

## ANALYSIS OF PATIENT SATISFACTION ON HEALTHCARE SERVICE WITH POTENTIAL GAIN IN CUSTOMER VALUE (PGCV) METHOD (CASE STUDY: CHILDREN'S POLY SERVICE AT PUSKESMAS SIMPANG IV SIPIN KOTA JAMBI)

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### *Abstract*

*Puskesmas Simpang IV Sipin Jambi still continuing to improve customer satisfaction. One indicator of the success of health services in Puskesmas is patient satisfaction. After observation, the reality of services at the Puskesmas still does not meet customer expectations. This is because the Puskesmas has not prioritized what services need to be repaired and improved. This study uses the Potential Gain in Customer Value (PGCV) method to find out the description of the service desired by the customer. This research is a quantitative descriptive research. The data taken was carried out by distributing online questionnaires to 120 respondents. The results of the PGCV analysis show that the Responsiveness attribute (3,277) and the two Tangible attributes (2,447), (2,188) become 3 priority focuses in improving service quality.*

**Keywords:** Service Quality, Patient satisfaction, Potential Gain in Customer Value (PGCV).

### **Introduction**

The provision of health services is one of the several actions that must be taken in order to obtain the best possible public health condition. The provision of health services for the community at the basic level in Indonesia is carried out through the Pusat Kesehatan Masyarakat (Puskesmas), which is the functional organizational unit of the Regency/Municipal health office and responsible for managing health for the community in each sub-district of the district or municipality concerned (Blum, 1976).

Additionally, Puskesmas purpose is not only to be profit-oriented but also provides services to patients in order to fulfill patients' satisfaction as a customer. According to the decision of the Minister of Health of the Republic of Indonesia, Number 828/MENKES/SK/IX/2008 : Minimum Services standards (Standar Pelayanan Minimal) refer to provisions regarding the type and quality of basic services which are obligatory regional affairs that every citizen has the right to receive at a minimum base. Moreover, the indicators referred to as minimum services standard indicators are quantitative and qualitative benchmark that describe the number of targets to meet in achieving a particular minimum services standard. This includes such forms of input, process results, and service benefits.

In general, the provision of high service quality is critical in both private and public sectors. Organizations are additionally required to produce high-quality services while also improving efficiency (Ramseook-Munhurrun et al, 2010 37). In order to fulfill customer satisfaction (in the context of this research, patients) ensuring good service quality is important to achieve customer satisfaction. This includes the public sector, specifically health care. Patient satisfaction is one indicator of the success of health services at Puskesmas. Moreover, Patient satisfaction can be achieved if Puskesmas's services are of high quality.

The aim of this study is to measure patient satisfaction with Puskesmas health services. This research was conducted based on patient visitor data at Pediatric Polyclinic at Puskesmas Simpang IV Sipin Kota Jambi. Our primary observation revealed that the number of visits to Children's Poly in 2019 increased from the number of visitors in 2018.

**Table 1.** Pediatric Polyclinic Patient Data from 2018-2020

Year	Patient's Gender		Number of Patients
	Male	Female	
2018	1.202	1.203	2.405
2019	1.721	2.153	3.874
2020	156	177	333
	Total		6.612

Source :Visitor Data of Simpang IV Sipin Health Center Jambi City

We conducted primary interviews with 6 parents from 11 pediatric polyclinic patients, based on our findings, patient respondents were dissatisfied with the services provided by the Puskesmas. A number of complaints have been made, including the fact that the hygiene and comfort of the kid poly service room are poor due to a lack of garbage cans. Also, the children's polyclinic does not yet have an adequate waiting room to support incoming patients. Even though Puskesmas has provided waiting rooms, they are narrow and

are unable to accommodate visiting patients, thus many patients remain standing in the hallway and corridor. However, there are supporting facilities and infrastructure that are less efficient such as a children's playground that is indoors, this should be outside the room so that it can be used by patients while waiting in line. In addition, respondents complained about service times that were not consistent with the schedule provided causing patients to wait, health workers who were slow to serve patients due to the large number of patients, a lack of clear information about drug use, and several health workers who were unfriendly and slow in responding to and serving patients.

