

## Quality Measurement for Hospital Services

Annamalai Solayappan<sup>1</sup>, Dr. Jothi Jayakrishnan<sup>2</sup>, Sethu Velmani<sup>1+</sup>

<sup>1</sup> Faculty member, Department of Business Administration, Annamalai University, India

<sup>2</sup> Reader, Department of Business Administration, Annamalai University, India

<sup>3</sup> Research Scholar, Department of Business Administration, Annamalai University, India

**Abstract.** This article investigates the perception and expectation of patients regarding hospital services by using service quality gap model. A purposive sample of 300 respondents has been selected who already have experience in the hospital as in-patients. The major emphasis of the study is to identify the service quality gap. It is found that there is a huge gap in the hospital services like physical appearance, lack of interest in solving problems and personal care.

**Keywords:** service quality, expectation and perception

### 1. Introduction

A hospital is an institution of health care providing treatment with specialized staff and equipment, but not always providing for long-term patient stay. Today hospitals are centers of professional health care provided by physicians and nurses. Hospitals are usually funded by the state, health organizations, health insurances or charities, including direct charitable donations. Similarly, modern-day hospitals are largely staffed by professional physicians, surgeons and nurses, whereas, in history this work was usually done by the founding religious orders or by volunteers. There are several kinds of hospitals. The best-known is the general hospital, which is set up to deal with many kinds of diseases and injuries, and typically has an emergency ward to deal with immediate threats to health and the capacity to dispatch emergency medical services. A general hospital is typically the major health care facility in its region, with a large number of beds for intensive care and long-term care, facilities for surgery and childbirth, bio assay laboratories, and so forth. Larger cities may have many different hospitals of varying sizes and facilities. Hospital services are different and distinct from boarding and grooming services-yet both are easily accessible to pet owners and team members. Patients just come for diagnosis and/or therapy and then leave (outpatients), but some others stay the nights (inpatients). Putting the patient first is a challenge that requires not just a huge change in the mindset of all the stakeholders in health care provision, but also the means by which to measure the levels of satisfaction of patients, and to discover what matters to them before, during and after their visit to any hospital. Patient quality initiatives, with their softer, experiential focus than clinical audit, with its precise and scientific methods of measurement, demand different measurement techniques.

Customers perceive services in terms of quality of service and how satisfied they are with their overall experience. These customer oriented terms quality and satisfaction have been the focus of attention for

---

<sup>1</sup> Annamalai Solayappan<sup>1</sup> Tel.: + 91-9944222110;  
E-mail address: an.solayappan@gmail.com

<sup>2</sup> Dr. Jothi Jayakrishnan<sup>2</sup>, Tel.: + 91-9489542049;  
E-mail address: jjaisubi2003@rediffmail.com

<sup>1+</sup> Sethu Velmani<sup>3</sup> Tel.: + 91-9994555590;  
E-mail address: velmani.s@gmail.com

executives and researchers alike over the last decade or more. Companies today recognize that they can compete more effectively by distinguishing themselves with respect to service quality and improved customer satisfaction.

Service quality is a critical element of customer perception. In the case of pure services, service quality will be the dominant element in customer's evaluations. In case, where customer's service or services are offered in combination with physical product, service quality may also be very critical in determining customer satisfaction.

### 1.1 Dimensions of Service Quality

Dimensions of service quality (SERVQUAL) were originally introduced by Parasuraman, A, Valerie A Ziethaml and Leonard L Berry in 1955 in the area of service quality. SERVQUAL was developed based on the view of the customer's assessment. This assessment has been conceptualized as a gap between the customer's expectations by way of SERVQUAL, from a class of service providers and their evaluation of the performance of particular service providers.

**Tangibles:** Tangibles are the appearance of physical facilities, equipment, personnel and communication.

**Reliability:** It promises delivery, service provision, problem resolving and cost.

**Responsiveness:** It emphasizes attentiveness and promptness in dealing with customers' requests, questions, complaints and problems.

**Assurance:** Assurance is defined as employee's knowledge of the firm and its employees capacity to inspire trust and confidence in the customer.

