

Evaluation Of Waste Implementation Flow Of Polyclinic Outpatient Service With Blueprint Service At Royal Prima General Hospital, Medan

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Abstract.

Waiting time for services at the hospital is a measure of the quality of services that concern the patient's rights in a service. Long waiting times are felt by patients so that dissatisfaction arises in the service. This study aims to evaluate the waste of polyclinic outpatient services by using a service blueprint to reduce waiting time for services at RSU Royal Prima Medan. This research is descriptive qualitative research involving 89 people consisting of medical staff, non-medical staff, and patients. Sample selection for officers was carried out using purposive sampling, while for patients using accidental sampling. The data in this study were collected through questionnaires, observations and interviews. The validity test of the questionnaire was carried out using Pearson while the reliability test was carried out using Cronbach's Alpha. The results of this study found that the majority of time spent by patients was included in the old category. Researchers also get three types of waste, namely waiting, inappropriate processing, and transportation. Recommendations for efforts to increase waiting time for services that can be done are: rescheduling for doctors, calculating the workload for services that are still managed by 1 officer, planning E-medical records and centralizing them for storing patient files, simplifying providing information to patients, carry out segregation at the poly if it has not been done, and maintain cleanliness and routine maintenance at each supporting facility.

Keywords: Waste Evaluation, Service Flow and Service Blueprint.

I. INTRODUCTION

One of the service installations in the hospital is an outpatient installation. Outpatient installation is a service used by doctors as a place for consultation, examination and treatment of patients who require a short time [1]. There are several stages of the service process at the outpatient installation, starting from taking a queue number, carrying out the registration process, carrying out an initial examination, carrying out an examination by a doctor, carrying out a consultation process, carrying out supporting processes, payment processes to taking drugs. Access is one of the dimensions of the quality of health services for health services which is characterized by patient waiting time [2]. The quality of health services provided to patients should be observed and addressed as well as possible so that patients as hospital customers can be loyal to the hospital. One aspect that needs to be improved is the aspect of outpatient services. The outpatient unit is the patient's entrance to the hospital besides the emergency department. The number of outpatient visits exceeds emergency department visits. The tendency of the community towards polyclinic services is increasing to get treatment services that are practical once they come and on the same day get complete services (one day care). Hospital care installations consist of inpatient and outpatient installations. Outpatient installation is a service used by doctors as a place for consultation, examination and treatment of patients who require a short time [1]. Patients can be categorized as outpatients (polyclinic patients and emergency department patients) and inpatients.

First, in terms of service, patients who come can be divided into two, consisting of patients who can wait (patients for outpatient treatment who come by appointment and patients who come not in an emergency) and patients who are immediately helped (emergency patients). According to arrival, it can be divided into two, namely new patients (patients who come to a health care facility for the first time to get health services) and old patients are patients who have come before for the need to get health services. The arrival of patients to health care facilities, can be caused, among other things, by doctors or midwives who are sent outside health service facilities, sent by other hospitals/Puskesmas/Maternity Hospitals/other types of health services, and come of their own accord [3]. Patients are served based on health service needs that have been identified according to the resources in the hospital. The following is an explanation of the flow and procedure according to the type of patient arrival. The flow and procedures of patients who will carry out

outpatient care, starting from registration to the results of the doctor's examination [3]. Waiting time in Indonesia is determined by the Ministry of Health through minimum service standards. Every hospital must follow one of the minimum service standards regarding waiting time. Outpatient waiting time according to Kepmenkes RI No.129/Menkes/SK/IV/2008 Outpatient services with service waiting time indicators are the waiting time required starting from registering until received/served by a specialist doctor <60 minutes [4]. Waiting time for services in a hospital needs to be considered, because it is a measure of the quality of service and relates to the patient's rights that they want in a service [5]. The categories of waiting time and check time are classified into three categories, namely if the service waiting time is more than 90 minutes it can be categorized as long, if the service waiting time is 30-60 minutes it can be categorized as standard, if the service waiting time is less than 30 minutes it can be categorized as fast [6].

