Importance-Peformance Analysis in A Selected Multi-speciality Hospital - Patients' Perception

Divya Sharma[a*], Jailaxmi[b], S.C. Dhamija[c]

[a, b, c]SDIMT, Uttarakhand Technical, University, Haridwar, Uttarakhand, India
Email Id: divyavashisht87@gmail.com

Abstract

An Importance performance analysis (IPA) is the best tool for recognizing the gap between the services provider and perception of the consumer. In this paper, we examine the perception of the patients of a healthcare center having different health care quality service attributes. The result of the analysis manifests a very different perception of the patients against the quality of service attributes of the health care center. The ramifications for research were discussed and recommendations are also mentioned for future researchers. This study exemplify the practicality of the model as a managerial tool, which distinguishes the areas to which marketing resources should allocated in order to ameliorate the quality of health care service providers.
Keyword: Importance Performance Analysis (IPA), Service Quality, Perception, Satisfaction.

*Corresponding Author

1. BACKGROUND

The healthcare industry is an aggregation and integration which provides goods and services to treat patients with curative, preventive, rehabilitative, and palliative care. It has become one of the India's largest sectors - both in terms of revenue and employment. The role and the importance of health care systems in the quality of life and social welfare in modern society have been broadly well recognized. The health care providers are proliferating higher levels of service quality to satisfy patients for which, various satisfaction surveys have been used widely as a management tool to address the problems of access and performance. They have also been acted as an instrument in helping government agencies to identify target groups, clarify objectives, define measures of performance, and develop performance information systems. In addition, the emerging health care literature suggests that patient satisfaction is a dominant concern that is inter-twined with strategic decisions in the health services. The overall Indian healthcare market today is worth US$ 100 billion and is expected to grow to US$ 280 billion by 2020. The healthcare delivery, which includes hospitals, nursing homes, diagnostics centres, and pharmaceuticals, constitutes 65 per cent of the overall market.

To reach that extent, the role of services given by the hospitals is an important factor in the overall growth, for which we should analyse the services provided and the expectations of the patients which they claimed as the important factors. To achieve that height of the pyramid, a study was conducted which determines the important factors, and calculates the gap in perception and services provided to the patients by using an IPA Model. Although numerous studies have examined patients' assessments, many questions still remain unanswered. The patients' evaluations of quality remain unclear because, in the absence of medical training, they are less qualified than their providers to determine technical competence.

Performance Analysis (IPA) conceptually underlies the multi-attribute models that date back to the late 1970s, Martilla and James were the first to apply the IPA technique to analyze the performance of a car dealer's service department or client satisfaction with a product or service. The IPA approach recognizes satisfaction as the function of two components: the importance of a product or service to a client and the performance of a business in providing that service or product **(Martilla & James, 1977)**. In this way, IPA examines not only the performance of an item, but also the importance of that item as a determining factor in satisfaction to the respondent **(Silva & Fernandes, 2010)**. This method has proven to be a generally applicable tool which is relatively easy to administer and interpret resulting in extensive use among researchers and management in various fields, and is a way to promote the development of effective marketing programs, because it facilitates the interpretation of data and increases usefulness in making strategic decisions **(Slack, 1994; Matzler et al., 2003; Kitcharoen, 2004; Abalo et al., 2007; Silva & Fernandes, 2010)**.

The interpretation of the IPA is graphically presented on a grid divided into four quadrants. The Y- axis reports the customers' perceived importance of selected attributes, and the X-axis shows the product's (or service's) performance in relation to these attributes. Each quadrant suggests a different marketing strategy.
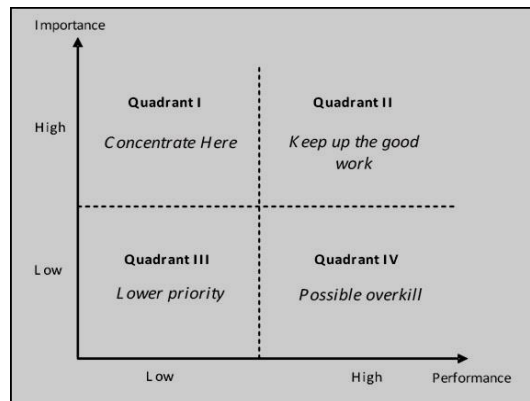
Figure 1: Importance-Performance Matrix (Adapted from Martilla & James, 1977, p. 78)

A. Concentrate here - high importance, low performance: requires immediate attention for improvement and are major weaknesses;

B. Keep up with the good work - high importance, high performance: indicate opportunities for achieving or maintaining competitive advantage and are major strengths;

C. Low priority - low importance, low performance: are minor weaknesses and do not require additional effort;

D. Possible overkill - low importance, high performance: indicate that business resources committed to these attributes would be overkill and should be deployed elsewhere.

