

# Factors Affecting Waiting Time for Completion of BPJS Patient Administration

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## ABSTRACT

*Waiting time is the grace period when the patient is allowed to go home by the doctor in charge of the patient until they leave the hospital. Based on the Regulation of the Minister of Health of the Republic of Indonesia Number 129 of 2008 concerning Minimum Service Standards for Hospitals, it is stated that the standard waiting time for repatriation patients is not more than 2 hours. This study aimed to determine the factors that affect the waiting time in completing the administration of repatriation of BPJS inpatients at Mitra Medika Hospital Tanjung Mulia in 2022. This is quantitative research with a cross sectional approach. The population in this study was all inpatient nurses' amount 93 people. The sample in this study was the entire population of inpatient nurses. The data analysis technique was done by using univariate and bivariate analysis. The results showed that there was an influence of human resources with waiting time for discharge of patients with  $p$ -value  $0.009 < 0.05$ , Administration with waiting time for discharge of patients with  $p$ -value  $0.005 < 0.05$ , Facilities and Infrastructure with waiting time for discharge of patients with  $p$ -value  $0.007 < 0.05$ . The conclusion shows that there is an effect of waiting time for discharge of patients with human resources, administration, and facilities and infrastructure at Mitra Medika Hospital Tanjung Mulia. It is expected that the hospital provides routine programs to improve the skills and abilities of nurses in completing the repatriation administration of patient, standardize waiting times, as well as add facilities at the nurse station and improve the quality of the information system to make it better.*

Keywords: Waiting, Time for BPJS, Inpatients Repatriation

## INTRODUCTION

Inpatient administration is a unit that plays a very important role in the hospital because in carrying out medical procedures, medicines, and even facilities are provided by the hospital to inpatients who are going home (McNeary et al., 2020; Kelly et al., 2018; Levine et al., 2020). Human resources that play a very important role in completing all administration of inpatient discharge are inpatient nurses. Plays an important role because of the speed problem of completing administration of patient discharge which relates to many units or not just one unit. To support the administrative process, it is necessary to have cooperation between individuals because humans cannot fulfill it alone, but need other people (Zaim et al., 2019). Because of interdependence, they need to work together so that these needs or goals are more easily achieved. Patient discharge is an activity that takes place while the patient is in the hospital stated that he was allowed to go home medically on instructions from the doctor in charge of the patient until patient leaves the hospital (Bucknall et al., 2019; Leary et al., 2020; Cheung et al., 2018). The length of waiting time and acceleration of patient discharge will be directly reflects how the Hospital manages services that are tailored to the situation and also the expectations of the patients.

The target of hospital services is not only for individual patients, but also for development patient's family and the general public (Graffigna & Barello, 2018; Hui et al., 2018). The focus of attention is on patients who come or are treated as individuals and part of the family. On the basis of with such an attitude, service at the hospital is a complete health service. The development of the Hospital initially only provided certified healing (curative) services to patients through outpatient care stay. Furthermore, because of the progress of science, especially medical technology, hospitals increase in community income and education. Health services in hospitals

are currently not only curative but also recovery (rehabilitative) (Anwar et al., 2018; Lawton et al., 2018; Zeng et al., 2020). The two services are integrated through health promotion efforts (promotive) and prevention (preventive). Waiting time for patient discharge is the timeframe when the patient is allowed go home by the doctor in charge of the patient until the patient leaves the hospital. Time This waiting is one of the factors that greatly influence the patient's perception of quality Hospital health services that can have an impact on the level of patient satisfaction and efficiency of inpatient cost packages (Agyapong et al., 2018; Al-Harajin et al., 2019; Spechbach et al., 2019). Based on the Regulation of the Minister of Health of the Republic of Indonesia Number 129 of 2008 concerning Minimum Hospital Service Standards that the standard waiting time in carrying out patient discharge is not more than 2 hours.

