INFLUENCE OF ACCURACY OF MAINTENANCE DIAGNOSIS CODES PATHWAYS AGAINST PENDING BPJS CLAIMS AT EDELWEISS HOSPITAL

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Abstract: Pending claims can significantly affect hospitals both financially and operationally. One contributing factor to pending claims is errors in road care diagnostic codes. This study aims to assess how the accuracy of these diagnostic codes impacts pending claims at Edelweiss Hospital. Using a quantitative descriptive approach, the researchers analyzed 24 pending claims out of 6,905 file claims collected from January to April 2024. The analysis revealed that diagnostic code accuracy influenced 80,3% of pending claims, while the remaining 19,7% were affected by other factors such as medical support, long return processes, and file completeness. The study suggests implementing an integrated electronic coding system with electronic medical records (RME) to enhance efficiency and reduce coding errors. Additionally, fostering open communication, coordination, and conducting regular evaluations are recommended to minimize claim delays each month.

Keywords: Accuracy, Diagnosis Code, Pending Claims

Introduction

In Minister of Health Regulation No. 54 of 2018 in (Heltiani et al., 2023) it is stated that the definition of a hospital is an advanced health service facility that is responsible for supporting the implementation of the JKN program, and is managed by BPJS. To improve the quality of services, hospitals need to be supported by adequate service systems, information technology and communications that function optimally (Setiatin & Susanto, 2021). In health financing with prospective payment methods, there is a casemix payment method, which is a combination of prospective payment methods where the payment amount is determined before health services are provided (Heltiani et al., 2023).The fundamental objective of multicultural education is to help students consider their diversity of ethnicity and race as an educational alternative and develop their knowledge, skills and behaviors necessary for them to perform various educational activities, and to restructure schools in this direction (Ajzen, 1985). Multicultural education supports students to show tolerance towards those with backgrounds different from theirs on the one hand, and focusing on the protection of each student's cultural heritage on the other (Barnea, 1998).

One important component in the outpatient cost claim process at BPJS Health is the patient diagnosis code. This code is used to determine the patient's disease type and the corresponding claim rate. Therefore, ICD-10 coding is carried out correctly, and in accordance with the diagnosis code in ICD10. Errors in this process can cause harm to patients and hospitals. (Puspitasari, 2017). This includes influencing the number or number of pending claims at the hospital itself.

The health service program in Indonesia is known as National Health Insurance, which is organized by the government. This program aims to provide health protection for participants, so that they can obtain health care and protection services that meet their basic needs. JKN includes individuals who pay contributions independently or contributions paid by the government (Syah & Setiatin, 2022). Claiming National Health Insurance costs is an important reason because diagnosis coding must be determined accurately, because medical records are very important files and serve as a reference for various purposes, diagnosis coding must be done completely and precisely.

Each health facility must fill in data into the INA-CBG application to obtain Indonesian Health Insurance financing. This application contains disease diagnosis codes for patients who participate in the Indonesian Health Insurance. Inaccuracy in diagnosis codes will hinder insurance financing. Rejection of JKN financing could result in a decrease in hospital income, which has the potential to disrupt the smooth operation of the hospital (Amanda & Sonia, 2023).

In Minister of Health Regulation No. 24 of 2022, medical records are the results of examinations, records of patient identity, and procedures carried out on patients. This file must be managed properly in accordance with the Minister of Health's regulations. With good management, patient rights are protected and health services can be provided better. Medical records can be defined as records, both in written and recorded form, which contain information about the patient's identity, anamnesis history, results of physical and laboratory examinations, diagnosis, as well as all medical procedures and treatment received by the patient, both in outpatient and inpatient services. hospitalization, or emergency care (Nuraulia et al., 2021).

Outpatient services are a type of health service provided in health facilities during operational hours, where patients do not need to stay overnight. This service covers treatments of less than 24 hours duration, including diagnostic and therapeutic procedures. This service is also often the first step for patients in deciding whether to continue using the health service (Latipah et al., 2021).