**Empathy:** Empathy is conveying through personalized services.

## 2. Need for the Study

There are a number of studies in the area of customer satisfaction and factors influencing the buying behavior of consumers but they do not throw light on the service gaps. With a fast growth and necessity of hospital services, it becomes vital to know the patient expectation and delivery services like tangibles, reliability, responsiveness, assurance and empathy. These service dimensions are prime for any service industry especially the hospital sector. They generate interest in finding the expectation and perception of the patient before and after the delivery of service. This study helps the hospital industry in understanding their position and also the probable service gaps.

## 3. Objective

To measure the service quality gap in hospitals

## 4. Methodology

An exploratory study has been carried out to get a clear picture of the research topic by interacting with patients, with regard to expectation and perception towards hospital services. Since SERVQUAL has been well accepted and tested in measuring service quality across industries, the researcher decides to use SERVQUAL dimensions to measure the level of service provided by the hospital. Respondents are asked to indicate their degree of agreement for the 22 expectation and perception statements based on their assessments of the services provided by the hospital. A seven-point rating scale is used to measure expectation and perceptions in which the alternatives range from very strongly agree to very strongly disagree. Thus, they could respond to the survey based on their perception and expectation more effectively. A total of 300 respondents have been selected using purposive sampling. In collecting the data, structured questionnaires are used. These questionnaires are divided into five sections according to five service quality dimension. The sample study consists of patients of leading hospitals in Chennai, Tamilnadu, India.

## 5. Results and Discussions

The service quality gap is described by the following equation  $SQ = E_{jk} - P_{jk}$ , where  $E_{jk}$  = expectation of service dimension, J for respondent k and  $P_{jk}$  = perception of service dimension J for respondent k. Service quality gap is SQ.

The data have been collected using SERVEQUAL tool from 300 samples for both expectation and perception regarding quality measurement of hospitals. The average mean score for 5 dimensions and 22 statements of the patient's expectation and perception is shown in table 1. The average mean score of expectation and perception for assurance are found to be 5.75 and 4.72. Further, the service quality gap is found for each dimension and also for 22 statements. The service quality gap for service dimension assurance is 1.02(5.57-4.72); similarly the gap is identified for each dimension and 22 statements. The service quality for the five dimensions, namely, responsiveness (0.93), assurance (1.02), tangibles (1.06), empathy (1.09) and reliability (1.10).

Here the gap is very high in case of reliability and assurance. Further, rank is provided to all the 22 statements of the service quality. The gap is the lowest for employees at hospitals are always willing to help the patients; hence it is rated as the first. The second place is occupied for hospitals having modern equipment and facilities. Convenient operating hours is considered as the third lowest gap.

From this study, it is found that there is a huge gap in employees' neat appearance, lack of interest in solving the problem, communication regarding services, problem in doing the right things for the first time, giving services as their promises, poor knowledge of the employees to answer the patients' questions and problems in personnel attention. These are the dimensions having huge gap among the patients who have their experience in the hospitals.

In general, hospitals are associated with infection and so patients expect that hospitals should have neat appearance. Hence the management should concentrate on the physical appearance of the hospital such as frequently cleaning the floor, changing the bed spread and pillows providing the dust bin, use of glows and dresses by employees. It may attract more patients.

When patients have a problem, they normally believe that this hospital could solve it. So the doctors should show sincere interest in solving the problem. Patients believe in doctors as demi-gods. They could save the patient's life without expecting anything.

The hospital employees should inform the patients regarding their exact problems and when services will be performed. Otherwise patients may get tension, worries and beget lack of confidence. So the timings should be informed to the patients regarding the service of the patients.

Excellent hospitals always do things right the first time. Hence doctors can quickly analyze the patient's problems and do the right things for the recovery of the patients.

Hospitals should provide their promised services. Here the hospitals should take care about regular services like proper medicine, blood pressure check up and heart beat check up.

Patients are like children. They are always worried regarding their needs and wants. So doctors should have enough knowledge and patience to answer the patient's questions. For that, management can give the behavioral orientation training to doctors and nurses.

Personal care is a key element for patient's satisfaction. So the management may provide necessary staff for taking care of the patients personally.

## 6. Conclusion

This study aims to diagnose the service quality based on the difference between the patients' expectation of quality services and their perception of the services received. It is found that there is a huge gap on reliability, responsiveness and tangibility services. With the increasing number of new and unknown diseases attacking mankind, the hospital industry faces a colossal and tough task of ensuring rapid treatment and sound health. The timely and correct information provided by the hospitals determines the very course of treatment of the diseases. Hence the hospital industry needs to revamp its prevailing image. Management needs to inculcate professionalism and implement modern techniques of customer relationship management.

