

Content available at: <https://www.ipinnovative.com/open-access-journals>

IP Annals of Prosthodontics and Restorative Dentistry

Journal homepage: <https://www.aprd.in/>

## Review Article

# Servqual method– A tool for quality assurance in health care

Poonam Prakash <sup>1</sup>\*

<sup>1</sup>Dept. of Prosthodontics and Crown & Bridge, Command Military Dental Centre, Chandimandir, Punjab, India



### ARTICLE INFO

#### Article history:

Received 30-03-2024

Accepted 14-04-2024

Available online 15-05-2024

#### Keywords:

Healthcare

Patient centric

Quality

Quality assurance

SERVQUAL

### ABSTRACT

Ensuring high-quality service delivery in the healthcare industry is crucial for both overall organizational success and patient satisfaction. However, numerous gaps often exist between patient expectations and perceptions of service quality, necessitating effective tools for assessment and improvement. The SERVQUAL method emerges as a valuable tool for quality assurance in healthcare, addressing these gaps through its comprehensive framework. SERVQUAL encompasses five key domains: reliability, assurance, tangibles, empathy and responsiveness.

When SERVQUAL is used in the healthcare industry, these domains are evaluated using a variety of approaches, such as focus groups discussions, interviews, and surveys. Healthcare organizations can customize interventions to enhance service quality and patient satisfaction by finding gaps between patient expectations and actual service delivery. The intricacy of patient-provider interactions and cultural diversity present challenges for SERVQUAL implementation in the healthcare industry, emphasizing the necessity for nuanced methods.

Despite these challenges, SERVQUAL remains a valuable tool for enhancing quality assurance in healthcare, promoting a patient-centered approach to service delivery. Through its methodical assessment of service quality along several dimensions, it helps healthcare organizations to focus on important areas for development, which eventually improves patient outcomes and experiences.

This is an Open Access (OA) journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/), which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: [reprint@ipinnovative.com](mailto:reprint@ipinnovative.com)

## 1. Introduction

Improvements in the field of healthcare services have resulted in increased life span of individuals. In the present scenario, clientele demands an improved quality of life, not merely an extension of life years. Hence the quality rather than the quantity of services provided becomes important. The quest of service quality serves as a road map, pointing the providers in the direction of excellence within the complex healthcare system. The need to overcome obstacles and put effective solutions in place is more important than ever, given the status of healthcare systems today and the rising demands of patients. In the

rapidly evolving healthcare industry, delivering high-quality services is essential to achieving positive patient outcomes and clientele satisfaction.

The significance of quality assurance in the healthcare industry cannot be emphasized enough. Healthcare professionals are trusted with patients' well-being; therefore any shortcomings in their treatment can have serious consequences, from jeopardizing patient safety to undermining public confidence in the healthcare system as a whole. As a result, healthcare organizations must act quickly to put strong quality assurance mechanisms in place and SERVQUAL provides a methodical framework to meet this requirement.

The SERVQUAL framework is a powerful instrument, in the toolbox of quality assurance techniques, providing

\* Corresponding author.

E-mail address: [pnmprakash@yahoo.co.in](mailto:pnmprakash@yahoo.co.in) (P. Prakash).

a methodical way to evaluate and improve service quality in the healthcare industry. Due to SERVQUAL's success in uncovering discrepancies between customer expectations and perceptions of service delivery, the tool was first created by Parasuraman, Zeithaml and Berry in the late 1980s and has subsequently been extensively used across a number of industries, including the healthcare sector.

## 2. Discussion

The healthcare sector deals with the human resources and the hence the quality is more significant in terms of the treatment facilities provided to the clientele. Since the quality is an intangible asset, it can't be quantified or measured. As per the International Organization for Standardization (ISO), "quality" is "the totality of properties of a product or service that determines its ability to meet identified or anticipated needs." "Quality" is a comparison between expectation and performance or the obtained effect.<sup>1</sup> According to Opolski K. et al., Quality is an objective goal that should be pursued.<sup>2,3</sup> The discrepancies arise when there is an imbalance between expectations and the services provided. Therefore it is very important to identify and analyse these gaps and steps need to be taken to reduce or eliminate these gaps thus providing an optimum level of quality care. Various authors have researched extensively and identified these gaps.