The ICD10 Disease Classification Theory is a disease classification used by various health organizations, including the World Health Organization (WHO). This system helps in the collection of health statistical data, disease reporting, and epidemiological research. In BPJS Health, "pending claims" refer to claims submitted by health facilities (health facilities) to BPJS Health but which have not received payment approval. This can cause health facility payments to be delayed and disrupt the health services received by BPJS Health participants.

The correct diagnosis code will help BPJS Health analyze data, carry out supervision, and process claims quickly and accurately and reduce the number of pending claims. However, in reality, there are still many cases of BPJS Health claims pending, for various reasons, one of which is the inaccuracy of the diagnosis code. Inaccuracy of diagnosis codes can be caused by various reasons, including errors in data input and incomplete files.

From the description above, the researchers took the title "The Influence of Outpatient Diagnosis Code Accuracy on Pending BPJS Claims at Edelweis Hospital Bandung".

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Methodology

Types of research

Sugiyono (2019) in (Ali et al., 2022), quantitative is based on the philosophy of positivism and is considered scientific because it meets objective, measurable, rational and systematic criteria. This research uses a quantitative descriptive approach.

Research Subjects

Sugiyono (2022:130) says that in (et al., 2023) the population consists of subjects whose number and characteristics are determined by the researcher for study purposes and drawing conclusions. The population in this study was 24 pending claim files from 6,905 outpatient medical claim files from January to April 2024. The research was conducted at Edelweis Hospital Bandung.

Method of collecting data

According to Sugiyono (2021: 199) in (Ridho, 2023), a questionnaire is a series of written statements that are presented to respondents to fill in. Researchers gave questionnaires to hospital officers, especially those directly related to claims, such as casemix officers and medical records officers.

Results & Discussion

Table 1 Number of Claim Files and Number of Pending Files Outpatient at Edelweiss Hospital in Months January-April 2024

No	Bulan	Jumlah Berkas Klaim	Jumlah Berkas Pending
1	Januari	1666	4
2	Februari	1606	3
3	Maret	1759	6
4	April	1874	11
Jumlah		6905	24

Source: Processed by the Author (2024)

From the data shown in the table, it can be concluded that during January to April, there were 6905 outpatient files for which claims would be submitted, while there were 24 files that were still in the process of being resolved (pending).

The percentage of JKN Outpatient Claim files that are pending can be calculated using the formula:

P = n/N x 100%
P = 24/6.905 x 100%
P = 0,034 x 100%
P = 0,34 %

Information:
P = Percentage
n – Number of pending files
N = Number of samples studied

So it can be concluded that the files that have pending claims are 0.34%, while the files that

have passed the claim are 99.66%.

Table 2 Normality Test

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Ketepatan Kode Diagnosis	.124	35	.189	.949	35	.104
Pending Klaim BPJS	.111	35	.200*	.942	35	.063

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: SPSS Processed by the Author (2024)

Sig value. The accuracy of the Diagnosis Code is 0.104 and the Sig value. Pending BPJS Claims is 0.063. Because the Sig value. > 0.05, then this result has a normal distribution.

Table 3 Linear Regression Testing

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	257.681	1	257.681	134.845	.000[b]
	Residual	63.061	33	1.911		
	Total	320.743	34			

a. Dependent Variable: Pending Klaim BPJS

b. Predictors: (Constant), Ketepatan Kode Diagnosis

Source: SPSS Processed by the Author (2024)

Table 4 Linear Regression Test Results

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	3.204	1.509		2.124	.041
Ketepatan Diagnosis	.851	.073	.896	11.612	.000

a. Dependent Variable: Pending Klaim BPJS

Source: SPSS Processed by the Author (2024)

From the table above it is known that the Sig value. is <0.05, and the T-count is 11.612

from the Diagnostic Code Accuracy variable to the Pending BPJS Claim variable and the t-table is 2.03693. If the T-count is greater than the T-table, this is the influence of the Accuracy of the Diagnosis Code on Pending BPJS Claims.

