Public Service Community Satisfaction Survey And Evaluation: A State Health Center Perspective

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Abstract. The purpose of this study is to implement the Decree of the Minister of Administrative and Bureaucratic Reform No.14 of 2017 concerning public service community satisfaction surveys and evaluation with Cartesian diagrams at the East Purwokerto Community Health Center. This study uses the Community Satisfaction Index calculation approach and evaluation with the Importance Performance Analysis approach. The instrument used uses 9 elements that are valid and reliable. The results obtained show that the Consumer Satisfaction Index (IKM) for BPJS and Non-BPJS patients is in a good category, while the elements that must be prioritized by the East Purwokerto Community Health Center are Service Completion Time and Service Facilities and Infrastructure.

Keyword: Public Service, Community Satisfaction, State Health Center

1   INTRODUCTION

Law number 36 of 2009 concerning Health [1] stipulates that everyone has the right to get health services. One of the development efforts in the health sector is improving the quality of outpatient services at primary (basic) health facilities such as clinics and community health centers. In receiving and serving outpatients with various characteristics, primary health care facilities must equip themselves so that they always listen to the voice of consumers, in this case are patients, and have the ability to respond to every desire, hope and demand of users of health service facilities. This is closely related to health workers who always accompany and serve patients as consumers.

Community Health Service (in Indonesian called Puskesmas) is a technical implementing unit for district/city offices that is responsible for carrying out health development in a work area [2]. Puskesmas is an institution that provides services to the public. Based on PerMenPAN-RB RI No. 14 of 2017 confirms that public service providers are required to conduct a Community Satisfaction Survey periodically at least 1 (one) time a year. The survey was conducted to obtain the Community Satisfaction Index [3]. Public services carried out by government officials are currently felt to have not met the expectations of the community [4]. This can be seen from various public complaints submitted through the mass media and social networks. Of course, if these complaints are not handled, they will have a negative impact on the government. Furthermore, it can lead to distrust from the public [3].

The quality of services provided by service providers generally has a goal to satisfy the patient. But sometimes there is a gap in interpreting the expectations that the patient wants. Meanwhile satisfaction according to Kotler and Keller [5] that satisfaction will be achieved if there is a match between expectations and performance. If performance is less than expectations, it will result in dissatisfaction. It could be that health care providers consider a dimension or attribute to be important for the patient but the patient considers it less important, resulting in a mismatch of expectations and service performance. This can cause patients to shift treatment to other places [6] ; [7]. On the other hand, a satisfied patient will have a high sense of trust and will not move to another place, even promoting the place to relatives or friends, other prospective patients to check their health at the primary health facility. Satisfied patients can also trigger them to be loyal [6], [8].

Based on the research results of Astuti et al [9] stated that the East Purwokerto Health Center achieved a high level of satisfaction. But with a value that is still below or close to the value of being satisfied. If the level of satisfaction with the services provided is not maintained, it can lead to dissatisfaction. Meanwhile, public service institutions must report the results of a community satisfaction survey once a year. It is hoped that the quality of service will increase. In KepMen PAN-RB No. 14 of 2017 it is not discussed how to evaluate. Public institutions conducting surveys only know the results are good or not because they only produce criteria/levels. The researcher continued the evaluation with an Important Performance Analysis Technique approach using a Cartesian diagram. With this diagram, public institutions, in this case the East Purwokerto Health Center, can find out whether these indicators are good or not in providing services, or even prioritize improvements. So it is very important to implement a community satisfaction survey based on the Decree of the Minister of PAN-RB No. 14 of 2017 with a performance evaluation using a Cartesian diagram.