## 3. GAP analysis

According to Parasuraman A et al., five gaps are distinguished.

The first gap relates to the differences between customer expectations and the perceptions of a generating entity (service providers) towards the needs of customers (e.g., patients). The size of the gap is influenced by marketing research, carried out by a given entity. For instance, a hospital may find that while patients expect quick appointment scheduling and minimal waiting period for outpatient services, the hospital's administrative staff may not be able to fulfil these expectations due to operational constraints. Bridging this gap requires aligning service delivery with customer preferences through strategies like improved time slot scheduling processes and enhanced communication with patients.

The second gap in the SERVQUAL model highlights the disjunction between the intended service concept and its actual delivery. For instance, a healthcare facility may aspire to provide personalized, patient-centric care, but operational constraints or inconsistent adherence to protocols may result in a gap between this vision and the reality of patient experiences. Management's commitment to quality, goal-setting, standardization of tasks and perception of improvement opportunities play crucial roles in determining the size of this gap. An example could be a hospital

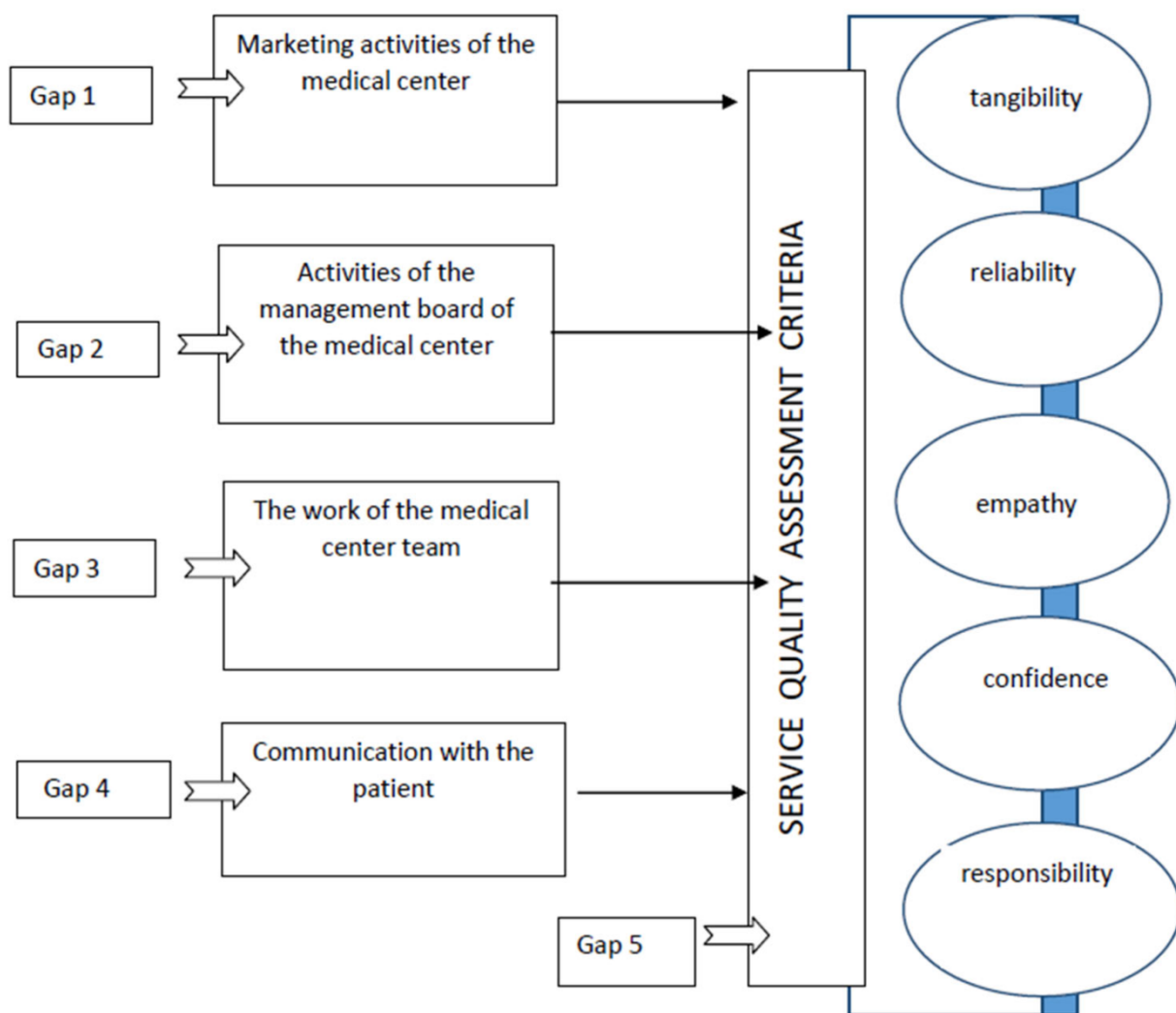
aiming to offer comprehensive discharge planning for all patients but struggling to consistently implement it due to limited resources or staff training gaps. Closing this gap requires proactive management initiatives to align service delivery with the intended concept, such as investing in staff training, streamlining processes and promoting a culture of continuous improvement.