2. LITERATURE REVIEW

Chu and Choi(2000) compared the importance and performance of 26 hotel attributes as perceived by business and leisure travellers in Hong kong. They point out that hotel managers can tailor make marketing strategies according to the findings displayed in four quadrants of IPA.

Mathis (2006) stated that the organization should use human resource management input in the following organizational functions, they are, Establishment of a legal and ethical management system, Job analysis and job design, Recruitment and selection, Healthcare career opportunities, Distribution of employee benefits, Employee motivation, Negotiations with organized labor, Employee terminations, Determination of emerging and future trends in health care, Strategic planning etc.

Mukhaimar and Taamenah (2004) with their studies entitled "Recent trends for the hospital management: concepts and applications", the researcher found that although the quality of the plans and organizational structures and preparing them according to the scientific methods, the hospital management could fail in achieving the planned objectives as a result of its failure to perform routing function, which is designed to influence the behavior of the various categories of personnel in the hospital, and urge them to contribute to high level of performance towards the goals of their units in particular and to their hospital in general. In addition to that the study concluded that the function of director of the hospital is not only to provide diagnostic and treatment services and associated procedures , but it also drew attention to the feelings of the various categories of workers in the hospital, including doctors, technicians and administrators, and, therefore, understand the conditions under which work will be done in the shade, it also

must be given their morale and satisfaction for the work that they have in the same level when they provide diagnostic and therapeutic services .

4. OBJECTIVES OF THE STUDY
- To identify the major service attributes of health care sector.
- To analyse the importance of each attribute in view of patients.

5. METHODOLOGY
This study expands in two phases, first phase was the collection of attributes relevant to primary health services from similar studies held earlier and second, patients perception about the services.

The first step in implementing the IPA analysis was to define a suitable questionnaire. The questionnaire was structured on a 7-point Likert's scale, ranging from 1 to 7. After conducting a reliability test the results brings several change in variables which improves their comprehensibility and the overall clarity of the instrument. The final questionnaire consisted of 28 main attributes out of 32 collected attributes, representing all five dimensions: Tangibility, Reliability, Responsiveness, Assurance and Empathy of service quality. The total sample of 200 patients was taken for this study from a selected hospital.

6. DATA ANALYSIS AND INTERPRETATION

Table 1: Demographic Profile Sheet of patients

Gender	Male=46% Female = 54%	
Age	Less than 30 Years	9.3%
	30 – 40 Years	30.4%
	40 – 60 Years	38.64%
	More than 60 Years	21.66%
Education Qualification	Illiterate=2.5% 10th/12th pass=12.6% Graduate=54.3% Post Graduate= 30.6%	

The largest group of respondents (38.64%) was aged between 40 to 60 years, the next largest group (30.4%) was aged 30-40 years and patients of age more than 60 years were 21.66%. Female respondents represented a little more than 54% of the survey population.
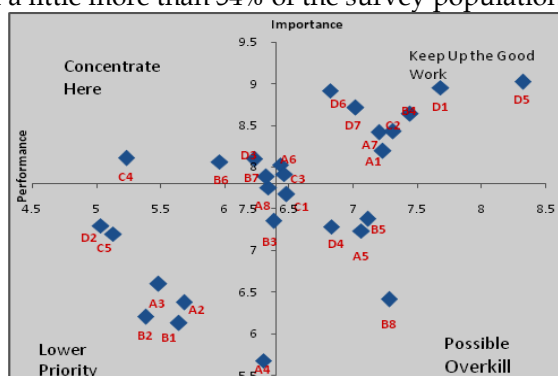
Figure 2: IPA Grid (Respondents: Patients)

Table 3: Interpretation table for (Patients) Respondents

Quadrant 1: Concentrate Here	Quadrant 2: Keep up the Good work	Quadrant 3: lower Priority	Quadrant 4: Possible Overkill
Attribute lies: B6, B7, C4, D3	**Attribute lies**: A1,A6,A7, C2,C3, B4,D1,D5,D6,D7	**Attribute lies:** A2,A3,A4,A8, B1, B2, B3, C5, D2	**Attribute lies:** A5, B5, B8, C1, D4
Interpretation: As per the perception of the patients, the centres should concentrate on the services like patients issue response and the waiting time. The patients also want the centres to concentrate on the ground staff as they were the direct communicator with the patients to avail the centre's services.	**Interpretation:** The patients found satisfied with the services like cleanliness, cafeteria in waiting hall, ground staff professionalism, their kindness, appointments schedule and services provided by the health care professionals.	**Interpretation:** The patients are not much bothered about the equipments and infrastructure of the centre. For them, the thrust area of focus was the right medication and good health of the patients	**Interpretation:** The services like directions boards inside the premises, staff communication, prestige etc were found not to be so much focussed as given to these services.

