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MORALITY BEFORE KNOWLEDGE

Factors contributing to delayed health insurance outpatient claims and administrative optimization strategies

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ABSTRACT
Background: Pending claims in BPJS Kesehatan (National Health Insurance) systems can cause significant financial and administrative inefficiencies. At Universitas Indonesia Hospital, a notable number of outpatient health insurance claims remain unresolved, affecting both hospital revenue and claim processing performance. **Methods:** This study uses a cross-sectional observational approach, collecting data at one specific point in time to analyze pending outpatient health insurance claim files at Universitas Indonesia Hospital in 2023. Claim submission and verification procedures were examined, from medical record processing to claim file transfer to the insurer. **Findings:** Out of 102,530 outpatient claims submitted in 2023, 1,557 (1.5%) were pending, amounting to a total of IDR 1.84 billion. The main causes were incomplete files and medical resumes (47.1%), coding discrepancies and incorrect medical actions (38.1%), and indications of repeated actions (14.8%). **Conclusion:** The high rate of pending claims can be mitigated through targeted strategies such as increasing human resources in the support services unit, routine hardware maintenance, ongoing training for coders on the latest coding agreements, and better communication with doctors to ensure clarity in diagnosis documentation. **Novelty/Originality of this article:** This study offers an in-depth, institution-specific analysis of outpatient claim delays in a major Indonesian hospital, identifying root causes and practical solutions. It contributes to optimizing hospital administration and health insurance efficiency by addressing operational gaps often overlooked in broader policy discussions.

KEYWORDS: pending claim; health insurance; hospital administration; BPJS.

1. Introduction

Starting January 1, 2014, BPJS Kesehatan, formerly known as PT Askes (Persero), was formed into the Social Security Organizing Agency (BPJS). BPJS Kesehatan was established as a public legal entity with the aim of organizing health insurance programs in accordance with Law Number 24 of 2011 concerning Social Security Organizing Bodies (Ministry of Law and Human Rights, 2011). As a social security organizing body and a public legal entity established to organize health insurance programs, BPJS establishes cooperation or MoU (Memorandum of Understanding) which is a cooperation agreement with many companies in various fields, one of which is a hospital (Dwiyovita et al., 2024). According to Law of the Republic of Indonesia number 44 of 2009 concerning Hospitals, it is stated that what is meant by a hospital is a health service institution that organizes comprehensive individual health services that provide inpatient, outpatient, and emergency services (Ministry of Law and Human Rights, 2009).

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With the existence of a health insurance program with a very large number of participants, it is quite influential on the quality and operations of a hospital or health care provider institution, therefore most hospitals that have made MoUs with BPJS Health in their operations are always stable and even increasing because the National Health Insurance/*Jaminan Kesehatan Nasional* (JKN) program makes it easy for participants to get free health services (Sudiantini et al., 2024). BPJS Kesehatan has provided convenience and benefits in cooperating or establishing an MoU with BPJS Kesehatan, it is possible that there are obstacles that will sufficiently hamper the smooth process of a company, especially hospitals in making BPJS Health claims.

Every month on the 7th, the hospital claims the participant's medical expenses to BPJS Kesehatan. This process is carried out jointly and billed to BPJS Kesehatan. In the framework of the implementation of the National Health Insurance (JKN) organized in hospitals by BPJS Health through the submission of claims, health financing is the most crucial component. Not all submitted files can be claimed, so the status of the claim is declared ineligible or pending claims occur if the hospital has not submitted the claim file. The final result of submitting a claim is the status of an ineligible claim or a pending claim. Pending claims can occur due to several factors and if the number of pending claims occurs frequently and the number is quite large, in this case pending claims will have an impact on increasing the high cost burden for hospitals which will affect the quality of health services provided (Anyaprita et al., 2020).

