supportive quality indicators in order to reach the highest level of patient satisfaction. As some of the priorities of doctors and nurses are to improve patient satisfaction and patient care in a healthcare system Out of all the most critical criterion for evaluating the quality of service offered to the customer by a service provider is customer satisfaction. The quality of patient care and patient satisfaction can be assessed by the quality of facilities and training, the expertise of staff and the reliability of operating processes indicating that if the personal rights and working environment of health workers are not improved, the quality of health care cannot be expected to increase.

Keywords: Healthcare quality; parameters of quality; patient satisfaction.

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1. INTRODUCTION

The quality and protection of health care remains problematic around the world [1]. Medicine which is a field of health and healing is also facing countless improvements and developments in the domain where scientific evolution is at its top. Yet the healthcare system is performing far beneath the appropriate standards to meet the quality improvement, patient requirements, patient protection and system performance [2]. Health care quality; in which the care offered will increase the probability of achieving the desired results from patients and decrease the possible unwanted effects. The life expectancy is increasing as the world grows. Almost 100 thousand individuals lost their lives in hospitals annually because of medical negligence, according to JAMA (Journal of American Medical Association) [3]. Patients are nowadays attentive towards their rights when it comes to quality and delivery of services in health care system. Different indicators or tools are there to provide patients the standard of facilities without developing any hospital-acquired- infection [4].

The legal and moral obligation of hospital boards is to ensure the high standard of care rendered by health care practitioners in their hospitals [5]. They are the ones who are responsible for government and insurance, but they face challenges in management of quality and safety hazards [6-9]. Difficulties such as inadequate funding, differences in the expertise and abilities of board members and challenges in tracking the quality of care in the hospital make it difficult for boards to control the quality of health care in their hospital [7]. For healthcare organizations, the capacity to enhance quality is visibly critical; each organization needs to recognize its challenges and solve them using organized method. In improving customer satisfaction, the quality of service, especially in the community sector, has become increasingly important. Organizations agree that contributing to the establishment of reputation and legitimacy amongst the community is customer satisfaction. The reputation and level of service quality in the public sector is influenced by public concerns about time-consuming queues, inadequate physical facilities and insufficient service delivery. Including service product, service delivery and service setting, the service quality that customers receive must be efficient, sensitive and emphatic. Service quality has been reported as one of the main drivers of business sustainability and is

important to the achievement of companies [10-12]. For many problems, tools adapted from industries such as Lean and Six Sigma, PDSA (plan-do-study-act) cycle are helpful in improving healthcare quality [13]. For improving quality of healthcare, some steps can be applied which includes identification and focusing on quality improvement efforts, decision on what process needs to be adjusted in order to improve outcomes, establishment of effective improvement strategies and finally monitoring and sharing the results [14].

In general, improving healthcare efficiency and quality will benefit healthcare providers with efficient cost-effective and sustained healthcare procedures and let them to reach their goals of improving the healthcare delivery and patient outcomes. For a well-functioning practice, understanding and properly implementing quality improvement is important and is appropriate for any practice interested in enhancing performance, clinical outcomes or safety of patients. The aim of this article is to define and critically evaluate the parameters of quality in healthcare mentioned in the literature.

2. METHODOLOGY

The current research was based on scoping review approaches developed in the last ten years (2010–2020) with the goal of finding and evaluating the efficacy of various interventions addressing key metrics for healthcare quality and associated domains. PubMed, Google Scholar, Medline, and other reputable search engines were used to gather data for this review article. Around 34 publications from peer-reviewed journals were included in this literature review, which met the primary goal. A variety of experimental, descriptive, and observational research are combined, all of which are based on critical parameters for maintaining and improving healthcare quality. We conducted a thorough assessment of the literature on healthcare quality, identifying deficiencies through critical analysis in regard to their overall influence on patient management, and establishing an integrated quality model that was acceptable to hospital employees.