Long waiting times must be a priority concern, because it can result in worsening of the patient's illness, families also waiting at home will be anxious, service time is inefficient and the loss of working hours that should still be used by patients and their families. The time used by health workers at the hospital to provide services to patients will reflect how the hospital manages the service component according to the patient's situation and expectations (Ali et al., 2018; Fix et al., 2018; Allen et al., 2018). The problem of waiting time always causes patient complaints in several hospitals, and often becomes a problem of not getting enough attention from the hospital management. Hospitals ignore the long waiting time for their health services, so in totality the quality of hospital services is considered unprofessional and can reduce patient satisfaction as well as patient families.

Good and quality service if the patient can be comfortable while being treated at the hospital, the friendliness provided by the workforce at the hospital and the speed of service provided by health workers greatly influences patient perceptions and satisfaction which will improve the quality of service at the hospital. The Health Social Security Administering Body is a legal entity established to administer the Health Insurance program. Each Participant has the right to obtain Health Insurance Benefits that are individual health services, including promotive, preventive, curative and rehabilitative services including services for drugs and consumable medical materials in accordance with the necessary medical needs. Research conducted by Priwastyani et al, (2022) with the title "Waiting Time for Inpatient Discharge at Private Hospital X in South Tangerang". Research conducted by Sari DP et al, (2018) entitled "Analysis of the Root Problems of the Long Waiting Time for Administrative Processes for Inpatient Discharge". Based on the results of an initial survey conducted by researchers in January 2022 at Mitra Medika Tanjung Mulia General Hospital by conducting observations and interviews.

From the observations of 5 BPJS patients who went home with a waiting time when they were declared home by the doctor, namely Patient I with a waiting time of 8 hours 10 minutes, Patient II with a waiting time of 2 hours 25 minutes, Patient III with a waiting time of 8 hours 30 minutes, Patient IV with a waiting time of 8 hours 30 minutes, Patient V with a waiting time of 5 hours 5 minutes. The cause of the patient waiting a long time during the discharge process is because they have to wait for the family to pick them up, the doctor does not determine the time for the patient's discharge, the nurse has to change shifts with the next duty nurse and the patient who returns at the same time. So, the average waiting time for BPJS patients to go home during observation is 6 hours 32 minutes. Based on the minimum service standards, the hospital stated that the patient should not be discharged for more than 2 hours (Baker & Quinn, 2018; Berg et al., 2019). Starting from the time the patient is declared discharged by the Doctor in Charge of the Patient (DPJP) until the patient leaves the hospital. So that from the results of observations (observations) and interviews that have been conducted by researchers, the average waiting time for patients participating in BPJS is 6 hours 32 minutes.

From the results of interviews conducted by researchers at Mitra Medika Tanjung Mulia Hospital by interviewing 2 inpatient nurses, they said that the reason for the length of time in completing the administration of BPJS participant patients was due to the long wait for drugs from the pharmaceutical installation, the presence of patients who went home at the same time, the presence of monitoring/observation patients, changing shifts. nurse, the E-med system used takes a long time to load (error) so that the nurse has difficulty administering medication. The aim of

the study was to find out the factors that influence the waiting time in completing the administration of inpatient BPJS participant patients at Mitra Medika Tanjung Mulia Hospital in 2022. Based on the background above, the formulation of the problem in this study is what are the factors that influence the waiting time in completing the administration of inpatient BPJS participant patients at Mitra Medika Tanjung Mulia Hospital in 2022.

## METHODS

This type of research uses quantitative research, quantitative research is systematic scientific research on the parts and phenomena as well as the causality of their relationships. The research design used was an analytic survey and used a cross-sectional approach in which causal and effect factors were calculated simultaneously. The research was conducted at the Mitra Medika Tanjung Mulia General Hospital in Medan. Conducted from the initial survey on the 17th January to April 08, 2022. Research on dates 16 to 29 July 2022. The population in this study were all inpatient nurses at Mitra Medika Tanjung Mulia Hospital, totaling 93 people. Sampling was carried out by Total Sampling, which is a sampling technique where the sample is equal to the total population. Data collection techniques use 3 (three) types of data, namely primary data, secondary data and tertiary data. Primary data in this study were obtained through a survey using questionnaires that had been prepared and distributed to respondents. Secondary data in this study were data from Mitra Medika Tanjung Mulia General Hospital, Tertiary data in this study were journal data, websites and laws. Data management methods are collecting, checking, coding, entering, data processing. The data analysis used was univariate analysis used to describe the data carried out on each variable from the research results. Bivariate analysis, namely after knowing the characteristics of each variable in this study, the analysis was continued at the bivariate level. Bivariate analysis is to determine the relationship (correlation) between the independent variable and the dependent variable.