Given the initial problem with patient satisfaction related to the children's polyclinic services at Puskesmas Simpang IV Sipin in Jambi City, this research intend to seek the value of the gap between customer expectations and reality, and what attributes need to be prioritized in improving services at the Puskesmas Simpang IV Child Polyclinic Sipin using the Potential Gain In Customer Value (PGCV) method. Moreover, this study aims to analyze the value of the gap between expectations and reality for customers at the Puskesmas Simpang IV Sipin Children's Poly Clinic by using the Potential Gain In Customer Value (PGCV) method and compiling priority attributes in order to improve services at the Puskesmas Simpang IV Sipin Children's Polyclinic, Jambi City.

## **Literature Review**

### **Customer Satisfaction**

Customer satisfaction is a condition where the desires, expectations, and needs of customers are met. A service is considered satisfactory if the service can meet the needs and expectations of customers. Therefore, measuring customer satisfaction is critical to providing better, more efficient, and effective services. If a customer is unsatisfied with a service, it is almost assured that the service will be ineffective and inefficient. This is especially relevant in the case of public services (Fahim, 2019).

According to Kotler & Keller (2009), customer satisfaction refers to a customer's experience of the feeling of pleasure or disappointment that emerges after comparing the products' performance (result) to the expected performance (or result). Therefore, in the case of health care, the patient is a customer. So, if the performance of health care falls short of expectations, it indicates that the patient is dissatisfied. In contrast, if the performance fulfill expectations, it indicates that the patient is satisfied, and it indicates that the patient is truly satisfied. Patient satisfaction has emerged as a major idea in marketing theory and practice in the healthcare context. Additionally, it become an important goal for business activities. Patient satisfaction contributes to a variety of important factors, including building patient loyalty and improving Puskesmas's reputation.

### **Service Quality**

Service quality in general can be understood as an overall evaluation of service by customers (Eshghi, et al, 2008: 121). Furthermore, Parasuraman et al (1988) define service quality as an organization's ability to meet or exceed customer expectations. As a result, the comparison of consumer expectations and perceived service quality offered by providers is crucial because when expectations exceed customer perceptions, service quality is less satisfactory, and vice versa (Ramseok-Munhurrun, et al 2010: 38). In this research the patient becomes an important variable since it conducts the before expectation, perception and after sales (gaps) from the patient as a customer.

The indicator of the success of health services at the Puskesmas is patient satisfaction. In addition, patient satisfaction can be achieved if the Puskesmas's services are of good quality. This research used the SERVQUAL tool developed by Parasuraman et al (1988). The SERVQUAL instrument introduced by Parasuraman et al (1988) consists of the conceptualization of five dimensions of service quality namely;

1. Tangibility; is the dimension associated with the availability of essential resources such as the attractiveness of the organization's physical facilities, equipment, and written communication materials, as well as the look of employees (workers and management team).
2. Reability; is the dimension that emphasizes the ability to perform the promised service accurately and reliably. It means that the organization gives an accurate service to customers without making mistakes and completing what was promised on time.
3. Responsiveness; is the dimension that addresses the organization's readiness to assist customers and give prompt service, which indicates that staff is willing to deliver the required service at any time without any inconvenience, as well as respond to customer requests and address their issues.
4. Assurance; is the dimension that emphasizes employee professionalism, as well as the ability to provide security, trust, and confidence. In addition, the professional management team with significant knowledge.
5. Empathy; is the dimension that emphasizes on individual care and attention that a company delivers to its consumers, understanding their needs and acting in their best interest, as well as having convenient cost and hours of operation.

By using the SERVQUAL instrument it also incorporates the idea of gap analysis (gap analysis) which considers quality as the difference between customer expectations and perceptions of the actual service performed by an organization (provider) (Ali & Yaseen, 2016; 3).