The categories of waiting time and check time are classified into three categories, namely if the service waiting time is more than 90 minutes it can be categorized as long, if the service waiting time is 30-60 minutes it can be categorized as standard, if the service waiting time is less than 30 minutes it can be categorized as fast [6]. There are several factors that affect the length of time waiting for outpatient services, namely individual factors which include educational level, demographics, socio-economic, and norms regarding health. Health service factors include the lack of availability of infrastructure, health facilities, resources, distance, referral system and health insurance. External factors as supporters are the government and so on [7]. One of the things that causes the waiting time for outpatient services to be long is the registration process, so that it greatly impacts the services provided. Based on the initial survey that I have conducted, the problem under study is related to the low achievement of waiting time at the outpatient installation of RSU Royal Prima Medan, in the period 2019 to 2020 with an average of 112 minutes. Various possible factors can cause long waiting times at the Outpatient Hospital of Royal Prima Medan Hospital, which can come from patient factors, hospital factors and staff factors. The factor that affects patient waiting time at the hospital is the patient's gender [8], Age difference of patients [9], Patient education level [10] and Outpatient treatment experience [9]. Then the factors that affect the waiting time for officers are the level of education of the officer [11], the level of knowledge of the outpatient installation staff [9], the length of service of the employee [9], the category of employment (medical personnel and non-medical personnel) [12] and employment status [13]. Then the factors that affect Outpatient Installation waiting time at the hospital are the outpatient queuing system [9], Standard Operating Procedures and Service Flow [9], Lean Management [14], and Service Blueprints.

II. METHODS

This type of research is qualitative which is included in this study aiming to obtain information regarding the evaluation of the implementation of the waiting time service program in outpatient services at RSU Royal Prima Medan through direct observation by researchers. The location of this research is RSU Royal Prima Medan. The research was conducted from December 2022 to January 2023. The population in this study were medical officers and non-medical officers starting from the Information services section, Registration Counters (General Patients and BPJS), Medical Records, Policenters, Laboratories, Doctors (general patients and BPJS), Nurses (General Patients and BPJS), Pharmacies and Cashiers, as well as 280 outpatients, both non-BPJS patients (general) and BPJS patients based on the number of visits per day. The total patient population was obtained from the number of calculations carried out by the researchers from annual visit data divided by month and divided by 22 working days per month. The sample used in the study with the Slovin formula get 89 people. This study used 2 (two) sampling techniques, namely purposive sampling for outpatient installation staff at RSU Royal Prima Medan and accidental sampling for patients receiving outpatient care at the outpatient installation at RSU Royal Prima Medan. This accidental sampling method begins when the patient enters the outpatient service entrance to get a queue number, then the researcher observes the patient who is the respondent in every service process that is passed until the service process is finished. After completing the observation, it is continued by examining the next respondent from the beginning of the process.

The reason the researcher chose purposive sampling for officers was because not all samples had criteria that matched the phenomenon being studied. Therefore, the authors chose the purposive sampling technique which determines certain considerations or criteria that must be met by the samples used in this study. Inclusion criteria or those included in the respondent criteria are officers who serve and deal with patients who are also research respondents both in the front office/onstage and back office/backstage in general outpatient care and special outpatient care during the study. Officers who are willing to be research respondents. Exclusion criteria were also established or those who were not included in the respondent's criteria, namely officers who served and related to respondents but were handling other services (double job). Medical staff such as doctors who are not in the clinic at the time of the study. Medical staff such as doctors who leave the practice or clinic in the middle of a practice schedule during the study. Based on the research conceptual framework, there is 1 (one) dependent variable, 5 (five) intermediary variables and 4 (four) independent variables. The dependent variable in this study is the waiting time for services at the outpatient installation, the intermediary variable is the service blueprint and the independent variable in this study is waste. The following are the variables in this study Service Blueprint (customer action), Onstage (visible officer activities), Backstage (invisible officer activities), Support process (support process) and, Physical evidence) Service Waiting Time, Waste (Waiting), Unappropriate processing (unnecessary process), Unnecessary motion (unnecessary movement), Transportation (transportation)).

The methods used to collect data were interviews, distribution of questionnaires and direct observation by researchers at the outpatient unit of the RSU Royal Prima Medan polyclinic. Research instruments include document study where document study is a data collection technique that is not directly addressed to the research subject. Document study is a data collection technique that examines various kinds of documents that aim to be material for analysis. The primary data was obtained from the results of distributing the questionnaires carried out by researchers. The questionnaire that will be distributed has gone through validity and reliability tests with statistical processors. Validity test using Pearson with the aim of knowing the suitability of the research results with the actual situation. Question items are said to be valid if the significance value is <0.05 . The reliability test uses Cronbach's Alpha with the aim of showing stability and consistency in measuring concepts. The questions are said to be reliable if the Cronbach's alpha value is > 0.60 . Primary data collection is carried out by analyzing the flow of outpatient services both in special outpatient care and general outpatient care/BPJS in terms of the time spent while the patient arrives until the service is finished starting from the registration room, refraction, meeting with doctors, medical support, payment to the cashier to the pharmacy. Furthermore, the researcher counted and recorded the time using a stopwatch to find out every process that the respondent went through during the service process. The way to determine external patients (patients) who are research respondents is obtained from the results of accidental sampling by observing one by one the activities carried out by respondents / patients starting from the registration process to taking the drug. If the activity process for the first respondent has been completed, it will continue to look for the next respondent.

