ANALYSIS OF WAITING TIME OF OUTPATIENT CLINIC USING LEAN HEALTHCARE METHOD IN CITRA HUSADA HOSPITAL

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ABSTRACT

Waiting time for service is the biggest problem that often occurs in hospitals. Minimum Service Standards Waiting time is the time used by patients to get health services from the registration point to enter the doctor's examination room of 60 minutes. Through the observation of the length of time, the average waiting time data is 98 minutes, which is more than the standard. The length of service time is due to the presence of waste and activities that do not provide added value for patients, so it is necessary to reduce waste activities using the lean healthcare method. This research is a qualitative research with a phenomenological approach. Determination of informants using purposive sampling technique with the type of critical case sampling on employees and patients. The results of this study are that there are three critical wastes that require immediate treatment, namely SIMRS often errors and is not integrated between registration and medical records, patients waiting for the doctor's arrival for about ± 70-80 minutes, and misfiles in searching for medical record files. Recommendations for improvement of this research use FMEA related to service management and Kanban for medical record file management.

KEYWORDS: Hospital, Waiting Time, Lean Healthcare.

INTRODUCTION

Waiting time for service is the biggest problem that often occurs in hospitals.[1] The waiting time for outpatient services in Indonesia is determined by the Ministry of Health through Minimum Service Standards (SPM).[2] SPM waiting time is the time used by patients to get health services from the registration point to entering the doctor's examination room 60 minutes.[3] Citra Husada Hospital is a private hospital with an increase in the number of visiting patients from 2013 as many as 7858 patients until 2019 reaching 41147 patients and a decrease of around 3500 patients to 37647 in 2020 due to the COVID 19 pandemic. Preliminary study conducted in September 2020 through interviews, it was found that there were still complaints submitted by outpatients regarding the length of waiting time for poly services. Through observation activities, the average waiting time data was 98 minutes. As a result of the long waiting time, the emergence of patient dissatisfaction so that many patients complain about the length of the waiting time.[4] The lean approach has been widely used by hospitals around the world and has produced many benefits including reducing patient length of stay, increasing efficiency, increasing patient and employee satisfaction, reducing clinical errors, and reducing waiting time.[5] Research using the lean method has several advantages, including by using the lean method, the process of getting to the root of the problem can be done quickly and systematically.[6] The use of the lean method focuses on processes that have the greatest waste aspect so that problem solving becomes more precise and effective.[7] The application of the lean method provides many benefits for health care facilities, one of which is improving the quality of service.[8] Several new sectors take advantage of the application of the lean concept, one of which is the health care sector. One of the developments of this method used in improving hospital operational services is lean healthcare[9]. The length of time this service takes is due to the presence of waste and activities that do not provide added value for patients, so it is necessary to reduce waste activities using a lean healthcare approach.[10] The importance of long waiting time management for outpatients that can reflect the management of health care facilities, it is necessary to improve the length of waiting time at Citra

Husada Hospital.[11]

OBJECTIVES

This research aim was to analyse the waiting time for outpatients at clinics of Citra Husada Hospital using the lean healthcare method

METHOD

This research is a qualitative research with a phenomenological approach. This research was conducted at Citra Husada Hospital Jember from April 2021 to December 2021. The selection of informants usedpurposive sampling technique with the type of critical case sampling consisting of key informants and key informants. The data sources of this research are primary data and secondary data. Data collection techniques using observation, interviews, questionnaires and documentation. The data presentation technique uses value stream mapping, identification of 8 wastes / waste, determining critical waste, analysis of causes of critical waste using fishbone and solutions and improvements using FMEA and Kanban. Credibility and dependability of data using source triangulation, technique triangulation and researcher triangulation.