## RESULTS

Table 1.  
Frequency Distribution of Respondents According to the Human Resources Group, Administration, Facilities and Infrastructure, Waiting Time at the General Hospital. Tanjung Mulia Medical Partners

Variable	Frequency (n)	Percentage (%)
<b>Human Resource</b>		
Yes	36	38,7
No	57	61,7
Total	93	100
<b>Administration</b>		
Yes	40	43,0
No	53	57,0
Total	93	100
<b>Facilities and Infrastructure</b>		
Yes	24	25,8
No	69	74,2
Total	93	100
<b>Waiting Time</b>		
Accordance	35	37,6
Not Accordance	58	62,4
Total	93	100

Based on the table above, it can be seen that in the Human Resources variable, there were 36 people who answered "Yes" (38.7%), and those who answered "No" were 57 people (61.3%). Respondents' opinions on administration variables who answered "Yes" were 40 people (43.0%), and who answered "No" as many as 53 people (57.0%).

Table 2.

Cross tabulation between the influence of human resources on waiting time Discharge of Patients in RSU. Tanjung Mulia Medical Partners

Human Resource	Waiting Time				Total		p-value
	Appropriate		Not Appropriate				
	f	%	f	%	f	%	
Yes	20	21,5	16	17,2	36	38,7	0,009
No	15	16,1	42	45,2	57	61,3	
Total	35	37,6	58	62,4	93	100	

Based on Table 2. cross-tabulation between human resources and waiting time, it is known that of the 93 respondents in human resources in the "Yes" category, there were 36 respondents (38.7%) with waiting time according to 20 respondents (21.5%) and "Not Appropriate" as many as 16 respondents (17.2%). Human resource variables in the "No" category, namely 57 respondents (61.3%), with waiting times according to 15 respondents (16.1%) and "No in the Facilities and Infrastructure variable, 24 people answered "Yes" (25.8%), 69 people answered "No" (74.2%). In the Waiting Time variable, 35 people (37.6%) answered "Appropriate", 58 answered "Not Appropriate". Appropriate" as many as 42 respondents (45.2%). Based on the results of the Chi-square test, there is an influence between human resource variables with patient discharge waiting time with p-value  $0.009 < 0.05$ . This shows that there is an influence of human resource variables the waiting time for completion administrative discharge of patients participating in BPJS inpatient at the Mitra Medika Tanjung Mulia Hospital.

Table 3.

Cross tabulation between the effect of administration on waiting time for patient discharge at the RSU. Tanjung Mulia Medical Partners

Administration	Waiting Time				Total		p-value
	Appropriate		Not Appropriate				
	f	%	f	%	f	%	
Yes	22	23,7	18	19,4	40	43,0	0,005
No	13	14,0	40	43,0	53	57,0	
Total	35	37,6	58	62,4	93	100	

Based on Table 3. cross-tabulation between administration and waiting time, it is known that of the 93 respondents in the administration with the "Yes" category, there were 40 respondents (43.0%) with waiting times according to 22 respondents (23.7%) and "Not Appropriate" namely as many as 18 respondents (19.4%). Administrative variables in the "No" category were 53 respondents (57.0%), with appropriate waiting time of 13 respondents (14.0%) and "Not Appropriate" namely 40 respondents (43.0%).

Table 4.