BPJS Kesehatan, which establishes MoUs with hospitals, if the hospital often experiences pending claims and with a large number of them, it can cause an increase in the high cost burden for the hospital and will affect the quality of health services provided, so in this case it is necessary to evaluate to reduce or minimize the occurrence or existence of pending claims (Sitomorang et al., 2025). Pending claims that are not immediately evaluated will be able to affect the hospital's cash flow and can affect the quality of health services provided and can even cause a loss for hospitals, one of which is the Universitas Indonesia Hospital. Universitas Indonesia Hospital is a type B hospital and is the first State Higher Education Hospital in Indonesia and has collaborated with BPJS Health (Universitas Indonesia Hospital, 2020). Officers who have duties in the BPJS Health section will certainly provide the maximum service possible by following all applicable standards and rules, but in practice, the process of claiming BPJS Health patients for outpatient services at the University of Indonesia Hospital is still found pending claim files. The pending claim certainly causes delays in the claim payment process. In 2023, the number of pending BPJS Health outpatient claim files amounted to 1557 files with a total tariff of IDR 1,841,966,970. This greatly affects cash flow and causes losses for Universitas Indonesia Hospital.

2. Methods

2.1 Place, time, method, and data collection

This research was conducted at the Outpatient National Health Insurance Receivables Management Unit M2 Floor of the Administration Building at the University of Indonesia Hospital, which is located at Depok City, West Java. The author will conduct research and data collection and collection at the University of Indonesia Hospital. This research method uses a cross-sectional approach. This method is a research method through observational means to analyze data collected at one specific point in time across a predetermined sample population because cross-sectional is a study that provides a description of the situation or phenomenon at that time, without involving observations over several periods of time (Notoatmodjo, 2010).

Cross-sectional is a study that provides a description of the situation or phenomenon at that time (Wang & Cheng, 2020), without involving observations in several time periods, so the cross-sectional method in this study will focus on observational data collection by analyzing the number of outpatient BPJS Health file submissions in 2023, the number of outpatient BPJS Health pending claim files in 2023, the number of INA-CBG pending claim

rates in 2023, and data on verification of outpatient pending claim files by BPJS Health. The data has been obtained through the National Health Insurance/*Jaminan Kesehatan Nasional* (JKN) Receivables Management Unit of Universitas Indonesia Hospital. The next phase is qualitative data collection by conducting interviews with outpatient BPJS Health coder officers and outpatient BPJS Health filing verifier officers.

2.2 Data processing

In the first phase, the author processes quantitative data obtained from the JKN Receivables Management Unit, in the form of data on the number of BPJS Health claim file submissions for outpatient services in 2023, the number of BPJS outpatient claim returns in 2023, the number of INA-CBG rates for BPJS Health claim files for outpatient services returned in 2023 and verification data for the return of BPJS Health claim files for outpatient services in 2023. The data processing is carried out in the following way: a) calculating data on the verification list of BPJS Health outpatient claim file returns using Microsoft Excel by eliminating incomplete data; b) based on the total amount of data that has been collected, the author groups the reasons for verification or consensus by BPJS Health by making it a list of groups of factors for returning claim files in the form of incomplete files and medical resumes, indications of repeated actions, coding discrepancies and medical actions, then the author performs calculations on each of these groups so that the most frequent group of reasons is known.

In the second phase, the author conducted interviews with several JKN Receivables Management Unit officers to get answers to the questions asked as material for this research. The questions asked will be grouped based on the 5Ms, namely man, material, method, machine and money according to the results of the group of factors found in the first phase. In the man section, the list of questions asked about the quality and quantity of human resources who carry out the process of submitting BPJS Health claims for outpatient services (Cahyo & Periostiawati, 2022). In the material section, the list of questions asked about office stationery used in the process of submitting BPJS Health claims. In the method section, the list of questions asked is based on the planning of organization, implementation and evaluation related to the process of submitting BPJS Health claims for outpatient services. In the machine section, the list of questions asked about the facilities and infrastructure both hardware and software used for the process of submitting BPJS Health claims for outpatient services. In the money section, the list of questions asked about the budget used for training and meeting the needs of facilities and infrastructure (Alamsyah & Sadhu, 2025). All questions are in the form of reasons why this happens, how to solve it, and what strategies have been carried out. The answers that have been collected will then be grouped and further analyzed according to the results in the first phase. In-depth interviews in this second phase were conducted with 2 informants, namely one coder and one verifier and filing officer. The characteristics of these informants are shown in Table 1 below.

