

CrossRef DOI of original article:

# 1 Assessment of Quality of Healthcare Services in Select Hospitals: 2 A Servqual Approach

3 Sabyasachi Rath,

4 *Received: 1 January 1970 Accepted: 1 January 1970 Published: 1 January 1970*

---

## 6 Abstract

7 The pursuit of quality healthcare has been the subject of all organizations; may it be the  
8 government, the nongovernmental and the private bodies that have concerns for health for all.  
9 There are many approaches to designing and delivering quality of services to the people.  
10 Servqual approach a seminal work of parasuraman et.al (1985) has been well received  
11 universally. But many studies with modified methodologies were conducted in divergent  
12 service setups. One such setup is healthcare organizations. This study attempts to assess  
13 quality of services in public and private hospitals in the twin cities of Hyderabad and  
14 Secunderabad, which are known as Health capitals of India, due to the extensive healthcare  
15 facilities available. Results reveal that both type of hospitals have gaps in the quality of  
16 services as expected and perceived by the patients. Implications have been drawn for closing  
17 the gaps in the services.

---

### 19 *Index terms*—

20 Abstract-The pursuit of quality healthcare has been the subject of all organizations; may it be the government,  
21 the nongovernmental and the private bodies that have concerns for health for all. There are many approaches  
22 to designing and delivering quality of services to the people. Servqual approach a seminal work of parasuraman  
23 et.al (1985) has been well received universally. But many studies with modified methodologies were conducted  
24 in divergent service setups. One such setup is healthcare organizations. This study attempts to assess quality  
25 of services in public and private hospitals in the twin cities of Hyderabad and Secunderabad, which are known  
26 as Health capitals of India, due to the extensive healthcare facilities available. Results reveal that both type of  
27 hospitals have gaps in the quality of services as expected and perceived by the patients. Implications have been  
28 drawn for closing the gaps in the services.

## 29 1 I. Introduction

30 he external health care environment is often described as hyper turbulent, which means managers cannot find  
31 and implement solutions to a particular problem before the nature and scope of the problem change. This type  
32 of decision-making environment results in managers collectively turning their attention to those matters with  
33 which they are most comfortable or that are the most visible or best understood. Although a focus on internal,  
34 day-to-day concerns may seem natural and comfortable, unfortunately an internal-only approach means that  
35 the all-important external decision-making arena may be neglected. At this juncture the concept of healthcare  
36 marketing comes in the picture. In the past, healthmarketing professionals were quite concerned about assessment  
37 of customer satisfaction. In the recent times, quality of healthcare services is considered to be the precondition  
38 to the quality of healthcare. (Berry, L. L., Parasuraman, A. and Zeithaml, V. (1988)).

## 39 2 II. Present Study

40 The SERVQUAL approach to measurement of service quality has attracted considerable attention since it was  
41 first introduced by Parasuraman et.al (1985). The approach starts from the assumption that the level of service  
42 quality experienced by patients is critically determined by the gap between their expectations of the service and  
43 their perceptions of what they actually receive from a specific service provider.

## 4 IV. RESULTS AND DISCUSSION

---

44 In this study, an attempt has been made to follow such approach and do the gap analysis using the perceived  
45 service quality scores and expected service quality scores. The difference between perceived scores and the  
46 expected scores is the gap in the quality of services. Further, in this paper, gap analysis has been carried out  
47 separately for the public hospitals, and private hospitals.

48 A comprehensive service quality measurement scale was developed on a marketing perspective by Parasuraman,  
49 Zeithanl and Berry (1988) to provide an instrument for measuring service quality across a broad range of service  
50 industries. To that extent, using same methodology suggested by them has been adapted in this study.

51 Thus keeping in view the objective of this study, it has been hypothesized that there will not be any significant  
52 gaps in the perceived and expected service quality as responded by patients from both public and private hospitals.  
53 Thus this null hypothesis has been tested and results in this regard are presented in the following sections Year  
54 2023 ( ) A Quality information is important to consumers and providers alike. However, the essential elements of  
55 "quality" may be understood in quite different ways and ranked with different priorities among various consumer  
56 and professional groups.

57 For example, health professionals may relate to objective and technical measures of quality, such as statistical  
58 measures of clinical performance. Lay consumers of health services may base quality on less technically complex  
59 and more.