Testing the Coefficient of Determination

Table 5 Testing the Coefficient of Determination

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.896[a]	.803	.797	1.382

a. Predictors: (Constant), Ketepatan Kode Diagnosis

b. Dependent Variable: Pending Klaim BPJS

Source: SPSS Processed by the Author (2024)

Interpretation :

Testing the coefficient of determination shows that there is an influence of Diagnosis Code Accuracy on Pending BPJS Claims of 80.3%.

Validity Testing

Table 6 Testing the Validity of Diagnostic Code Accuracy

NO	R Hitung	R Tabel	Hasil
1	0,820	0,2826	Valid
2	0,838	0,2826	Valid
3	0,811	0,2826	Valid
4	0,655	0,2826	Valid
5	0,492	0,2826	Valid

Source: SPSS Processed by the Author (2024)

Table 7 Testing the Validity of BPJS Pending Claim

NO	R Hitung	R Tabel	Hasil
1	0,569	0,2826	Valid
2	0,710	0,2826	Valid
3	0,737	0,2826	Valid
4	0,561	0,2826	Valid
5	0,822	0,2826	Valid
6	0,844	0,2826	Valid
7	0,802	0,2826	Valid

Source: SPSS Processed by the Author (2024)

Interpretation:

From the table above, the Rtable used is 0.2826. If the comparison results show that Rcount is greater than R table for each statement, that research instrument has good validity.

Reliability Testing

Table 8 Reliability Test of Diagnostic Code Accuracy

Reliability Statistics

Cronbach's Alpha	N of Items
.785	5

Source: SPSS Processed by the Author (2024)

Interpretation:

Reliability testing provides that if the alpha value exceeds 0.6 then the data is considered reliable. This test showed a result of 0.785, which means the data is considered reliable.

Table 9 Testing the Reliability of Pending BPJS Claims

Reliability Statistics

Cronbach's Alpha	N of Items
.849	7

Source: SPSS Processed by the Author (2024)

Interpretation:

Reliability testing provides that if the alpha value exceeds 0.6 then the data is considered reliable. This test showed a result of 0.849, which means the data is considered reliable.

The influence of the accuracy of outpatient diagnosis codes on pending BPJS claims at Edelweiss Hospital Bandung can be seen from various aspects, both from the hospital management side and from the interests of BPJS Health. The accuracy of diagnosis codes is very important in the BPJS claims process, because errors or inaccuracies in coding can cause claims to be pending or rejected. Hospitals must ensure that the diagnosis codes given by medical personnel comply with the standards set by BPJS, so that claims can be processed quickly and accurately. Inaccuracy in coding is often caused by a lack of understanding or accuracy in implementing the diagnosis coding system, so regular training and evaluation for medical personnel and coders in hospitals is very necessary to minimize this problem.

The impact of pending BPJS claims on Edelweiss Hospital Bandung is also quite significant, especially from a financial perspective. When claims are pending, hospitals have to wait longer to get payment from BPJS, which can disrupt cash flow and hospital operations. Additionally, this can also affect patient satisfaction levels, as they may have to face more complicated and time-consuming administrative processes. Therefore, efforts to improve the accuracy of diagnosis codes not only impact claim efficiency, but also contribute to overall service quality. Optimization in the coding and claims process can be one of the key strategies in improving hospital performance and ensuring a smooth cooperative relationship with BPJS Health.

CONCLUSION

From the research results above, overall, this study found that 80.3% of diagnosis codes greatly influenced pending claims, while the other 19.7% were influenced by other factors,

because the author only examined the accuracy of the diagnosis code. Meanwhile, pending claims are not all influenced by diagnosis codes, but by several factors such as medical support, documents that take a long time to return, completeness of files, and others. These findings indicate that the accuracy of outpatient diagnosis codes plays an important role in the smooth claims process at Edelweiss Hospital. Suggestions that can be given by researchers are that the implementation of an electronic coding system that is integrated with electronic medical records (RME) is highly recommended to increase efficiency and minimize errors in the coding process and must be user-friendly and easy to use by medical personnel, and always updated with the latest version. A culture of open and effective communication and coordination needs to be built between doctors, other medical personnel and coding officers. Hospitals and casemix teams are advised to carry out regular evaluations to reduce the possibility of claim delays every month.

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