

# Knowledge Management of Performance Analysis

*by Fitri Yenni*

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## Knowledge Management of Performance Analysis and Quality Service from Regional Public Health Pariaman

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**Abstract.** Competition increasingly competitive requires every company both manufacturing and services, including RSUD Pariaman to always consider the customer wants and needs and try to meet what they expect. The purpose of this research is to analyze how is the quality of service, a service attribute be the first priority, and recommendations can be given to improve the quality of services RSUD Pariaman. The results showed that 25 of the 26 attributes of service is worth the negative gap with the largest value of -1.21 for the attribute "The hospital has a waiting room, treatment rooms, beds, toilets and adequate sanitation" and "The hospital has enough medicines and adequate medical equipment (such as CT-Scan, MRI, USG, etc.)". Based on analysis of IPA there are 11 attributes included in quadrant A and must be repaired. Recommendations based on the highest priority needs to be done and improved in advance is "Conducting training and employee empowerment" with the highest analytical value 0.170 or 17.02%. With this recommendation is expected to improve the quality of service in RSUD Pariaman.

### 1. Introduction

The rapid development of technology, especially in the field of information and communication, is the main challenge faced by all industries, both manufacturing and service industries. This development has made competition between companies in the industry increasingly increasing. With increasing competition, every company must find ways to survive in an increasingly competitive industry. According to Kotler (2002), quality must begin with customer needs and end with customer perceptions. This means that a good quality image is not based on the perception of the service provider but rather based on customer perceptions. Ekinci, et al. In Rivai, et al. (2011) stated that service quality is a factor that shows how to compare the performance of a service that can meet customer satisfaction. Feigenbaum in Rivai, et al. (2011) said that quality is what customers say, that if we want to know whether our services are of quality, ask our customers (Dai: 2011). Companies are required to pay attention and focus on each dimension which is the main indicator of service quality that provides maximum satisfaction for customers. These dimensions include: (1) reliability, as the company's ability to carry out the services promised are accurate and reliable, (2) responsiveness, who showed a willingness to help customers and provide services quickly or response (3) *assurance*, shows the extent of employee knowledge and politeness and the ability to create a good *image* or perception for the company by fostering trust and confidence in the minds of



consumers towards the company, (4) empathy, as a condition for caring and giving attention personally for customers. (5) Direct evidence (*tangible*) in the form of physical facilities, personnel and communication media (Nugraha: 2014). *Gap* is a condition where the quality of service provided by a company is not in accordance with the wishes and expectations of its customers. This gap will later make consumers feel dissatisfied and likely consumers will move to competitors. Therefore, companies must better understand that at the level of conformity that is getting higher between expectations and the quality of services provided by the company, that's where the value of maximum satisfaction is created. This means that the smaller the level of gap between quality and expectations, it can be said that consumers are increasingly satisfied (Kaihatu: 2008). Customer satisfaction is a situation where the customer's desires, expectations, and needs are met. A service is considered satisfactory if the service can meet the needs and expectations of its customers. Customer satisfaction measurement is an important element in providing better service (Ginting: 2012). But to achieve maximum satisfaction is not an easy thing. Therefore, to find out how the service expected by consumers is a challenge for service providers because services have different characteristics. According to Tjiptono (2007), there are four characteristics of service quality, namely intangibility (cannot be seen, felt, kissed, heard, or touched), *heterogeneity* (variety), *inseparability* (cannot be separated), and perishability (not durable) (Aranningrum: 2013). Importance Performance Analysis (IPA) is one approach that can be used to answer problems that occur. In this approach a measurement of the level of suitability is needed to find out how many their customers are satisfied with the performance of the company, and how much the service provider understands what customers want for the services they provide. In addition, with this approach the hospital can find out the quality of what patients expect when receiving services and also can help hospitals to focus on improving the quality of their services (Nugraha: 2014). Meanwhile, to find out how the repairs should be done first can be done by using the Quality Function Deployment (QFD) Method. QFD is a structured method used in the planning and product development process to determine specifications of customer needs and desires, as well as systematically evaluate the capabilities of a product or service to meet customer needs and desires. Customer level of interest, perceptions and expectations based on Servqual dimensions are used as priority setting in the matrix of customer needs (Halim: 2011). Achievement of inpatient customer satisfaction on the National Quality control standard is  $\geq 90\%$ . Achmad Mochtar Bukittinggi Hospital with SPM customer satisfaction 88% has approached national standards. Solok General Hospital with *grade* customer satisfaction increases every year from 72%, 75%, 85% and Pariaman Regional Hospital with a service standard (SPM) *grade* reduced (Profile of West Sumatra Provincial Health Office: 2016). In addition, there were also complaints of satisfaction submitted by telephone or message to no. The cellphone printed on the information board complains of complaints. Complaints of satisfaction from patients include the behavior and way of communicating nurses in providing services, facilities and infrastructure of the Hospital (Ahmalia: 2016). Based on the preliminary studies that the researchers conducted through observation and interviews with 20 patients and families of patients (attendants) of Class III BPJS participants, most of them delivered various complaints regarding health services provided by the hospital and it was found that the overall level of patient satisfaction was 67%. This value can be said to not meet the target of the hospital itself. Therefore Pariaman Regional Hospital must know the quality of service as what is desired and expected by its patients thus, it can create satisfaction for its patients, which in turn can improve its existence and belief in the quality of services at Pariaman Regional Hospital. Since, from the background above the authors are interested in conducting research on the quality of services whose results are presented in a study entitled "Analysis of Quality Improvement of Health Services for Patient Satisfaction of Participants in Class III BPJS in Pariaman Regional Hospital Using Importance Performance Analysis and Quality Function Deployment Method.