60 Assessment of quality of services provided by the hospitals in these days has been a serious concern for the  
61 hospitals and health care organizations owing to the excessive demands imposed on them by the users, consumer  
62 for a, government and the society at large. As a result, many hospitals have resorted to such assessment not only  
63 for the reasons of compliance but for the improvement of the services to the satisfaction of the users. Nevertheless,  
64 such efforts have not been much strengthened by research perspective owing to the lack of adequate qualification  
65 on the part of the providers and also lack of time to scientifically carry out such assessments by the executives.  
66 Hence there is a need to do some scientific analysis in this area of patient satisfaction.

### 67 3 III. Method

68 Using a descriptive-analytic research design quality of services in the select hospitals in the twin cities of  
69 Hyderabad and Secunderabad of Andhra Pradesh state. Two types of hospitals were selected on the basis  
70 of their ownership namely public hospitals and the private hospitals. Besides they were qualified on the basis of  
71 their bed strength. As such, three hospitals in the private ownership and three hospitals in public ownership have  
72 been short-listed. Using a 2x2 factorial design (two types of hospitals and two service units in these hospitals),  
73 the sample for this study includes 300 patients (150 from private hospitals and 150 from public hospitals) selected  
74 by using stratified disproportionate random sampling method. The patients were selected randomly on the basis  
75 of the hospital they visited for the services. Thus, in all, there were 25 patients from each hospital resulting  
76 in 100 patients per ownership, 75 spread over type of care namely intensive care unit or general care unit from  
77 hospitals were selected for this study. All these were administered the structured interview schedule. Thus, in  
78 all, the total sample is 300.

79 The interview method was utilized and the interview schedule included two parts. questions pertaining to  
80 personal background, a standardized scale pertaining to assessment of their satisfaction developed for this study,  
81 and a standardized scale developed to assess quality of services, using SERVQUAL approach, provided by the  
82 hospitals the split half reliability of the scale was computed.

83 All the scales used in this study were examined for their reliability and were found to be highly reliable with  
84 more internal consistency.

85 In order to examine the gaps in the expected and perceived services quality, means, Sds and t-test values were  
86 computed for testing of the null hypothesis.

### 87 4 IV. Results and Discussion

88 The null hypothesis has been tested using means, SDs and the t-values computed for all the dimensions of  
89 quality of services using servqual approach. Further the expected and the perceived scores on all the dimensions  
90 of the service quality have also been presented separately. Thus the results in this regard are presented in the  
91 following tables. It is clear from the table that as regards tangibles in public hospitals services, the difference  
92 between expected score (mean=12.79) and the perceived (mean=9.53) is 3.26. Such difference in the tangibles as  
93 dimension of services quality in public hospitals is statistically significant which is evident from the paired t-test  
94 value presented in the table. This means that there is a wide gap by 3 counts in the tangibles as dimension of  
95 services quality in public hospitals.

96 With regard to reliability, the perceived score (mean=3.75) was less than the expected score (mean=6.99) by  
97 3 counts which is the gap. Such gap or difference in the quality scores is statistically significant which is also  
98 evident from the paired t-test value presented in the table. This means that the reliability of services in public  
99 hospitals has a wider gap as difference found by the patients.

100 As regards responsiveness of the services of health care as dimension of quality of services, it is found that the  
101 perceived score (mean= 5.55) was lesser than the expected score (mean= 8.75). The gap found between them  
102 is by 3.0 units. The paired t-test value suggests that such gap in the responsiveness of the healthcare services

---

103 in the public hospitals is statistically significant. This means that patients from public hospitals expected more  
104 responsiveness from these hospitals.

105 It is further found that with regard to assurance, it is clear from the table that the perceived service quality is  
106 less (mean= 4.83) than the expected score (mean=7.90). The gap was found to be 3.0 units. Such difference in  
107 their perceived and expected mean score was also found to be statistically significant which is evident from the  
108 f-value presented in table.

109 This means that patients expect more assurance in the quality of services provided to them by the public  
110 hospitals.

111 Lastly, with regard to empathy, it is found that the perceived score was less (mean=3.05) than the expected  
112 score (mean=6.31). The gap was found to be 3.0 units. Such gap was also found to be statistically significant  
113 which is evident from the paired t-test value presented in the table. This means that the patients in the public  
114 hospitals feel that the public hospitals should empathize more with them. With regard to the gap analysis in  
115 private hospitals, it is quite clear from the table that the quality of tangibles expected (mean=14.13) by the patients  
116 in relation to their perceived tangibles (mean=12.23) reveals that though the gap is by 2.0 units approximately,  
117 yet such gap was found to be statistically significant as evident from the paired t-test value presented in the  
118 table. This indicates that the patients do perceive a significant gap in the expected and the perceived quality of  
119 tangibles as part of services quality in the private hospitals.