Cross tabulation between the effect of facilities and infrastructure on waiting time Discharge of Patients in RSU. Tanjung Mulia Medical Partners

Facilities & Infrastructure	Waiting Time				Total		p-value
	Appropriate		Not Appropriate				
	f	%	f	%	f	%	
Yes	15	16,1	9	9,7	24	25,8	0,007
No	20	21,5	49	52,7	69	74,2	
Total	35	37,6	58	62,4	93	100	

Based on Table 4. cross-tabulation between facilities and infrastructure on waiting time, it is known that of the 93 respondents to facilities and infrastructure in the "Yes" category, there were 24 respondents (25.8%) with waiting time according to 15 respondents (16.1%) and "Not Appropriate" as many as 9 respondents (9.7%). Facilities and infrastructure variables in the "No" category were 69 respondents (74.2%), with appropriate waiting time of 20 respondents (21.5%) and "Not Appropriate" namely 49 respondents (52.7%). From the results of the Chi-square test there is an influence between the variables of facilities and infrastructure with the waiting time for patient discharge with a p value of  $0.007 < 0.05$ . This shows that there is an influence of the facilities and infrastructure variables on the waiting time in completing the administration of

returning inpatient BPJS participant patients at Mitra Medika Tanjung Mulia Hospital in 2022. From the results of the Chi-square test there is an influence between the administration variable and the waiting time for patient discharge with a p value of  $0.005 < 0.05$ . This shows that there is an influence of administrative variables on the waiting time in completing the administration of returning inpatient BPJS patients at Mitra Medika Tanjung Mulia Hospital in 2022.

## DISCUSSION

### **The Influence of Human Resources on Waiting Time in Completing the Administration of Discharge Patients for BPJS Inpatient Participants**

From the results of the Chi-square test there is a significant influence between human resource variables with patient discharge waiting time with a p-value of  $0.009 < 0.05$ . This shows that there is an influence between human resources and time wait in completing the administration of the patient's discharge BPJS inpatient at Mitra Medika Hospital Tanjung Mulia Year 2022. According to the assumptions of human resource researchers is a factor that affects time wait in completing administration repatriation of inpatient BPJS participant patients. This is because the respondent or inpatient nurse not optimal in discharging patients such as nurses not explaining how long patients have to wait for preparations for the discharge process. There is no routine program to improve the skills of nurses in completing patient discharge administration so that nurses in the process of returning patients are in accordance with existing habits and depend heavily on the skills of each nurse. Patients who go home at the same time are also considered to have the most influence on the speed of patient discharge where inpatient nurses have concurrent assignments or repatriate more than one patient so they cannot be done immediately.

The influence of human resources on waiting time is one factor that very important in the hospital (Dong et al., 2019; Duarte-Rojo et al., 2018) were human resources who act as individuals who work to improve efficiency and effectiveness as well as the main key determine the length of the process of waiting time for the return of inpatient BPJS patients (Mahmud, 2018; Wau & Purba, 2019). Quality human resources will also produce good quality services. Based on the results of this study, it can be concluded that if human resources or inpatient nurses do not work optimally in accordance with the standards and patient discharge flow, it will greatly affect the waiting time in completing the administration of inpatient BPJS patient discharge.

### **The Influence of Administration on Waiting Time in Completing the Administration of Patient Discharge of BPJS Inpatient Participants**

From the results of the Chi-square test there is an influence significant difference between administrative variables and waiting time for patient discharge with a p-value  $0.005 < 0.05$ . This shows that there is the influence between administration and waiting time in completing the administration of hospitalized BPJS participant patient discharge at Mitra Medika Tanjung Mulia Hospital in 2022. According to the researcher's assumption, administration is a factor that influences waiting time in completing the administration of returns inpatient BPJS participant patients. This is because the nurse also waits for the patient's medication to go home from the pharmacy installation not on time and the drug prescriptions that the patient takes home are also not always complete because the drug stock in the pharmacy is empty. If the patient's discharge medication is incomplete, then patient must wait and take re-control (Zhou, 2018). As well as the absence of a standard waiting time in completing patient discharge administration so that nurses returning patients do not comply with the minimum service standards at the hospital with a patient discharge waiting time of no more than 2 hours. However, at the RSU. Mitra Medika Tanjung Mulia during the waiting time for patient discharge there were patients who waited  $< 2$  hours and there were patients who waited  $> 2$  hours so there was no fixed waiting time when the patient was discharged. So, patients also often complain when the discharge process is very long.