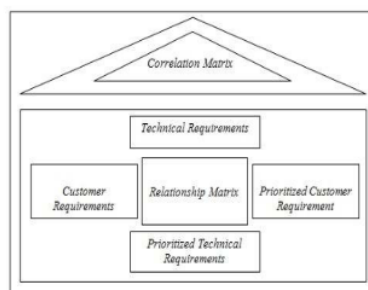
## 2. Research Method

This study was conducted at Pariaman Regional Hospital located on Jalan Prof. Yamin SH Number 5 Pariaman, Pariaman City. The study was conducted in December 2016 until February 2017. The sample of this study were 100 patients who were hospitalized chosen by using *accidental sampling* technique. The data obtained in this study are primary data (obtained directly from sources without

going through intermediaries by means of observation, questionnaires, and interviews) and secondary data (obtained indirectly / through intermediaries such as documents and literature studies).

#### 1. Quality Function Deployment

Quality Function Deployment (QFD) is a process to determine customer needs (customer "wants") and translate them into attributes ("How") which can be done as a corrective action needed to provide services. QFD is used to help determine what will satisfy customers and where they will make efforts to improve quality (Heizer & Render: 2017). This method uses a tool called the House of Quality Matrix. House of Quality Matrix tries to translate the voice of customer directly to the technical characteristics or technical specifications of a product (goods or services) produced.



**Figure 1.** House of Matrix

Generally, matriks House of Quality have six main components as follow: a) Customer Requirements, b) Technical Requirements, c) Relationship Matrix, d) Correlation Matrix, e) Prioritized Customer Requirements.

### 3. Research Result

Description of respondent data based on the results of research conducted on 100 respondents conducted using accidental sampling; respondents' characteristics can be obtained as follows: a) the characteristics of respondents based on gender were dominated by female respondents as many as 64 people. b) The characteristics of respondents based on age are dominated by respondents aged 17-30 years as many as 53 people. c) The characteristics of the respondents based on the latest education were dominated by respondents with the last high school education / equivalent, as many as 41 people. d) The characteristics of respondents based on work are dominated by respondents with Entrepreneurial status as many as 41 people.

### 4. Discussion

Gap Value Calculation (Gaps) Attributes From the results of the calculation of Gap value per attribute, the calculation between the differences in the level of perception with the level of expectations shows the extent to which the Pariaman Regional Hospital has provided services in accordance with customer expectations and achieves customer satisfaction. Based on the results of the study using Importance Performance Analysis, it can be seen that most of the attributes tested have negative gap values. Of the 26 service attributes tested, only 1 attribute has a positive gap and is able to meet customer satisfaction. The attribute is that the hospital building looks beautiful, clean and comfortable with a 0.05 value gap. Meanwhile the remaining 25 attributes have a negative gap value. The overall measurement of the gap value produces a value of -15.14, this means that the customer's expectations for the services of Pariaman Regional Hospital are higher than the perceptions or services that they actually received so far. The Calculation of Service Attributes that must be Prioritized Based on the analysis using the IPA Diagram in Figure 7. It can be seen that from the 26 service attributes tested as many as 11 attributes are in Quadrant A. The attributes include 1) Health workers on time, 2) Health workers respond immediately when needed 3) Waiting time for

services no more than one hour, 4) Health workers use good and polite language, 5) Health workers prioritize patient interests, 6) Health workers pay personal attention to patients, 7) Health workers are always being friendly and polite, 8) Hospitals have waiting rooms, treatment rooms, beds, toilets, and adequate sanitation, 9) Parking lots that are safe, comfortable and adequate, 10) Hospitals have enough medicines and equipment adequate health (such as CT scans, MRI, ultrasound, etc.) and 11) Hospitals have clear and easy to understand signs. Thus it can be concluded that there are 11 services attributes being the top priority for immediate improvement in order to improve the service quality of Pariaman Regional Hospital. Calculation of Technical Response that Needs to be Prioritized Immediately Conducted This study aims to provide recommendations for improvement in services at Pariaman Regional Hospital by knowing what services what is desired and expected by its users and pay attention to the technical response that can be done by the Hospital by looking at the resources and capabilities of the hospital itself using the Quality Function Deployment (QFD) method. As seen in Figure 6. It can be seen that the response which is the first priority to be carried out immediately is "Training and empowering health workers" with a value of 0.1702 or 17.02%. Then, "Job performance assessment" with a value of 0.1064 or 10.64%.