Secondary data in this study were obtained by means of the researcher providing an explanation to the hospital as the person in charge of the data regarding the research being carried out. After the data person in charge understood and agreed, the data person in charge gave permission for secondary data collection after the researcher fulfilled the administrative requirements given by the hospital as the data person in charge. The secondary data used in this study is hospital profile data and hospital mandatory indicator data with one of the indicators in it, namely the achievement of outpatient waiting time at RSU Royal Prima Medan.

III. RESULT AND DISCUSSION

Identification of Service Blueprint Service Flow for Outpatient Installation at RSU Royal Prima Medan

Identification of service blueprint variables in services at the outpatient unit of RSU Royal Prima Medan begins when the patient enters the hospital, namely taking a queue number for the registration process, initial examination, waiting for a doctor's call, giving action by a doctor, waiting in the medical

support unit, giving action in the unit medical support, waiting for the results of medical support, waiting for the consultation process, giving the consultation process, payment processing, waiting at the pharmacy/optical, administering drugs at the pharmacy/optics which are called patient activity variables (customer action), then there are the activities of onstage and backstage officers then followed with supporting processes and physical evidence.

Patient Actions (Customer Action) in Special Outpatient and General Outpatient Care at RSU Royal Prima Medan

Patient activity (customer action) is one of the factors that can allow long outpatient services to occur. The process that patients go through, namely patients who are in general outpatient care and special outpatient care in this study starts from the registration process, initial examination, waiting for a doctor's call, giving action by a doctor, waiting in a medical support installation, giving action in a medical support installation, waiting for the results of medical support, waiting for the consultation process, providing the consultation process, payment processing, waiting at the pharmacy, administering drugs at the pharmacy/optics based on the perspective that the patient has gone through. From this study, it was found that the most diseases were treated at RSU Royal Prima Medan in 2020 were Schizophrenia with 5,820 people, followed by Chronic Obstructive Pulmonary Disease, Unspecified with 5,284 people, then the third was CHF with 4,839 people, the lowest was Arthrosis with 2,314 people. From this study, it can be seen that the number of patients seeking treatment at RSU Royal Prima Medan fluctuates every year. The largest outpatient patient in 2019, there was a decrease from 2020. Most patients in 2019 used BPJS 98,360 (84.79%). The total number for 2019 was 116,008 patients.

Inpatient Services

Inpatient services at RSU Royal Prima Medan include several treatment rooms with a total bed capacity of 187 beds. The biggest diagnosis of inpatients in 2020 was Delivery by Caesarean Section with 961 people (21.30%), followed by the second biggest diagnosis was Spontaneous Vertex Delivery with 551 people (12.21%), the third biggest diagnosis was Stroke with 503 people (11.15%), and the lowest was Tuberculosis of Lung as many as 269 people (5.96%).

Activities of Visible Officers (Onstage) in Special Outpatient Care and General Outpatient Care at RSU Royal Prima Medan

Table 1. Activities of Visible Officers (Onstage) at the Outpatient Polyclinic of BPJS Health and General Patients RSU Royal Prima Medan

No	Visible officer activities (onstage)	Average Time Spent by Officers (in minutes)			
		General (n = 19)		BPJS Health (n = 70)	
1	Carry Out The Registration Process	19	06:05:28	70	2:14:07
2	Initial Inspection	19	08:39:07	70	13:50:24
3	Examination Action by A Doctor	19	03:22:34	66	03:48:40
4	Examination Of Actions in The Medical Support Unit	19	01:01:19	2	01:11:12
5	Production Of Medical Support Results	0	01:11:31	2	03:11:59
6	Provision Of Consultations	10	03:45:52	10	02:13:03
7	The Process Of Dispensing Drugs In A Pharmacy By A Pharmacist	0	-	46	01:45:45