2 LITERATURES REVIEW

2.1 Community Satisfaction Survey for Public Service Providers

Public service providers are required to conduct a Community Satisfaction Survey periodically at least 1 (one) time a year. The survey was conducted to obtain the Satisfaction Index. Public. The Community Satisfaction Survey conducted on public service delivery units uses predetermined indicators and survey methodologies. Public service providers are required to publish the results of the Community Satisfaction Survey. The Public Satisfaction Survey Results are reported to the Minister for Administrative Reform and Bureaucratic Reform. Operators are required to carry out an evaluation of the results of the public satisfaction survey from the Public Service Unit.

2.2 Community Satisfaction Index

The Community Satisfaction Index is data and information about the level of community satisfaction obtained from the results of quantitative and qualitative measurements of people's opinions in obtaining services from public service providers by comparing expectations and needs. With the availability of periodic community satisfaction index data, the following benefits can be obtained: a) Knowing the weaknesses or shortcomings of each element in the implementation of public services; b) It is known that the performance of service delivery has been carried out by the public service unit periodically; c) As material for determining policies that need to be taken and efforts that need to be made; d) It is known that the overall community satisfaction index on the results of the implementation of public services within the scope of the Central and Regional Governments; e) Stimulating positive competition between service delivery units within the scope of the Central and Regional Governments in an effort to improve service performance; f) For the public can know the description of the performance of the service unit..

3 RESEARCH METHOD

3.1 Populasi Dan Sampel

Population In this study, the population used were outpatients at the East Purwokerto Health Center. According to KEMENPAN-RB, respondents are selected randomly according to the area coverage of each service unit to meet the accuracy of the index results, the selected respondents are set at least 100 people from the total population of service recipients, on the basis of ("Number of Elements" + 1) × 10 = number of respondents (9 + 1) × 10 = 100 respondents.

3.2 Scale

The ordinal scale model based on (KEPMen PAN-RB No. 14/2017) for the calculation is:
a. Poor: Score 1
b. Not Good: Score 2
c. Good: Score 3
d. Very Good: Score 4

3.3 Data Analysis Method

a. Test Instrument Data

This test was conducted to analyze the quality of research data, including: Validity Test and Reliability Test

b. Satisfaction Index Analysis (SIA)

The value of the Community Satisfaction Index (CSI) is calculated using the "weighted average value" of each service element. In calculating the community satisfaction index for the 9 service elements studied, each service element has the same weight with the following formula KEMENPAN-RB/14/2017:

$$\text{weighted average value} = \frac{total\ weight}{Number\ of\ Elements} = \frac{1}{X} = N$$

To obtain the CSI value of the service unit, a weighted average value approach is used with the following formula KEMENPAN-RB/14/2017:

$$CSI = \frac{Total\ of\ Perception\ Value\ per\ Element}{Total\ Elements\ Filled} \times \text{Weighing Value}$$

To facilitate the interpretation of the CSI assessment, which is between 25-100, the results of the assessment above are converted to a basic value of 25, with the following formula KEMENPAN-RB/14/2017:

$$\text{SIA Service Unit} \times 25$$

Table 1. Perception Value, CSI Interval, Conversion Interval CSI, Service Quality and Service Unit Performance

Perception Value	CSI Interval	Conversion Interval CSI	Service Quality	Service Unit Performance
1	1,00 - 2,5996	25,00 - 64,99	D	Poor
2	2,60 - 3,064	65,00 - 76,60	C	Not Good
3	3,06444-3,532	76,61-88,30	B	Good
4	3,5324-4,00	88,31-100,00	A	Very Good

c. *Importance Performance Analysis* (IPA)

To find out whether the performance of the East Purwokerto Health Center is in accordance with the interests of the patients and to determine the level of patient satisfaction, it is analyzed between the real performance and expectations represented by letters X and Y, where X is the performance carried out by the East Purwokerto Health Center while Y is the interests of the Puskesmas patients. East Purwokerto. The formula used is:

$$Tki = \frac{Xi}{Yi} \times 100\%$$

(Supranto,2018:241)

Information:

Tki = Respondent's level of conformity

Xi = Performance Assessment Score of East Purwokerto Health Center

Yi = Score of patient interest assessment of East Purwokerto Public Health Center

