

## ICASH-A102

# FACTORS RELATED TO PENDING CLAIM IN INDONESIAN NATIONAL HEALTH INSURANCE (JKN): A SYSTEMATIC REVIEW

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### ABSTRACT

**Background:** The number of Indonesian National Health Insurance (JKN) member is increasing every year. It is bringing impact to the hospital and Social Security Organizing Agency (BPJS) of health. The hospital finances will face problem if BPJS of health pending or giving a smaller number of claims paid to the hospital. The hospital will get problem with employee payroll, payment of specialist medical services, drugs availability, and maintenance of hospital facilities and medical equipment. This study aims to analyze factors related to pending BPJS claim in Indonesian National Health Insurance.

**Methods:** This study was a systematic review used PRISMA (Preferred Reporting Items for Systematic Reviews & Meta-Analyses) guidelines. Data obtained from journal database of Google Scholar that published between 2014-2019. The relevant studies must include factors related to pending claim in JKN.

**Results:** The search found out 217 studies, of which 84 studies used English and Indonesia language and only 5 studies that eligible for this study. The 5 studies showed factors related to pending claim in JKN were human resources, administration, regulation, facilities, external and evaluation factors. Human resources factor more likely appeared as cause for pending BPJS claim.

**Conclusion:** Factors related to pending claim in JKN were human resources, administration, regulation, facilities, external and evaluation factors. Human resources was the factor that most influenced for pending BPJS claim. The hospital must create strategies to overcome the factors that cause pending claim. The government should create a policy that can help BPJS of health overcome the deficit and protect the patients from facing decrease in the quality of hospital services.

**Keywords:** Pending claim, BPJS, National Health Insurance (JKN)

### INTRODUCTION

National Health Insurance (JKN) is a program launched since 2014 that aims to provide health protection for the Indonesian people in accordance with the mandate of the Law of the Republic of Indonesia No. 40 of 2004 concerning the National Social Security System [1,2]. As an organizer of the program a legal entity was formed, namely the Social Security Organizing Agency (BPJS) in accordance with the Republic of Indonesia Law No. 24 of 2011 concerning the Social Security Organizing Agency [3-5]. BPJS also act as the single payer in JKN program [5].

By April 2019, the number of JKN member is 219 million and number of healthcare facilities enrolled become JKN provider is 27,218, which include in it 2,249 hospitals [6]. The number is increasing year by year, in line with the government's goal of Universal Health Coverage in 2019 [4,7,8]. However, this

condition also has undesired effect, which is hospitals become dependent to BPJS [9]. If there is a problem in the claiming or in the BPJS itself, it will threaten hospital finances.

In JKN program, outpatients and inpatients care in hospitals are paid by BPJS based on predetermined diagnosis and casemix medical conditions, called the Indonesian Case Based Groups (INACBGs) [10–12]. The claiming process begin with claim documents submission by the hospital monthly to BPJS. BPJS will verified and have to issue minutes of claim documents within 10 days since claim document received. BPJS then must pay to the hospital maximum 15 days since minutes of claim documents is issued [10]. The aim is to ensure that hospitals able to maintain their cash flow to ensure health care is delivered timely to patients [9].

Incomplete claim documents in the verification process caused pending claim. These not worth claiming/pending documents must be returned to the hospital to go through the confirmation stage [13]. Pending or unclaimed BPJS claims result in a smaller number of claims paid by the BPJS than those submitted by the hospital. This has an impact on hospital cash flows and raises problems with employee payroll, payment of specialist medical services, drugs availability, and maintenance of hospital facilities and medical equipment [9]. The aim of this study is to analyze factors that related to pending BPJS claim in Indonesian National Health Insurance.

