AN ENHANCE OF OUTPATIENT SERVICES FOR HEALTH INSURANCE (BPJS) PATIENTS AT HOSPITAL METTA MEDIKA II SIBOLGA BASED ON LEAN MANAGEMENT

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ABSTRACT

An improving health services that are effective and according to hospital service standards and always followed by developments in science and technology to create quality services as stipulated in Law no. 44 of 2009. Over time hospitals are facing increasing pressure to improve the efficiency and cost-effectiveness of their services, due to competition among healthcare providers, higher customer expectations, stricter checks for insurance payments, new government regulations, aging and reducing population government spending (Al Owad, Samaranayake, Karim & Ahsan, 2018). Waiting time for service is a problem that is still often found in health service practice, and one of the components that have the potential to cause dissatisfaction, where using a long time causes dissatisfaction with the patient. The long waiting time for the outpatient service process will hinder the running of the service, which has an impact on the queues that pile up and results in inefficient service. However, not all errors come from health care, Sukernas (National Health Survey) revealed that in general, only 59.7% of hospital outpatients in Indonesia were satisfied with the service, the rest were somewhat satisfied (32.3%), and some were dissatisfied (7.2%) and dissatisfied (0.9%) (Iswanto, 2019).
Keywords: Waiting time for services, government, hospitals.

INTRODUCTION.

A hospital is a place for public health services which is required to always provide effective health services according to hospital service standards and always be followed by developments in science and technology to create quality services as stipulated in Law no. 44 of 2009. Over time hospitals are facing increasing pressure to improve the efficiency and cost-effectiveness of their services, due to competition among healthcare providers, higher customer expectations, stricter checks for insurance payments, new government regulations, aging and reducing population government spending (Al Owad, Samaranayake, Karim & Ahsan, 2018).

Waiting time for service is a problem that is still often found in health service practice, and one component that has the potential to cause dissatisfaction was using for a long time causes patient dissatisfaction. In terms of context, waiting time is a problem that always causes patient complaints in several hospitals, very often the problem of waiting time for this service does not get the attention of the hospital.

According to Aueprasent & Wonghatsanekorn (2016), the longest waiting time at the hospital generally occurs in outpatient units, this is an urgent problem because over time the use of outpatient facilities in Indonesian hospitals has increased. Because there are many processes required to receive health care for each outpatient, the service time each outpatient spends in the

hospital is longer than necessary. This problem affects outpatient satisfaction and also the credibility of the hospital.

One of the private hospitals in the city of Sibolga is Metta Medika II Hospital with class D type. In serving patients, especially outpatient care, Metta Medika II Hospital refers to the service time standard set by the government in the Decree of the Minister of Health No. 129/Menkes/SK/II/2008, namely service time no more than 60 minutes.

Health services include emergency room services, outpatient care, inpatient care, pharmacy, supporting examination services, and other supports. Outpatient services consist of internal medicine polyclinic, pediatric polyclinic, surgical polyclinic, obstetrics and gynecology polyclinic, neuro polyclinic, pulmonary polyclinic, ENT polyclinic, and other supporting polyclinics. Based on the secondary data obtained, it appears that the most patient visits were at the internal medicine polyclinic with 2981 patients from January-August 2021.

Based on the results of initial observations and interviews with outpatients, complaints were obtained from new patients who complained about registration services especially for BPJS patients because the files brought were incomplete due to a lack of information received by patients, it was also found that several patients who immediately sat in the waiting room did not take queue numbers Firstly, this causes patients to register for a long time and have to fill out a new patient application first. Some patients complain about the long time taking pharmaceutical drugs.

FOUNDATION OF THEORY.

2.1 Outpatient Services

Outpatient services are services provided to patients who are admitted to the hospital for observation, diagnosis, treatment, medical rehabilitation, and other health services without staying in an inpatient room. Outpatient services include medical treatment in individual private practice, joint practice with clinics, medical and private and government service centers including hospitals (Bustani, et al, 2015).

The flow of outpatient services at Metta Medika II Hospital starts when the patient arrives for the first time to register first to get the registrant's queue number. ran, then the registrar will register the patient and complete the necessary administrative files, after the patient will get a queue number to the polyclinic for examination, the registrar will direct the patient to the polyclinic where he is going. This polyclinic is differentiated based on the type of specialist doctor who treats it according to the type of disease referred to.

2.2. Service Waiting Time (Response Time)

Service waiting time is a problem that often causes patient complaints in several hospitals. The length of patient waiting time reflects how the hospital manages service components that are tailored to the patient's situation and expectations. Good and quality service is reflected in friendly, fast, and comfortable service (Utami, 2015).