Table 1. shows that of the 7 process activities carried out by outpatient polyclinic officers, namely the process of carrying out initial examinations by officers spent an average of 6 minutes 05 seconds for 19 respondents to serve general patients and 2 minutes 14 seconds to serve BPJS Health patients. The process of activities carried out by outpatient service workers who spend a long time, namely the process of giving consultations by doctors with an average time spent of 2 minutes 22 seconds for 10 patients. These results can affect the next service process for the next patient. The process of the onstage officer's activities has a standard deviation for each process that is smaller than the average value. The standard deviation that is smaller than the mean value indicates that the data used has a wide distribution, so that the data deviation can be said to be good. The researcher decided not to display the table because the data distribution was quite

good. There are several activities that officers go through to support services to be fast starting from carrying out the registration process to dispensing drugs at the pharmacy, the results will then be grouped and compared between the average value and the standard deviation for each activity which will be explained in table 2:

Table 2. Standard Deviation, Average, Minimum and Maximum Values of Onstage Officer Activities

No	Visible officer activity (On stage)	Patient	n	Std. Dev	Mean	Min	Max	SD > Mean
1	Carry Out the Registration Process	General	19	05:52:12	06:05:28	00:30:54	20:51:30	-
		BPJS	70	1:45:29	2:14:07	00:13:05	7:54:11	-
2	Do An Initial Check	General	19	05:40:39	08:39:07	02:53:24	28:53:50	-
		BPJS	70	7:49:25	13:50:24	02:02:43	43:20:28	-
3	Giving Action by A Doctor	General	19	01:47:26	03:22:34	01:01:06	7:30:04	-
		BPJS	70	02:49:02	03:48:40	00:55:27	17:40:36	-
4	Provision Of Action In The Medical Support Unit	General	19	01:01:19	01:01:19	01:01:19	01:01:19	-
		BPJS	70	02:49:02	03:48:40	00:55:27	17:40:36	-
5	Production Of Medical Support Results	General	19	01:11:31	01:11:31	01:11:31	01:11:31	-
		BPJS	70	01:11:57	01:11:12	01:07:00	01:15:25	-
6	Provision Of Consultations	General	19	05:14:57	03:45:52	00:29:01	19:48:20	√
		BPJS	70	01:11:26	03:11:59	02:21:28	04:02:30	√
7	The Process of Dispensing Drugs in Pharmacies	General	0	-	-	-	-	-
		BPJS	70	1:29:19	1:45:45	00:11:27	06:55:08	-

Table 2 shows that there are 2 (two) activities of onstage officers who have a standard deviation value greater than the mean value, one of the activities is the provision of consultations by doctors with a standard deviation value of 5 minutes 14 seconds and the mean value is 3 minutes 45 seconds. The standard deviation that is greater than the average value indicates that the data used has a wide distribution, so that the deviation of the data can be said to be not good.

Activities of Invisible Officers (Backstage) in Special Outpatient and General Outpatient Care at RSU Royal Prima Medan

Table 3. Activities of Invisible Officers (Backstage) in the Outpatient Polyclinic for BPJS Health and General Hospital patients, Royal Prima Medan Hospital

No	Invisible officer activities (backstage)	Average Time spent by Officer (in minutes)			
		General (n total= 19)		BPJS Health (n total = 70)	
1	Preparing Medical Records	19	08:16:14	70	04:35:04
2	Waiting For the Medical Record to Be Taken	19	05:97:25	70	07:42:57
3	Deliver Medical Records To The Polyclinic	19	01:05:53	70	01:02:05

Table 3 shows that of the 3 service processes that spend the time needed by service workers at the outpatient clinic in preparing patient files until the patient files are ready to be sent to the poly, it takes an average of 4 minutes 35 seconds for 70 BPJS Health patients, and 8 minutes 16 seconds for 19 general patients, whereas for officers serving the general patient service process in the outpatient polyclinic the process that takes a long time is the process of delivering medical records to the polyclinic which takes an average of 1 minute 2 seconds for 70 patients. The researcher found that there were several obstacles in the file preparation process starting from inputting patient data in the registration section and the length of time medical record officers searched for patient files in the medical record room during the study. The service process that exceeds the specified time will greatly impact the next service process. The service process, which takes a long time to be carried out by officers at the outpatient polyclinic for general patients, also spent an average of 1 minute 19 seconds for 19 patients when delivering patient files to each of the intended

polyclinics. This discovery will greatly impact the next service. There are several activities that are carried out by officers who are not involved and have direct contact with patients, starting with preparing patient files to delivering patient files to the poly, which have been described in table 3. From these results will then be grouped and compared between the average value and the standard deviation for each activity which will be explained in the following table.