The third gap in SERVQUAL model addresses inconsistencies between the service delivered and the defined standards for service quality. This gap's magnitude hinges on factors such as teamwork, appropriate employee task allocation, technological support, perceived control and the effectiveness of supervision and control systems. For instance, in a healthcare setting, this gap may manifest when medical staff fail to adhere to established protocols for patient care, leading to variations in service quality. This could occur due to inadequate training, ineffective communication among team members or insufficient oversight mechanisms. Closing this gap requires measures such as enhanced training programs, optimizing staff allocation, leveraging technology to support service delivery, fostering a collaborative work environment, and implementing robust supervision and quality control systems.

The fourth gap in the SERVQUAL model pertains to the variance between the service promised to customers and the service actually delivered. This gap's size is impacted by horizontal communication within the organization and tendencies to overpromise. For example, a healthcare provider may advertise short wait times for appointments but fail to meet these expectations consistently due to internal communication breakdowns or unrealistic promises made by marketing departments. Closing this gap necessitates improved communication channels within the organization, setting realistic service expectations and aligning marketing messages with the actual capabilities of service delivery.

The fifth gap in the SERVQUAL model arises from the collective impact of the preceding gaps, reflecting the disparity between a client's (e.g., patient's) expectations and the actual service received. For instance, if a hospital fails to meet its marketing promises of timely and attentive care due to internal shortcomings, the patient's experience may fall short of their expectations. Closing this gap necessitates addressing each preceding gap systematically, ensuring that service delivery closely aligns with customer expectations to enhance overall satisfaction and loyalty.<sup>4-6</sup>

Numerous elements, such as the dedication of managers and staff, marketing research, activity standardization, the perception of consumer requirements and customer interactions, affect the magnitude of the aforementioned gaps. Therefore, the topic of how customers perceive service quality can be answered by comparing expectations and perceptions of quality.<sup>7-9</sup>



**Figure 1:** Servqual Model for improving quality in health care

#### 4. Servqual (Rater) Model

The SERVQUAL model was developed by Parasuraman, Zeithaml and Berry, in the late 1980s. At its core, SERVQUAL model revolves around the concept of measuring service quality based on five dimensions: reliability, assurance, tangibles, empathy and responsiveness. These dimensions collectively form the acronym RATER, providing a comprehensive framework to evaluate various aspects of service provision.

