

## **The Effect Of The Number Of Patients On Health Insurance Receivable Income At Rs Azra Bogor During The Covid-19 Pandemic Period 2019 To 2021**

**Revita Rivani<sup>1</sup>, Immas Nurhayati<sup>2</sup>, Diah Yudhawati<sup>3</sup>**

<sup>1,2,3</sup> Universitas Ibn Khaldun Bogor, Indonesia

\*Corresponding author: [revitarevani@gmail.com](mailto:revitarevani@gmail.com)

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### **Abstract**

The expansion of the healthcare business was greatly aided by hospitals, which played an important role in the process. Especially considering the current situation, namely the outbreak caused by the Covid-19 virus. One of the many problems facing hospitals in supporting the expansion of health services is inadequate financial resources. Receiving receivables is one of the things that must be done to ensure the availability of sufficient and sustainable money. The purpose of this study was to see how much influence the provision of outpatient and inpatient health insurance services on the amount of money carried by BNI Life insurance receivables at Azra Hospital Bogor. This research method uses descriptive qualitative analysis on primary data using SPSS25. The results of the research on receivables income have a significant effect on the scenario. The correlation coefficient between outpatient and inpatient services on BNI Life insurance receivables income is 0.646 in a positive direction, where higher receivables will be followed by increased income

Keywords : Hospital, Health Services, Accounts Receivable, Income

### **Introduction**

Coronavirus cannot be considered just an outbreak given the current pandemic situation. Ordinary people may believe it's just a common cold based on the symptoms, but medical research shows that this virus is quite dangerous. SARS-CoV2 causes Covid- 19, a respiratory disease, infectious disease, and viral infectious disease that affects the respiratory system. Fever, cough, runny nose, sore throat, or pneumonia are some of the clinical symptoms of Covid-19, which is often referred to as the Corona virus. Of course, this is a source of concern for the well-being and health of the general public. them. In this case, hospitals serve as the main treatment center for medical services. The hospital acts as a central hub to coordinate all the activities necessary to provide each patient with the medical care they need. A hospital is a kind of service company that is run jointly by the government and the private sector (foundation). The main goal of the hospital is to provide high-quality care to the local population, which is aided by the use of a well-functioning hospital administration system. As RS Azra Bogor has been treating patients with the PARIPURNA designation since 2017, the facility gives high marks for the services it provides. Although RS Azra's tagline is "Fast, Friendly, and Quality", the hospital under these conditions, according to Director General Prof H Abdul Khadir Ph D Sp THT KL MARS, manages to provide fast, precise, and consistent services. maintaining the level of service Since the profit generated from the financial statements differs from one period to the next, measuring the performance of hospital management in a hospital will be very difficult because the profit in a hospital cannot be targeted for measurement every period.

It is difficult to compare profits from one period to the next because of this. It will be difficult to set operating profit goals for a certain period of time because hospitals will not be able to estimate how many patients will submit themselves to them for treatment or other care at the hospital. Especially in a pandemic era like this, people are worried about coming to the hospital, even to buy basic necessities they are worried, let alone to seek treatment at the hospital, which incidentally the hospital is a gathering place for people infected with the covid-19 virus, of course this is a big challenge for the hospital how to provide comfort and trust to change their worries. Azra Hospital serves patients from various circles ranging from the lower middle class to the upper middle class, although the majority of patients who visit this hospital are patients with upper middle economic levels, because there is one factor that affects the hat, namely in terms of financing. in the payment methods carried out at the Azra Bogor Hospital there are several ways including using general services both cash and cashless (debitcard / creditcard), BPJS services, namely dependents from government agencies, and

insurance services both companies and individuals. Azra Bogor Hospital itself has collaborated with several third parties or insurance that provides coverage for insured patients, and one of them is health insurance from BNI Life. From a global patient flow, all are the same, only because of data limitations by hospital policy transparency, researchers only take one insurance guarantee sample, namely BNI Life. The revenue component of the hospital can be measured from several payment methods including: revenue from general patients, from BPJS patients and from patients with insurance and company guarantees both from outpatient and inpatient treatment. In the flow of services in the hospital itself, according to Jan Carlzon (1987), taking from marketing science, the flow of hospital processes is divided into 3 parts: a. Pre-admissions service. b. Admission service. c. Post Hospital Services Indicator Definition