Table 1. Characteristics of research informants

Informant	Gender	Age	Education	Length of Service	Position
Informant 1	P	39	DIII	3 years	Coder
Informant 2	P	33	S1	3 years	Verifier and Filing

2.3 Data analysis

Data analysis aims to determine the factors causing the pending BPJS Health claim file for outpatient services at the JKN Receivables Management Unit of the Universitas Indonesia Hospital by looking at the BPJS Health pending claim data and knowing the reasons that trigger the BPJS Health pending claim. Quantitative and qualitative databases are analyzed separately in this approach. Quantitative results are then used to study the correlation between risk factors by approaching, observing or collecting data all at once over a period of time (Notoatmodjo, 2010). In the first phase, the author conducted

quantitative research, then analyzed it to get a design that would be used further in the second phase, namely qualitative research. The results of qualitative research were then analyzed to produce a final interpretation. This method is observational with univariate analysis. Univariate analysis is used to determine the frequency distribution and percentage of pending variables, univariate analysis will be presented in tabular form with a brief narrative. After a brief narrative the research findings are discussed by comparing the existing problems with the applicable provisions. The purpose of this method is so that the results of data collection can provide more in-depth and new suggestions for quantitative findings (Diah et al., 2024).

3. Results and Discussion

3.1 Flow of submission of national health insurance outpatient claim files

The process of submitting national health insurance claims for outpatient services at the University of Indonesia Hospital begins with the collection of patient files at the polyclinic every day. These files consist of the Participant Eligibility Letter, patient control letter, outpatient summary, supporting examination forms, photocopies of identity cards, and referral letters, if any. Next, the files are received by the verifier and filing officer to be assembled, then submitted to the coder to enter the Participant Eligibility Letter/*Surat Eligibilitas Peserta* (SEP) number, date of service, and name of the Doctor in Charge of Service. The coder then inputs the diagnosis code using the ICD-10 guidelines and the procedure code using the ICD-9 guidelines in accordance with the diagnosis and procedures on the outpatient summary sheet. If the diagnosis or procedure is not listed in the summary, the coder will complete it by referring to the data in the SIMRS. Once all data has been entered, the file is saved, grouped, and the claim status changes to final. However, files that do not include supporting examination results will be separated for re-examination by the verifier and filing officer.

Files with final status are then sent online and the claims are printed. The claim files are re-checked by verifiers and filing officers to ensure the accuracy and completeness of patient data, such as name, identity number, BPJS Kesehatan card number, SEP number, and supporting examination results. If all files have been verified, the documents are scanned and placed in folders according to the patient's Participant Eligibility Letter/*Surat Eligibilitas Peserta* (SEP) number, then the data is extracted in its entirety for system purification to ensure that there are no errors in the medical record number, date, SEP number, or card number. For claim files in soft file form, the data is copied onto a CD which will be sent together with the physical files to BPJS Kesehatan by the officer. The final stage is the preparation of a claim submission report signed by the hospital director, which is then sent to BPJS Kesehatan by the head of the JKN receivables management department.

The procedure for submitting INA-CBG's based claims at Universitas Indonesia Hospital has followed the procedure according to the provisions. The claim submission process includes data entry in the INA-CBG's E-Claim application which is carried out by the coder and then verification of requirements by the BPJS Health verifier. The claim files to be verified for outpatient care include the Participant Eligibility Letter/*Surat Eligibilitas Peserta* (SEP), proof of service that includes the diagnosis and procedure and is signed by the Doctor in Charge of the Patient and in certain cases if there is a claim payment outside INA-CBG, additional supporting evidence is needed such as: therapy protocols and regimens (administration schedules) for special drugs, prescriptions for medical devices and receipts for health aids (glasses, hearing aids, motion aids, etc.). After that, the verifier will verify the administration of the claim by examining the suitability of the claim file between the SEP and the membership data inputted in the INA-CBG's application and matching the suitability, completeness and validity of the claim file with the required files (BPJS Kesehatan, 2014).

3.2 Number of submission files, pending claim files, and number of pending claim INA-CBG rates

This data was obtained through the ional Health Insurance (JKN) Receivables Management unit during the study period, namely April 1-31, 2024. Throughout 2023, it is known that Universitas Indonesia Hospital received outpatient BPJS Health patients with a total of 102,530 claim files. The number of BPJS file submissions can be seen in table 2.

Table 2. Number of outpatient health BPJS file submissions in 2023

Month	Number of File Submissions
January	5,017
February	7,426
March	8,784
April	6,632
May	7,946
June	9,142
July	8,982
August	9,813
September	8,792
October	10,054
November	10,744
December	9,198
Total	102,530

Data analysis from table 2 shows that the highest number of file submissions occurred in November, with a total of 10,744 files submitted, while the smallest number was recorded in January, with only 5,017 files submitted from Universitas Indonesia Hospital. This phenomenon may illustrate the variation in claim submission patterns over a period of time. Factors such as disease seasonality, internal hospital policies, or changes in BPJS Health policies may influence fluctuations in the number of claim files submitted (Putri et al., 2019).