### Potential Gain Customer Value (PGCV)

Potential Gain Customer Value or PGV is a tool that used is to determine priority improvements to be made by the organizations. Additionally, William C Hom (1997) introduced customer analysis through the PGCV index number in a publication named Quality Progress, where he stated that the PGCV index is a simple concept and instrument for analyzing customers. Furthermore, this method can be used to determine improvement priorities in terms of customer's voices but does not pay attention to the strengths of management (Wicaksono et al, 2015). The priority order of attribute improvement will be determined using PGCV. This is to say that if an attribute has the highest PGCV index value, it indicates that the attribute should be prioritized over the next attributes with a value lower than the main attribute in order to improve customer service quality.

The advantage of using the PGCV index method is the ability to identify the attributes that must be considered to be improved based on the potential value of the customer satisfaction while also identifying services that are not too concerned with quality by customers so that the company can make cost efficiencies for these services (Christine, 2008). Furthermore, PGCV analysis involves the level of performance and importance. The PGCV index approach can also provide more detailed I-P (importance-performance) and marketing data with quantitative output. The PGCV value is obtained from the reduction value of UCDV (Ultimately Desired Customer Value) and value of ACV (Achieved Customer Value).

To find the value of ACV (Achieved Customer Value) that is by multiplying the importance variable and the performance variable. In the form of the following formula:

$$ACV = I \times P$$

Explanation: I (Importance) = Expectancy average score  
P (Performance) = Actual average score

After obtaining the ACV Value, the next step is to find the Ultimate Desired Customer Value (UDCV) value which is obtained by the formula:

$$UDCV = I \times P_{max}$$

Explanation: I = Expectancy average score  
P<sub>max</sub> = The highest value of the likert scale.

Furthermore, to obtain the PDCV index value, the Ultimate Desired Customer Value is reduced by the Achieved Customer Value, namely;

$$PGCV = UDCV - ACV$$

### Methods

This is a quantitative descriptive study. The population of this study included all the patients that seeking treatment at the Children's Polyclinic and the management of Puskesmas Simpang IV Sipin Jambi from April 1st 2020 until June 30th 2020. The number of respondents in this study was 120, which was determined by multiplying the number of statements/questions by 10 times 12 (Algifari, 2016). In addition, there are 15 respondents that come from associated management to determine the value weighting and determine the priority of the improvement.

Furthermore, in this study, the type of data used, namely primary data, is data obtained from the results of filling out questionnaires and direct observation of pediatric polyclinic patients at the Puskesmas Simpang IV Sipin, Jambi City.

### Result and Discussion

#### Validity Test

The validity test was performed to establish the level of confidence in the data or whether the data obtained from respondents were adequate to be used as a research instrument. Additionally, with a total of 120 respondents, the value of r<sub>table</sub> can be obtained through r product moment pearson with df (degree of freedom) = n-2, so the value of df = 120-2 = 118, then the value of r<sub>table</sub> is 0,150 (look further at appendix 5). The Question items are valid if the value of r<sub>hitung</sub> > r<sub>table</sub>. The analysis can be seen in the table below

**Table 2.** Validity Test

Variabel	r hitung	r tabel	Explanation
Question A1	0,345	0,150	Valid
Question A2	0,282	0,150	Valid
Question A3	0,646	0,150	Valid
Question B1	0,293	0,150	Valid
Question B2	0,111	0,150	Invalid
Question C1	0,305	0,150	Valid
Question C2	0,865	0,150	Valid
Question D1	0,230	0,150	Valid
Question D2	0,312	0,150	Valid
Question D3	0, 641	0,150	Valid
Question E1	0,735	0,150	Valid
Question E2	0.744	0,150	Valid

Source: calculation results using SPSS

From the analysis of the validity data above, there is one question that's is declared invalid because the value of r hitung is lower than r tabel. So, the invalid data was deleted in order to proceed with the reliability data analysis. Furthermore, eleven questions were declared as valid and processed to the next stage.

