Constraint Analysis National Health Insurance

**Constrain Analysis Jaminan Kesehatan Nasional**

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ABSTRACT

Introduction: The government ratifies and establishes the Healthcare and Social Security Agency that manages health insurance for all people in Indonesia. However, this agency, through the National Health Insurance program, can still not pay all claims submitted by hospitals. Several claims were rejected because the claimant did not meet the requirements for the benefits covered. This research analyzes national health insurance claims' constraints to reduce unworthy claims at Undata Hospital, Central Sulawesi Province. Method: This research is a Constraint Analysis with an analytical observational method and a cross-sectional approach where the researcher wants to identify constraints in each BPJS claim flow process, which consists of verification, data coding process, and file entry process at the National Health Insurance Unit of Undata Hospital, Central Sulawesi Province. This research was conducted from November 2020 to September 2021. There were 17 subjects in this study. Sampling using a purposive sampling technique. Results: The cause of the constraint in the BPJS Health verification claim process at Undata Hospital is that the health service verification process was not carried out before being it to Agency. The cause of the constraint in coding BPJS Health claim files at Undata Hospital is that, based on knowledge constraints, it is known that there is no training for coders regarding the coding process. Conclusion: Implementing the BPJS Health claim procedure at Undata Regional Hospital, Central Sulawesi Province, still needs improvement because the existing SOP still lacks a detailed explanation of the stages of the existing claim procedure.

Keywords: Constraints, Health Guarantee, Claims

ABSTRAK

INTRODUCTION

The government has established and designated the Healthcare and Social Security Agency with the product National Health Insurance, resulting from the transformation of PT. Askes is outlined in Law No. 24 of 2011 (Presiden Republik Indonesia, 2011). RSUD Undata in Central Sulawesi Province is a government hospital, thus obligated to provide participants with National Health Insurance. Hospitals are prohibited from rejecting National Health Insurance participants. Hospitals file claims against National Health Insurance starting from the patient's receipt of treatment as a billing process or compensation for services rendered. Failure to manage claims effectively can disrupt the hospital's cash flow and operations (Widyassari, 2015).

Not all claims can be reimbursed by the Healthcare and Social Security Agency. Claim rejections occur due to failure to meet covered requirements. Claim rejections can result from fraud, misrepresentation, or claims falling outside the coverage scope (Thabrany, 2012).

According to the National Health Insurance Report by the American Medical Association, between 1.38% and 5.07% of claims are denied by various insurance providers. In 2012, claim denials reached 3.78% for Medicare (Zimlichman et al., 2013). From 2015 to 2019, there was an increase in claim rejections from the Healthcare and Social Security Agency, totaling 83 cases with an average denial rate of 21.75% per year at RSUD Undata in Central Sulawesi Province.

Minister of Health Regulation No. 69 in 2013 states that health services provided by advanced health facilities and claim payments will be based on INA-CBG's package rates, ensuring consistency in the claim submission system (Kementerian Kesehatan RI, 2013). Hospital management needs to address issues within the claim management system. The claim process at RSUD Undata involves various stages, including administration, completion of the requirements, case-mix forms, and submission of patient-received service evidence at the Medical Records Installation.

Claim files undergo re-verification for completeness at the Claim Verification/Health Assurance Installation. Subsequently, coder personnel codes the INA-CBGs into the INA-CBGs software. The Claim Verification Installation submits the claim to the Healthcare and Social Security Agency, where verifiers from the agency verify the claim and service evidence. Incomplete files are returned to the hospital for completion. Healthcare and Social Security Agency determines whether the claim is eligible for payment.

Annually, an increase in non-payable claim files leads to financial losses, necessitating an evaluation of the underlying factors. The researcher narrows the study down to the Healthcare and Social Security Agency claim process using the Theory Of Constraint (TOC) method described by Schragenheim and Dettmer (2000), comprising resource, policy, and knowledge constraints. This classification outlines significant groupings of constraints, encompassing internal and external constraints (Tomaszewksa, 2020). It is expected to result in comprehensive system performance improvement. This study aims to analyze constraints in the Healthcare and Social Security Agency
claim process to reduce the number of non-payable claims at RSUD Undata in Central Sulawesi Province.

METHODS
This research is a Constraint Analysis employing an observational analytical method and a cross-sectional approach. The researcher aims to identify constraints within each step of the Health insurance claim process, encompassing verification, data coding, and file entry at the National Health Insurance Unit of RSUD Undata in Central Sulawesi Province. The study was conducted from November 2020 to September 2021. The study's subjects comprised 17 individuals, including one administrator responsible for claim management, three coding team members, two verification team members, and 11 entry team members. Sampling was performed using purposive sampling. Data collection in this study uses in-depth interviews, observations, and group discussions. The data analysis was content analysis to examine the research subjects' behavior by analyzing their communication outcomes and meanings. The analytical process included data reduction, presentation, conclusion drawing, and verification. This research protocol was ethically approved with ethical certificate number 2183-KEPK on March 15, 2021.