Based on the results of the analysis of pending BPJS Health claims for outpatient services in 2023 obtained from the calculation of claim files at Universitas Indonesia Hospital, there are two different types of claim status after submitting a claim to BPJS Health at Universitas Indonesia Hospital (Listyorini & Ramadhan, 2022), namely eligible claim status and pending claim status. Eligible claims are claims that have been confirmed by the BPJS Health verifier and indicate that the claim has been processed and is appropriate. Pending claims are pending claims that have not been paid by BPJS Health due to incomplete filing. Pending claim of Universitas Indonesia Hospital is one type of claim status that has passed the process by the BPJS Health verifier but cannot be paid. The pending claim file occurs because the claim file submitted by the Universitas Indonesia Hospital is incomplete. BPJS Health claim status data for outpatient services at Universitas Indonesia Hospital can be seen in table 3.

Table 3. BPJS Health outpatient claim status data 2023

Claim Status	Number	%
Eligible	100,973	98.5%
Pending	1,557	1.5%
Total	102,530	100%

Data analysis in Table 3 shows that outpatient claims have two main statuses. The first claim status showed that 102,530 files or 98.5% of the total claims were declared eligible, while the second claim status noted that 1,557 files or 1.5% were still pending. This indicates that most outpatient claims have been processed and deemed eligible, while a small number still require further review before they can be claimed. Focusing on handling files that are still in pending status is important to ensure the smoothness and accuracy of the claims process.

Based on research by Irmawati et al., (2018), the process of submitting claims from the Hospital to BPJS Health in accordance with the technical instructions for claim verification involves several stages, including verification of membership administration, service administration, and verification of health services. When the claim file is incomplete during the verification process, this results in BPJS Kesehatan returning the file. One of the causes of claim file returns is inaccuracies in membership administration, such as differences between data in the INACBG's application and supporting documents. This is a factor in returning the claim file, in accordance with the technical guidelines for verification of claims in 2014 which emphasizes that if there is an inaccuracy between the completeness and validity of the document, the file will be returned to the hospital to be completed (Irmawati et al., 2018). The following is table 4 of the number of pending claims BPJS Health outpatient services in 2023.

Table 4. Number of outpatient BPJS health pending claims in 2023

Month	Files submitted	File rejected	%	Total INA- CBG rate
January	5017	29	0.58%	IDR 86,010,500
February	7426	284	3.82%	IDR 78,532,400
March	8784	106	1.21%	IDR 75,739,700
April	6632	23	0.35%	IDR 18,309,570
May	7946	90	1.13%	IDR 121,813,100
June	9142	193	2.11%	IDR 286,777,600
July	8982	117	1.30%	IDR 162,094,400
August	9813	117	1.19%	IDR 155,116,800
September	8792	93	1.06%	IDR 230,983,400
October	10054	196	1.95%	IDR 251,468,400
November	10744	168	1.56%	IDR 251,736,000
December	9198	141	1.53%	IDR 123,385,100
Total	102,530	1,557		IDR 1,841,966,970
Average month		129.75	1.48%	

Based on table 4 above, it is known that the average pending claim for outpatient BPJS Health at Universitas Indonesia Hospital in 2023 was 129.75 (1.48%) with a total INA-CBG tariff of IDR 1,841,966,970. From January to December, the largest percentage of pending claim files was in February, with 284 files analyzed with a percentage of 3.82%. The highest pending claim INA-CBG rate was in June, which amounted to IDR 286,777,600. Meanwhile, the lowest percentage and rate of INA-CBG pending claims was in April, which was 0.35% with the results of the analysis of 23 pending claim files with a total INA-CBG rate of IDR 18,309,570. The file will be postponed for claim payment because it must be completed and revised by the hospital first before being resubmitted in the next claim submission.