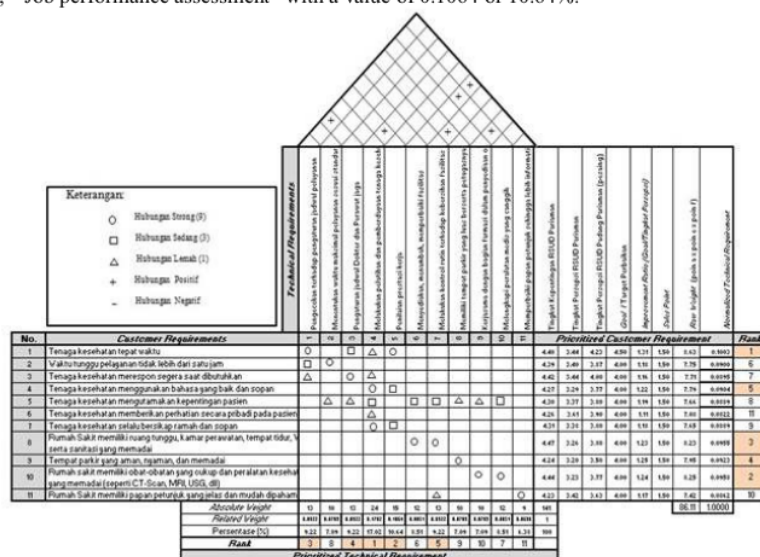


Figure 2. Gaps Performance

## 5. Conclusion

Based on the research results and data analysis that has been conducted through an analysis of improving the quality of health services in Pariaman Regional Hospital by integrating Importance Performance Analysis and Quality Function Deployment, the researcher concluded that:

- From the results of gap analysis using IPA, it can be seen that quality Health services provided by Pariaman Regional Hospital are still not as expected by the users, especially for patients participating in Class III BPJS. This is evidenced by the results of research that explains that most of the attributes tested in the questionnaire have a negative gap value. Of the 26 service attributes tested, only 1 attribute has a positive gap, while the other 25 have negative gaps. Then it can be concluded that the quality of service at Pariaman Regional Hospital is still low and requires improvements.
- From the results of data analysis of Importance Performance Analysis (IPA) using IPA Diagrams or Cartesian Diagrams, the priority attributes for immediate improvement are the attributes of

Quadrant A as many as 11 service attributes. The attributes are: (2) Health workers on time, (6) Health workers respond immediately when needed, (7) Waiting time for services is no more than one hour, (10) Health workers use good and polite language, (12) Health workers prioritize the interests of patients, (13) Health workers give personal attention to patients, (16) Health workers are always friendly and polite, (21) Hospitals have waiting rooms, treatment rooms, beds, toilets, and sanitation adequate, (22) Parking spaces that are safe, comfortable and adequate, (23) Hospitals have adequate medicines and adequate health equipment (such as CT-Scan, MRI, USG, etc.), and (26) Houses Pain has clear and easy to understand signs. Thus, based on these results, the 11 attributes above are the main priority attributes to be improved to improve customer satisfaction.

- c. From the results of Quality Function Deployment data analysis using House of Quality, it can be seen that the technical response that is a priority to be immediately carried out to improve the quality of health services in Pariaman Regional Hospital is "Conducting training and empowering health workers" Then "Job performance assessment", and "Checking the arrangement of service schedules". By doing these improvements, it is hoped that it can increase the customer's satisfaction.

## 6. SUGGESTION

Based on the conclusions about the analysis of improving the quality of health services in Pariaman Hospital by integrating Importance Performance Analysis and Quality Function Deployment, some suggestions can be made as follows:

- a. For companies, Pariaman Regional Hospital should make improvements to priority service attributes where the attribute has the highest negative gap value is in Quadrant A Science Chart because these attributes are considered very important but the level of service is still low. These improvements are expected to provide services that are in line with expectations so that they can achieve patient satisfaction.
- b. For researchers, With this research, it is expected that further researchers can carry out further research related to service quality in companies and other institutions. This research can also be continued by replacing research objects in other fields and using different and more varied data processing methods. In addition, this research can also be modified by adding to the dimensions of its service, reviewing the costs or it can also change the purpose of the research.

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