RESULTS
This study was conducted at RSUD Undata in Central Sulawesi Province. The research was carried out from November 2020 to September 2021. This study identified constraints within each step of the BPJS claim process, including verification, data coding, and file entry.

Table 1. Characteristics of Respondent Officers in the National Health Insurance Unit at Undata Hospital

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>7</td>
<td>41,2</td>
</tr>
<tr>
<td>Female</td>
<td>10</td>
<td>58,8</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>100</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior High School</td>
<td>3</td>
<td>17,7</td>
</tr>
<tr>
<td>Vocational Pharmacy</td>
<td>1</td>
<td>5,8</td>
</tr>
<tr>
<td>Vocational Midwifery</td>
<td>1</td>
<td>5,8</td>
</tr>
<tr>
<td>Vocational Nursing</td>
<td>1</td>
<td>5,8</td>
</tr>
<tr>
<td>Public Administration</td>
<td>1</td>
<td>5,8</td>
</tr>
<tr>
<td>Economic</td>
<td>2</td>
<td>11,7</td>
</tr>
<tr>
<td>Social Science</td>
<td>1</td>
<td>5,8</td>
</tr>
<tr>
<td>Medicine</td>
<td>1</td>
<td>5,8</td>
</tr>
<tr>
<td>Computer Science</td>
<td>1</td>
<td>5,8</td>
</tr>
<tr>
<td>Nursing</td>
<td>1</td>
<td>5,8</td>
</tr>
<tr>
<td>Public Health</td>
<td>2</td>
<td>11,7</td>
</tr>
<tr>
<td>Sains</td>
<td>1</td>
<td>5,8</td>
</tr>
<tr>
<td>Characteristic</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----</td>
<td>------</td>
</tr>
<tr>
<td>Master of Public Health</td>
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<td>5.8</td>
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<tr>
<td>Total</td>
<td>17</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Working period</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 Years</td>
<td>7</td>
<td>41.2</td>
</tr>
<tr>
<td>≥ 5 Years</td>
<td>10</td>
<td>58.8</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1 shows that most respondents who work at the National Health Insurance unit (JKN) at Undata Hospital are female, as many as ten people (58.2%). Most recent education is high school as many as three people (17.7%). The most working period is > 5 years, as many as ten people (58.8%).

Figure 1. Fishbone analysis of the causes of constraints in the verification process

Figure 1 shows that the cause of the constraint in the BPJS Health verification claim process at Undata Hospital is that the health service verification process was not carried out before being sent
to BPJS Health. The analysis results based on knowledge constraints show that officers have no training regarding the verification process. Meanwhile, based on policy constraints, it is known that SOPs and primary duties are not communicated to officers, SOP evaluations are not routinely carried out, and hospital SOPs do not explain the stages in file verification. The analysis results using resource constraints show that the verification process is still manual, and no electronic medical record system exists.

Figure 2. Fishbone analysis of the causes of constraints in claims file coding

Figure 2 shows that the cause of the constraint in the coding of BPJS Health claims files at Undata Regional Hospital is that, based on the knowledge constraint, it is known that there is no training for coders. The analysis results based on policy constraints show that the hospital does not have an SOP for the coding process and does not routinely evaluate SOPs. Meanwhile, analysis of resource constraints shows a lack of accuracy in writing files, incomplete claim data, computer/e-claim application errors, poor internet network, and no routine equipment maintenance program.

Table 2. Priority Causes of Constraints at the stages of the national health insurance claim administration and verification process at Undata Hospital, Central Sulawesi Province
Table 2. shows that there are five priority issues causing constraints in the process of verifying the administration of BPJS Health claims at the JKN Unit of the Undata Hospital in Central Sulawesi Province, which were assessed using the USG method, including the hospital SOP not explaining the stages of the file verification process, SOPs and inadequate task and function socialized, SOP evaluations are also not carried out routinely, staff lack of accuracy, and no training is conducted regarding the verification process.

Table 3. Priority Causes of Constraints in the BPJS Claims Coding Process at Undata Hospital, Central Sulawesi Province

<table>
<thead>
<tr>
<th>No</th>
<th>Problem</th>
<th>Criteria value</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>U</td>
<td>S</td>
</tr>
<tr>
<td>1</td>
<td>Officer discipline is lacking</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Insufficient staff accuracy (wrong coding of disease diagnoses and procedures)</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Existing medical record documents from each room are incomplete</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Hospital SOPs do not have a coding process</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>The computer or e-claim application and internet network often have errors and are slow</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>There is no monitoring and evaluation</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>SOP evaluation is not routinely carried out</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>There is no training for coders</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>No briefing</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 3 shows that there are five priority Constraint issues in the coding process for BPJS Health claims at the Undata Regional Hospital in Central Sulawesi Province, which were assessed using the USG method, including hospital SOPs not available for the coding process stage, SOP evaluations are also not routinely carried out, no training is provided to the coder, and the officer's accuracy is lacking.