120 As regards, reliability of the health care services in private hospitals, patients perception of the reliability of  
121 services (mean=8.07) is lesser than their expected score (mean=9.95). Thus there exists a gap of 1.8 units. Such  
122 gap was also found to be statistically significant which is evident from the paired t value presented in the table.

123 In case of responsiveness of the services, it was found that the responsiveness expected (mean 8.74) was more  
124 than the responsiveness perceived (mean=6.99). The gap between them was found to be 1.74 units. Such gap  
125 was also found to be statistically significant. This indicates that though the gap was found to be relatively less,  
126 yet such gap was found to be significant from the t-value presented in the table.

127 With regard to assurance, it could be seen from the table that the perceived assurance (mean=8.56) is less  
128 than the assurance expected (mean=10.27). Thus the gap between them was to be 1.71 units. Interestingly such  
129 gap is found to be statistically significant.

130 Lastly, with regard to empathy, it is seen from the table that the empathy expected (mean=7.57) was more  
131 than the empathy perceived (mean=5.63) by the patients. The gap was found to be 2.0 units. Such gap was also  
132 found to be statistically significant. This indicates that that though the gap in such service dimension was thin,  
133 yet such gap was found to be a significant one.

134 In conclusion, it could be said that the gaps existing in perceived and expected quality of services was more in  
135 case of public hospitals on all the dimensions of services quality when compared with those of private hospitals. Bu  
136 and large, patients expressed certain gaps in their perceived and the expected services in both types of hospitals,  
137 yet such gaps were found to be more in public hospitals than in private hospitals, thus the null hypothesis that  
138 "there is no gap in the perceived and the expected quality of healthcare services in the hospitals as reported by  
139 the patients" is rejected since, it was found that in both public and private hospitals, when separate gap analyses  
140 were run, statistically significant gaps were found in these hospitals separately.

## 141 5 V. Implications

142 How to fill the services gaps? The following implications were drawn for filling in the gaps. Therefore closing  
143 these gaps is critical to the success in satisfying and retaining the patients to the hospitals.

## 144 6 Inspection for Improving Service Quality and

145 Customer Satisfactions: Hospitals must set standards of performance as stated earlier, inform the staff and the  
146 patients of those standards and then measure the actual performance against those standards. 5. When goals  
147 are set for the hospital services based on patients' requirements and expectations, then publicly measure the  
148 hospitals' performance towards those goals. This is a best choice for improving both hospitals quality and the  
149 services to the patients.

## 150 7 Improved Performance Leads To Increased Profits:

151 While there is no guarantee that this will occur, it is a safe assumption that if services are improved while delivering  
152 them, hospitals will benefit from increased profits. More patients will want to use services from such hospitals.,  
153 thereby increasing the bed occupancy and also the volume of diagnostics for the patients, thereby contributing  
154 to profits. 7. Draw Road Maps: There are many good reasons to measure service equality performance and  
155 patients' satisfaction levels. While gaps are identified and learn about how to close them, it only gives hospitals  
156 an opportunity to learn further how the hospital is doing right here and right now. And also it enables to initiate  
157 further steps for the future. 8. Process of Continuous Improvement: If hospitals do not try to continuously  
158 improve the services offered, someone else will and then the patients from one hospital will change their loyalty.  
159 While asking patients about how you can do better, ask employees as well for suggestions, and recommendations.  
160 This will make incremental improvements.

