Optimization of Outpatient Waiting Times to Improve the Achievements of National Quality Indicators at TNI AD 05.08.04 Hospital Lawang

Wieko Prayudi[1*], Ganista Alkautsar[2], Ika Retnani[3], Titis Ari Respatilatsih[4], Indasah[5]
[1,2,3,4,5] *Department of Public Health, Universitas STRADA Indonesia, Kediri, Indonesia*
[*]*Corresponding author: wprayudi@yahoo.com*

ABSTRACT

The waiting time for outpatient services in a hospital is one of the important factors determining patient satisfaction with the hospital, so it is hoped that patients will not wait too long while in the hospital. This study aimed to optimize outpatient waiting times so that it can increase the achievement of national quality indicators at TNI AD 05.08.04 Hospital, Lawang. This study used fishbone diagrams, USG (Urgency, Seriousness, Growth), and SWOT Analysis (Strength, Weakness, Opportunity, Treats) to formulate problems and find solutions. The results of this study showed that priority problems in waiting time include: standard operating procedure (SOP) for outpatient service flow are still not available, the electronic medical record system is still often slow, and evaluation of national quality indicators is still not carried out routinely. Furthermore, the proposed strategy offered is the creation of SOP regarding the flow of outpatient services and routine outreach regarding the use of electronic medical records. With the implementation of these two strategies, it is hoped that they will be able to speed up waiting times for outpatient services, thus improving the achievement of national quality indicators.

Keywords: National Quality Indicators, Optimization, Outpatient Waiting Time

INTRODUCTION

The waiting time for services remains a prevalent issue in healthcare practice, and it is a potential component causing dissatisfaction. Waiting for an extended period leads to dissatisfaction among patients. According to Kapustiak (2000), waiting time is the total time spent by patients waiting in the polyclinic, starting from the time the patient registers until the patient is called/enters the polyclinic room. Based on the Indonesian Ministry of Health Decree No. 129/Menkes/SK/IV/2008 for outpatient services, the waiting time indicator should be ≤ 60 minutes, starting from patient registration to being received/treated by a specialist doctor.

According to Buhang (2007), related to quality management, the length of patient waiting time in obtaining health services is one of the important things and determines the quality of health services provided by a health service unit, as well as reflecting how the hospital

manages service components that are adapted to patient situation and expectations. In the contextual sense, waiting time is a recurring issue that prompts patient complaints in several hospitals. Often, the issue of waiting time for services does not receive adequate attention from hospital management. If a hospital neglects the prolonged waiting time in its healthcare services, the overall quality of the hospital's services is considered unprofessional and can reduce both patient and family satisfaction.

TNI AD 05.08.04 Hospital Lawang also pay attention to the quality of healthcare services related to patient waiting time. Prolonged waiting time can worsen the patient's illness, inefficiencies in service time, and the loss or reduction of working hours that should be used by the patient or his family. Reducing the duration of waiting time is one way to improve the quality of health services (Pratiwi, 2021). Based on a preliminary study conducted in May 2023, delays in outpatient care services lead to patient accumulation due to the prolonged waiting time, impacting to patient satisfaction. This, in turn, serves as an indicator of the national quality standards for the TNI AD 05.08.04 Hospital Lawang. Based on the above background, an in-depth study is needed regarding optimizing outpatient waiting times to improve the achievement of national quality indicators at the TNI AD 05.08.04 Hospital Lawang.

METHODS

This study was conducted at the TNI AD 05.08.04 Hospital Lawang, Malang Regency, in May 2023. The research method used was a qualitative descriptive method. The qualitative method according to Walidin, Saifullah and Tabrani (2015) states that qualitative research is a research process to understand human or social phenomena by creating a comprehensive and complex picture that can be presented in words, reporting detailed views obtained from informant and carried out in a natural setting. Primary data collection techniques are through interviews and observation, while secondary data collection is through document review. Then the study discusses existing problems using fishbone diagrams, USG (Urgency, Seriousness, Growth), and SWOT Analysis (Strength, Weakness, Opportunity, Treats).