According to the Ministry of Health of the Republic of Indonesia (KEMENKES RI) Number: 129/Menkes/SK/II/2008 regarding service waiting time, the time it takes from the patient registering at the outpatient registration place, until served by a doctor at the advanced

polyclinic, with the fast category usually takes place approximately or equal to 60 minutes. From the statement above, it can be concluded that waiting time is the time used by patients from registration to being served by a doctor in less than one hour. although the waiting time in each hospital is different.

2.3   Lean Hospital

*lean*is defined as thin (slender). Lean is defined as a set of tools (tolls set), management system and methodology that can transform hospitals in organizing and managing so as to reduce errors, reduce waiting times, eliminate all barriers and support the activities of doctors and employees aimed at improving the quality of service and patient care. (Graban, 2016).

*lean*hospital is eliminating waste in every service area with the aim of reducing inventory, service cycle time and costs. So that high-quality patient care can be provided in an efficient, effective and responsive manner as possible.

In the context of healthcare the lean philosophy demands that someone, not just doctors, but everyone understand the processes that occur, observe them, and gather information about them to identify the roots of patient inefficiency or dissatisfaction. Not only in an administrative context, but also in standard operating procedures (SOP) lean is more capable of efficiency and it is advisable not to mix it with other approaches.

Graban (2016) defines lean into two simple parts, namely:

a.   *Total Elimination Of Waste*

Waste or waste is a variety of activities that do not reflect assistance to the patient's healing process. This lean approach aims to eliminate or minimize waste so that later hospital costs can be reduced, patient satisfaction increases, and patient and staff safety increases. Examples of hospital waste:

1. Patient waiting time to be examined by a doctor
2. Waiting time for the next process
3. There is an error that harms the patient
4. Unnecessary movements, for example the location of the pharmacy and cashier are far away

b.   *Respect of People*

Respect in other contexts means a number of ways to encourage people to be motivated and do a better job constructively. This does not mean leaving all kinds of things to solve each other's problems and workloads, but respect for people has the meaning of respect for patients, employees, doctors, community and all hospital stakeholders and their environment so that it can be said if employees do bad things to just one of them is an unacceptable act.

Based on the definitions above, we can summarize the definitions*lean*is a systematic approach that focuses on continuously increasing added value for customers (customer value) by identifying and eliminating activities that do not add value or waste (waste) in the service process (Putri, 2017)

*lean*is a philosophical approach to management, focused on identifying and eliminating all types of waste and loss and continuous improvement. Lean concepts can be evaluated by increasing value in production and business processes, redesigned and prepared to offer

customers what they want in parallel with quality improvement, safety improvement, delay and failure reduction (Kovacevic, Jovici, Djapan & Zivanovic-Macuzic, 2016) . Lean strategies help to eliminate waste and control costs, described as a combination of structured philosophy, process, people and problem-solving methods (Al Owad et al., 2018).

The successful implementation of lean requires active participation in the continuous improvement process of all members of the organization following a structured and scientific method based on a "learning by doing" system. Therefore, it is important for organizations to be flexible, willing to accept change, requires a culture and an open mind. The challenge that must be faced is the awareness and training of all members of the organization to achieve success in its implementation (Ruano, Hoyuelos, Mateos & Gento, 2019).

Lean implementation can have a significant impact on efficiency and effectiveness in hospitals or health services, the impacts of lean implementation include:

1. *Patient outcomes*: patient satisfaction
2. *Provider outcomes*: staff satisfaction
3. Access and utilization of length of stay (LOS), waiting time
4. Hazard/near injury: error rate related to patient safety
5. Resource usage costs: cycle time costs, resource-related error rates

2.4. Lean Principle

Womack and Jones define five principles of lean into the hospital service system, namely:

Figure 1. Principles of Lean Management

*Value*is a product that has the right quality, price and time so that it can meet consumer needs. Value can also be interpreted as something that can be offered to consumers to own, use, consume, or enjoy in order to fulfill a need and desire. This value can be determined by the end consumer (end customer). This means that consumers are the party that knows best about the value of a product. So by measuring consumer perceptions we can find out and determine the value of a product.

The implementation of the lean concept is a form of adjustment regarding the value of a product from the consumer's point of view to the producer's point of view in the form of the ability to provide resources so that there is hope that a product or service will occur that meets consumer needs. In a hospital the most real consumer is the patient. Most of the patient's time is

used for non-value added (waste) activities of 90%, while value added activities are only 10% of the total process through Value Stream mapping (Dyah Noviani 2017).