Delays in claim payments can result in increased costs and decreased hospital revenue. From the results of the calculation of BPJS Health claim submissions for outpatient services in 2023, the factors causing pending claims were obtained. This is in line with Anyaprita et al (2020) which states that due to delays in claims that have an impact on hospital cash flow, bill payment is a top priority (Anyaprita et al., 2020). In addition, the effect of delays in BPJS Health claims also results in inaccuracies in the distribution of doctor honoraria and other health services, which can potentially disrupt hospital operations and finances. This impacts the hospital's cash flow and creates problems related to the payment of employee salaries, compensation for specialized medical services, availability of drugs, and maintenance of medical facilities and equipment (Pratama et al., 2023). This is in line with research by Tiyas (2019) that delays in payment due to pending claims are an obstacle in service operations, if it continues and for a long period of time it will cause liquidity problems for hospitals that lead to a crisis. Delays in disbursement of BPJS Health receivables will reduce the hospital's liquidity capability so that patient service becomes slow and not optimal (Tiyas, 2019).

3.3 Factors causing pending claims

This study analyzes the factors that cause delays in BPJS Health claims at the University of Indonesia Hospital and the results are in the following table 5. Based on Table 5, the causes of pending outpatient claims in 2023 have been grouped into three factors causing pending claims, namely incomplete files and medical resumes, indications of repeated actions, and mismatches in coding and medical actions. The first order of causes of pending BPJS Health claims for outpatient services is incomplete files and medical resumes with the results of 732 files analyzed with a percentage of 47.1%. The factors causing incomplete files and medical resumes at the University of Indonesia Hospital are as follows: a) not completing proof of patient service that includes the diagnosis and therapy/action obtained by the patient and signed by the Doctor in Charge of the Patient (DPJP); b) not attaching proof of action; c) not attaching soft files.

Table 5. Causes of pending claims

Causes of Pending Claim	Number	%
Incomplete Medical Files and Resumes	732	47.1%
Coding and Medical Action Discrepancies	594	38.1%
Indication of Repeated Action	231	14.8%
Total	1.557	100%

Completeness of files is one of the important requirements for managing claims to BPJS Health. Therefore, it is important for officers to check the completeness and ensure that it is in accordance with the BPJS Health claim requirements. Incomplete files and not attaching supporting results will cause claims management to be disrupted. The results of the study are in line with the research of Irmawati et al., (2018), it was found that the incompleteness of the forms was the cause of the return of the inpatient claim file because based on the practical technical guidelines for verification of BPJS Health claims in 2014, it explains that the BPJS Health verifier has the right to confirm to the officer if no evidence is found, the claim is returned to the hospital claim officer to be completed or corrected (Irmawati et al., 2018).

The results of this study were also found to be in line with Aprilianty (2018) found that the non- attachment of the supporting examination report due to the waiting time for the results of the supporting examination while the patient's claim file must be claimed immediately causing the BPJS verifier to return the claim file to be completed or revised by the hospital because the absence of supporting service examination results cannot support the doctor's diagnosis given (Aprilianty, 2018). Coding and medical action mismatches are the second most common cause of pending BPJS Health claims for outpatient services in 2023 with 594 files analyzed with a percentage of 38.1%. The factor causing the occurrence of coding and medical action mismatches is that there are errors in determining the diagnosis code that does not meet the criteria set by the Permenkes. BPJS Health verifiers must ensure the suitability of the diagnosis on the bill with the ICD-10 code and ICD-9-CM for the action code. Coding provisions must follow the coding guidelines contained in the INA-CBG technical guidelines (BPJS Kesehatan, 2014).

If there is a mismatch in the diagnosis coding provided by the coder, the claim file must be suspended and returned to the hospital until the hospital makes improvements to the diagnosis coding and is resubmitted as a supplementary claim. This study is in line with research at RSUD Dr. Soedirman Kebumen, where it was found that there were inaccurate provisions in the placement of primary and secondary diagnoses with coding rules in ICD-10 which caused the claim to be returned (Pratama et al., 2023). The causal factor with the third highest number is indications of repeated actions with the results of the analysis of 231 files with a percentage of 14.8%. The causative factor for indications of repeated actions is due to certain conditions or complaints from patients that cause therapy, actions or other supporting examinations to be carried out beyond the provisions provided by BPJS Health, such as patients indicating ultrasound 3 times in one month, and patients doing HD 3 times

in one week but the specialist does not provide more explanation regarding the patient's complaints. The results of this study were found to be in line with Dewi & Zahwa (2023), it was found that the case of repeated ultrasound indications was a factor causing the claim file to be delayed because the specialist did not explain the patient's complaints and indications for repeated ultrasound, while the BPJS Health needs clarity as to why the patient was repeatedly ultrasounded, because from the BPJS Health regulations for pregnancy ultrasound, during pregnancy it can only be 4 times ultrasound until birth (Dewi & Zahwa, 2023).