Table 4. Standard Deviation, Average, Minimum and Maximum Values of Invisible Officer Activities (Backstage)

No	Invisible officer activities (backstage)	Patient	n	Std.DEv	Mean	Min	Max	SD > Mean
1	Preparing Medical Records	General	70	02:59:44	04:35:94	00:35:21	14:47:33	-
		BPJS	19	08:04:07	08:16:14	01:22:34	29:49:34	-
2	Waiting For the Medical Records to Be Delivered	General	70	05:44:51	07:42:57	00:12:13	2159:03	-
		BPJS	19	04:50:02	05:07:25	00:54:41	17:04:08	-
3	Medical Record Delivered	General	70	02:52:47	01:02:05	00:00:29	20:09:00	√
		BPJS	19	01:19:29	01:05:53	00:04:27	06:01:30	√

Table 4. shows that there is 1 activity that has a standard deviation value that is greater than the average value, namely the delivery of medical records to each of the intended polyclinics which has an average value of 1 minute 02 seconds for BPJS Health patients and 1 minute 05 seconds for general patients. The standard deviation that is greater than the average value indicates that the data used has a wide distribution, so that the deviation of the data can be said to be not good.

Support Processes in special outpatient and general outpatient care at RSU Royal Prima

Medan

Table 5. Support Processes in the Outpatient Polyclinic for BPJS Health patients and Royal Prima Medan Hospital patients

No	Support Process	Category	N	%
1	BPJS Outpatient	Not easy	49	55%
		Easy	15	16,8%
2	General Outpatient	Not easy	5	5,6%
		Easy	20	22,4%

Table 5 results from the opinions of patients who are respondents, namely patients who are treated in outpatient care, in general outpatient services or BPJS outpatient care, showing that 55% of patients think that the process of supporting the computerized system in the outpatient polyclinic of BPJS patients is not easy for patients to understand, these results are inversely proportional to the outpatient general patient polyclinic, amounting to 22.4% of patients think that the system in the service support process runs well and is easily understood by patients. Researchers found that there was a possibility that the number of patients in general outpatient care would affect the work of a system in every service process during the study.

Physical Evidence (Physical Evidence) in special outpatient and general outpatient care at RSU Royal Prima Medan

Table 6. Physical Evidence in Special Outpatient and General Outpatient Care at RSU Royal Prima Medan

No	Physical Evidence	Category	Outpatient BPJS Patients	Outpatient General Patient	Total
1	Clinic Location	Not Accordance	15	75%	5
		Accordance	45	65%	24
2	Outpatient Waiting Room Conditions	Not good	20	61%	13
		Good	44	78%	12

Table 6. shows that the majority of the results from physical evidence according to the respondents' opinion are good. Either in this case is physical evidence or facilities supporters in the outpatient polyclinic

for BPJS Health and general patients can function properly and in accordance with current needs and conditions, but there are some respondents who think the opposite is in the outpatient installation of the general patient polyclinic regarding the condition of the waiting room which has a result of 39%. The researcher found the reason from the patient's perspective, namely for the condition of the outpatient waiting room, some respondents who thought it was not good reasoned that the supporting facilities were not functioning and there was a lack of variety of available facilities.

Evaluation of Waiting Time for Services at the outpatient polyclinic installation for BPJS Health patients and outpatient polyclinic for general patients at RSU Royal Prima Medan

Waiting time for services in special outpatient and general outpatient installations is one of the factors that can indicate the occurrence of outpatient services to be significantly longer. Waiting time for services in this study was calculated starting from waiting for the registration process, carrying out the registration process, initial examination, waiting for a doctor's call, giving action by the doctor, waiting at the medical support installation, giving action at the medical supporting installation, waiting for the results of medical support, waiting for the consultation process, providing the consultation process, waiting at the pharmacy, and administering drugs at the pharmacy both from the patient's perspective. The results of the waiting time for this service were obtained from observations during the study through stopwatch calculations.

The results of these observations are in the form of a unit of time that the patient spends in one service period. then from the results of the time units obtained, the researcher bolded the numbers that exceeded the set time according to the standards that had been determined by the researchers. The results of the waiting time in the appendix show that there are some differences in waiting time for general patient outpatient services. The majority of the calculation of time spent by patients when processing payments at general outpatient care is longer than some other service processes, supported by the existence of several numbers that have been bolded by researchers when processing payments at general outpatient care. These results are inversely proportional to the time spent on the payment process at the outpatient polyclinic for BPJS patients. Almost all respondents spent time during the registration process which was relatively fast, but during consultations at the outpatient polyclinic for general patients, there were 19 respondents who spent almost 17 minutes at the time. the initial inspection process takes place. However, the authors cannot find reasons related to the length of time spent by the respondents because there are regulations for maintaining patient privacy in polyclinic outpatient services.