## **METHODS**

### ***Search Strategy***

The articles used in this study were obtained from electronic database, in this case *Google Scholar*, published from 2014 until 2019. Selection of eligible articles for this study using the PRISMA (*Preferred Reporting Items for Systematic Reviews & Meta-Analyses*) protocol [14]. Articles considered for review were peer – reviewed articles. To ensure that, exploration of journal’s official site was performed. This study focus on factors that related to pending BPJS claim in Indonesian National Health Insurance. Irrelevant articles through the process of identification, screening, and eligibility were eliminated.

### ***Document Selection***

Using the keywords “pending claim JKN” in *Google Scholar*, we got 217 documents. The articles were selected based a document searching from April 17<sup>th</sup> to 22<sup>nd</sup> 2019. Continued with screening based on publication year, 133 articles were excluded leaving 84 articles. The 84 remaining articles were further screened based on relevance by title and abstract followed with assessment for eligibility in the final review. 79 articles were excluded and 5 articles were selected. The selection process follows flowchart as in Figure 1.

### ***Eligibility Criteria***

We use several inclusion criteria to determine which article is appropriate for this study. These inclusion criteria are: a journal from research; reported in English and Indonesian; published from 2014 – 2019. We limit this study by looking the factors that related to pending BPJS claim in hospital. Through brief reading from title and abstract, we identified articles that relevant for this study. Exclusion criteria is any study that doesn’t meet the criteria above.

### ***Data Extraction***

Extraction and data analysis were performed by the author and categorized factors related to pending claim JKN into particular classes. Data is presented in table form.

