

Analysis Of Health Services Through Importance Performance Analysis Theory (IPA) And Service Quality Method

Cempaka Nova Intani^{1*}, Wiwiek Rabiatal Adawiyah², Daryono³

^{1*}Universitas Jenderal Soedirman, adelwin21@yahoo.com, Indonesia

²Universitas Jenderal Soedirman, wiwiekra@gmail.com, Indonesia

³Universitas Jenderal Soedirman, daryono_jvc@yahoo.com, Indonesia

*Cempaka Nova Intani

ABSTRACT

Balai Kesehatan Paru Masyarakat (BKPM) seeks to improve the quality of services in order to achieve patient satisfaction. One of the ways to measure the quality of health services from the Health Center is by knowing the patient's satisfaction with the service. The vision of BKPM as one of the prime health service units, evenly distributed and affordable by the community in order to support the achievement of optimal health status. The purpose of this study was to determine the performance of health services to the community, especially in the treatment center by measuring the level of patient satisfaction.

Research methods with the Importance Performance Analysis Theory (IPA) approach mapped in a Cartesian diagram which is divided into 4 areas or quadrants, namely attributes to improve – top priority (A), maintain performance – achievement priority (B), attributes to maintain – low priority (C.) and attributes to de-emphasize – final priority (D). Determination of the position of an attribute into the 4 regions is the average value of the attribute as a whole. BPKM needs to maintain and improve existing achievements. Some things that need to be taken into consideration are having sufficient time to communicate with patients, responding to complaints properly, and providing information clearly.

Keywords: Satisfaction; Health Services; Importance Performance Analysis Theory

1. Introduction

Along with the development and the amount of competition in the health sector, public health facilities, both government and private, will compete to win this competition by improving the service system, especially in terms of meeting customer needs, in this case patients and their families. Balai Kesehatan Paru Masyarakat (BKPM) Banyumas is one of the public health services owned by the local government of Banyumas, Central Java, which is specifically engaged in community lung health services. The focus of its line of business is services so that improving the quality of service to consumers, namely patients and their families is very important and can have a big impact on the work unit.

Based on these problems, BKPM seeks to determine the level of service quality and seeks to improve service quality in order to achieve patient and family satisfaction. The method used to

analyze is Six sigma is used to identify the target market and service attributes, based on the level of importance and impact on the company's overall performance. Customer satisfaction is able to describe a conformity of expectations and the reality of a service quality. The design of a strategy to improve the quality of health services that is oriented to patient satisfaction is able to provide an advantage in intense competition. Identification of patient needs as customers using the Six Sigma method makes it easier for management to find out patient needs as the basis for developing service quality.

Research that has been carried out in the Banyumas area includes Research Kurniawan and Intiasari (2012) which showed that less than 60% of patients stated that the quality of health services at FKTP in Banyumas reached the indicator of poor quality. Internal data from a clinic in Purwokerto showed an increase in patient complaints in January 2018 of 5 reports and continued to increase to 11 reports in March and reached 21 reports in June 2018. Customer complaint report data for 6 months from customers obtained reports in the form of problems regarding overall length of service, doctor and paramedical services and clinical facilities.

The first gap is the mismatch of management perceptions and customer expectations caused by management failing to understand customer expectations due to vertical communication failures in the form of unpreparedness to pay attention to customers, indirect interactions with customers, minimal marketing research orientation and no effort to identify customer expectations. The second gap is the mismatch of management perceptions and quality specifications caused by design and service standards that are not in accordance with the perception of consumer expectations due to errors in the formulation of organizational goals, failure to identify accurately and low quality commitment causing this gap. The third gap is the non-conformance of service quality specifications and service delivery caused by problems in providing services that are not in accordance with standards by employees. The fourth gap is the discrepancy in service delivery and external communication caused by management not providing the services that have been communicated. The fifth gap is the perceived and expected service discrepancy caused by wrong customer perceptions regarding service quality and differences in how to measure performance.

Based on the Law of the Republic of Indonesia Number 25 of 2009 concerning Public Services, all public services are required to conduct an analysis of service quality. Balai Kesehatan Paru Masyarakat (BKPM) Banyumas is one of the public health services owned by the local government of Banyumas, Central Java, which is specifically engaged in community lung health services. The focus of its line of business is services so that improving the quality of service to consumers, namely patients and their families is very important and can have a big impact on the work unit. As long as BKPM Banyumas has been established and operating, there has never been an analysis of the service quality of its health workers. so to determine the effect of BKPM service quality on patient satisfaction so that it can be seen whether BKPM is feasible to be maintained or even raised to a special pulmonary hospital which is being a discourse of the Banyumas local government for progress and efforts to improve public health, especially in the field of lung health. After doing this research, it is hoped that it can be input to the local government of Banyumas to make the right decisions, especially during a pandemic and in an effort to eliminate tuberculosis.

