

Analysis of Factors Causing Waste in the Outpatient Room of Surabaya Islamic Hospital

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Abstract, Hospitals as healthcare providers are demanded more competitive in the era of national health insurance. Therefore the hospital faces the challenge of improving the quality of health services by using available resources. The study aims to analyze factors causing waste in the outpatient room of Surabaya islamic hospital. A descriptive study with cross sectional design was conducted in September until October 2017 in the outpatient room of Surabaya islamic hospital. Collecting data through indepth interviews, observation and review of document. The study found five main activities in the service process in the outpatient room, queue number retrieval, registration, examination and action, supporting investigationp, pharmaceutical services. There are two waste categories in the outpatient room of Surabaya islamic hospital, waiting time and transportation. The recommendations include scheduling patient-based arrival of service groups, visite scheduling and polyclinic services and temporary payment method changes, for inpatient room program consisting of 5R program implementation, rearranging standard operating procedure of patient's diet information, improving the patient's prescribing system and rearranging standard operating procedure return of insurance patients.

Keywords: waste, outpatient room, Surabaya islamic hospital

1. INTRODUCTION

In the national health insurance era, competition in healthcare business is increasingly competitive so hospitals are increasingly striving to improve the quality of services through effective and efficient resource management. Hospitals in the face of competition are required to always ensure the level of effectiveness and efficiency at each stage of the service process in order to be able to produce superior service quality, ensure patient safety, and use appropriate resources by minimizing cost.

the hospital does not perform efficiently well it will greatly affect the financial of the hospital. Another problem faced by Surabaya islamic hospital is the decline in hospital profit margin for three consecutive years, since 2015-2017.

The decline in profit margin causes hospitals to work to improve the efficiency of health services by implementing lean hospital management. Therefore, this study was conducted to identify waste in the outpatient room of Surabaya islamic hospital.

2. METHOD

A descriptive study with cross sectional design was conducted in September until October 2017 in the outpatient room of Surabaya islamic hospital. Collecting data by indepth interviews, observation and review of document.

3. RESULTS AND DISCUSSION

Business Process Analysis

Outpatient service quality indicator report is well. The waiting time in the outpatient room is less than 30 minutes in accordance with the standards specified in the quality indicator report. The counting of waiting time in the outpatient unit starts from the moment the patient is called for an examination and action from the specialist doctor until the patient is

Table 1. Total of patients

Years	Total of Patients					
	General		Social Insurance		Other Insurance	
	n	%	n	%	N	%
2015	42.379	31,4	62.343	46,2	30.123	22,3
2016	38.149	27,5	88.049	63,5	12.289	8,8
2017	20.849	13	129.36	81	7.816	6

Source:

Medical record of Surabaya islamic hospital

During 2015-2017, the percentage of patients with social insurance increased from 63,5-81% of general patients. The challenge facing hospitals in the face of increasing social insurance patients is the efficiency in managing hospitals without necessarily reducing the quality of patient care. If

completed and proceeds to the investigation or to the Pharmacy unit to take the medicine. The calculation of this waiting time further illustrates how long the process of providing services by doctors and nurses who are part of the processing time in the outpatient unit. In some hospitals the waiting time of outpatient service is determined from the time the patient has finished carrying out the registration up to start getting doctor services.

In the observation of the residency II at the outpatient room of Surabaya islamic hospital, observations were made to 16 outpatients without disaggregating between the general patient and the social insurance patient and did not distinguish between patients who received investigations and patients who did not receive investigation. Observations were performed on patients in general poly, surgical poly, interna medicine poly, neurons poly, ENT polymers and obgyn poly. Observations have been made since the patient arrives until the patient returns, starting with the patient coming in, picking up the queue number, filling out the medical record file request form, waiting for the registration, registering, waiting to get the doctor's

services, obtaining services and acting, conducting investigations in the laboratory and or radiology, make payments at the cash register and take medication at the pharmacy unit. Activities carried out by patients as mentioned above will be described further in the value stream mapping chart in the outpatient unit.

Value stream mapping describes a series of service activities, patient and attendant flow, material flow, information flow in ambulatory units depicted with different lines, symbols or symbols and colors. From value stream mapping of outpatient room will get description of the series of activities and time required in carrying out these activities and waiting time that occurs in service process in outpatient unit. From value stream mapping can be identified which activities include value added, non value added but necessary, and non value added (waste) and possible causes of waste. After identification is done then we can arrange the program as recommendation of improvement. The picture below shows the value stream mapping in the outpatient room of Surabaya islamic hospital.