7. CONCLUSIONS

The result of patients' perception defined a valuable dimension of insight into the process by which the quality of health care service is evaluated, hence to identify the correct service quality problems quickly; management should understand patients' perceptions of the quality of service actually delivered. The result shows a quite difference in perception of the quality of the attributes.

Mainly the quality of a health care centre depends on the dimensions that are closely linked to the patient like ease of making appointment, waiting time, consultation, diagnostic tests, equipments etc.

REFERENCES

[1]. **Antony, J., Antony, F.J. and Ghosh, S. (2004)** Evaluating Service Quality in a UK Hotel Chain: A Case Study. International Journal of Contemporary Hospitality Management, **16**, 380-384.

[2]. **Bacon, D.R. (2003).** "A Comparison of Approaches to Importance-Performance Analysis," International Journal of Marketing Research, Vol. 45, No. 1, 2003, pp. 55-71.

[3]. **Desombre, T. and Eccles, G. (1998),** Improving Service Quality in NHS Trust Hospitals: Lessons from the Hotel Sector. International Journal of Health Care Quality, **11**, 21-26.

[4]. **Dolinsky, L. (1991),** "Considering the Competition in Strategy Development: An Extension of Importance-Performance Analysis," Journal of Health Care Marketing, Vol. 11, No. 1, 1991, pp. 31-36.

[5]. **Dolinsky, L. and Caputo, R.K. (1991),** "Adding a Competitive Dimension to Importance-Performance Analysis: An Application to Traditional Health Care Systems," Health Care Marketing Quarterly, Vol. 8, No. 3, 1991, pp. 61-79.

[6]. **Eccles, G. and Durand, P. (1997),** Improving Service Quality: Lessons and Practice from the Hotel Sector. Managing Service Quality, **7**, 224-226

[7]. **Hu, H.Y., Lee, Y.C., Yen, T.M. and Tsai, C.H. (2009),** Using BPNN and DEMATEL to Modify Importance-Performance Analysis Model: A Study of Computer Industry. Expert Systems with Applications, **36**, 9969-9979

[8]. **Martilla, J.A. and James J.C. (1977)** "Importance-Performance Analysis," Journal of Marketing, Vol. 41, No. 1, 1977, pp. 77-79.

[9]. **Mukhaimar & Taamenah (2004),** Recents Trends for the Hospital Management : Concept and Applications, IJM, vol. 7, Feb. pp. 165-176

[10]. **Parasuraman, A., Zeithaml, V. and Berry, L.L. (1991),** Refinement and Reassessment of the SERVQUAL Scale. Journal of Retailing, **67**, 420-450.

[11]. **Parasuraman, A., Zethaml, V.A. and Berry, L.L. (1985)** A Conceptual Model of Service Quality and Its implications for Future Research. Journal of Marketing, **49**, 41-50.

[12]. **Raymond, K.S. Chu, Tat Choi (2000),** An Importance Performance Analysis of Hotel Selection Factors in Hong kong Hotels Industry : A Comparison of Business and Leisure Travelling Industry, Journal of Tourism Management, Vol. 21, pp. 363-377.

[13]. **Robert, L. Maths, John H. Jokson (2006),** Business & Economics, Online Book, pp. 595-606.

[14]. **Swan J. and Coombs, I.L. (1976),** "Product Performance and Consumer Satisfaction: A New Concept," Journal of Marketing, Vol. 40, No. 2, 1976, pp. 25-33.

[15]. **Watson, E.H., McKenna M.A. and McLean, G.M. (1992).** "TQM and Services: Implementing Change in the NHS," International Journal of Contemporary Hospitality Management, Vol. 4, No. 2, 1992, pp. 17-20.

APPENDIX

1   A1- Cleanliness
2   A2- Equipments
3   A3-Location
4   A4- Infrastructure
5   A5-Signs and Directions information
6   A6- Waiting Area
7   A7- Facilities in waiting area- Cafeteria/ Washroom/Drinking Water etc
8   A8- Reception/ Location/ Information/ Receptionist
9   B1- Staff Cleanliness
10 B2- Staff Professionalism

11 B3- Staff Kindness and Politeness
12 B4-Trust
13 B5-Staff Communication
14 B6- Attention and understanding to Patients problem
15 B7- Interest in Patients issue
16 B8-Staff Prestige
17 C1- Ground Staff Cleanliness
18 C2-Ground Staff Professionalism
19 C3- Ground Staff Kindness and Politeness
20 C4-Ground staff Trust
21 C5- Ground Staff Communication
22 D1- Easy Appointment making
23 D2- Level of Bureaucracy
24 D3-Waiting Time before consultation
25 D4-Speed of Complementary test
26 D5- Resolution of Complaints
27 D6- Time to focus on each patient
28 D7-Health Centre Time table.