The horizontal axis (X) will be filled by the level of performance, while the vertical axis (Y) will be filled by the score of importance. In simplification of the formula, then for each attribute that affects customer satisfaction can be known by the formula [10]:

$$\underline{X} = \frac{\sum Xi}{n} \qquad \underline{Y} = \frac{\sum Yi}{n}$$

Table 3. Criteria for Assessment of IPA attributes

Score (in %)	Service Quality Performance
0-34	Poor
35-50	Not Good
51-65	Good Enough
66-80	Good
81-100	Very God

Cartesian diagram is used to determine the service indicators that are satisfactory or unsatisfactory for the patient. The formula used is as follows [10]:

$$\overline{X} = \frac{\sum_{i=1}^{N} \underline{Xi}}{K} \qquad \overline{Y} = \frac{\sum_{i=1}^{N} \underline{Yi}}{K}$$

K = the number of attributes that can affect patient satisfaction at the East Purwokerto Health Center.
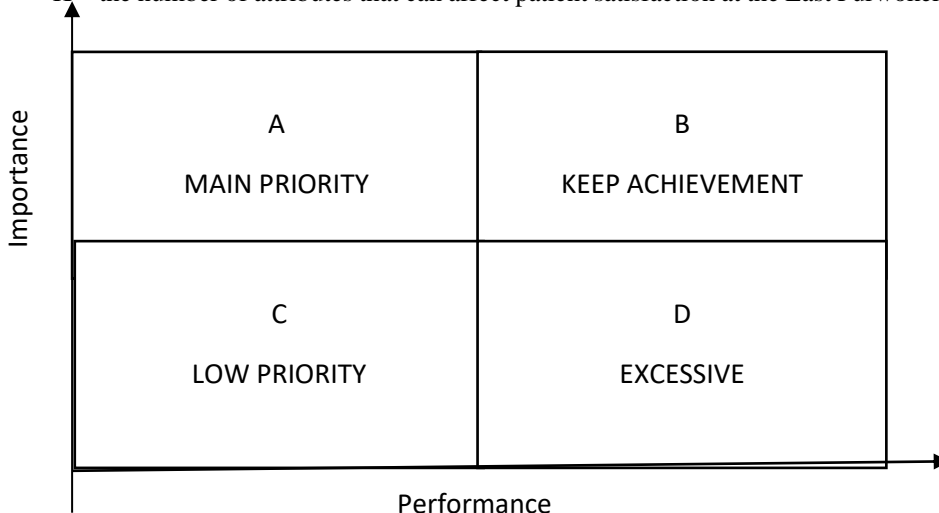
4   RESULTS

4.1 Response Rate

Response rate is the percentage of the number of respondents who answered the research instrument validly to the number of samples set at the beginning of the study. Since the outbreak of the Corona Virus pandemic, the activities of the health facilities have been limited in particular to collecting data (distribution of questionnaires), therefore the questionnaire was changed from offline to online. Returning Questionnaire 85% offline and 15% online

4.2 Data Analysis

4.2.1 Instrument Test

The analysis of the validity of the questionnaire includes 9 elements of reality and 9 elements of hope. The calculation results show that all statements in the questionnaire have a correlation coefficient greater than 0.2272 which means that the questions of performance and expectations in the questionnaire are valid and can be used as research instruments. all variables are greater than the limit value of Cronbach Alpha of 0.60. Thus, all variables are declared reliable and can be used as a data collection tool.