Table 2. Category of activities

Process	Sub Process	Activity		
		VA	NVAN	NVA
Patient in	Take queue number		x	
	Fill the medical record file request form by patient		x	
	The process of retrieving medical record files		x	
Registration	Waiting for the registration queue			x
	Input data participation	x		
	Print SEP	x		
Doctor's examination	Waiting for the doctor			x
	Anamnesis	x		
	Physical examination	x		
	Action and therapy	x		
Examination support	Laboratory inspection	x		
	Radiological examination	x		
Patient out	Accepting for reception	x		
	Drugs preparation	x		
	Waiting for drugs			x
	Accepting for drugs	x		

VA: value added, NVAN: necessary but non value added, NVA: non value added

There are five main activities in the service process in the outpatient room. **Queue number retrieval**, Sub processes in queue number retrieval consists of queue number retrieval and filling out forms of filing requests for medical records and retrieval of medical record files. **Registration**, sub process in registration is input data of membership and print SEP. **Examination and action**, sub processes in examination and action include anamnesis, physical examination, action and therapy. **Supporting investigation**, investigations consist of laboratory and radiology checks. Subprocesses from laboratory tests and radiology are described further in the discussion chapter on the laboratory and radiology unit. **Pharmaceutical services**, Sub processes in pharmaceutical services consist of prescription receipt, drug preparation and drug acceptance. The sub-process will be discussed further in the discussion at the pharmacy unit.

The patient's flow in the outpatient service process from the patient arriving up to the patient home takes 2 hours 50 minutes. While waiting time during the process is 1 hour 38 minutes consisting of: waiting time awaits registration after retrieving registration number, waiting time awaits doctor at polyclinic, waiting time awaiting investigation, waiting time waiting for medication, and the stream of porter officers retrieves the SEP file from registration to the medical record.

The flow of material in the form, a medical record file form from where the queue was taken to the medical record room, SEP files from the registration room to the medical record room, files Medical records from the medical record room to the clinic, a laboratory and radiology inspection request form from polyclinic to laboratory and radiology, and the flow of information.

Waste Categories Analysis

Categories of waste that can be identified in the business process in the outpatient room of Surabaya islamic hospital can be seen in the table below:

Table 2. Waste categories

Waste	Aktivitas
Waiting Time	Waiting for registration Waiting for a doctor Waiting for medicine Waiting for laboratory results
Transportation	General patient three times to the cashier

Table 2 showed that two waste categories in the outpatient room of Surabaya islamic hospital. First, waiting time such as waiting for registration, waiting for a doctor, waiting for medicine, and

waiting for laboratory results. Second, transportation, is general patient three times to the cashier.