The current state of public health is in the public spotlight and can be used as a benchmark for the success of development, especially in the era of the COVID-19 pandemic. Banyumas Regency is very concerned about the condition of public health and is always at the forefront of efforts to improve public health. It can be seen from the many physical and non-physical developments for

Community Health Centers (Puskesmas) in all Banyumas sub-districts. The formulation of the problem in this study is "How is the effect of service quality on patient satisfaction at Balai Kesehatan Paru masyarakat (BKPM) Banyumas district?"

2. Literature Review

2.1 Importance Performance Analysis Theory (IPA)

Importance Performance Analysis (IPA) Theory or the theory of interest and performance analysis is a method developed by Martilla and James in 1977. IPA is used to analyze the level of interest and the level of company performance. IPA is used to develop an effective corporate strategy in the future by identifying which areas need to be concentrated to be improved, maintained or eliminated. The term Importance is the level of importance according to one's perception. From the various perceptions of the level of interest, it can be formulated the most dominant level of interest. By using this concept, it is hoped that it will capture a clearer perception of the importance of these variables. Furthermore, this is linked to the perceived reality (performance). By assessing the relationship between the two, it can be identified these variables in the importance and performance matrix (Martilla & James, 1977).



Figure 1. Importance Performance Analysis Matrix Diagram (Martilla & James, 1977)

The explanation of each quadrant is as follows:

In IPA, the analyzed factors will be mapped in a Cartesian diagram which is divided into 4 areas or quadrants, namely attributes to improve – top priority (A), maintain performance – priority achievement (B), attributes to maintain – low priority (C.) and attributes to de-emphasize – final priority (D). Determination of the position of an attribute into the 4 regions depends on the average value of the attribute as a whole.

2.2 Service Quality

Service is the process of fulfilling consumer needs by service providers using certain procedures, systems and methods (Moenir, 2010). While satisfaction is the suitability of the results of consumer assessments of various aspects of service that are felt and expected, so that patient satisfaction can be an evaluation of service providers regarding the quality of their services (Pratiwi, 2014). Service is an act or deed of a person or an organization to provide satisfaction to customers, fellow employees and also leaders. Service and providing support to customers according to Armistead and Clark (1992) is the ability of employees to carry out their duties, namely providing service and support with full commitment and problem-solving skills when the service is in progress. Based on the definitions above, it can be concluded that service quality is

the level of ability to provide services to customers in meeting customer expectations so that customer satisfaction can be achieved.

2.1.1 Dimensions of Service Quality

According to Gronroos (2006), service quality consists of two dimensions, namely:

- Dimensions of technical quality (technical quality), namely what is obtained by consumers,
- The functional dimension (functional quality), namely by how consumers obtain services.
- According to Brady, et al (2006), there are three main dimensions as an alternative to service quality dimensions, namely:
- Quality of interaction (interaction quality): the contact that occurs in the service delivery process in meetings between service providers and consumers and this is the key determinant of the evaluation made by consumers of service quality.
- Quality of results (outcome quality): is defined as an evaluation by consumers of the results of the service activities they receive, including timeliness in service delivery.
- Environmental quality (environment quality) is related to how far and how large the tangible features of the service delivery process which then play a role in developing consumer perceptions of service quality as a whole.

According to Davis and Heineke (2007) service quality itself is a very broad concept that includes many dimensions including:

- The friendliness of employees when serving customers,
- Ease of access to services,
- Employee knowledge,
- Speed of service to customers,
- Comfort while waiting for service.

According to Lovelock and Wright (2002) divide service quality into five dimensions as follows:

- Reliability is a company that can be relied on in providing services as promised from time to time.
- Tangibles are related to anything that is done by a service provider or company which can be in the form of physical facilities, website sites, worker equipment, and communication delivery.
- Responsiveness is the ability possessed by employees in a company to provide prompt assistance and service to consumers.
- Assurance is an employee who has the knowledge and ability to provide service, is courteous, competent, and can be trusted by consumers.
- Empathy is the ability of a company's employees to provide attentive service to consumers.