## Methodology

This research uses qualitative research methodology and descriptive approach. This research is based on the philosophy of post-positivism, which is used for natural object conditions, according to Sugiyono (2010: 6). The main source of data collection is the researcher, and this can be done by objective or snowball method. In Sugiyoni's definition (2016:53), descriptive methods are statistics used to evaluate data by describing or summarizing the data obtained as it is without the aim of drawing generally accepted or general conclusions. In contrast, inferential statistics are used to draw conclusions from a set of data.

Due to the more lively nature of this technique, it may better describe the plausible relationship between the researcher and the respondent. Furthermore, qualitative analysis is influenced by this approach and descriptive methods. Various categories and data are created using primary and secondary procedures.

First. Researchers obtained primary data directly from the object of research by conducting interviews with the property owner concerned and directly collecting data about the *regol* in the field.

Second. Secondary data obtained indirectly from the research item and secondary data, which is data obtained from sources other than the intended audience of the research. Researchers have access to information that has been collected by others using several means, both commercial and non-commercial. Secondary data from relevant authorities may include published records, government legislation and policy documents.

In collecting data obtained from several techniques including:

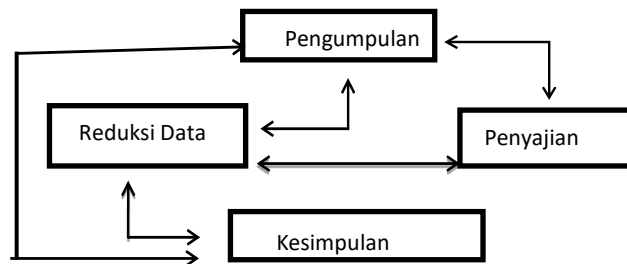
First. Interviews: Researchers conducted interviews directly with employees and staff of related units related to the collection of receivables such as outpatient insurance claims at polyclinics, inpatient insurance claims and others related to the collection of receivables. The data obtained is the outpatient and inpatient BNI Life insurance patient billing data obtained from the interview process and research observations at the Azra Bogor Hospital location.

Second. Observation technique: In accordance with empirical objectives, observations were made of the selection, recording and archiving of a series of flows and patient data using BNI Life insurance coverage at Azra Bogor Hospital. Researchers will see the process of implementing communication problems in each relevant unit related to the receipt of insurance claim files for the purposes of this study.

Third. Documentation: Documents are records of previous events. Text, images or important parts of a person's work can be considered documents. In this case, the researcher used a research camera to record a video of the flow of outpatient and inpatient BNI Life insurance admissions at Azra Hospital to the billing department. Researchers used documentation as an additional strategy. This documentation is provided by the registration department where the initial stage of the patient enters with a series of stages that must be done then when closing the patient's data in insurance.

at the cashier's office, check each file received by the patient during the action in the hospital which is then verified by the billing department to make billing by the finance department.

The data analysis approach used in this investigation is based on the ideas offered by Miles and Huberman. The actions included in qualitative data analysis, according to Miles and Huberman's findings, are interactive and occur continuously throughout each phase of the research. This was done to ensure that all components of the data analysis were completed.



**Fig1.** Model analysis components

After the researcher obtains data in the form of numbers as a result of the data collection process, the data is processed and analyzed to extract the scientific information hidden under the numbers, according to Nanang (2010: 19). The information consists of numerical data and nominal data, and reveals some trends from one year to the next, which are presented in the table below:

Bulan	2019			2020			2021		
	RJ	RI	Pendapatan Piutang Klaim Asuransi BNI Life	RJ	RI	Pendapatan Piutang Klaim Asuransi BNI Life	RJ	RI	Pendapatan Piutang Klaim Asuransi BNI Life
januari	311	30	Rp.200.900.800	180	25	Rp.112.000.900	189	25	Rp.133.456.700
februari	234	28	Rp.189.090.080	111	15	Rp.115.600.900	200	22	Rp.138.000.900
maret	322	40	Rp.211.900.800	210	22	Rp.113.800.900	254	28	Rp.112.345.566
april	343	23	Rp.299.800.700	109	18	Rp.100.900.800	200	21	Rp.102.111.999
mei	178	45	Rp.200.878.600	156	24	Rp.112.300.900	255	24	Rp.116.900.800
juni	108	33	Rp.200.900.789	125	28	Rp.101.200.800	185	28	Rp.112.800.900
juli	400	22	Rp.200.500.600	114	17	Rp.104.566.700	199	27	Rp.111.900.800
agustus	299	20	Rp.190.800.655	123	23	Rp.116.900.900	202	29	Rp.101.200.300
september	234	28	Rp.164.993.762	152	21	Rp.111.800.900	180	21	Rp.102.300.400
oktober	487	34	Rp.267.800.900	126	24	Rp.110.598.502	212	24	Rp.114.233.400
november	489	37	Rp.230.900.800	116	22	Rp.115.777.900	240	29	Rp.157.800.900
desember	288	28	Rp.233.400.900	142	21	Rp.100.090.998	251	24	Rp.121.900.800
Total	3.698	348	Rp.4.600.877.386	1.664	260	Rp.2.435.550.100	2.365	297	Rp.2.759.520.465

From the table above, there was a significant decrease in 2020, where the number of visits decreased compared to the previous year and there was an increase again in 2021 and this affected the income receivable on BNI life insurance claim bills. Data processing uses traditional assumption test methods which include normality, heteroscedasticity, multicollinearity, and correlation tests, as well as hypothesis testing with partial, simultaneous, and determination tests, the results of which show whether the data is normally distributed or not. . Researchers use multiple regression analysis, according to Sugiyono (2010: 275), to predict how the scenario (lower value) of the dependent variable (criteria). When a researcher manipulates two or more independent variables as predictors, this happens (increases the value). When there are more than two variables that can be manipulated separately, multiple regression analysis is required.

## Result

In the procedure of admitting patients to receiving payments, Azra Bogor Hospital uses a method with a computerized system made by the SIRS (Hospital Information System) section. The use of this system is to simplify and speed up the cash cycle process. Azra Bogor Hospital issued various policies involving insurance and company receivables to achieve effective receivables administration. Bills must be provided to the insurance company no later than 30 days after the patient has completed treatment, and payment for health services must be made by the insurance company no later than 30 working days from receipt by the insurance company. As a result, sixty working days must elapse from the time the patient is discharged from the hospital until the bill is paid in accordance with the regulations, but the maximum number of days that must pass for outpatients is thirty. In terms of cashier/tariffing, finance, and accounting operations in the process of admitting patients for receivables, there is a clear and visible division of labor.

In terms of patient registration, Rowland (1984) and Mehta (1977) came to the following conclusions: (pre-admission and admission stages, treatment stage, account setting stage, billing stage and account closing stage).

The following is the flow of patient services using insurance coverage at the hospital:



Fig 2 Service flow of insurance-covered atss patients

In the sample normality test Kolmogorov-Smirnov test the significant level is  $> 0.05$ . The normality test is processed with the help of the IBM SPSS Statistic 25.00 program for windows. And the results can be seen in the table below:

**Normality Test**

Table 1 Normality Test  
One sample Kolmogorov Smirnov test

N		36	
Normal Parameters <sup>a,b</sup>	Mean	.0000000	
	Std. Deviation	1237.2662	
Most Extreme Differences	Absolute	.170	
	Positive	.170	
	Negative	-.071	
Test Statistic		.170	
Asymp. Sig. (2-tailed) <sup>c</sup>		.010	
Monte Carlo Sig. (2-tailed) <sup>d</sup>	Sig.	.009	
	99% Confidence Interval	Lower Bound	.007
		Upper Bound	.012

From table 1 above, it can be interpreted using the Komogrof-Smirnov test, obtained a significant value on variables X1 and X2, namely outpatient and inpatient data on BNI Life insurance receivable bills (Y) of 0.10 seen in (Asymp sig). Because the significance value of the Kolmogorov-Smirnov test on both variables is more than 0.05, it can be concluded that the data of the two variables is normally distributed.