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consultations at the outpatient polyclinic for general patients, there were 19 respondents who spent almost 17 minutes at the time. the initial inspection process takes place. However, the authors cannot find reasons related to the length of time spent by the respondents because there are regulations for maintaining patient privacy in polyclinic outpatient services.

Evaluation of Waste that Occurs in the Outpatient Polyclinic for BPJS Health patients and general patients at RSU Royal Prima Medan

Table 7. Identification of Types of Waste in Patient Activity Process in Services

No	Activity	Patient	Score		Analysis		Note
			Std. Dev	Mean	Std.Dev < Mean	Std.Dev > Mean	
Patient Activity (Customer Action)							
1	Registration Process	BPJS	5:56:10	7:35:21	√		Not Waste
		General	14:05:27	13:45:15		√	Waste
2	Standard Registration Process (10 minutes)	BPJS	1:45:29	2:14:07	√		Not Waste
		General	5:52:12	6:05:28	√		Not Waste
3	Preliminary Examination	BPJS	12:47:20	24:09:57	√		Not Waste
		General	16:53:22	10:08:32		√	Waste
4	Initial Examination Standard (20 minutes)	BPJS	7:49:25	13:50:24	√		Not Waste
		General	5:40:39	8:39:07	√		Not Waste
5	Doctor Call	BPJS	17:42:46	38:50:03	√		Not Waste
		General	34:50:08	10:24:53		√	Waste
6	Doctor's Action	BPJS	2:52:33	38:50:03	√		Not Waste
		General	1:47:26	3:22:34	√		Not Waste
7	Medical Support Unit	BPJS	2:02:05	0:20:18		√	Waste
		General	6:00:57	6:00:57	√		Not Waste
8	Procedures In the Medical Support Unit	BPJS	0:11:58	0:02:02		√	Waste
		General	1:01:19	1:01:19	√		Not Waste
9	Medical Support Results	BPJS	0:40:29	0:06:26		√	Waste
		General	0:00:00	0:00:00	√		Not Waste
10	Consultation Process at The Polyclinic	BPJS	8:25:19	2:445:18		√	Waste
		General	17:57:51	17:39:56		√	Waste
11	Provision of Consultations	BPJS	1:06:15	0:19:00		√	Waste
		General	4:27:49	2:32:08		√	Waste
12	Waiting At the Pharmacy	BPJS	10:01:18	8:41:22		√	Waste
		General	-	-			-
13	Dispensing Drugs in Pharmacies	BPJS	1:28:05	1:09:30		√	Waste
		General	-	-	-	-	-

Table 8. Identification of Types of Waste in Officer Activity Process (onstage) in Services

No	Activity	Patient	Score		Analysis		Note
			Std. Dev	Mean	Std.Dev < Mean	Std.Dev > Mean	
Officer Activities (onstage)							
1	Registration Process	BPJS	1:45:29	2:14:07	√		Not Waste

		General	5:52:12	6:05:28	√		Not Waste
2	Initial Inspection	BPJS	7:49:25	13:50:24	√		Not Waste
		General	5:40:39	8:39:07	√		Not Waste
3	Giving Action by A Doctor	BPJS	2:49:02	3:48:40	√		Not Waste
		General	1:47:26	3:22:34	√		Not Waste
4	Provision Of Action in The Medical Support Unit	BPJS	0:05:57	1:11:12	√		Not Waste
		General	1:01:19	1:01:19	√		Not Waste
5	Production Of Medical Support Results	BPJS	1:11:26	3:11:59	√		Not Waste
		General	1:11:31	1:11:31	√		Not Waste
6	Provision Of Consultations	BPJS	2:09:18	2:13:03	√		Not Waste
		General	5:14:57	3:45:52		√	Waste
7	The Process of Dispensing Drugs in A Pharmacy	BPJS	1:29:19	1:45:45	√		Not Waste
		General	-	-	-	-	-

Table 9. Identification of Types of Waste in Officer Activity Process (backstage) in Services

No	Activity	Patient	Score		Analysis		Note
			Standard Deviation	Mean	Std.Dev < Mean	Std.Dev > Mean	
Officer Activities (backstage)							
1	Preparing Medical Records	BPJS	2:59:44	4:35:04	√		Not Waste
		General	8:04:07	8:16:14	√		Not Waste
2	Waiting For the Medical Records to Be Delivered	BPJS	5:44:51	7:42:57	√		Not Waste
		General	4:50:02	5:07:25	√		Not Waste
3	Medical Record Delivered	BPJS	2:52:47	1:02:05		√	Waste
		General	1:19:29	1:05:53		√	Waste

Table 7, 8, 9. shows that there are 6 activities which are waste by comparing the standard deviation value with the average (mean) value. The standard deviation value that is > (more than) the average value is categorized as waste and vice versa.