3. DISCUSSION

On both macro and a micro level, improving healthcare quality is viewed as something that will take an extensive, structural modification in the whole healthcare system and that every

single doctor can practice and give quality treatment to their patients. By following the techniques for keeping the patients safe from infections, follow-up more frequently or linking their patients to improved services, doctors may increase the quality of health care for their patients. In actuality, primary care professionals are best positioned to influence the quality of patient care; they serve as the hub for patient care as they're more likely to correspond to patients and knowledgeable about their needs and health [15]. The parameters that can help improve the healthcare quality are as follows:

3.1 Patient and Workforce Satisfaction

The core idea behind healthcare quality improvement is to place the requirements and needs of the patient on the same page. Services which are structured to put together needs and expectations includes patient protection, patient engagement, systems that support access by patients, provision of evidence-based services, patient-centric relationship and patient wellness awareness [2]. A significant and widely used metric for evaluating the quality of health care system is patient satisfaction. Patient satisfaction affects hospital performance, medical malpractice litigation and patient retention. The appropriate, reliable and patient-centered delivery of quality health care is impaired if there is lack of patient's satisfaction. Therefore, patient satisfaction is a substitution, but it is a very effective indicator of the achievement of hospitals and physicians [16].

Also, for the better quality of healthcare, performance and productivity of an employee, workplace environment plays a major role. If the working, personal rights and working environment of health workers are not improved, the quality of health care cannot be expected to increase. There are a lot of factors that can have a negative impact on employee's productivity that includes poorly designed work stations, lack of safety measures for emergencies, poor workforce environment, poor supervisor support, unsuitable furniture and excessive noise. Workers' productivity and performance can suffer as a result of a poorly planned workplace environment, which has a negative impact on their confidence and can lead to low motivation and job satisfaction. As a result, providing a safe work environment for employees in order to maintain their health, efficiency, productivity, and good performance becomes a challenge for management [17].

3.2 Infection Control

One of the leading preventable healthcare concerns is health-care associated infections and these infections are patient acquired infections, when a patient is seeking medical treatment in a hospital. These infections have a detrimental impact on healthcare along with increased length of stay, increased mortality and morbidity and the cost of health care. Infections in hospitals may have a detrimental effect on healthcare system that results in increased length of stay and financial burden. It raises safety issues for healthcare workers and patients. It also has a devastating impact on morbidity and mortality and in addition, it can advance resistance to antibiotics that can eventually lead to other long lasting disabilities [18]. These infections can also cause complications such as sepsis. Health-care associated infections are avoidable and critical measures are required to prove a secure environment in a hospital. These infections can affect a patient in less than 30 days after discharge or after 48 hours of admission [19]. The key types of health-care associated infections include, catheter-associated urinary tract infection, surgical site infection, ventilator-associated pneumonia, *Clostridium difficile* infection, and central-line associated bloodstream infection [20]. One in ten patients who are admitted can be affected by these infections [21].

The goal is to reduce the incidence of health-care associated infections that will eventually result in improving the patient outcomes and quality of patient care. This can be prevented by washing hands with soap and warm water, creating policies for infection control, identifying highly contagious infections as early as possible, providing education regarding infection control, using gloves and masks, disinfecting and keeping surfaces clean and providing isolation-appropriate personal protective equipment [22,23].

3.3 Average Length of Stay

Decreasing the length of stay improves economical, operational, and clinical performance by reducing a patient's treatment cost. By minimizing the danger of health-care associated infections, it can also maximize performance [24]. Hospital employees who are not specialized in the diseases, for which the patient is seeking treatment and is hospitalized, end up at the wrong level of treatment and

eventually leading to increased length of stay of patient. Slower recovery times and even health conditions can contribute to this. Length of stay will be decreased when the right patient is on the right bed at the right time [25].

3.4 Physician and Staff Performance

Healthcare physicians are qualified to diagnose ill health and to treat it. Most clinicians perform this task very effectively that maintains a good relationship with patients behind the closed door of the consultation room [26]. In public policy and management, performance assessment has a long history and has found fertile ground in the public health field [27].