RESULTS

1. Depiction of Big Picture Mapping in the Outpatient Installation at Citra Husada Hospital

The collection of information on outpatient services by interview, observation and documentation is used as a description of the big picture mapping. The big picture mapping depiction of outpatient waiting time starting from the patient registering until the patient is examined by a doctor. In the big picture mapping, outpatient services are divided into 3 units, namely registration, polyclinic and medical records. The registration section is where the patient registers at the hospital. Then the patient file is coordinated by the medical record section to view the history of the patient. Then, at the polyclinic, patients receive outpatient services. The following is a big picture mapping of the outpatient flow at Citra Husada Hospital.
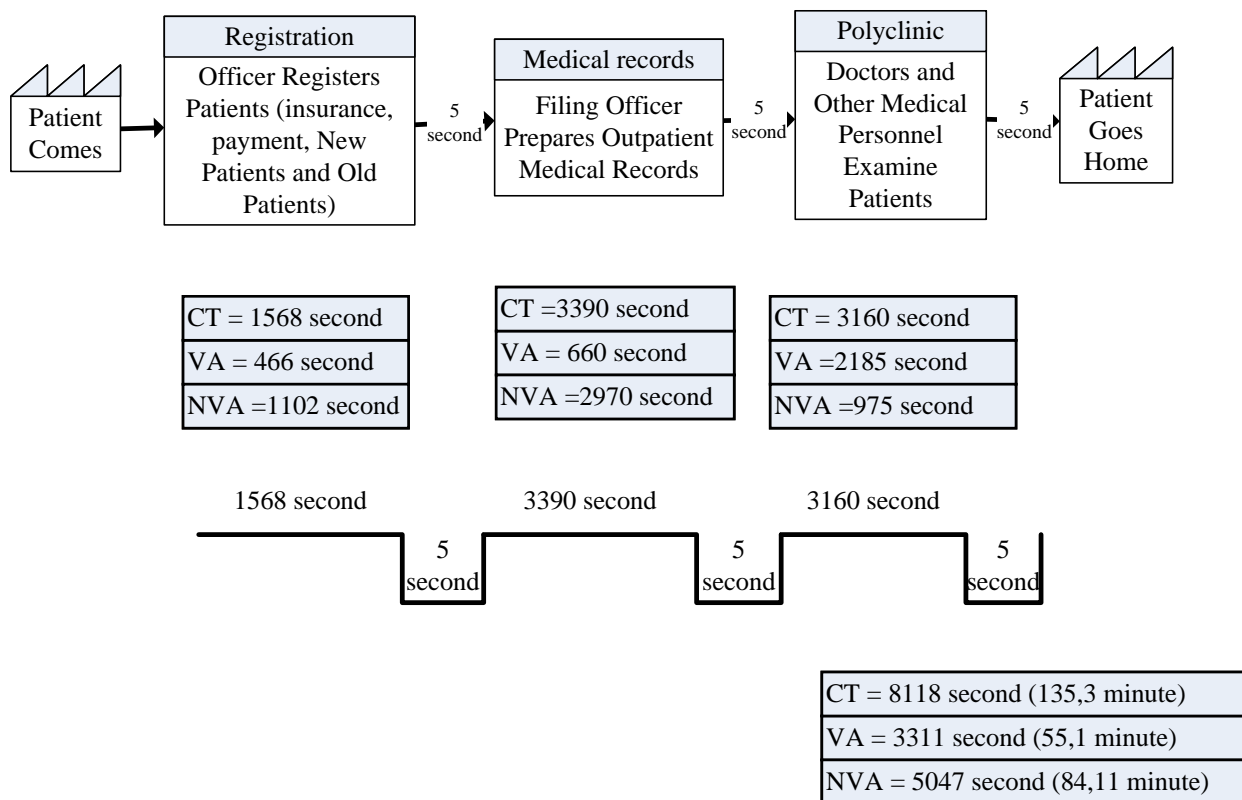

Figure 1: Big Picture Mapping of Outpatient Installation at Citra Husada Hospital.

2. Identification of Critical Waste in the Outpatient Installation at Citra Husada Hospital
Table 1: Identification of Critical Waste.

NO	Type of Waste (What)	Source of Waste (Where)	Occurred Time (When)	Reason Happens (Why)
1.	SIMRS often has errors and is not integrated between registration and medical records	Registration	Service Process at Registration	IT officers don't always stand by at the hospital, so if there is an error in the SIMRS, it can't be fixed right away
2.	Patient waiting for doctor's arrival around ± 70-80 minutes	Polyclinic	Services at the Polyclinic	1. Patient waiting for doctor at polyclinic 2. All doctors who practice not only at Citra Husada Hospital, but in other hospitals too 3. There are patients who need cito action, so the doctor is forced to leave poly hours
3.	Misfile in medical record file search	Medical records	File search in medical records	Because there was a misfile (wrongly put) the medical record file so that the officers had difficulty finding the file

DISCUSSION

1. Analysis of the Causes of Critical Waste In Outpatient Installation Using Fishbone
Waste is identified from outpatient services starting from outpatient registration until the patient gets an examination by a doctor. Researchers have identified waste that occurs from outpatient services at Citra Husada Hospital. Three critical wastes that often occur are experienced by officers as executor of outpatient services. The three wastes are the three wastes that need to be handled especially considering that apart from being a frequent waste, the critical waste is also the waste with the largest waiting time in each service (registration, polyclinic and medical records). The three wastes consist of waiting time at registration. about ± 35 minutes long, ppatient waiting for the doctor to come around ± 70-80 minutes and missfile in the search for medical record files.

2. Repair Design Using FMEA At Citra Husada Hospital Outpatient Installation
Waste Critical factors that have been determined and the cause has been determined, improvements will be made to minimize waste that occurs at Citra Husada Hospital Jember.

Table 1: Improvements Using FMEA (Failure Mode And Effect Analysis) at Citra Husada Hospital.