RESULTS

Assessment

This study collects data on outpatient waiting times from January 2023 to April 2023, from several outpatient clinics, namely Pediatric clinic, Surgery clinic, Oral Surgery clinic, Gynecology clinic, Internal Medicine clinic, Eye clinic, Nerve clinic, and Ear Nose Throat clinic. The data obtained was as follows:

Table 1. Achievements of National Indicators for Outpatient Waiting Time Quality (in percentage)

Clinic	January	February	March	April	Mean
Pediatric	85.71	66.67	77.78	83.33	**78.37**
Surgery	61.54	68.75	76.92	77.27	**71.12**
Oral Surgery	50.53	67.46	88.07	82.29	**72.09**
Obgyn	68.97	58.33	83.33	55.56	**66.55**
Eye	65.79	65.06	91.67	77.17	**74.92**
Internist	54.72	76.92	92.98	87.50	**78.03**
Nerve	77.78	100.00	100.00	80.00	**89.44**
Ear Nose Throat	62.50	75.00	73.33	87.50	**74.58**
Mean	**65.94**	**72.27**	**85.51**	**78.83**	**75.64**

Based on table 1 above, it is found that the achievements in January 2023, February 2023 and April 2023 are still below standard with achievements of 65.94%, 72.27% and 78.83%. As a national standard indicator for the quality of outpatient waiting time is ≥ 80%, and not more than 60 minutes (Kepmenkes RI No.129/Menkes/SK/IV/2008)

Research Problems

Study of not achieving the national indicators for the quality of outpatient waiting times at the TNI AD 05.08.04 Hospital Lawang categorized with the help of a fishbone diagram or also known as 5M, namely: man, material, environment, machine, method. The description of the 5M that has been discovered includes:

a. Man: 1) There is only one outpatient assistant, 2) Outpatient assistants also serve as administrative staff, 3) Doctors are quite busy.
b. Machine: 1) Tools for calling patients are not yet available, 2) Limitation of examination tools.
c. Environment: 1) The waiting room is unspacious, 2) Space between registration room, outpatient administration and polyclinic room.
d. Material: Slow electronic medical record system.
e. Method: 1) The SOP for outpatient service flow is still not available, 2) Evaluation of national indicators of quality is still not carried out routinely, 3) Socialization of the use of electronic medical records is still not carried out routinely.

According to Murnawan (2014), Fishbone is one way improving the qualities discovered by Japanese scientists in the 1960s. Dr. Kaoru Ishikawa. Fishbone is a quality control tool used to detect problems happened in the company. Fishbone is used in its application for identify the factors that cause problems. Hence, the existence Fishbone can trigger continuous exploration so that it can be discovered the root of the problem in the company.

Determining Problem Priority

After the 11 problems mentioned above were found, then the problems were prioritized using the USG method (urgency, seriousness, growth). The USG method (urgency, seriousness, growth) is one of the methods for determining problem priorities for solving them (Wardani & Minarno, 2021). By using USG method shows that the problems that need to be prioritized for solving are:

a.　SOP for outpatient service flow is still not available
b.　Slow electronic medical record system
c.　Evaluation of national quality indicators is still not carried out routinely.

Intervention Plan

Based on the priority determination of problem solving above, to determine the intervention plan for this study is to carry out a SWOT (strength, weakness, opportunity, threats) analysis of the internal and external factors at the TNI AD 05.08.04 Hospital Lawang. This analysis is based on the assumption that an effective strategy will maximize strengths and opportunities and minimize weaknesses and threats. When applied accurately, this simple assumption has a huge impact on the design of a successful strategy and environmental analysis provides the information needed to identify opportunities and threats that exist in the company's environment (Noor, 2014).