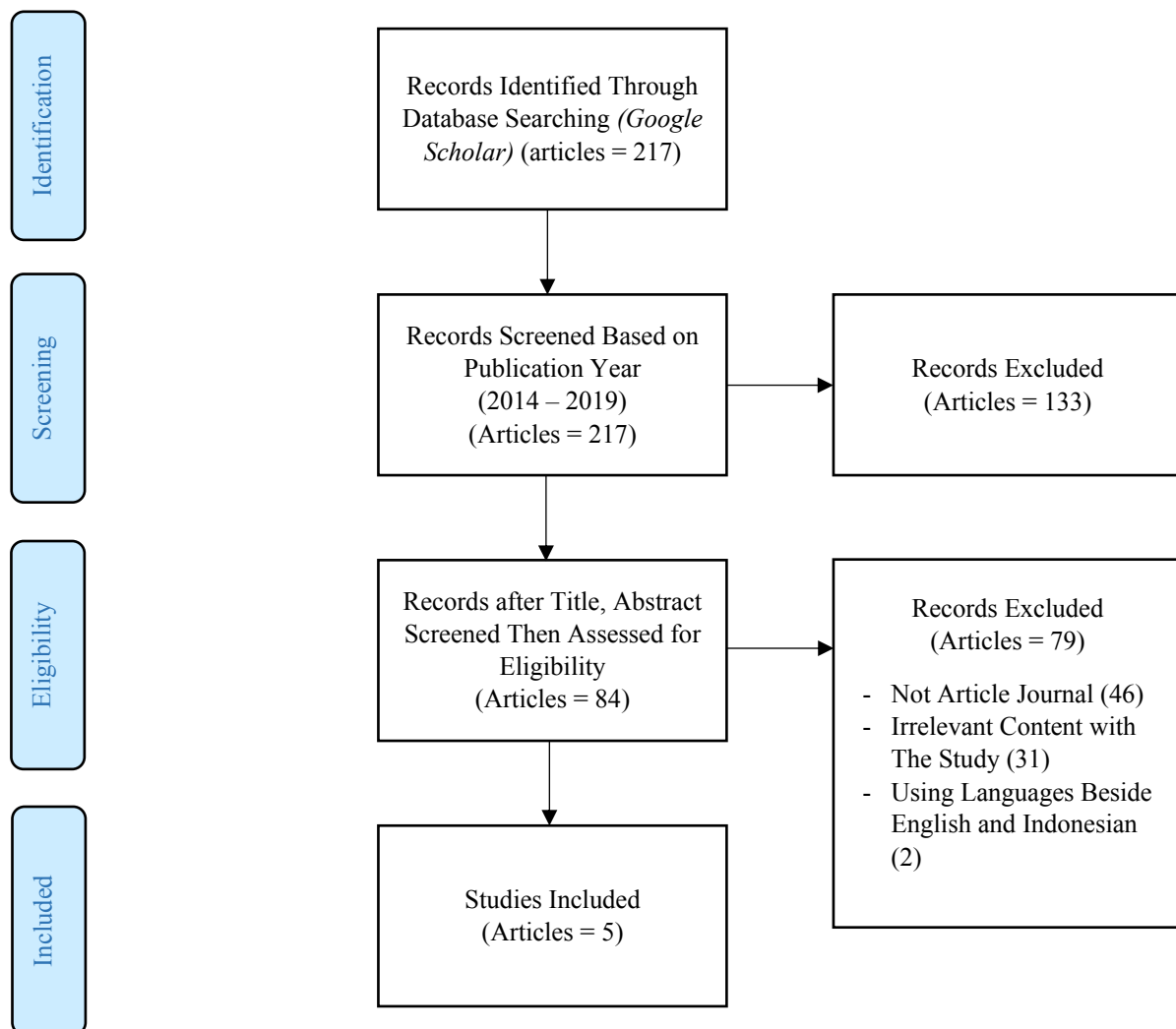


Figure 1. PRISMA Flow Diagram

## RESULTS

Our search identified 5 articles, all of them were held in Indonesia. Those 5 studies shown factors that related to pending in JKN/BPJS claim. We synthesized those factors into 6 classes of influence factors: human resources, administration, regulation, facilities, external, and evaluation. From 5 articles, 4 articles concluded human resources factors, 3 articles concluded administration, regulation, and facilities factors, 1 article concluded external factors, and 2 articles concluded evaluation factors. 3 articles included recommendation in their study. The summary of these studies and factors related to pending claim in JKN are shown in table 1.

### *Human Resources*

Human resources appear to be the most frequent factor in this study. This factor includes medical staff compliance to fill medical records [9], lack of claim officers/coders [9,13], knowledge and discipline level of claim officers [9,15], and the treating doctor is in a hurry and has no time to fill out a patient's medical resume [16].

### *Administration*

Administration factor also has important role in BPJS claim. Administration factor includes incomplete medical resume [13,16], disease coding problem [13,17], and incomplete and mismatch claim file [17].

### ***Regulation***

In this study, regulation factor appears in 3 articles. Regulation factor includes no standard procedure related to pending claim [13] and no standard procedure related to claiming inpatient BPJS patients [15,17].

### ***Facilities***

Inadequate management information system [9] and lack of equipment such as computers and printers, internet network problem [13] are included in facilities factor. Room condition for claim officers can effect claiming process. A narrow work space may lead to file buildup and indicate the occurrence of scattered files, not claimed, and even lost [15].

### ***External***

External factor means factor from outside of the hospital, in this case, delay in claim payment caused by BPJS financial condition in deficit [9]. Hospitals should provide reserve funds to protect them from financial hardship when delays occur.

### ***Evaluation***

Pending BPJS claim also influenced by evaluation of claiming process. 2 articles show evaluation related to claiming has not been routinely implemented in the hospital [13,15].



Table 1. Summary of Included Studies and Factors Related to Pending Claim in Indonesian National Health Insurance (JKN)

No	Journal Title	Place of Journal	Publication Year	Influence Factors						Recommendation
				Human Resources	Administration	Regulation	Facilities	External	Evaluation	
1	Analysis Of Causes Of Unclaimed Inpatient BPJS File In Dr. Soekardjo Tasikmalaya Hospital	West Java, Indonesia	2016	Claim officers' knowledge and discipline are still not good enough. This can be seen from the inconsistency in filling out the check list sheet and sending files that should not be queried.		No standard procedure related claiming.	Work space for claim process is narrow, file buildup everywhere that can indicate the occurrence of scattered files, not claimed and even lost.		Evaluation related to claiming has not been routinely implemented.	