The effect of administration on waiting time is a cooperative activity between a group of people based on the division of tasks to complete administration (Improta et al., 2018; Oueida et al., 2018; Duvald, 2019) according to what has been determined to achieve the goal, namely to shorten the waiting time for patient discharge so that patients do not wait too long in the discharge process. Based on the results of this study, it can be concluded that if there is no cooperation

between related units, especially between pharmaceutical installations in preparing finished drug prescriptions to be taken home by patients, it will greatly affect the waiting time in completing the administration of inpatient BPJS participant patients.

### **The Influence of Facilities and Infrastructure on Waiting Time in Completing the Administration of Discharge Patients for BPJS Inpatient**

From the results of the Chi-square test there is a significant influence between the variables of facilities and infrastructure with the waiting time for discharge of patients with  $p\text{-value } 0.007 < 0.05$ . This shows that there is an influence between facilities and infrastructure with time wait in completing administration repatriation of inpatient BPJS participant patients in Mitra Medika Hospital Tanjung Mulia Year 2022. According to the researchers' assumptions, facilities and infrastructure are factors that influence the waiting time in completing the administration of inpatient BPJS participant patient discharge. This is because the hospital information system used, namely the E-med system, does not work properly or often errors and the loading process takes a long time, namely in the process of administering drugs or requesting drugs for supplies prepared at the pharmaceutical installation which will be brought home by patients with the E-system med still working slowly. The Hospital information system used also plays an important role in the patient discharge process. Facilities at the nurse station such as a telephone to contact the relevant unit during the preparation process for completing the administration of patient discharge are still not sufficient and the computer is not sufficient, which hinders the process of completing the administrative discharge of patients participating in BPJS for inpatient care at Mitra Medika Tanjung Mulia Hospital.

The effect of facilities and infrastructure on waiting time is anything that can be used as a tool or media as well as the main support provided by the Hospital to achieve the goals (Karlton et al., 2020; Bauer et al., 2019; Ferreira & Marques, 2021) and objectives in carrying out activities or activities that really help smooth the process of shortening the waiting time for patient discharge (Tlapa et al., 2020; Baim-Lance et al., 2019). Facilities or complete infrastructure at the nurse station such as IT systems, computers and telephones which are very important in the patient discharge process which will help the performance of inpatient nurses, namely used to administer drugs or request drugs for supplies prepared at the pharmaceutical installation and to communicate with units regarding patient discharge. Based on the results of this study, it can be concluded that if the facilities and infrastructure are insufficient, it will greatly affect the waiting time in completing the administration of inpatient BPJS participant patients.

### **CONCLUSION**

The conclusions from the results of this study are as follows: There is an influence of human resources on waiting time in completing the administration of inpatient BPJS participant patients at Mitra Medika Tanjung Mulia Hospital in 2022 with a value of  $p = 0.009 (<0.05)$ . There is an administrative effect on the waiting time in completing the administration of inpatient BPJS participant patients at Mitra Medika Tanjung Mulia Hospital in 2022 with a value of  $p = 0.005 (<0.05)$ . There is an influence of facilities and infrastructure on the waiting time in completing the administration of inpatient BPJS participant patients at Mitra Medika Tanjung Mulia Hospital in 2022 with a value of  $p = 0.007 (<0.05)$ . The conclusions from the results of this study are as follows Expected to Partner Hospitals Medika Tanjung Mulia for more: Increase the professionalism of human resources or inpatient nurses such as nurses who must be responsible for their duties, increase cooperation between units regarding patient discharge, provide routine programs to improve their skills and abilities in completing patient discharge administration. Increase administrative efficiency at home hospitals are getting better, such as preparing files for patient discharge, speeding up the process of preparing prescriptions to be taken home by patients, and providing standard waiting times for patient discharge according to the hospital's minimum service standards. Improving the physical condition and availability of infrastructure facilities to be better, namely by adding facilities at the nurse station such as telephones and computers that assist nurses in dispensing medication to patients, as well as improving the quality of hospital information systems so they can work properly.

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