3.5 Standard Operating Procedures

There is a particular collection of procedures that as particular situations occur, must be initiated and followed. For example, patients coming in the state of coma, emergency room doctors have standard operating procedures (SOPs); nurses hand over the swabs and forceps following the SOPs to the surgeon in operation theatre; and also lab technicians follow standard operating procedures for examining, handling, and ultimately disposing body fluids collected from

patients [28]. In serious cases, SOPs guarantee a higher level of medical treatment, such as lithium toxicity and neuroleptic malignant syndrome [29].

3.6 Documentation

The cornerstone of the medical record of a patient is clinical documentation. It includes patient care in which diagnosis of patient's disease, services and treatment used during patient care and from the time of admission to discharge of patient is included. It removes the errors and facilitates cooperation between healthcare personnel when the documentation covers everything and it is complete, detailed, and reliable [30].

3.7 Responsiveness of Services

The responsiveness concept is multi-dimensional and can be evaluated across different fields, including prompt attention, integrity, connectivity, autonomy, and provider choice, quality of services, privacy, and access to family support. This research explores the views of covered users on the responsiveness of their health care facilities [31-35].

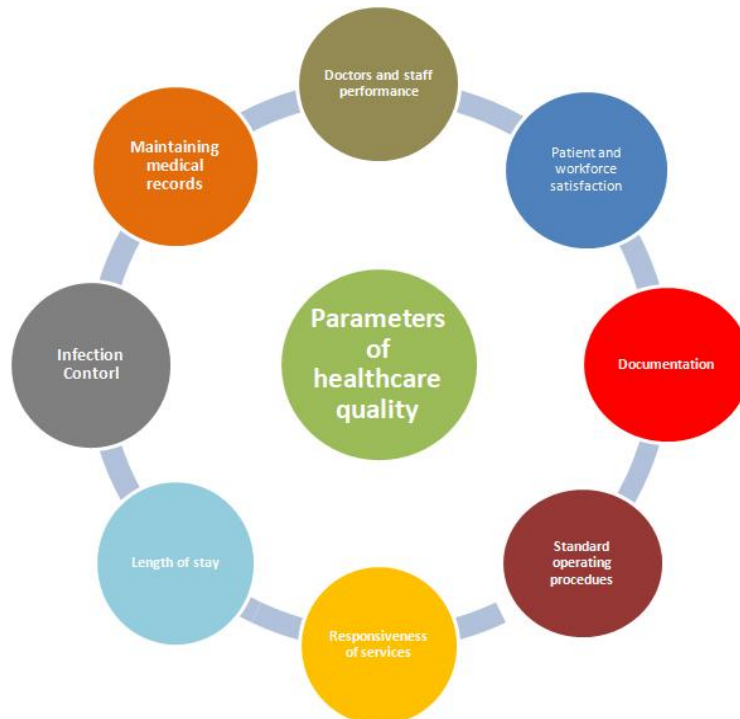


Fig. 1. Quality parameters in healthcare

In tracking and assessing health insurance schemes in developed countries, responsiveness has been used as a success outcome measure, but has gained little attention in low- and middle-class countries [36].

3.8 Maintaining Medical Records

By improving management, reducing medicine and prescription errors, reducing unnecessary investigations, and improving communication and interactions between primary healthcare professionals, patients, and other providers involved in healthcare, electronic medical records increases the quality of care, patient protection and outcomes [37].

4. CONCLUSION

In the hospitals, several researchers have worked for quality. Many of them worked for the satisfaction of customers. The most critical criterion for improving healthcare quality is patient satisfaction. Health quality can be strengthened by educating physicians and workers to follow the standard operating procedure (SOPs) collection. Organization should verify the similar quality improvement parameter by patient maintaining medical records (MR) too (Fig. 1). By integrating quality tools and customer satisfaction offered by different international and national communities, more work can be done. The consumer does not measure the quality of the services given to them but the average duration of stay in the hospital can be best measured by the incidence of health-care associated infections.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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