In healthcare, the SERVQUAL model serves as a valuable framework for evaluating and improving service quality. By assessing performance across these dimensions, healthcare organizations can identify areas for improvement, prioritize resources and enhance the patient experience.<sup>10–13</sup>

As the first component in SERVQUAL paradigm, reliability emphasizes on how crucial consistency and

dependability are to healthcare services. Patients entrust their healthcare providers with a great deal of trust, anticipating trustworthy follow-up care, prompt treatment, and precise diagnosis. However, achieving reliability amidst the complexities of modern healthcare requires meticulous attention to detail, robust systems, and a commitment to continuous improvement.<sup>14</sup>

The second factor, responsiveness, refers to how quickly and eagerly healthcare providers attend to patients' needs. Responding to patients in a time when instant gratification is expected places a premium on responsiveness, as patients want appointments, communications, and problem solving to happen quickly. Healthcare companies may build confidence, improve patient satisfaction and eventually improve health outcomes by emphasizing responsiveness.

Assurance, the third dimension, revolves around the competence, credibility and trustworthiness of healthcare

providers. Patients seek reassurance not only in the clinical expertise of their caregivers but also in their ability to communicate effectively, demonstrate empathy and uphold ethical standards. By instilling confidence and building rapport with patients, healthcare providers can cultivate enduring relationships grounded in mutual respect and trust.

The fourth component, empathy, encompasses the capacity of healthcare professionals to recognize and attend to patients' emotional needs. Patients want personal connection, empathy, and compassion beyond medical care, especially at vulnerable and difficult times. Healthcare organizations may establish healing environments where patients feel valued, understood, and supported throughout their healthcare journey by cultivating a culture of empathy and compassion.

Tangibles, the final dimension, encompass the physical facilities, equipment and appearance of healthcare settings. While clinical expertise remains paramount, patients also form perceptions based on the tangible aspects of care, such as the cleanliness of facilities, the comfort of amenities and the professionalism of staff. By investing in tangible elements that enhance the patient experience, healthcare providers can create welcoming environments that inspire confidence and instill a sense of well-being.

The SERVQUAL model, which is a research tool, determines the relative impact of five dimensions, namely, tangibility, reliability, responsibility, confidence and empathy, on customer perception.<sup>4</sup> In the medical field, an efficient identification of errors in the process of creating and providing services is conducive to high quality. The SQ method basically refers to gap 5, the last one in the above list, combining service quality design from the customer's point of view. Service evaluation is carried out by means of a questionnaire/survey, dedicated to this method and regarded as a measurement tool.

The SERVQUAL scale consists of 44 questions, aimed to support the evaluation of the gap between expectations and perceptions. The first 22 questions address the customer's expectations and the second set of 22 questions enquire about the customer's perceptions of service provided<sup>14</sup>. The answers to questions are presented in a five-level format of the Likert scale, where 1 is definitely dissatisfied and 5 is definitely satisfied. The service quality rating is then determined by calculating the difference between the ratings of customer's perceptions and expectations, according to the formula:  $SQ = P - E$  where SQ is overall service quality, P is perception of service quality provided and E is expected service quality.

A positive assessment of the gap indicates that the client's expectations have been met, i.e., the perception of services is very high. If, on the other hand, the score for the gap is negative, it means that the services provided have not met the expectations, so their perception is unsatisfactory.<sup>15</sup>

## 5. Conclusion

In the face of the numerous challenges faced by the healthcare sector today; from resource constraints and healthcare disparities to technological breakthroughs and regulatory complexities-the SERVQUAL paradigm offers guidance and insight towards service quality. By carefully evaluating each facet of service quality and identifying areas that require improvement, healthcare practitioners may put themselves on a path towards real improvements that will be relevant to patients and provide positive outcomes.