According to Fentiana & Ginting (2020), the steps for compiling a SWOT analysis are to capture perceptions and assessments obtained through literature studies as well as interview from related departments as well as in-depth observation. To analyze using the SWOT method it is necessary to distinguish between internal factors consisting of strength and weaknesses with external factors, consisting of opportunities and threat (Nurhayati, 2009). The following is a problem-solving analysis that can be carried out using a SWOT analysis.

Table 2. Internal Factor Evaluation Matrix Calculation

No	Factors Analysis	Scale	Rating	Score
	Strength			
1	Infrastructure support	0,1	4	0,4
2	The availability of The Hospital Management Information System (HMIS) which makes easier to convey data between service units	0,1	5	0.5
3	Funding support for HMIS	0,1	4	0,4
4	Additional support for staff or officers.	0,1	3	0,3
5	Internal management support for HMIS improvements	0,09	4	0,36
	Total *Strength* (S)	0,49		1,96
	Weakness			
1	Insufficient outpatient assistance	0,1	3	0,3
2	Slow electronic medical record system	0,11	5	0,55
3	Socialization of the use of electronic medical records is still not carried out routinely	0,11	5	0,55
4	SOP for outpatient service flow is still not available	0,12	4	0,48
5	Tools for calling patients are not yet available	0,07	4	0,28
	Weakness(W)	0,51		2,16
	Total IFE			
	S-W	1,96-2,16		**-0,2**

Tabel 3. External Factor Evaluation Matrix Calculation

No	Factors Analysis	Scale	Rating	Score
	Opportunity			
1	Leader policy to improve infrastructure and human resources	0,13	5	0,65
2	Increasing the role of digital information technology in the era of industrial revolution 4.0	0,12	4	0,48
3	The Ministry of Health supports hospital digitalization	0,13	3	0,39
4	PMK No 24 year 2022 about medical record system	0,15	4	0,6
	Total *Opportunity(O)*	0,53		2,12
	Threats			
1	Competition between hospitals to provide the best service to staff and honorary staff	0,11	3	0,33

2	Changes in regulations from regional governments and/or the Ministry of Health	0.11	4	0,44
3	Decreasing number of patient due to pandemic to endemic era	0,13	4	0,52
4	Changing regulation from National Health insurance	0,12	4	0,48
	Total *Threats* (T)	0,47		1,77
	Total EFE	1		
	O-T	2.12-1,77		**0.35**

From the results of calculating the value of each internal factor which includes strengths and weaknesses, as well as external factors which include opportunities and threats, the final S-W value is -0.2 and the O-T value is 0.35. The two S-W and O-T values are then depicted on the SWOT flyover diagram to determine the position of the SWOT quadrant. From the quadrant results obtained, strategies that might be implemented can then be determined.
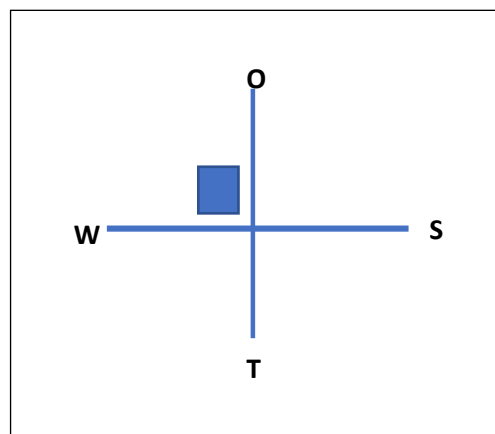

Figure 1. SWOT Analysis Flyover Diagram Strategy for Optimizing Outpatient Waiting Times to Increase Achievement of National Quality Indicators in TNI AD 05.08.04 Hospitals Lawang

Based on the SWOT diagram in Figure above, the strategy that can be applied is in quadrant III or defensive strategy, namely a strategy to minimize weaknesses and maximize the opportunities that hospital has by defending. The meaning of defensive according to the Cambridge dictionary is used to protect someone or something against attack