### Reliability Test

In this study, a questionnaire was examined with a reliability test to assess the respondents' stability and consistency in answering questions linked to the question items, which are the dimensions of a variable arranged in a questionnaire form. Reliability test can be carried out simultaneously on all the question. If the value of alpha > 0,60, it means that the question is reliable, vice versa. The table below shows result of processing reliability data and their analysis;

**Table 3.** Result or reliability test

Cronbach's Alpa	r <sub>tabel</sub>	Result
0,737	0,60	Reliabel

The results of the reliability test obtained reliability data on the questionnaire of 0.737 with a r tabel value of 0.60. The value of Cronbach's Alpa shows higher value than the value of r tabel . So, all the questions can be used as a research instrument.

### Gap's calculation

In this study, the model used is the Service Quality (ServQual) model. Moreover, this model also known as the Gap Analysis Model (Wicaksono et al, 2015). In this stage, we will calculate the gap between reality and the respondent's expectation based on each attribute in the questionnaire (the gap calculation in detail can be seen in Appendix 1). From the data that we obtained, we analyze that there are 5 gaps with 11 questions and 120 total respondents. Respondents' assessment using a Likert scale 1-4 where value 1 is not very important, value 2 is not important, value 3 is important, and value 4 is very important.

The results of the questionnaire on expectation assessment, namely respondents selecting more values 3 and 4 for each item, indicate that customer expectations are very high. As for the results of the questionnaire on the reality assessment, respondents chose more values 2 and 3 for each item, indicating that the service's actuality was not satisfactory.

Furthermore, in processing the GAP data using the ServQual method to measure the level of service quality at the Children's Polyclinic at the Puskesmas Simpang IV Sipin based on the respondents' assessment. Respondents assessed 2 questions, namely expectations and reality. The average results of the expectation assessment from the questionnaire can be seen in Appendix 2.

The result shows that the overall average value for the statement of expectations is 3.61, for the average value per gap, namely 3.47 for tangible, 3.73 for reliability, 3.39 for responsiveness, 3.76 for assurance, 3. 68 for empathy. The highest value or highest expectation is assurance with a value of 3.76 and the lowest score is gap responsiveness 3.39. Then, the overall average value for reality assessment is 3.15, and for each gap, namely: 3.02 for tangibility, 2.78 for reliability, 3.35 for responsiveness, 3.37 for assurance, 3.12 for empathy. The highest score is assurance 3.37 and the lowest score is gap reliability with a value of 2.78. It can be concluded that the variables of responsiveness, reliability, responsiveness, assurance, and empathy based on the respondents' assessment were dissatisfied. The comparison of expectations and reality can be seen in the table below.

**Table 4.** Comparison of expectation and reality

No.	Gap	Average Expected Value	Average Reality Value	Explanation
1	Tangible	3,47	3,02	Not Satisfied
2	Reliability	3,73	2,78	Not Satisfied
3	Responsiveness	3,39	3,35	Not Satisfied
4	Assurance	3,76	3,37	Not Satisfied
5	Empathy	3,68	3,12	Not Satisfied

Furthermore, the SERVQUAL method measures consumer behavior between expectations and reality where there are 5 variables that are measured, namely, tangible, reliability, responsiveness, assurance, empathy and for each variable there are several attribute questions with the same statement between expectations and reality. If the expectation value is greater than reality, the consumer is dissatisfied with the puskesmas service, if the expectation value is less than the reality value, the consumer is satisfied with the puskesmas service and if the expectation value is the same as the reality value, the consumer is satisfied with the puskesmas service.