*Value streams*is a step that must be implemented after knowing what is considered valuable in the eyes of customers including the processes of making, producing and delivering products or services to the market. This step is intended to identify all stages of the process which provide added value to the final consumer and which do not provide added value, so they must be eliminated.

a. Implementing a Pull System or Pull System (Customer Pull)
    The production system uses two approaches, namely planning and scheduling. The first is product push, namely the company produces based on its production capability or capacity. The second is market pull, namely a product is produced according to consumer needs, including the number and type of orders.
    There is compatibility between the pull system concept and market pull which means added value in the service process must be seen from the perspective and needs of consumers. If it does not provide added value for consumer satisfaction, it should be eliminated or minimized.
b. Carry out Continuous Improvement or Continuos Improvement
    The implementation of the four principles above is not the end of the process of reducing waste, time, costs and errors, but rather the beginning of a long-term improvement. The repair process is carried out not only once but as long as a company is still standing. It is better if you need to make continuous improvements that are repeated continuously so that a cycle is created where the last condition of the first cycle becomes the beginning of the action in the second cycle. As the cycle progresses, the best ways to overcome existing problems will be found.

METHOD

This type of research uses qualitative analysis with a case study research design. A qualitative approach is a research method that places more emphasis on aspects of in-depth understanding based on a methodology that investigates social phenomena and problems for generalization research. Case study research is a type of in-depth qualitative research about individuals, groups, institutions, and so on at a certain time. (Sugiarto, 2017). The purpose of case studies is to try to find meaning, examine processes, and gain an in-depth and complete understanding and understanding of individuals, groups, or an institution at a certain time. Case study data were obtained by interviewing, observing, and studying various documents related to this research.

RESEARCH RESULTS.
4.1. Research result

Observations and interviews were carried out by researchers to identify 8 wastes throughout the service process at the outpatient installation at Metta Medika II Hospital. The eight types of waste studied are in accordance with the lean concept which has been discussed previously in the literature review in this study. The identified waste throughout the outpatient service process in the internal medicine polyclinic unit is as follows:

Table 1. **Identification of Waste**

WASTE TYPE	ACTIVITY
waiting	• Patients queue to take a queue number • Patient waiting for specialist doctor to come • Patient awaits laboratory/radiology results
Transportation	• The registration officer delivered the SEP file to the polyclinic • The medical record officer delivers the medical record file to the registration

The causes of the main problems (long polyclinic waiting times) which were obtained at the time of observation were then grouped into several categories as follows:

a. Management

Based on the results of the interviews, it is known that the management of the outpatient service process still has deficiencies and has not run optimally, causing the service procedure to be less than optimal. The following are the results of interviews related to service management:

"Sep files often take quite a long time to be delivered by the Registration, and you have to be reminded constantly and there are lots of patient files piled up so that they have to be adjusted again with the patient's medical record files" (Head of Outpatient Installation).

"Medical record files take a long time to be delivered by medical record officers, so the patients also have to wait a long time. Meanwhile, the doctor demanded that the patient's medical record file be available" (Head of Outpatient Installation).

The results of the interviews were then reconfirmed with the results of observations related to the actual conditions that occurred, then continued with interviews with the officers concerned and clarifications from the relevant leaders:

"There are a lot of people registering at the registration, so all officers are busy registering and it's a hassle when they deliver SEPs in small numbers, so wait for a few more SEPs to be delivered" (Head of Registration)

"Many patient medical records do not match the number on the shelf, because many friends in the medical record unit do not return the medical record files to the shelf neatly, making it difficult for officers to find files quickly" (Head of the Medical Record Unit)

"It's true that the flow of the registration process is like that at this point. But later we will try to find the best solution" (Head of Administration & General Affairs)

b. Information Systems

The results of interviews related to equipment that supports the service process also found constraints that hinder the service process. The following are the results of the interviews obtained:

"Hospital networks sometimes tend to be slow, so patient registration and verification takes a long time" (Head of Registration)

"The e-Med system is sometimes slow and sometimes there are errors so it takes a long time to input data" (Head of Verifier)

"The lab and radiology results input system is not yet connected to the hospital information system, so the lab and radiology results must be delivered and awaited by the patient" (Polyclinic Nurse).

The findings of these results were then reconfirmed to the relevant officer, along with the results of the interview:

"The network connection is sometimes disrupted and has been conveyed to the internet service provider" (Ka. Bid Administration & General)

"It has been complained to the SIMRS provider so that repairs or updates are carried out regarding system problems" (Ka. Administration & General Bid)

c. Room layout

The results of interviews related to the layout of the room in outpatient services were still inefficient, because the size of the outpatient installation room was less extensive and also the distance between the laboratory units and radiology units on different floors had an effect on service efficiency. Following are the results of interviews with related officers:

"The waiting room is too cramped, so many patients are standing and causing the situation and space to move freely" (Head of Outpatient Installation).