Table 10. Category of Waste for Each Activity Process at Outpatient Services at RSU Royal Prima Medan

No	Activities Include Waste	Patient	N	Score		Waste	Note
				Std. Dev	Mean		
Officer Activities (onstage)							
1	Registration Process	BPJS	5	14:05:27	13:45:15	Waiting	More than 20 minutes
		General	3	13:04:09	12:07:00	Waiting	More than 20 minutes
2	Initial	BPJS	16	16:52:15	13:20:00	Waiting	Spend time 30

	Inspection				3		to 60 minutes
3	Waiting For Doctor's Call	BPJS	10	32:01:26	12:39:36	<i>Waiting</i>	Patient waiting for poly II takes 30 to 60 minutes
4	Giving Action by A Doctor	Genera I	6	7:08:03	4:53:15	<i>Unappropriate processing</i>	Spends time with the doctor more than 10 minutes
5	Provision Of Consultations	BPJS	1	4:23:47	3:17:46	<i>Unappropriate processing</i>	Spends 10-20 minutes consulting
		Genera I	1	2:53:30	2:48:47	<i>Unappropriate processing</i>	Spends 10-20 minutes consulting
6	The Process of Dispensing Drugs in A Pharmacy	BPJS Health	2	6:50:32	4:34:54	<i>Unappropriate processing</i>	Spends time in medication for more than 10 minutes

No	Activities Include Waste	Patient	N	Score		Waste	Note
				Std. Dev	Mean		
Officer Activities (onstage)							
1	Giving action by a doctor	General	6	7:08:03	4:53:15	<i>Unappropriate processing</i>	More than 30 minutes
2	Initial Inspection	BPJS	1	4:30:17	3:03:35	<i>Unappropriate processing</i>	Officers spend 10-20 minutes
		General	1	2:53:30	2:48:47	<i>Unappropriate processing</i>	Officers spend 10-20 minutes
3	The process of dispensing drugs in a pharmacy	BPJS	2	6:57:56	4:19:54	<i>Unappropriate processing</i>	Officers spend more than 10 minutes

No	Activities Include Waste	Patient	N	Score		Waste	Note
				Std.Dev	Mean		
Officer Activities (onstage)							
1	Medical Record Delivered	BPJS	1	1:13:12	1:08:12	<i>Transportation</i>	Takes 5-10 minutes)
		General	2	2:27:26	1:01:18	<i>Transportation</i>	Takes 5-10 minutes)

Table 10. shows that there are 13 types of activities from the total identification of waste from all service process activities. There are 3 (three) categories obtained from the results of the waste analysis, namely 3 activities classified as waiting, 7 activities classified as unappropriate processing, 0 activities classified as Unnecessary motion and 2 activities classified as transportation.

Table 11. Evaluation of Waste that Occurs in the Outpatient Polyclinic Installation for BPJS Health patients and general patients at RSU Royal Prima Medan

No	Types Of Activities That Include Waste	Waste	Cause (Researcher Identification)
Customer Action			
1	Patients waiting for the registration process more than 20 minutes	<i>Waiting</i>	The process of verifying patient data requires sufficient time
2	Patients waiting for the initial examination spend 30 to 60 minutes	<i>Waiting</i>	The initial examination room is still combined between BPJS Health patients and the

			general public
3	Patients waiting for a doctor's call at the poly spend 30 to 60 minutes	<i>Waiting</i>	Doctors often leave the room for visits or surgeries
4	The patient spends more than 10 minutes examining the doctor	<i>Unappropriate processing</i>	There are language limitations in patients so that the examination takes a long time
5	The patient spends 10-20 minutes consulting	<i>Unappropriate processing</i>	The consultation room is still combined between consultation needs for further examination or patient education
6	The patient spends more than 10 minutes in taking the drug	<i>Unappropriate processing</i>	There are patients who don't understand how the drug works, so it takes a long time to explain