**DISCUSSION**

The National Health Insurance claim process at RSUD Undata in Central Sulawesi Province is initiated for inpatients, starting when patients arrive from the emergency department and outpatient clinics. However, a streamlined process flow for claims is not yet established. The submission process of claims at RSUD Undata is guided by Ministry of Health Regulation No. 27 of 2014 (Kementerian Kesehatan RI, 2014). Based on the research findings, constraints within the BPJS Claim Verification process include manual verification, lack of precision in verification, absence of electronic medical records, and workload burden on staff. Claim files are often returned due to non-compliance with administrative requirements (Tarigan et al., 2022). Insurance verifiers have the authority to return claims for correction by staff. The study conducted at RSUP dr. Soeradji Tirtonegoro Klaten noted that incomplete claim files are more likely to be rejected by insurance verifiers (Putri & Budi, 2020).

Findings related to policy constraints indicate that Standard Operating Procedures (SOPs) and work instructions are inadequately disseminated, SOPs are unclear, and routine SOP evaluations are lacking. SOPs significantly affect delays in medical record document provision (Antika, 2023). Proper knowledge of SOPs is essential for employees to execute tasks following established regulations, ensuring work efficiency and effectiveness.

Regarding knowledge constraints in the claim verification process, it was found that some staff members lacked the necessary training. Training is crucial for enhancing staff skills, thus requiring ongoing management evaluation to enhance training across all claim management personnel (Santiasih et al., 2022).

Resource constraints identified in the file coding process include staff lack of discipline, insufficient precision, incorrect diagnosis and procedure coding, and poor internet connectivity. Factors contributing to coding errors, including errors in selecting the primary diagnosis, code selection, and invoice inputting codes (Indawati, 2019). Coders should seek clarification from doctors if coding errors are identified.
The research revealed that policy constraints in the coding process include the absence of a hospital SOP governing coding phases, inadequate dissemination of SOPs and work instructions, absence of briefings (morning and evening), and infrequent SOP evaluations. Hospitals should support staff financially and through SOPs and work instructions as guidance for their tasks (Kusairi, 2013).

Regarding knowledge constraints in the claim coding process, it was found that not all staff members receive uniform training; only verifiers and coders undergo training. Factors influencing medical record completeness include knowledge, experience, competence, policies, and procedures related to claims. Knowledge derived from experience might not always yield accurate outcomes (Mathews et al., 2011). The agency's coding regulations were changed regularly, demanding coders to remain updated. However, not all coders are well-informed about these changes, resulting in inadequate knowledge.

Research findings on resource constraints in the file entry process include staff lack of discipline and precision, incomplete files, computer/application errors for e-claims, and poor internet connectivity. A study conducted at RSUD dr. Soekardjo Tasikmalaya revealed that a lack of claim staff knowledge leads to file entry errors and claims processing delays (Nurdiah & Iman, 2016). Underperformance could stem from aspects such as the recruitment of coding staff, lack of specific competence criteria, undefined guidelines for the National Health Assurance Program, overlapping job positions, limited participation in training, a lack of ongoing evaluation by the control team coordinator, and insufficient reward and punishment systems (Kusairi, 2013).

The BPJS Health claim procedure at RSUD Undata in Central Sulawesi Province still requires improvement, particularly in detailing the stages of the claim procedure in the existing SOP. It represents one of the constraints within the insurance claim procedure at RSUD Undata. Theory of Constraints (TOC) is a management philosophy focused on addressing the weakest link in a chain to enhance system performance (Şimşit et al., 2014). TOC represents an ongoing improvement process concentrating on constraints limiting an organization (Blackstone, 2010). Focusing steps help identify and manage constraints within a system to enhance cycle flow (Ikeziri et al., 2019; Naor et al., 2013).

Conclussion

The claim process at the National Health Insurance Unit of Undata Hospital, Central Sulawesi Province, there are constraints in the verification process, namely the failure to re-verify the files before sending them to agency and the absence of hospital SOPs regarding the process of coding claim files. Researchers provide recommendations to hospitals to develop a sequential and detailed claim process flow. Hospitals also need to prepare SOPs. The internal verifier re-examines the claims file, and holds internal discussions with the claims manager, verifying doctor, and team of coders. Regular meetings between the National Health Insurance management's internal coding verifier and employees also need to be held. Hospitals need to use medical record applications and utilize IT systems through bridging hospital management and information system with e-claim software and also the V-Klaim application.
ETHICAL APPROVAL

Health Research Ethics Committee Faculty of Nursing, Airlangga University No: 2183-KEPK

CLINICAL IMPLICATIONS

It is hoped that the results of this research can be used as input in making policies to increase the completeness of medical resumes as a requirement for claims to agency so as to increase hospital income.

REFERENCES