**Table 5.** Gap Calculation Result

Dimensions	Question Attributes	Reality	Expectation	Attribute Gaps	Rank	Attribute Dimension Gap
A. Tangible	Question 1	3,075	3,958	-0,883	2	
	Question 2	3,058	3,200	-0,142	10	-0,453
	Question 3	2,917	3,250	-0,333	7	
B. Reliability	Question 4	2,775	3,733	-0,958	1	-0,479
C. Responsiveness	Question 6	3,575	3,083	0,492	11	-0,042
	Question 7	3,125	3,700	-0,575	5	
D. Assurance	Question 8	3,283	3,958	-0,675	4	
	Question 9	3,825	3,992	-0,167	9	-0,383
	Question 10	3,008	3,317	-0,308	8	
E. Empathy	Question 11	2,917	3,683	-0,767	3	
	Question 12	3,325	3,683	-0,358	6	-0,563

After calculating the gap, it can be seen that in terms of attribute dimensions, all attribute dimensions have negative gaps, indicating that the service quality of each dimension does not meet customer expectations. According to the attribute dimension with the largest negative gap value, namely the dimension of reliability (reliability) with a value of -0.958, because customer expectations regarding the level of reliability from the Puskesmas are not met by the reality of the service felt.

#### Index Calculation of Potential Gain in Customer Value (PGCV)

Based on the gap analysis that has been carried out, it has been determined which attributes will require improvement and their values after which further calculations will be performed using the Potential Gain in Customer Value (PGCV) method.

The result of the PGCV index calculation is used to determine priority improvements in terms of customer voice but does not pay attention to management. With the PGCV index, it will be known the priority order of attribute improvement. If an attribute gets the largest PGCV index value, it means that the attribute needs to get the main improvement priority then the next attributes that have a value below the main attribute in order to improve the quality of service to customers

**Table 6.** PGCV Calculation Value

Dimensions	Question Attributes	Expectation	Reality	Value of ACV	Value of UDCV	PGCV	Rank
		X	Y	X*Y	X <sub>maks</sub> *Y	UDVC-ACV	
A. Tangible	Question 1	3,958	3,075	12,172	12,300	0,128	10
	Question 2	3,200	3,058	9,787	12,233	2,447	2
	Question 3	3,250	2,917	9,479	11,667	2,188	3
B. Reliability	Question 4	3,733	2,775	10,360	11,100	0,740	8
C. Responsiveness	Question 6	3,083	3,575	11,023	14,300	3,277	1
	Question 7	3,700	3,125	11,563	12,500	0,938	6

D. Assurance	Question 8	3,958	3,283	12,997	13,133	0,137	9
	Question 9	3,992	3,825	15,268	15,300	0,032	11
	Question 10	3,317	3,008	9,978	12,033	2,056	4
E. Empathy	Question 11	3,683	2,917	10,743	11,667	0,924	7
	Question 12	3,683	3,325	12,247	13,300	1,053	5

From the table above it can be seen that the attributes of question 6, question 2, and question 3 are the 3 main focuses for improvement priorities according to the results of the assessment, then improvements are made to the attributes whose value is below the others to improve service quality. Based on the results, that is to say, the response of the medical staff when a patient needs assistance requires significant improvement followed by employee tidiness and the availability of supporting facilities such as medical equipment, playground, number of seats in the waiting room, and public toilets.

### Conclusion

According to the findings of this study, the respondents were dissatisfied with the five service dimensions (tangible, reliability, responsiveness, assurance, and empathy) at the Puskesmas Simpang IV Sipin Children's Polyclinic in Jambi City. We can analyze this based on the calculation of the gap. Furthermore, when the gap is calculated, it is found that all attributes have a negative gap, implying that the quality of service for each dimension is insufficient to meet the expectations of patients. According to the attribute dimension with the largest negative gap value, reliability (reliability) with a value of -0.958, because customer expectations regarding the level of reliability from the Puskesmas are not matched by the reality of the service felt. Furthermore, the PGCV calculation results demonstrate the three main areas for priority improvement of services at the Puskesmas Simpang IV Sipin Child Poly at Jambi City in the future are the Responsiveness characteristic (3.277), the reaction of health workers when a patient requires assistance, the Tangible attribute (2.447) namely the neatness of the officers, and (2.188) namely the availability of supporting facilities.

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