Table 4. SWOT Analysis

	Strength	**Weakness**
	a. Hardware supporting infrastructure, counter computers are available, waiting room equipment is in place and running well	a. Lack number of staff
	b. HMIS is available which makes it easier to convey data between units	b. Electronic Medical Report running slow
	c. Management support in improving HMIS	c. There has been no routine outreach regarding the use of electronic medical records

	d. There is financial support in improving HMIS e. Additional personnel/officers	d. There is no SOP for the flow of outpatient services. e. There is no patient calling tool yet.
Opportunities a. Leader policy to improve infrastructure and human resources b. Increasing the role of digital information technology in the era of industrial revolution 4.0 c. The Ministry of Health supports hospital digitalization. d. PMK No 24 year 2022 about medical record system	**S-O** **a.** The development of HMIS b. Workshop for HMIS c. Adding outpatient staff	**W-O** a. Making SOP about outpatient flow b. Routine outreach regarding the use of electronic medical records. c. Improvement of the electronic medical record system d. Proposed procurement of patient calling equipment
Threats a. Competition between hospitals to provide the best service to staff and honorary staff b. Changes in regulations from regional governments and/or the Ministry of Health c. Decreasing number of patient due to pandemic to endemic era d. Changing regulation from National Health insurance	**S-T** a. Fulfillment of infrastructure needs related to HMIS b. Excellent service training for administrative officers and outpatient assistants	**W-T** a. Proposed additional staff for outpatient assistants and administrative staff b. Monitoring the use of HMIS

Based on the SWOT analysis on table 4, the WO strategy (in quadrant III-defensive) that can be applied includes:
    a. Making SOP regarding outpatient service flow
    b. Routine outreach regarding the use of electronic medical records
Based on the proposed strategy above, from the results of the fishbone, USG, and SWOT analysis, the strategy that can be implemented in this residency activity at the same time is to create regulations for making rules or SOP regarding the flow of outpatient services, and socializing the use of electronic medical records.

DISCUSSION

Short-term implementation of this residency activity includes: 1) Coordinating with the Head of Training at the TNI AD 05.08.04 Hospital Lawang, 2) Coordinating with the Head of the Information Technology Installation at the TNI AD 05.08.04 Hospital Lawang, 3) Coordinating with the Head of the Outpatient Installation TNI AD 05.08.04 Hospital

Lawang. Meanwhile, the long-term implementation of this residency activity is creating an SOP regarding the flow of outpatient services and a socialization regarding the use of electronic medical records. Next, the following are proposed procedures and standard operating procedures (SOP) for outpatient service flow:

General Procedures

a. There are officers who help patients to use the registration queue machine, as well as direct patients to choose the polyclinic they are going to if the patient does not have a referral letter.

b. Maintenance of the registration queue machine must be carried out regularly to ensure the functioning of the tool.

c. Internet speed must always be monitored, to ensure the patient registration process and data transfer going quickly.

d. There must be a system that ensures the presence of doctors arrived on time according to schedule

e. There must be regular refreshing for the operation of the Hospital Management Information System application to the operator officers of each unit/poly.

f. There must be regular outreach to patients about the flow of outpatient services, both directly or through banners, audio-visual media and social media owned by the Hospital

Outpatient Service Flow

a. Officers welcome the patient's arrival and carry out an initial screening whether the patient can be served at the outpatient clinic or whether they must go directly to the Emergency Unit.

b. If the patient can be served at the outpatient clinic, the officer asks about the patient's complaint or the destination clinic.

c. The officer helps the patient to press the registration queue button.

d. The officer invites the patient to wait in the registration waiting room.

e. The registration officer calls the patient according to the queue.

f. The registration officer asks about patient complaints/needs.

g. The registration officer registers the patient according to the patient's complaint (the target clinic).

h. The registration officer invites the patient to wait in the poly waiting room.

i. Officers at the destination polyclinic receive data sent from the registration unit.

j. Poly staff call patients according to the order and carry out an initial examination.