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2	Factors Causes of East Claim Delayed Kalimantan Health BPJS Dr. , Indonesia Kanujoso Djatiwibowo Period January - March 2016	2018	The treating Incomplete doctor is in a medical resume, hurry and has no due to absence time to fill out a of treating patient's medical doctor resume. signatures (90,9%), INACBGs' code mismatch (4,8%), and mismatch in diagnose and therapy given (4,3%)	<b>Treating Doctors:</b> Treating doctors must order the case manager to make the initial medical resume for patients who will be discharged so that when the patient is discharged in the morning, the electronic medical resume is ready to be signed.
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No	Journal Title	Place of Journal	Publication Year	Influence Factors						Recommendation
				Human Resources	Administration	Regulation	Facilities	External	Evaluation	
										<p>Performance appraisal in completing electronic medical resumes for treating doctors can be an indicator of additional remuneration.</p> <p><b>Case Managers:</b> Coordinate with nurses in seeking treating doctors' signatures so that electronic medical resumes can be complete and included in medical records to be returned to the medical record unit.</p> <p><b>Claimer Unit:</b> Actively coordinate with case manager and treating doctors in resolving pending claims due to incomplete medical resumes.</p>

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No	Journal Title	Place of Journal	Publication Year	Influence Factors					Recommendation
				Human Resources	Administration	Regulation	Facilities	External	
									<p><b>Head of Medical Services Division:</b> Use of electronic medical records, separating the case manager function from the ward doctor so that they can focus on their respective fields.</p>
3	Cause Of Fair Central Reverse Claims Of Java, Social Security Institution (BPJS) Patients Representative Required From Terms Of Claims In R.A Kartini Jeparu Hospital		2018	<p><b>Member Administration:</b> incomplete file (71%) includes proof of service that has no treating doctors' signature and supporting files. File mismatch (61%) includes claim file mismatch based on Patient's Eligibility Letter (SEP) data with INA CBG's application data (4%), and</p>	No standard procedure related to inpatient BPJS				





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No	Journal Title	Place of Journal	Publication Year	Influence Factors					Recommendation	
				Human Resources	Administration	Regulation	Facilities	External		Evaluation
					INACBG's application data with supporting files (61%).					
					<b>Service Administration:</b> file mismatch (14%) include suitability of treating doctors' specialization with diagnosis (4%) and disease code is not unbundling code (10%)					



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No	Journal Title	Place of Journal	Publication Year	Influence Factors						Recommendation
				Human Resources	Administration	Regulation	Facilities	External	Evaluation	
4	Analysis Of Causes North Of Unclaimed Sumatera, Inpatient BPJS File Indonesia In Indonesian Workers Imelda Hospital (IPI Hospital) Medan		2018	Lack of claim officers/coders	Wrong coding of disease, medical indication discrepancy, incomplete medical record (no anesthesia form).	No Standard Procedure related pending claim	Lack of equipment, such as computers, printers, and printer ink. Internet network problem.		No routine evaluation	Recruit claim officers, fix the facilities, provide standard procedure and routine evaluation.



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No	Journal Title	Place of Journal	Publication Year	Influence Factors						Recommendation
				Human Resources	Administration	Regulation	Facilities	External	Evaluation	
5	Delayed Claim Payment And The Threat To Hospital Cash Flow Under The National Health Insurance Scheme In Indonesia	Indonesia	2018	Medical staff compliance to fill the medical record, insufficient competencies of coder, inadequate number of claim administrator			Inadequate management information system	BPJS financial condition		The government should fix the problems to protect patients from decreasing quality of care. Hospitals should provide reserve funds to protect them from financial hardship when delays occur.

## DISCUSSION

This study explored articles on pending claim in Indonesian National Health Insurance (JKN). Generally, those articles reported factors that related to pending claim in JKN. These factors were synthesized into 6 classes of influence factors: human resources, administration, regulation, facilities, external, and evaluation.