Additionally, SERVQUAL offers a structure for continuous improvement, encouraging healthcare facilities to track results, solicit feedback and adapt to patients' evolving needs. By following the values of dependability, responsiveness, assurance, empathy, and tangibles, healthcare workers can enhance the quality of care they provide, forge better bonds with patients, and ultimately make a substantial difference in the lives of people they serve.

## 6. Source of Funding

None.

## 7. Conflict of Interest

None.


## References

1. Papanikolaou V, Zygiaris S. Service quality perceptions in primary health care centres in Greece. *Health Expect.* 2014;17(2):197–207.
2. Fatima T, Malik SA, Shabbir A. Hospital healthcare service quality, patient satisfaction and loyalty: An investigation in context of private healthcare systems. *Int J Qual Reliability Manag.* 2018;35(6):1195–214.
3. Gupta KS, Rokade V. Importance of Quality in Health Care Sector: A Review. *J Health Manag.* 2016;18(1):84–94.
4. Parasuraman A, Zeithaml VA, Berry LL. A conceptual model of service quality and its implications for future research. *J Mark.* 1985;49:41–50. doi:10.2307/1251430.
5. Jonkisz A, Karniej P, Krasowska D. SERVQUAL Method as an "Old New" Tool for Improving the Quality of Medical Services: A Literature Review. *Int J Environ Res Public Health.* 2021;18(20):10758. doi:10.3390/ijerph182010758.
6. Mauri AG, Minazzi R, Muccio S. A Review of Literature on the Gaps Model on Service Quality: A 3-Decades Period: 1985–2013. *Int Bus Res.* 2013;6(12):134–44.
7. Haque A, Sarwar AM, Yasmin F, Anwar A, Nuruzzaman. The impact of customer perceived service quality on customer satisfaction for private health centre in Malaysia: A structural equation modeling approach. *Inf Manag Business Rev.* 2012;4(5):257–67.
8. Irfan SM, Ijaz A. Comparison of service quality between private and public hospitals: Empirical evidences from Pakistan. *J Qual Technol Manag.* 2011;7(1):1–22.
9. Jog S, Kelkar D, Bhat M, Patwardhan S, Godavarthy P, Dhundi U, et al. Preparedness of acute care facility and a hospital for COVID-19 pandemic: What we did! *Indian J Crit Care Med.* 2020;24(6):385–92.
10. ĐO Došen, Škare V, Čerfalvi V, Ž Benceković, Komarac T. Assessment of the quality of public hospital healthcare services by using SERVQUAL. *Acta Clin Croat.* 2020;59(2):285–93.
11. Shaikh BT, Mobe N, Azam S, Rabbani F. Using SERVQUAL for assessing and improving patient satisfaction at a rural health facility in

- Pakistan. *East Mediterr Health J.* 2008;14(2):447–56.
12. Levesque JF, Sutherland K. What role does performance information play in securing improvement in healthcare? A conceptual framework for levers of change. *BMJ Open.* 2017;7(8):e014825. doi:10.1136/bmjopen-2016-014825.
  13. Levesque JF, Sutherland K. Combining patient, clinical and system perspectives in assessing performance in healthcare: An integrated measurement framework. *BMC Health Serv Res.* 2020;20(1):1–14.
  14. Christoglou K, Vassiliadis C. Using SERVQUAL and Kano research techniques in a patient service quality survey. *World Hosp Health Serv.* 2006;42(2):21–6.
  15. Teshnizi SH, Aghamolaei T, Kahnouji K, Teshnizi SMH, Ghani J. Assessing quality of health services with the SERVQUAL model in Iran. A systematic review and meta-analysis. *Int J Qual Health Care.*

2018;30(2):82–9.

### Author biography

**Poonam Prakash,** Classified Specialist Prosthodontics  
 <https://orcid.org/0000-0002-9179-0161>

**Cite this article:** Prakash P. Servqual method– A tool for quality assurance in health care. *IP Ann Prosthodont Restor Dent* 2024;10(2):101-105.