3.4 Strategies to overcome pending claim files

3.4.1 Incomplete files and medical resumes

Judging from the aspect of human resources (man), the problem that causes incomplete medical files and resumes is due to the lack of human resources in the supporting services section which causes the expertise of supporting results to not be inputted. This is in accordance with the statement of informant 2 as follows:

> "...*there are supporting results that have not been made by the expertise of the supporting service officer, well that is also due to the lack of human resources who do it anyway*..." (Informant 2).

Based on this statement, it is known that incomplete files and medical resumes are things that cannot be avoided by the JKN receivables management unit because the supporting examination report is only available one week later. Therefore, the strategy that can be carried out by Universitas Indonesia Hospital is to calculate the Workload Analysis in the supporting service unit so that the number of health workers and administrative staff needed in the unit can be known in accordance with the workload and hospital needs so as not to cause a buildup of patients which leads to pending claims. According to Hudaningsih & Prayoga (2019) planning and management of human resources can be done through workload analysis (Hudaningsih & Prayoga, 2019). This is in accordance with Permenkes No. 33 of 2015 concerning Guidelines for Preparing Health Human Resources Needs Planning which states that the purpose of Health Workload Analysis aims to plan HRK needs both at the managerial level and service level in accordance with the workload so that information on the number of employees is obtained (Ministry of Health, 2015). Judging from the aspect of method in the process of submitting outpatient BPJS Health claims, it is known that Universitas Indonesia Hospital has a policy for managing claims and resolving pending claims. This is in accordance with the statement of informant 1 as follows:

> "*There is a policy that pending claims must be completed within 2 days and so far the implementation is in accordance with the policy*" (Informant 1).

Based on the statement from informant 1, it can be concluded that there are no problems when viewed from the method aspect which causes incomplete claim files. The strategy that can be suggested to Universitas Indonesia Hospital is to keep updating policies so that they can continue to follow the changing BPJS Health regulations. Judging from the aspect of the machine (machine) the problem caused is the scanner which is often error so that it hampers the process of scanning claim files. The reason is because the scanned files are too many so that the machine inside is hot. This is in accordance with what informant 2 said as follows:

> *"...mostly the scanner, if there are too many files, the machine is definitely hot, so the scan results like to zoom themselves, the results can also be blurry. sometimes if we don't realize the results, the files will be returned to BPJS*" (Informant 2).

It is also known that the hospital will only make repairs if there are problems with the facilities and infrastructure, while routine maintenance and inspection are needed to make the facilities and infrastructure last longer. This is in accordance with what one of the informants, namely informant 2, said as follows:

"No, it is only repaired if there are complaints from us" (Informant 2).

Based on the information that has been obtained, the strategy that can be carried out by the hospital is to carry out routine maintenance of facilities and infrastructure in the JKN receivables management unit, especially hardware that supports the process of submitting claims such as computers, scanners and printers. According to Wahyudiono & Safari (2019) preventive maintenance is much better than maintenance to restore damage that may arise erratically (remedial maintenance) (Wahyudiyono & Safari, 2019).

Judging from the budget aspect (money) in the process of submitting outpatient BPJS Health claims, it is known that Universitas Indonesia Hospital has a budget for the needs of facilities and infrastructure in supporting the submission of BPJS Health claims. This is in accordance with the statement of informant 1 as follows:

"... if the infrastructure is always provided, anyway, if something is damaged, it can be replaced immediately" (informant 1).

Based on the statement from informant 1, it can be concluded that there are no problems when viewed from the aspect of money that causes incomplete claim files. The strategy that can be suggested to Universitas Indonesia Hospital is to draft a budget for routine maintenance. Judging from the aspect of materials in the process of submitting outpatient BPJS Health claims, it is known from the results of interviews that the materials used to submit BPJS Health claims do not cause problems. The materials in question, for example, stationery, are available and their procurement is not problematic. This was confirmed by each officer who had been interviewed, one of which was the statement from informant 1 as follows:

"*For stationery such as steples, filling steples, etc. it's easy really, we usually every Friday if for example something runs out, just fill out a form to ask for more"* (Informant 1).