These findings are in line with the research by Sakyi *et al* (2012), which stated delay in processing claim affected by: inadequate competent staff, poor handwriting, wrong diagnosis and prescription, and heavy workload coupled with incomplete patient data [18]. Research by Atinga *et al* (2012) showed pending in claiming process related to: 1) Still using manual method for processing claims; 2) Limited number of staff with sufficient knowledge in claims management; and 3) Poorly written patient data by health professionals [19]. While research by Noviatri (2016) showed delay in claiming process come from human factors (verificators, doctors, coders), machine factors (BPJS server and limited bridging system), and method factors (implementation of standard procedure that has not been running well) [20].

This study categorized related factors to pending BPJS/JKN claim into 6 classes of influence factors. Human resources factors most often appears as a cause for pending BPJS claim. Knowledge level, amount, and compliance are included in human resources factor [9,13,15,16]. However, human resources factors are closely related to administration problem. Incomplete medical resume or file and coding problem are caused by human resources which not compliant, incompetent, and lack of knowledge [13,16,17]. Human resources problem may also be caused by the absence of standard procedures that result in staff carrying out different steps in the claim process [15,17]. Staff will not be able to work properly if not supported by good facilities. Under JKN, the claim process requires INACBGs application which is bridging with the hospital management system and internet connections. Other equipment, such as computers, printers, and adequate work space will support the BPJS claim process [9,13,15]. Delay in claim payment caused by BPJS financial condition in deficit [9]. Overall, claiming process needs routine evaluation to be able to solve problems in claim process and take steps so that the problem does not repeat [13,15]. Government must take a role in overcoming the BPJS deficit to protect patients from decreasing the quality of care. Because, no matter how well the steps that have been taken by the hospital, if BPJS is still deficit, then the delay in claim payment will still occur.

Pending BPJS/JKN claim also happened in Bhakti Rahayu Hospital Denpasar. Internal claim data report period January to March 2019 shown 815 pending claim files amount Rp. 755,760,700.00 from 38,334 file submitted. Feedback from BPJS stated that the pending is caused by inappropriate diseases or procedure code, and hospitalization indication that did not comply with BPJS criteria. From in – depth interview with Head of Hospital Finance Department, this pending disrupted hospital cash flow. However, hospital still has sufficient reserve funds, so the problem can be resolved, but still have to alert about this problem. Another informant, Head of Claim Unit, stated that the number of personnel in the claim unit was sufficient. The equipment in the claim unit is also complete. In terms of regulation, the claim unit already has standard procedures in claiming. Incomplete files still occur, therefore, claim unit will return the file to the related unit to be completed. This is to ensure the file is complete when submitted to the BPJS. This method can be used to minimize pending BPJS claim.

The limitation of this study are the sources of articles used as references. *Google Scholar* was chosen as database because limited relevant information in the topic area. Therefore, the official site of the journal is also explored to ensure that the article is peer – reviewed and credible for this study. Another limitation is that this study is limited in Indonesia. Future reviewers should extent their scope and do comparative reviews of pending claim in national health insurance in more than one Asian country.

## CONCLUSION

This study concluded there are factors that related to pending claim in Indonesian National Health Insurance (JKN) which can be categorized into 6 particular classes (human resources, administration, regulation, facilities, external, and evaluation). Pending JKN or BPJS claims can be a threat for hospital cash flow because they result in a smaller number of claims paid than those submitted by the hospital. Hospital must create strategies to overcome the factors that cause pending claims. Management should approach treating doctors to increase their compliance in completing medical records, improving coders or claim officer's knowledge, make standard procedure, provide equipment, and system for claiming, and regularly evaluate the implementation of the JKN program at the hospital. Government should fix BPJS deficit to protect patients from decreasing quality of care. This study is limited by database source and research location. Future research should make such study in more than one Asian country.

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