2.1.2 Factors Affecting Service Quality

According to Tjiptono (2008) the factors that affect service quality are as follows:

- Simultaneous production and consumption; Some things that may have a negative impact on perceptions of service quality are:
 - Unskilled in serving customers,
 - The way employees dress is not in accordance with the context,

- The employee's speech is impolite or even annoying,
- Employee body odor that disturbs customer comfort,
- Employees always frown or put on a "haunted" look.
- High labor intensity;
- Inadequate internal customer support;
- Communication gaps; communication gaps can be:
 - Service providers make promises that are too excessive, so they are unable to fulfil them,
 - Service providers cannot always or incorrectly present the latest information to customers, for example relating to changes in procedures or rules, changes in the arrangement of goods on supermarket display shelves, changes in packaging, changes in prices, and others.
 - The communication message delivered by the service provider is not understood by the customer,
 - Service providers do not pay attention or do not immediately follow up on complaints and or suggestions submitted by customers.
- Treat all customers the same way.

3. Research Methodology

3.1 Research design

3.1.1 Types of research

This type of research is associative research, namely research that aims to determine the relationship between two or more variables.

3.1.2 Research object

The object of this research is patient satisfaction with service quality at BKPM Banyumas

3.1.3 Research Subject

The subjects of this study were BKPM Banyumas patients during the study

3.1.4 Research sites

The location of the research was carried out at Balai Kesehatan Paru masyarakat (BKPM) Banyumas. This study examines how the relationship between service quality is seen from the five dimensions of service to patient satisfaction.

3.1.5 Research data sources

The data source comes from internal data, namely patients from BKPM Banyumas.

3.1.6 Method of collecting data

The data collection method used a closed questionnaire that had been standardized in order to make it easier for subjects to answer questions and speed up the filling time so that patient services were not disturbed by all research subjects.

3.1.7 Population and sample

The population of this study were all BKPM Banyumas patients. The research sampling system used total sampling, namely all BKPM patients who visited for 1 month, namely October 2022.

4. Discussion

4.1 Service quality factors according to Leonard L. Berry, 1995, are:

- *Tangibles*
Quality of service by looking at the physical appearance, equipment, appearance of employees, and existing infrastructure. The results of observations by researchers that the physical appearance of BKPM is still standard and the age of the building from the information obtained is ten years and more than ten years, so the model has not been updated to make it more comfortable and attractive.
- *Empathy*
There is a willingness from employees to care, give special personal attention, ease of relationship, good communication and understanding of patient needs.
- *Responsiveness*
The response or alertness of doctors and nurses in helping patients and providing services and handling complaints quickly.
- *Reliability*
Reliability is the ability of a hospital to provide and carry out health services as promised accurately, precisely and reliably. Reliability includes two main things, namely; work consistency (performance) and the ability to be trusted (dependability).
- *Assurance*
Assuranceliaise with nurses and doctors regarding knowledge, courtesy, and ability to foster patient trust and confidence. This BTCLS training is very important and is a mandatory requirement for health workers, especially nurses who work in hospitals, health centers, clinics and companies. The results of the researcher's observation that not all BKPM nurses have a valid BTCLS certificate, so it is necessary to renew the validity period by participating in the BTCLS training again. By participating in training to be able to improve the ability of nurses.

4.2 Procedural Dimension

In the procedural dimension, there is more emphasis on systems and mechanisms of service to patients. This dimension includes several factors, namely:

- *Punctuality*
Good service requires punctuality, namely the time it takes for a service to arrive at the patient. Efficient service is fast service and the desired time is the right service time.
- *Accommodation*
Accommodation means creating a service that is flexible in procedures and can be used by all patients. It is necessary to design procedures according to the wishes of the patient with efficient services. The procedure is good, but in practice the patients who come with a referral letter from the Level I Health Service Provider (PPK I) not all patients are directly

served as outpatients but there are patients who are treated as outpatients.

- **Communication**
Services cannot be said to be of good quality without clear and concise communication between nurses, doctors and patients. Messages must be delivered specifically and efficiently. From the observations, the researchers got information that the communication between the doctors on duty to the patients was quite clear, but there were complaints from the patients that there were different doctors' diagnoses, between General Practitioners and Specialist Doctor. So it is necessary to have a common perception that refers to the guide.
- **Consumer response**
Patient response is needed to help improve service procedures by identifying areas that need improvement. Patients also respond to service procedures with BPJS Health facilities to be more flexible.