Based on this statement, it can be concluded that there are no problems when viewed from the material aspect that cause incomplete medical files and resumes. All stationery used to support claim submission is always complete and always provided by Universitas Indonesia Hospital. The strategy that can be suggested to the Universitas Indonesia Hospital is that it is hoped that the procurement of stationery in supporting claim submissions will be maintained so that it does not become a factor in causing pending claims.

3.4.2 Discrepancies in coding and medical actions

In terms of human resources (man), it is known that the number of officers of the JKN receivables management unit at Universitas Indonesia Hospital who serve as BPJS Health coders for outpatient services is 2 people. The coder employees have educational backgrounds, namely S1 Business Management, S1 Informatics Engineering, and DIII Hospital. During their duty period, the coder officers are always updated with the latest information and regulations from BPJS Kesehatan. Communication between coder officers also runs very well. The comparison between the number of claim files each month and the number of existing coder human resources is considered insufficient because every month BPJS Health patients always increase. The number of outpatient claim files on average every month is approximately eight thousand five hundred files, making the coder overwhelmed. This was conveyed by informant 1 as follows:

"In my opinion, it is not enough because BPJS patients must increase every month so we are also quite overwhelmed" (Informant 1).

Based on this statement, it is highly recommended to calculate workload analysis for all National Health Insurance/*Jaminan Kesehatan Nasional* (JKN) receivables management unit officers to find out whether the current human resources are appropriate or not to be able to carry out further planning so that the claim submission process is more effective and efficient. According to Nabila et al. (2020) Human resources that are in accordance with the needs can be obtained by measuring workload, so that optimization of coders at work can be achieved.

Workload measurement is the process of determining the number of man-hours needed to complete the workload in a certain time (Nabila et al., 2020). From the statement of one of the coders, namely informant 1, it was stated that he had never attended training or in-house training related to coding and the obstacles often faced by coders in the E-Claim input process were because the Doctor in Charge of the Patient (DPJP) did not write a diagnosis in the outpatient summary form and made the input process longer. This was stated by informant 1 as follows:

"...sometimes there are DPJPs who don't write it so we have to go to SIMRS AFYA again" (Informant 1).

Based on this statement, it is strongly recommended that coder officers attend training related to coding to improve coder knowledge related to diagnosis coding. This is in line with the research of Triatmaja et al. (2022) the level of officer knowledge needs to be improved by attending special coding training for BPJS claiming so that coding officers do not feel difficulties when claiming and the facts that occur in the field today are that coding officers find it difficult to determine the diagnosis code because the doctor's writing is not clear, cannot be read, even in the diagnosis or action column the diagnosis or medical action given to the patient is not filled in, so the officer must call the poly nurse or doctor concerned directly to confirm the correct diagnosis. (Triatmaja et al., 2022). From the results of interviews with JKN receivables management officers, the cause of coding and medical action discrepancies is due to changes from BPJS Health. This is in accordance with the statement of informant 1 as follows:

"That's usually because there are changes from BPJS, so we have coded according to the ICD, but apparently there is a new BA agreement" (Informant 1).

Based on this explanation, the strategy that can be carried out by the hospital is to conduct coordination or special meetings that must be attended by related parties such as DPJP and coders for the purpose of submitting BPJS Health claims. Seen from the method aspect, the JKN receivables management unit has an SOP related to submitting claims to BPJS Health. This was conveyed by informant 2 as follows:

"There is and so far it is appropriate" (Informant 2).

"...always socialized every month" (Informant 2).

Based on this statement, it can be concluded that the application of the SOP for submitting claims has been implemented and is not a contributing factor to the occurrence of pending claims on coding mismatches and medical actions. SOPs play a very important role in determining the steps that must be followed in the process of submitting claims and resolving pending claims. In addition, it can help reduce the risk of errors and ensure that claims can be made more efficiently. This is in line with the research of Nuraini & Lestari (2021) SOP is very important and is one of the requirements for hospitals to participate in accreditation and can be a guide for officers, and SOPs that are made are also sought to help

smooth procedures and timeliness in returning files and submitting claims. The strategy that can be suggested to Universitas Indonesia Hospital is to maintain the implementation of SOPs and socialization which is carried out every month (Nuraini & Lestari, 2021).