## 8 VI. Conclusion

161 Health care leaders once felt that marketing was only for other industries or had extremely limited use in health  
 162 care. Today, however, health care marketing is viewed as a necessity that can offer a health care organization a  
 163 competitive advantage as well as a benefit that can be offered to potential collaboration partners. Historically,  
 164 in the era of cost-plus reimbursement, health care marketing efforts were put in place for the narrow purpose  
 165 of increasing the utilization of services. Today's health care leaders, however, understand that reimbursement  
 166 initiatives from government programs and managed care organizations define organizational success as the ability  
 167 to control the cost of providing services, and not as the ability to fill beds. This study attempted to assess the  
 168 service quality gaps that existed in public and private hospitals. Results show that both types of hospitals had  
 169 services gaps. Implications for filling the gaps have been made. <sup>1</sup>

1

		Mean	Std. Devia- tion	Std. Error Mean	Paired Means Differ- ences	Paired SD Dif- fer- ences	T	Df	P=
Pair 1	Tangible Perceived	9.53	2.73	.223	-3.26	2.03	-19.65	149	.000
	Tangibles Expected	12.79	2.64	.216					
Pair 2	Reliability Perceived	3.75	1.98	.162	-3.24	1.93	-20.51	149	.000
	Reliability Expected	6.99	1.96	.160					
Pair 3	Responsiveness Perceived	5.55	1.51	.124	-3.20	2.04	-19.18	149	.000
	Responsiveness Expected	8.75	2.26	.185					
Pair 4	Assurance Perceived	4.83	1.73	.142	-3.06	2.11	-17.74	149	.000
	Assurance Expected	7.90	2.35	.193					
Pair 5	Empathy Perceived	3.05	1.84	.151	-3.26	2.00	-19.94	149	.000
	Empathy Expected	6.31	1.98	.162					

Figure 1: Table 1 :

2

		Mean	Std. Error Mean	Std. Error Mean	Paired Means Differences	T	Df	P=	
Pair 1	Tangible Perceived	12.23	1.40	.115	-1.90	1.20	-19.27	149	.000
	Tangibles Expected	14.13	1.93	.158					
Pair 2	Reliability Perceived	8.07	1.10	.090	-1.87	1.36	-16.84	149	.000
	Reliability Expected	9.95	1.77	.145					
Pair 3	Responsiveness Perceived	6.99	.85	.070	-1.74	1.49	-14.28	149	.000
	Responsiveness Expected	8.74	1.70	.139					
Pair 4	Assurance Perceived	8.56	1.20	.098	-1.71	1.53	-13.63	149	.000
	Assurance Expected	10.27	2.04	.167					
Pair 5	Empathy Perceived	5.63	1.26	.103	-1.94	1.36	-17.38	149	.000
	Empathy Expected	7.57	1.97	.161					

Figure 2: Table 2 :

170

<sup>1</sup>© 2023 Global Journals

---

The perceptions that are to be identified should include: what patients look for in the hospitals; why they change hospitals; what might make them change again in the future and how soon; what are their criteria for acceptable service quality performance; what must they perceive to be minimally satisfied; what must managers do to make them extremely satisfied; and what must managers do for them so that they will continue to be repeat patients in case of their health considerations.

## 2. Determination

of Patient Wants,

Requirements and Expectations: i. The gap between what a hospital thinks a patient wants and what the patient actually wants.

ii. The gap between what a hospital thinks a patient has bought and what a customer perceives has been received

iii. The gap between the service quality the hospital believes it is providing and what the patient perceives is being provided

iv. The gap between the patient's expectations of service quality and actual performance.

v. The gap between marketing promises and actual delivery.

Figure 3:



- 
- 171 [Boulding et al. ()] 'A dynamic process model of service quality: from expectations to behavioural intentions'.  
172 W Boulding , A Kalra , R Staelin , V A Zeithaml . *Journal of Marketing Research* 1993. 30 (1) .
- 173 [Babakus and Mangold ()] 'Adapting the SERVQUAL Scale to Hospital Services: an Empirical Investigation'. E  
174 Babakus , W G Mangold . *Health Services Research* 1992. 26 (2) .
- 175 [Babakus and Boller (1992)] 'An empirical assessment of the SERVQUAL scale'. E Babakus , G Boller . *Journal*  
176 *of Business Research* 1992. May. 24.
- 177 [Bowling ()] 'Healthcare Rationing: The Public Debate'. Ann Bowling . *British Medical Journal* 1996.
- 178 [Berry et al. (1985)] 'Quality counts in services too'. L L Berry , V A Zeithaml , A Parasuraman . *Business*  
179 *Horizons* 1985. May-June. 28 (3) .
- 180 [Gronroos ()] *Service Management and Marketing a Customer Relationship Management Approach*, C Gronroos  
181 . 2000. England: John Willey & Sons LTD.
- 182 [Berry et al. ()] 'The service quality puzzle'. L L Berry , A Parasuraman , V Zeithaml . *Business Horizons* 1988.  
183 28 (5) .