Based on the results of interviews, FGDs, documentation and observation studies that have been carried out, data on NON BPJS patient visits from 2019 to March 2022, the number of patients is stable and even tends to increase. However, the percentage of patient visits has decreased to below 60%, which is not ideal for the Ministry of Health of 60-85%. Information obtained that:

- There is a dominance of DPJP and there is not the same perception of doctors in outpatient services because there is no specific guideline for outpatient admission criteria.
- The follow-up from the BKPM management added human resources to complement the required specialist doctors, so that patients can be served. In essence, individuals must respect each other in any circumstances (Syarif et al., 2016).
- In BKPM, infrastructure is still limited, this is the reason patients enter NON BPJS AND BPJS with true emergency conditions are not treated outpatient at BKPM but are referred to other hospitals. Supporting facilities and better services create patient satisfaction. Facilities partially have a significant effect on the satisfaction of hospital service users. A hospital that can provide facilities to the community to make it easier if you need hospital services immediately. Service quality partially has a significant effect on the satisfaction of hospital service users. Hospitals that provide quality services can increase service sales and create their own advantages compared to competing hospitals (Mongkaren, 2013).
- Every patient who comes to the registration must be screened to get the right service and according to the patient's condition. Screening at registration is carried out by trained/senior nurses, using color criteria, namely red, yellow, green, and black.
- Human resources are still limited for specialist doctors. The results of the study show that there are still limited specialist doctor.

4.3 Analysis

Credibility criteria to test the validity of the data in this study. The results of the analysis of services for outpatients, namely:

- Limited specialist doctor as DPJP.
- Implementation of old patient services because there is no special doctor on duty, still concurrently guarding the outpatient.
- The availability of supporting facilities and incomplete infrastructure is one of the factors

that patients are referred to other hospitals.

The results of the analysis of outpatient services, namely:

- *Planning*
In the implementation of outpatient services, it is planned to equip specialist doctor so that true emergency patients can be served, they are not referred to other hospitals.
- *Organizing*
Organizing the implementation of services for outpatients is still carried out by referring to the main duties and functions of each part involved in the implementation of outpatient services. In practice, coordination and communication between doctors is still not optimal because there is no specific guideline for outpatient admission criteria for reference for all doctors.
- *Actuating*
The implementation of patient services to be able to enter outpatient services still has several obstacles, the availability of facilities and infrastructure is limited.
- *Controlling*
Supervision and evaluation have not been carried out optimally because not all have been followed up with results.

Infrastructure or service facilities available at BKPM: Outpatient, Laboratory, Radiology, Pharmacy, Public Health, Place of registration. Based on the fishbone model, steps according to PDCA are carried out which serve to guide the thinking process in breaking the task into several technical steps and then evaluating the results, improving them, and retesting them.

- Plan
 - Meet doctors, nurses and patients at BKPM for information.
 - Hope produces a good response when doctors, nurses and patients are met and provide information about BKPM services.
 - In-depth interviews with BKPM doctors, nurses and patients.
- Do
 - What is the patient's attitude or behavior when he comes to BKPM
 - Observing how doctors and nurses service to patients
 - What is the follow-up after the doctor examines the patient?

Based on the observations above, it seems that a change in strategy is necessary.

- Check/Result Check
The results of observations of patients who come to BKPM with outpatient decisions because:
 - False emergency patient so outpatient
 - The patient brought a referral from FKTP I but after being examined by the BKPM doctor, with outpatient advice.
 - A true emergency patient, but the facilities or infrastructure needed are not available
 - A true emergency patient but there is no specialist doctor who fits the patient's illness
- Action

The results obtained for this implementation:

- Separate registration counter between BKPM and outpatient
- Special guidelines for outpatient criteria are applied as a reference so that the doctor's perception is the same
- Completing outpatient service facilities
- Increasing the number and variety of specialist doctor for outpatients.



Figure 2. DMAIC

Based on Figure 2, there are several stages carried out in Six Sigma in solving problems at BKPM. Or commonly known as the DMAIC Method or Stages. Following are the DMAIC stages (Krishnan and Prasath, 2013):

- *Definition*
 - The goal of the patient can be outpatient.
 - BKPM management can meet the needs of outpatient services
- *Measure*

BKPM patient visit data from January to March 2022. However, there are patients who are referred to other hospitals and the outpatient alternative becomes an outpatient decision.
- *Analysis*
 - False emergency patient so outpatient
 - The patient brought a referral from FKTP I but after being examined by the BKPM doctor, with outpatient advice.
 - A true emergency patient, but the facilities or infrastructure needed are not available
- *Improve*
 - Separate registration counter for severe illness and mild symptoms
 - Special guidelines for outpatient criteria are applied as a reference so that the doctor's perception is the same
 - Completing outpatient service facilities
 - Increase the number and variety of specialist doctors
- *Control*

After improving, control the progress and achievement of outpatients on the percentage of

patient visits. Steps or models to improve patient visits:

The patient's decision to outpatient is influenced by several things, namely:

- Availability of a place or registration counter to check for heavy and light categories and separate outpatients, to reduce false emergency patients
- Completing the variety and number of specialist doctors according to patient service needs data.
- Completeness of outpatient medical support facilities or infrastructure.
- There are special guidelines for outpatient admission criteria and the ease of use of BPJS Health facilities that are flexible for all doctors, because the number.

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