4.2.2 Service Quality Calculation

The calculation of CSI is differentiated based on membership in the Social Security Administering Body (BPJS) and non-BPJS payments

The following is the calculation of CSI for BPJS patients at the East Purwokerto Health Center

Table 4. Calculation of CSI for BPJS patients

No	Perceived Value Per Element (1)	Total Elements (2)	(3) = (1)/(2)	Weigher (4)	CSI (3)*(4)
1	172	53	3,25	0,11	0,36
2	168	53	3,17	0,11	0,35
3	150	53	2,83	0,11	0,31
4	170	53	3,21	0,11	0,35
5	176	53	3,32	0,11	0,37
6	170	53	3,21	0,11	0,35
7	177	53	3,34	0,11	0,37
8	160	53	3,02	0,11	0,33
9	181	53	3,42	0,11	0,38
Total					3,16

BPJS Patient CSI Value = 3,16 x 25 = 79.08

Based on the calculation of the CSI value of 79.08, the quality of service for BPJS patients is included in the good interval category, seen from table 1

The following is the calculation of CSI for non-BPJS patients at the East Purwokerto Health Center

Table 5 Calculation of CSI for Non BPJS patients

No	Perceived Value Per Element (1)	Total Elements (2)	(3) = (1)/(2)	Weigher (4)	CSI (3)*(4)
1	149	47	3,17	0,11	0,35
2	146	47	3,11	0,11	0,34
3	132	47	2,81	0,11	0,31
4	141	47	3,00	0,11	0,33
5	147	47	3,13	0,11	0,34
6	146	47	3,11	0,11	0,34
7	149	47	3,17	0,11	0,35
8	141	47	3,00	0,11	0,33
9	155	47	3,30	0,11	0,36
Total					3,06

BPJS Patient CSI value = 3.06 x 25 = 76.41
Based on the calculation of the CSI value of 76.41, the quality of service for BPJS patients is in the Less Good category seen from table 1

Based on table 4, the calculation level of service quality for BPJS patients is 79.08, which means that the service quality of the East Purwokerto Health Center is in the good category. Then based on table 5, the calculation level of service quality for Non BPJS patients is 76.41, which means that the service quality of the East Purwokerto Health Center is in the poor category. Although the service quality of Non BPJS patients is in the poor category, judging by the CSI score close to Good, the first hypothesis states that the quality of service at the East Purwokerto Health Center is good if the minimum score is 76.61-88.30, thus the first hypothesis is accepted.

4.2.3 Calculation of *Importanc Perfomancee Analysis* (IPA)
Calculation of the Compliance Level of BPJS Patients

Table 6 Calculation of the Compliance Level of BPJS Patients

Elements	Reality			Expectation			Conformity level (%)
	Xi	n	average	Yi	n	average	
1	**172**	53	3,25	189	53	3,57	0,91
2	**168**	53	3,17	184	53	3,47	0,91
3	**150**	53	2,83	196	53	3,70	0,77
4	**170**	53	3,21	193	53	3,64	0,88
5	**176**	53	3,32	191	53	3,60	0,92
6	**170**	53	3,21	199	53	3,75	0,85
7	**177**	53	3,34	199	53	3,75	0,89
8	**160**	53	3,02	195	53	3,68	0,82
9	**181**	53	3,42	188	53	3,55	0,96
Total	1524		28,75	1734		32,72	
average score			3,19			3,64	

The results of the level of conformity above indicate that the performance given by the East Purwokerto Health Center to BPJS patients has an average score of 3.19 and patient expectations show an average score of 3.64. And this shows that the performance given by the East Purwokerto Health Center has not been in accordance with the patient's expectations

The results of the calculation of the IPA analysis on the performance and expectations of BPJS patients

The step used to create a Cartesian diagram is to determine the average value of each attribute, namely X and Y, where the calculation value has been obtained from the calculations carried out previously. Calculation of X = 3.19 and Y = 3.64. So that the placement of the quadrants on each indicator is presented in the following table:

Table 7 Conclusion Cartesian diagram for BPJS patient care

Elements	Item	average		quadrant
		performace	expectation	
1	Service Systems, Mechanisms and Procedures	3,25	3,57	D
2	Terms of Service	3,17	3,47	C
3	Service Completion Time	2,83	3,70	A
4	Product Specification Service Type	3,21	3,64	B
5	Service Rates	3,32	3,60	D
6	Service Implementing Competence	3,21	3,75	B
7	Service Executor Behavior	3,34	3,75	B
8	Service Facilities and Infrastructure	3,02	3,68	A
9	Handling of Complaints, Suggestions and Service Feedback	3,42	3,55	D

Results of Cartesian Diagram Analysis While the calculation of the IPA analysis using a Cartesian diagram for BPJS patients is described in Figure 2
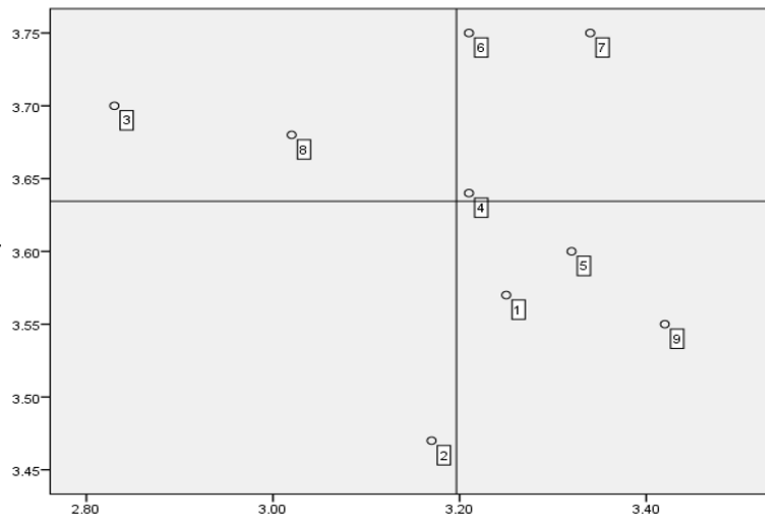

Figure 2 Importance Performance Analysis (IPA) Diagram on BPJS Patients

Calculation of the Conformity Level of Non BPJS Patients and the Conclusion of the Cartesian Diagram Calculation of the Compliance Level of Non BPJS Patients

Table 8 Calculation of Compliance Level for Non BPJS Patients

Elements	Reality			Expectation			Conformity level (%)
	Xi	n	average	Yi	n	average	
1	**149**	47	3,17	164	47	3,49	0,91
2	**146**	47	3,11	159	47	3,38	0,92
3	**132**	47	2,81	169	47	3,60	0,78
4	**141**	47	3,00	168	47	3,57	0,84
5	**147**	47	3,13	167	47	3,55	0,88
6	**146**	47	3,11	172	47	3,66	0,85
7	**149**	47	3,17	176	47	3,74	0,85
8	**141**	47	3,00	172	47	3,66	0,82
9	**155**	47	3,30	170	47	3,62	0,91
Total	1306		27,79	1517		32,28	
Average score			3,09			3,59	

The results of the level of conformity above indicate that the performance given by the East Purwokerto Health Center to Non BPJS patients has an average score of 3.09 and patient expectations show an average score of 3.59. And this shows that the performance given by the East Purwokerto Health Center has not been in accordance with the patient's expectations.

The results of the calculation of the IPA analysis on the performance and expectations of Non BPJS patients The step used to create a Cartesian diagram is to determine the average value of each attribute, namely X and Y, where the calculation value has been obtained from the calculations carried out previously. Calculation of X = 3.09 and Y = 3.59. So that the placement of the quadrants on each indicator is presented in the following table:

Table 9 Conclusion of Cartesian Diagram for Non-BPJS patient care

Elements	Item	average		average
		performace	expectation	
1	Service Systems, Mechanisms and Procedures	3,17	3,49	D
2	Terms of Service	3,11	3,38	D
3	Service Completion Time	2,81	3,60	A