Waste (Waste)	Reason	Solution	Effect or Impact	Failure
SIMRS often has errors and is not integrated between registration and medical records	IT officers are only on the morning shift Limited availability of computers	Addition of officers for the afternoon shift and night shift Addition of computers in each poly	SIMRS if the error Can be corrected at any time Supports SIMRS To be integrated	It is not easy to realize because you have to recompile the employee payroll budget The budget for the procurement of 1 computer requires large
	Computer systems that are difficult to develop to be integrated	1. SIMRS development by the hospital itself 3. Using SIMRS from the Ministry of Health of the Republic of Indonesia	1. The self-developed SIMRS makes it easy to be integrated without the help of a third party 2. The advantages of using SIMRS from the Ministry of Health a. Free use b. SIMRS can be refined according to RS needs because it is open source c. Its development does not require large funds	Hospital staff must adapt to the new SIMRS system so they have to make adjustments from the beginning
	There is no SOP that regulates SIMRS	Making SOPs that regulate SIMRS	The use of SIMRS can be well coordinated	SOP design that takes time and cannot be implemented immediately
Patients Waiting for Doctor Arrival About ± 70-80 Minutes	Doctors who practice at Citra Husada Hospital practice elsewhere	Adjustment of the doctor's practice schedule to 1 hour after practice hours in other places are finished	The doctor's schedule can be well coordinated and the doctor is expected to come on time	It's difficult to coordinate with doctors both directly and via telephone

	The doctor performs an Action that Requires rapid treatment (cito)	Provide understanding to the patient regarding the doctor's delay	Patients better understand the reason for the doctor's delay	Patients can misunderstand what the officer said regarding the doctor's delay
	There is no SOP that regulates The time of doctor's service at the polyclinic	Making SOP about doctor's service time	Doctor's service time can be coordinated well	SOP design that takes time and cannot be implemented immediately
	Police officers forgot to prepare equipment for doctors to examine patients	Creating reminders for police officers	The equipment that has been prepared makes it easier for doctors to examine patients faster	There are more urgent activities so officers don't have time to prepare equipment
Misfile In Medical Record File Search.	Lack of filling officer	The addition of shift officers at least 2 people per shift	Searching for medical record files is faster and more precise due to the addition of personnel	It is not easy to realize because you have to recompile the Employee payroll budget
	There is no training on medical records at the filling staff	Procurement of Training for officers regarding procedures for setting up medical record files	Officers become more aware of the arrangement of medical records	Insufficient budget for training
	Lack of Discipline of police officers	Provide understanding to officers	Officer discipline is expected to increase	It only lasts for a while, after that it returns to a less disciplined work culture
	SOP implementation is still not optimal	Dissemination to officers regarding SOPs regarding medical records	Officers become more aware of SOPs regarding medical records	Adjusting the staff's schedule for socialization about SOPs is difficult
	Lack of socialization regarding SOP	Re-procurement of socialization about medical record SOP	Both old and new officers are more familiar with SOPs regarding medical records	Adjusting the staff's schedule for Socialization about SOPs is difficult
	Most of the tongues of the medical record folder are damaged	Procurement of an empty folder so that the RM folder is immediately replaced if it is damaged	File search is easier because the tongue of the medical record folder is easy to read	1. Procurement for empty folders to replace damaged folders requires separate funds 2. The officer did not have time to replace the damaged map
	Some medical record files are not placed on the shelf	Files that are not on the shelf (stacked) are marked using a kanban design	Files are easy to find with alphabetical guides in each stack	Marks that have been created are not returned to the stack when searching for files
	Tracer is not applied optimally	Redesign tracer using kanban	Tracer with a strong and more prominent material makes it easier for officers to know the entry and exit of medical record files on shelves / piles	The tracer that has been made is not returned to the shelf / stack when removing the medical record file from the shelf

3. Repair Design Using Kanban in the Medical Record Section at Citra HusadaHospital

Here is the tracer redesign as well as the final tracer output for Citra Husada Hospital.

Figure 2: Latest Tracer Design at Citra Husada Hospital.

Figure 4: The latest marker design at Citra Husada Hospital.

Tracers and markers are made of PVC plastic where the material is thin and flexible but strong because it is a material for the roof of the house. The tracer is 45 cm long, 9 cm longer than the map length, which is 36 cm. Tracers and markers that are longer than the folder are expected for officers to easily identify files that come out of the RM rack.

CONCLUSIONS

Based on the results of the study using the lean healthcare method, there are three critical wastes that require immediate treatment, namely SIMRS often has errors and is not integrated between registration and medical records, patients waiting for the doctor's arrival for about ± 70-80 minutes, and misfiles in searching for medical record files. Recommendations for improving lean healthcare using FMEA for outpatient service installation management and using kanban for medical record file management in and out with a medical record tracer in the medical record shelf and alphabetical and month markers for files stacked in medical records.

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