<i>Onstage</i>			
1	Doctor Examination exceeds the standard time limit (more than 30 minutes)	<i>Unappropriate processing</i>	There are language limitations in patients so that the examination takes a long time
2	Officers spend 10-20 minutes consulting with patients	<i>Unappropriate processing</i>	The consultation room is still combined between consultation needs for further examination or patient education
3	Officers spend more than 10 minutes in administering drugs to patients	<i>Unappropriate processing</i>	There are patients who don't understand how the drug works, so it takes a long time to explain

<i>Backstage</i>			
1	Medical Record Delivered to Poly (10-20 Minutes)	<i>Transportation</i>	The distance between the medical record room and the polyclinic is a bit far / the medical record building and the polyclinic building are different

Table 11 shows that there were 10 types of waste that were obtained during the research in general outpatient and special outpatient service installations. The results of the waste analysis are that the majority are while waiting for the service process, and for the majority type of waste, it is in the young type 2. In the young type 2, waste can be repaired or can be removed immediately in order to optimize service time. Some of the waste that has been found will then be included in a strategic issue for improvement.

Service Blueprint Before Repair

The service process at the outpatient unit at RSU Royal Prima Medan begins when officers and patients wait for the registration process, carry out the registration process, initial examination, wait for the doctor's call, administer the action by the doctor, wait in the medical support unit, administer the action in the medical support unit, wait for the results medical support, waiting for the consultation process, giving the consultation process, waiting at the pharmacy, administering drugs at the pharmacy. The entire service process for the outpatient unit at RSU Royal Prima Medan involves several officers who are directly involved with patients and those who are not directly involved with the service process, namely consisting of officers at the patient registration section, health workers, non-health workers. Researchers have identified and prepared a flow chart for outpatient unit services based on primary data that has been obtained from the hospital and the results of the service blueprint for outpatient unit services based on current field conditions from the results of the stopwatch calculations that have been obtained to find out the time needed in every process both carried out by patients and those carried out by service personnel.

There are several points that need improvement in the results of the identification of service flow schemes as well as in the results of service blueprints which will be marked in red. The following are the

results of the service blueprint for services in the outpatient unit of RSU Royal Prima Medan. From the results of the research found in the identification process in the service flow for each category of patients, it was found that there were several processes which the authors found identified waste in the process. The process that has identified waste, the process of identifying 5 (five) service blueprint components waiting for the registration process, carrying out the registration process, initial examination, waiting for the doctor's call, giving action by the doctor, waiting in the medical support unit, giving action in the medical support unit, waiting results of medical support, waiting for the consultation process, giving the consultation process then the patient finishes and leaves the polyclinic. The findings on the identification of service blueprints were obtained from the identification of several activities that were carried out by patients and staff during the study.

IV. CONCLUSION

From the presentations presented in the previous chapters, several things can be concluded as follows. The highest number of outpatient patients at RSU Royal Prima in 2022 are patients using BPJS cards with 65,941 people, 13,889 general patients, and the total number of patients 79,830 people. The value of the inpatient service indicators, namely Realized IKM, is 79.77, the average BOR is 59%, the average LOS is 4 days, the average BTO is 40 times, the average TOI is 4 days, the average NDR is average of 50%, average GDR of 98%. There will be 1,590 patients in the General Surgery Room and Obstetric Surgery Room in 2022 who are in the simple surgery category. 644 people in KBU, 664 in KBK. The number of visits to the Emergency Room in 2022 was 7,759 people. It decreased by 13.32% from 2019. If seen from the follow-up service, the number of visits treated was 5,907 people, 75 people were referred, 1,777 people were sent home. Of those treated, 71 people died not long after being in the emergency room, while 75 people died outside the emergency room after receiving further treatment in the room. The number of deliveries in 2022 was 1,256 people, 9 mothers died, 1,279 live born babies, 5 stillborn babies, 168 low birth weight babies. Laboratory activities at Royal Prima Medan Hospital in 2022 totaled 75,912, a decrease of 29.82% from 2019. The largest laboratory examination was 10,696 leukocytes and the lowest laboratory examination was a pregnancy test with 43. Activities in the Physiotherapy Installation consisted of Electro Therapy, Physical Exercise, Akino Therapy and Others with a total of 9,393 visits in 2020. Endoscopy and EKG Room Activities with a total of 2022 EKG examinations, namely 3,600 inpatients and 363 outpatients. Radiology Installation Activities consisting of CT-Scans, Abdominal Ultrasound and Thorax Photos with a total 10,112 visits in 2022.

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