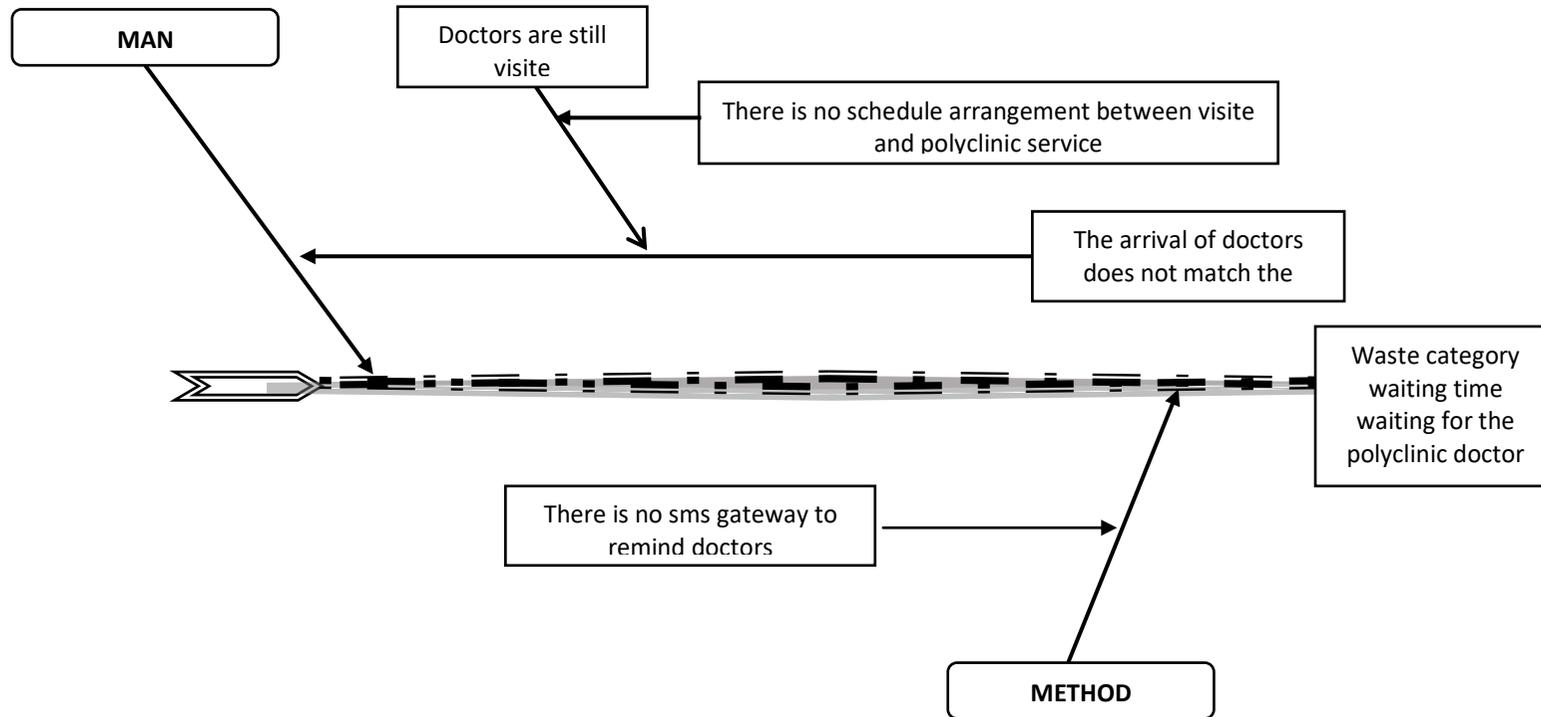
4. CONCLUSION

The study found five main activities in the service process in the outpatient room. There are two waste categories in the outpatient room of Surabaya islamic hospital, waiting time and transportation. Recommended programs offered in the outpatient room, including scheduling patient-based arrival of service group, visite scheduling and polyclinic service and temporary payment method change, for inpatient program program consist of implementation of 5R program, re-arranging standard operating of patient's diet information, improvement of prescribing system for patients and rearrangement of standard operating procedure for the return of insurance patients.