4	Product Specification Service Type	3,00	3,57	C
5	Service Rates	3,13	3,55	D
6	Service Implementing Competence	3,11	3,66	B
7	Service Executor Behavior	3,17	3,74	B
8	Service Facilities and Infrastructure	3,00	3,66	A
9	Handling of Complaints, Suggestions and Service Feedback	3,30	3,62	B

Results of Cartesian Diagram Analysis While the calculation of the IPA analysis using a Cartesian diagram for BPJS patients is described in Figure 3
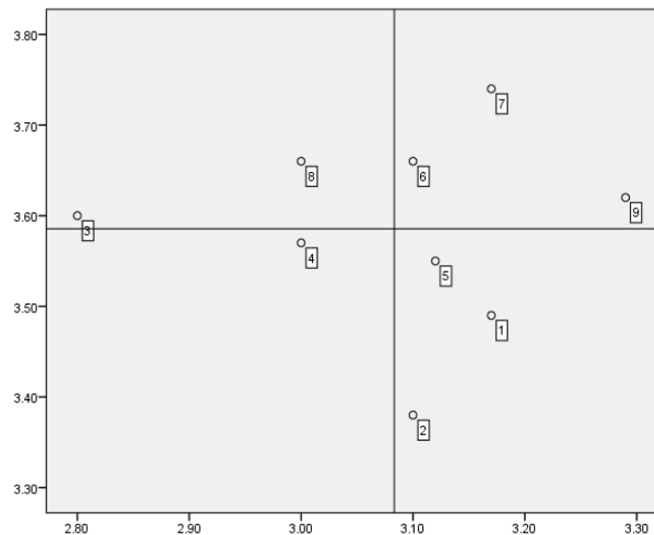

Figure 3
Importance Performance Analysis (IPA) Diagram on Non BPJS Patients

5   Discussion

5.1 Community Satisfaction Index for East Purwokerto Health Center Services

The administration of the government is said to be good if the public services carried out are oriented to the interests of the community. East Purwokerto Health Center is one of the public service providers owned by the Banyumas Regency government. Good and quality service has implications for the satisfaction of the community, because the community directly assesses the performance of the services provided. Based on the analysis, it was obtained that the Community Satisfaction Index (CSI) was 79.08 for patients who used BPJS cards and 76.41 for patients who paid for health care using non-BPJS. When viewed from the conclusion interval of CSI according to PerMenPAN-RB RI No. 14 of 2017 is 76.61-88.30 in the good category, although for Non BPJS of CSI it should be in the Not Good category, but it is close to **Good**.

5.2 Elements to prioritize

Based on the Importance Performance Analysis (IPA) analysis, it shows that Quadrant A (Main Priority) is an area that contains attributes that are considered important by patients but in reality, these attributes are not as expected (the level of satisfaction achieved is still not good). The attributes that are in this quadrant indicate the location of the weakness of the management of the East Purwokerto Health Center in meeting the needs of both BPJS and Non BPJS participants.

Table 10 Comparison of the level of conformity between BPJS and Non BPJS patient services

Elements	BPJS			Non BPJS		
	Average reality	Average expectation	Conformity level (%)	Average reality	Average expectation	Conformity level (%)
1	3,25	3,57	0,91	3,17	3,49	0,91
2	3,17	3,47	0,91	3,11	3,38	0,92
3	2,83	3,70	0,77	2,81	3,60	0,78
4	3,21	3,64	0,88	3,00	3,57	0,84

5	3,32	3,60	0,92	3,13	3,55	0,88
6	3,21	3,75	0,85	3,11	3,66	0,85
7	3,34	3,75	0,89	3,17	3,74	0,85
8	3,02	3,68	0,82	3,00	3,66	0,82
9	3,42	3,55	0,96	3,30	3,62	0,91

Based on table 10, it can be explained that the level of service suitability for BPJS and Non BPJS patients is less than 100%. In other words, both services for BPJS and Non BPJS patients have not provided satisfaction, because the patient's expectations have not been met by the performance of the East Purwokerto Health Center. In element 9 (Handling of Complaints, Suggestions and Service Inputs) is the highest element for BPJS services, which is 96%, while for Non BPJS patient services, namely in elements 1 (Systems, Mechanisms and Service Procedures) and 9 which is 91%. Element 9 in BPJS patient care is included in quadrant D in the Cartesian diagram.