k. The police officer asks the patient to sit down again.

l. If the doctor is present at the polyclinic, the polyclinic officer calls the patient according to the order and invites the patient to enter the examination room.

m. The doctor examines the patient and provides a prescription, and introduces supporting examinations if necessary.

n. If the patient does not need supporting examinations, the polyclinic officer invites the patient to go to the pharmacy service area.

o. The pharmacy officer receives the prescription from the patient and invites the patient to wait for the preparation of the medicine.

p. Pharmacy staff prepare patient medications in the order in which prescriptions are received.

q. If the medicine is ready, the pharmacy officer calls the patient and hands over the medicine.

r. The pharmacy officer asked the patient to go home.

Evaluation

Evaluation is carried out on the content of the regulations and compliance with the regulations on the procedures and flow of outpatient services that have been created, whether they comply with the regulations in terms of the content of the procedures and flow, as well as how staff comply with these regulations. Likewise, evaluation of the accuracy of the doctor's attendance according to schedule, internet speed to support the application used, competence of the Hospital Management Information System application operator, as well as evaluation of the patient's understanding of the outpatient service flow that applies in the Hospital.

CONCLUSION

a. Factors that influence the waiting time for services at the Outpatient TNI AD 05.08.04 Hospital Lawang can be identified, namely: 1) waiting time is related to staff compliance with the regulations applied, 2) waiting time is related to compliance with the doctor's presence in accordance with predetermined schedule, 3) waiting time is related to the internet system at the hospital, 4) waiting time is also related to the patient's understanding of the flow of services at the hospital.
b. Priority problems regarding waiting times include: SOP for outpatient service flow are still not available, the electronic medical record system is often slow, and evaluation of national quality indicators is still not carried out routinely.
c. The proposed strategy offered is the creation of SOP regarding the flow of outpatient services and routine outreach regarding the use of electronic medical records.

REFERENCES

Buhang. (2007). Measuring Customer Satisfaction. Jakarta: PT. Gramedia Pustaka Umum.

Fentiana, N., & Ginting, D. (2020). Strategi Peningkatan Pendapatan Rumah Sakit berdasarkan Analisis SWOT. Jurnal Ilmiah Universitas Batanghari Jambi, 20(3). http://dx.doi.org/10.33087/jiubj.v20i3.1034.

Kapustiak, J., & Ling, H. (2000). Evaluation of Patient Waiting Times at an Academic Ophthalmology Clinic. The Journal of Medical Practice Management: MPM, 15(5), 228-33.

Kepmenkes RI No.129/Menkes/SK/IV/2008.

Murnawan, H. M. (2014). Perencanana Produktivitas Kerja dari Hasil Evaluasi Produktifitas dengan Metode Fishbone di Perusahaan Percetakan Kemasan X. 5(2), 111–116.

Noor. (2014). Strategi Baru Manajemen Pemasaran. Yogyakarta: Amara Books.

Nurhayati, R. (2009). Perumusan Strategi Perusahaan Berdasarkan Analisis SWOT (Studi Kasus PT Mondrian). Yogyakarta: Universitas Sanata Dharma.

Pratiwi. (2021). Analisis Faktor - faktor yang Menyebabkan Keterlambatan pada Penyediaan Dokumen Rekam Medis Rawat Jalan: Literatur Review. Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal, 11(2).

Walidin, W., Saifullah., & Tabrani. (2015). Metodologi penelitian kualitatif & Grounded Theory. Banda Aceh: FTK Ar-Raniry Press.

Wardani, R., & Minarno, B. (2021). Strategi Pelayanan IPSM RSUD Dr Soetomo Surabaya Modifikasi Tata Udara Ruang Operasi Covid-19 untuk Mendukung Kesehatan dan Keselamatan Kerja / K3 Rumah Sakit Pada Masa Pandemi Covid-19. Madaniya, 2(4), 378–382. https://doi.org/10.53696/27214834.105.