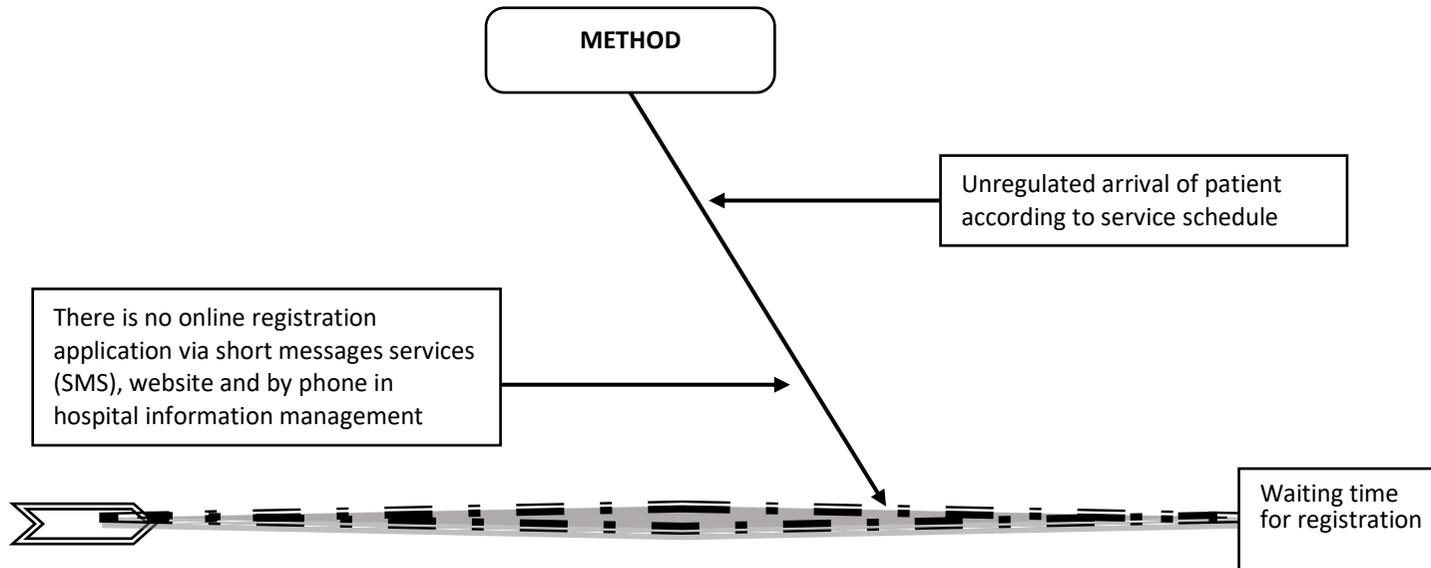
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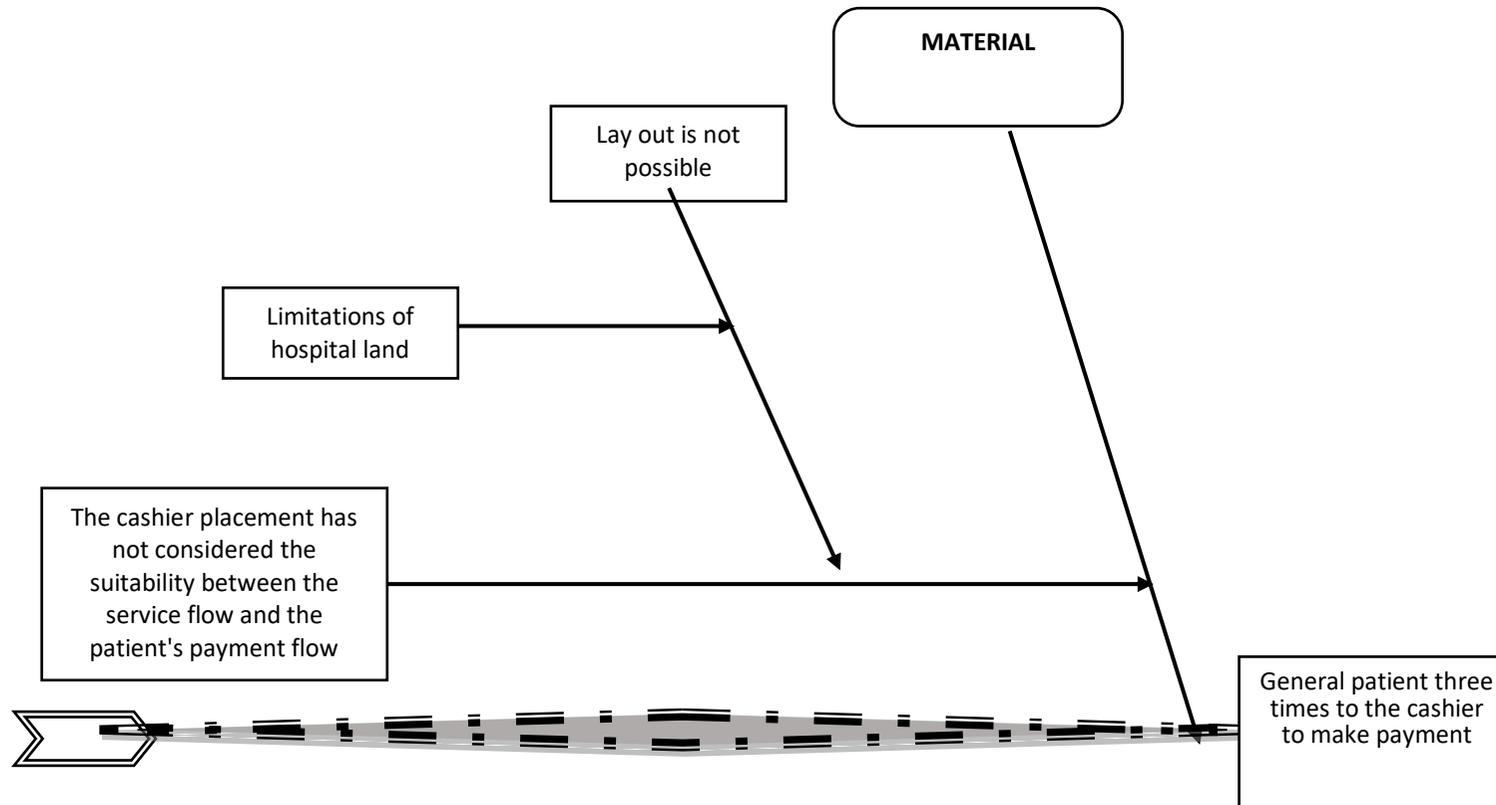
Appendix



Root causes analysis of waiting time for doctor



Root causes analysis of waiting for registration



Root causes analysis of transportation