Judging from the machine aspect, the claim process is carried out by coders through SIMRS AFYA, SIMRS Infinit, LUPIS, V-Claim and E-claim software. The INA-CBG's E-Claim software used by coder staff is integrated with SIMRS AFYA at Universitas Indonesia Hospital but only bridging to patient billing. It is known that there is already bridging between INA-CBG's and SIM RS. In addition, the software used to submit BPJS Health claims is SIMRS AFYA, SIMRS Infinit, LUPIS, V-Claim and E-claim. According to informant 2, all of these applications are easy to use but the supporting features in SIMRS AFYA have not been maximized as needed and there are slow network constraints that make the work of JKN receivables management officers hampered. This is in accordance with the statement of informant 2 as follows

> *"Actually it is easy to use but the supporting features have not been maximized according to their needs and functions, but for software like INFINIT that has radiology it is already good and for E-claims, V-claims and LUPIS itself it is quite good but due to network constraints it is slow loading but so far it rarely errors anyway*" (Informant 2).

Based on the information that has been submitted, it is known that computer networks often experience errors that can hinder the work of officers because INA-CBG's cannot be accessed. This is in line with Wiguna's research (2020) in operating the INA-CBG's application is not difficult, but in entering BPJS claim files on outpatients, officers sometimes experience obstacles in the form of networks that sometimes error and software that sometimes loads long (Wiguna, 2020). The strategy that can be suggested to University of Indonesia Hospital is to improve supporting features on SIMRS AFYA and optimize network speed.

3.4.3 Indications for repeat actions

In terms of human resources (man) factors, the indication of repeated actions is due to registration officers who do not know the provisions of the BPJS Health patient visit episode or because the patient's DPJP does not explain the patient's complaints completely. This is in accordance with the information submitted by informant 2 as follows:

> *"...it's from the registration officer anyway, it could be because the registration officer doesn't know about the provisions of the BPJS patient's visit episode to get services or because the relevant specialist doctor does not explain the patient's complaints further, causing a pending claim"* (Informant 2).

This is in line with Dewi & Zahwa's research (2023) that cases of repeated ultrasound indications occur because the specialist does not explain the patient's complaints and indications for repeated ultrasound, while the BPJS Health needs clarity as to why the patient is being repeatedly ultrasounded, because from the BPJS Health regulations for pregnancy ultrasound, during pregnancy it can only be 4 times ultrasound until birth (Dewi & Zahwa, 2023). The strategy that can be suggested to the hospital is to coordinate and communicate directly between the registration officer and the JKN receivables management unit regarding the provisions of the visit episode for BPJS Health patients, and provide information to DPJP to write down specific patient complaints so as to reduce pending claims.

4. Conclusions

The flow of submitting BPJS Health patient claim files for outpatient services starts from the file being taken from the polyclinic, then submitted to the verifier and filing officer

for assembly and checking, then coding is carried out by the coder and grouper then the final status file will be printed claims, after which checking and scanning the file is carried out then all data will be pulled for system purification. When it is finished, the physical file and softfile will be sent to BPJS Kesehatan and a minutes of claim submission will be made and sent by the section head of JKN receivables management. During 2023, the number of pending BPJS Health outpatient claim files at Universitas Indonesia Hospital in 2023 amounted to 1,557 with a percentage of 1.5% of the total submission of 102,530 files but the total pending INA-CBG claim rate was IDR 1,841,966,970.

Factors causing pending BPJS Health outpatient claims based on verification data are incomplete files and medical resumes totaling 732 files (47.1%), coding discrepancies and medical actions totaling 594 (38.1%), and indications of repeated actions totaling 231 files (14.8%). The strategy that can be done from the factors that cause incomplete files and medical resumes is to calculate ABK to add human resources in the supporting services section and carry out routine hardware maintenance. Based on the factors causing discrepancies in diagnosis and medical action codes, the strategy that can be carried out is to hold socialization to coders to stay aware of the latest BA coding agreement. In addition, coordinate with the Doctor in Charge of the Patient (DPJP) to write down the patient's complaints and diagnoses clearly so that there are no coding errors again. Finally, the strategy that can be done from the indications of repeated actions factor is to make reminders in every briefing from superiors to registration officers regarding the provisions of BPJS Health patient visit episodes and provide information to DPJP to write down patient complaints specifically to avoid the occurrence of indications of repeated actions.

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