"It's troublesome because the patient has to go down to the 1st floor to the laboratory or radiology if there are supporting examinations to be carried out" (Head of Outpatient Installation).

d. Officer

From the results of in-depth interviews, it was found that the service had not been implemented according to the set time. The following are the results of interviews related to service time:

"Doctors often come late, even though it's already 40 minutes past the polyclinic" (Head of registration).

Furthermore, interviews were carried out with related officers and also the head of the outpatient installation, along with the results of the interview:

"Doctors often experience delays because some specialist doctors have to visit patients in the inpatient room again, there are also doctors who have to treat cyto patients in the operating room again. Because it is impossible for an emergency patient to not be prioritized (Ka. Outpatient Installation).

From the results of observations and interviews with outpatient installation officers, it was found that nurses sometimes also have to call laboratory personnel repeatedly to do blood sampling, so this will take time. Then, further interviews were conducted with the relevant officers, the following are the results of the interviews:
"It's hard for lab staff to be called to take blood samples and check KGD, so it takes a long time to wait for the patient. Not to mention waiting for the lab results to be taken to the polyclinic" (Polyclinic Nurse).
"Radiology officers are sometimes not on standby because they are handling CT-scan patients"(Polyclinic nurse).

4.2. Proposed Improvement Design to Minimize Waste that Occurs in the Outpatient Installation Service Process of Metta Medika II Hospital

The outpatient service process at Metta Medika II Hospital shows that there is still waste that occurs and indicates that the hospital is. Therefore, we need a way to minimize or even eliminate all the existing waste. Proposed improvements are made by considering that changing and planning an idea in a hospital is not always easy because it involves various policies, applicable regulations, funds, authorized parties, and the need for consultation with hospital management. Proposed improvements to minimize waste in the outpatient installation of Metta Medika II Hospital are short, medium, and long-term proposals. In addition to applying the 5S method which is believed to be very superior in the lean concept.

The results of the Value Stream Mapping (VSM) mapping at the outpatient installation at Metta Medika II Hospital for BPJS Kesehatan patients shows that there is still a high amount of waste waiting which causes a long waiting time for outpatient installation services. Waste waiting is waste that occurs because there are no ongoing activities or waiting for processes such as people waiting time, machines waiting for time, or material waiting time to be processed (Charron et al. 2015).

Based on the results of research conducted at the outpatient installation of Metta Medika II Hospital, showed that one of the factors causing the long waiting time was the late arrival of specialists. The doctor's delay is also a factor that prolongs the waiting time process, where several doctors arrive late because the doctor visits the inpatient room first and the surgery schedule is sudden in the case of cyto then the doctor serves outpatients and the solution that can be given is to arrange a scheduled repeat and provide clear information to patients regarding outpatient service hours.

Research conducted by Mosadeghrad in 2014 showed that the reward and recognition system implemented for hospital employees will increase employee satisfaction so that officers work better and increase patient satisfaction. Therefore, suggestions for improvements related to doctors' delays in outpatient care can be done by setting reward and recognition regulations. Paulamsyah and Sudiro stated that the main problems causing high waiting times had been identified including the late arrival of doctors, and the early arrival of patients. (Paulamsyah JC, Sudiro, 2017)

The advantage of the lean method applied in health is that it can translate based into the healthcare environment, then make Lean language relevant and meaningful lean leadership development to define a vision for organizational transformation, then there is change management to create a platform for continuous and continuous improvement, as well as a performance measurement to building on the results of Lean culture (Abouhenidi, 2014).

One of the efforts that can be made to improve outpatient services can be by approaching doctors regarding discipline, or by recruiting new medical specialists so that they can produce more optimal services. The approach can be done personally by meeting doctors who do not comply with practice hours or are late by Ka. field of medical services or through committee meetings. If the approach is not successful, a written warning letter will be given from the director and the medical committee. The addition of officers can also be done at very busy hours.

5. CONCLUSION

1. Based on the results of observations and interviews, it is known that there are 8 types of waste that occur in outpatient installation services at Metta Medika II Hospital, namely waste waiting, transportation, overproduction, inventory, motion, human potential and defects.
2. Based on the results of Value Stream Mapping, it shows that there is still a high number of Non-Value Added where the time spent working on a process or activity does not add value or is not something that the patient wants.
3. The cause of the high waiting time for outpatient installation at Metta Medika II Hospital is caused by several factors such as: Room layout factors, management factors, information system factors, and staff factors.

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