**Multicollinearity Test**

The VIF value of the X1 outpatient variable and the X2 inpatient variable in Azra Bogor Hospital patients is 1.157 10, and the Tolerance Value is 0.864  $> 0.1$ , which indicates that the data does not appear multicollinearity or multicollinearity is free, according to table 2 (objective). The output data is listed in the table below:

Table 2  
Multicollinearity Test Results

Coefision				t	S i g -	Collinearity Statistics	
Mo del		B	Std. Error			Tolera nce	VIF
1	(Constan t)	6151. 080	2013.24 9	3.055	.004		
	Jumlah pasien Rawat Jalan	293.6 80	39.981	7.346	.001	.864	1.157
	Jumlah pasien Rawat Inap	- 158.2 92	411.292	.385	.703	.864	1.157

### Heteroscedasticity Test

Figure 3  
Scatterplot Image of Heteroscedasticity Test

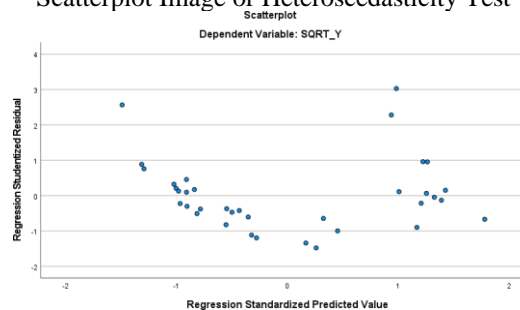


Fig 3. Scatterplot Image of Heteroscedasticity Test

The findings of the investigation, shown in Figure 3 of the Scatterplot, indicate that the points spread out haphazardly and do not follow any particular pattern. This indicates that none of the variables in the model exhibit symptoms of heteroscedasticity.

### Autocorrelation Test

Table 3 Autocorrelation Test Results  
Model Summary

Model	R	R Square	Adjusted RSquare	Std. Error of the Estimate	Durbin- Watson
1	.804 <sup>a</sup>	.646	.624	1274.20770	1.699

The results of testing the assumption of autocorrelation with the Durbin Watson method in Table 3 obtained a Durbin Watson value of 1.699 which indicates that the regression model used does not have autocorrelation because the Durbin Watson value is in region B, namely between the value of  $dU < 1$  and the value of  $4 - dU > 3$  so that the assumption of colleration is fulfilled.

**Multiple Linear regression test**

Table 4 Coefitenti

Model	Unstandardized		Standardized
	Coefficients B	Std. Error	Coefficients Beta
1 (Constant)	6151.080	2013.249	
Jumlah Rawat Jalan	293.680	39.981	.819
Jumlah Rawat Inap	-158.292	411.292	.043

The coefficient values in the multiple linear regression equation are displayed in the regression coefficient table. Table 4, which can be seen above, has these findings. For the equation, the numbers in column B of the spreadsheet are used (coefficients). If you apply the standard equation for multiple regression, you can get the following results:

$$Y = 6151.1 + 293.7 X1 - 158.3 X2 + 0.05$$

The X1 outpatient and X2 inpatient variables have a linear effect on BNI Life's receivable income Y, according to the multiple linear regression research results. This conclusion is drawn from the research findings. Based on the table given earlier, the interpretation of the effect shows the multiple regression equation as follows:

$$\alpha = 6151,1$$

Shows a constant or condition of 6151.1 where when the Receivable Income variable from BNI Life insurance (Y) has not been influenced by the Number of Outpatients (X1) and the number of inpatients (X2.). If the Independent Variable does not exist, the BNI Life insurance receivable income variable does not change.

$$B1 = 293,7$$

Indicates that the variable number of outpatients (X1) has a positive influence on BNI Life insurance receivable income (Y) which means that every 1 unit increase in the variable number of outpatients (X1) will affect the insurance income of BNI Life by 293.7. assuming that other variables are not examined in this study.

$$B2 = - 158,3$$

Indicates that the variable number of hospitalized patients (X2) has an influence with a negative direction on the receivable income from BNI Life insurance which means that every 1 unit increase in the variable number of hospitalized patients (X2) will affect the BNI Life insurance receivable bill by -158.3 assuming that other variables are not examined in this study.