## 7. Reference

- [1] A. Parasuraman, V.A. Zeithaml and L.L. Berry, "SERVQUAL: *A Conceptual Model of Service Quality and its Implications for Future Research*", Journal of Marketing.
- [2] A. Valarie Zeithami and Mary Jo Bitner, *Service Marketing*, 3<sup>rd</sup> Edition, Tata McGraw Hill Publishing House, Delhi, pp. 61-79, pp. 92-111, pp. 124-153.
- [3] Christopher Lovelock, *Services Marketing*, 4<sup>th</sup> Edition, Pearson Education publishing, Delhi, pp. 110 – 129, 361-383.
- [4] Rajendra Nargunkar, *Services Marketing*, Tata McGraw Hill publishing House, Delhi, pp. 172-199.
- [5] Shajahan Nargunkar, *Services Marketing*, 2<sup>nd</sup> Edition Himalaya Publication house, Mumbai, pp. 76-101.

table: 1 service quality gaps for hospitals

S.NO	DIMENSION	MEAN (E)	MEAN (P)	GAP (E-P)	RANK
	<b>ASSURANCE</b>	<b>5.75</b>	<b>4.72</b>	<b>1.02</b>	<b>2</b>
1	Patients of excellent hospitals/ clinics will feel safe in their dealings with the hospital/clinic.	5.88	4.92	1.06	14
2	Personnel in excellent hospitals/clinics will be consistently courteous to patients.	5.83	4.78	1.05	13
3	Personnel in excellent hospitals/clinics will have the knowledge to answer patients' questions.	5.62	4.51	1.11	17
4	The behavior of personnel in excellent hospitals/clinics will instill confidence in patients.	5.68	4.69	0.99	10
	<b>TANGIBLES</b>	<b>5.66</b>	<b>4.60</b>	<b>1.06</b>	<b>3</b>
5	Excellent hospitals/clinics will have modern equipment.	5.76	5.06	0.70	2
6	Materials associated with the service will be visually appealing in excellent hospitals/clinics.	5.34	4.38	0.96	8
7	The Physical facilities at excellent hospitals will be visually appealing.	5.72	4.53	1.19	18
8	Personnel at excellent hospitals/clinics will be neat in appearance.	5.82	4.44	1.38	22
	<b>REALIABILITY</b>	<b>5.78</b>	<b>4.68</b>	<b>1.10</b>	<b>5</b>
9	When excellent hospitals/clinics promise to do something by a certain time, they do so.	5.86	4.98	0.88	5
10	Excellent hospitals/clinics will provide their services at the time they promise to do.	5.82	4.84	0.98	9
11	Excellent hospitals/clinics will get things right at the first time itself.	5.64	4.42	1.22	19
12	Excellent hospitals/clinics will insist on error-free records.	5.72	4.63	1.09	15
13	When a patient has a problem, excellent hospitals/clinics will show a sincere interest in solving it.	5.88	4.54	1.34	21
	<b>RESPONSIVENESS</b>	<b>5.53</b>	<b>4.60</b>	<b>0.93</b>	<b>1</b>
14	Personnel in excellent hospitals/clinics will always be willing to help patients.	5.15	4.72	0.43	1
15	Personnel in excellent hospitals/clinics will give prompt service to patients.	5.66	4.64	1.02	11
16	Personnel in excellent hospitals/clinics will never be too busy to respond to patients' requests.	5.68	4.64	1.04	12
17	Personnel in excellent hospitals/clinics will tell patients exactly when services will be performed.	5.66	4.42	1.24	20
	<b>EMPATHY</b>	<b>5.54</b>	<b>4.45</b>	<b>1.09</b>	<b>4</b>
18	Excellent hospitals/clinics will give patients individual attention.	5.25	4.34	0.91	7
19	Excellent hospitals/clinics will have staff who give personal attention to patients.	5.38	4.28	1.10	16
20	Excellent hospitals/clinics will have operating hours convenient to all their patients.	5.62	4.78	0.84	3
21	The personnel of excellent hospitals/clinics will understand the specific needs of their patients.	5.57	4.72	0.85	4
22	Excellent hospitals/clinics will have the patient's best interests at rates.	5.63	4.073	0.90	6

E: Expectation and P: Perception