Quadrant D shows the elements that affect the patient are less important, but their implementation is excessive. Considered less important but very satisfying. While element 9 in Non BPJS patients is included in the Quadrant B category, it shows the elements that have been successfully implemented by the service provider and for that it must be maintained and considered very important and very satisfying.

Services for BPJS patients with the lowest level of conformity in element 3 (Service Completion Time) with a value of 77%. The elements are the same for Non BPJS patients. If you look at the Cartesian diagram, element 3 is in quadrant A. Quadrant A shows elements that are considered to affect patient satisfaction, including service elements that are considered very important, but service providers have not implemented them according to the wishes of the patient. In other words, the element of service completion time is an element that must be prioritized at the East Purwokerto Health Center.

The level of conformity between performance and the second lowest expectation is element 8 (Service Facilities and Infrastructure) for both services for BPJS patients and Non BPJS patients. Facilities and infrastructure are also included in quadrant A, meaning that these elements must be prioritized by the East Purwokerto Health Center in order to increase patient satisfaction.

6   Conclusions and Implications

6.1 Conclusions

a. The Consumer Satisfaction Index (CSI) for BPJS and Non BPJS patients is in the good category
b. The elements that must be prioritized by the East Purwokerto Health Center are the Time for Completion of Services and Service Facilities and Infrastructure.

6.2 Managerial Implications

The East Purwokerto Health Center maintains and even increases its ranking by maintaining the elements of implementing competence (competence/ability of officers in service) and Service Implementing Behavior (the behavior of officers in services related to politeness and friendliness).

References

[1] Republik Indonesia, 2009. Undang-undang nomor 36 Tahun 2009 tentang Kesehatan
[2] Depkes, 2011. PROFIL KESEHATAN INDONESIA TAHUN 2011
[3] Republik Indonesia, 2017. Peraturan Menteri Pendayagunaan Aparatur Negara Dan Reformasi Birokrasi Republik Indonesia NOMOR 14 TAHUN 2017 Tentang Pedoman Penyusunan Survei Kepuasan Masyarakat Unit Penyelenggara Pelayanan Publik
[4] Hariany, Z., & Matondang, A. R. (2016). Analisis Indeks Kepuasan Masyarakat (IKM) terhadap Pelayanan Publik di Puskesmas Xxx. *Jurnal Teknik Industri USU*, 5(2).
[5] Kotler, Philip dan Kevin L. Keller (2009). *Manajemen Pemasaran*. Edisi Ke-Tigabelas. Jilid 1. Penerbit Erlangga
[6] Astuti HJ and Nagase K. 2014. Patient loyalty to health care organizations: strengthening and weakening (satisfaction and provider switching). J Med Market. 2014 14(4); 191-200.
[7] Astuti HJ and Nagase K. 2016. A framework for conceptualizing patient loyalty to healthcare organizations. Health Services Management Research 2016, Vol. 29(3) 70–78
[8] Astuti HJ and Nagase K. 2014.Patient loyalty to healthcare organizations: Relationship marketing and satisfaction. Int J Manage Market Res 2014; 7(2): 39–56.
[9] Astuti, HJ., Rahayu, TSM dan Miftahuddin, MA (2018) SERVICES QUALITY ANALYSIS (Servqual and Importance Performance Analysis Model) In Effort of Patient Satisfaction Improvement on Primary Healthcare (Chapter 6) Headway Global Research Consultancy, Singapore
[10] Supranto, J. (2018). Pengukuran tingkat kepuasan pelanggan. Rineka Cipta