## Partial Test (T)

Table 5 T test

Model		Unstandardized		Standardized		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	6151.080	2013.249			3.055	.004
	Jumlah Rawat Jalan	293.680	39.981	.819		7.346	.001
	Jumlah Rawat Inap	-158.292	411.292	.043		.385	.703

First. T test on Outpatient service

The t test on outpatient indicator X1 on BNI life insurance receivable income X2 obtained tcount of 7.346 with a significance t of 0.0001 Because t count > t table (7.346 > 1.98) or t significance is less than 0.05 (0.0001 < 0.005), then partially the outpatient service indicator on BNI Life receivable income at Azra Bogor Hospital has a significant effect.

Second. Test on Inpatient services

The t test on the X2 inpatient service indicator obtained t count of 0, 386 with a significance of 0.703. because t count is smaller than t table (0.386 < 1.98) or the significance is greater than 0.005 (0.703 > 0.005), then partially the indicator of inpatient services on BNI Life insurance receivable income at Azra Bogor Hospital has no significant effect.

## Similitude Test (F)

Table 6 F Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9775.0583	2	48875291.822	30.103	.001 b
	Residual	53.5789	33	1623605.252		
	Total	1513.2955	35			

From the results of the output table 17 above, it is known that the residual df is 33 and it can be seen that the Table data table in appendix 7 determines df = 3.28, which is interpreted as a significance result of 0.0001 < 0.005 and obtained a fcount value of 30.103 > 3.28. Then from the above analysis it can be concluded that together the independent variables BNI life insurance receivable income consisting of independent variables of the number of BNI Life insurance outpatient service patients X1 and the number of inpatient service patients X2 have a significant effect.

Detremination test

Table 7 Determination test results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
1	.804 <sup>a</sup>	.646	.624	1274.20770	1.699

R square = 0.804

The coefficient of determination (R Square) is 0.646, which is equivalent to 64.6 percent, according to the data in table 18. This means that accounts receivable turnover has a 64.6 percent effect on revenue, the rest is due to the influence of unexplored factors.

### Conclusion

From the qualitative data with a descriptive approach it can be concluded: 1) It is good, as evidenced by the organizational structure of Azra Hospital's insurance receivables collection procedures which clearly defines the lines of authority and responsibility of each unit, as well as based on research conducted on Azra Hospital's inpatient and outpatient receivables collection systems and procedures. Documents are used in multiple copies. Due to the existence of records, it is now feasible to ensure that each transaction is appropriately recorded and supported by paper that has been verified and approved by the appropriate authority. The system of inpatient and outpatient receivables collection procedures at Rs Azra runs in accordance with the current system. The visit procedure (On the Spot) is carried out properly so that if insurance arrears occur that exceed the due date in accordance with the outstanding data recorded, an onspot is immediately carried out to smooth the payment process. 2) From the methods that have been tested, data can be generated that is distributed with normal. When viewed from the data on the number of outpatients, the receivable income generated from the number of outpatients has a significant effect in a positive direction. The majority of patients who come for treatment use BNI life insurance with outpatient services. And this has an effect on income. 3) The test results on the inpatient variable show a negative direction on BNI Life insurance receivable income because it is influenced by the number of patients. During a pandemic, the majority of patients choose to self-isolate, this affects the number of hospitalized patients on insurance receivable income. In this case, it does not mean that BNI life insurance receivables from hospitalization do not contribute to general income at azra bogor hospital, because there are many insurances that have collaborated with azra bogor hospital which are not examined in this study.

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