REVIEW ARTICLE

Fraud in The Implementation of the Health Insurance Program: A Systematic Literature Review

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Fraud in the implementation of the health insurance program in the national social security system, hereinafter referred to as JKN Fraud, involves intentional acts by participants, BPJS Kesehatan officers, healthcare providers, and suppliers of medicines and medical devices to obtain financial benefits. These fraudulent actions violate the provisions of the national social security system. This research is a systematic literature review. Data were collected by searching for scientific research articles published between 2014 and 2024 using search engines such as Portal Garuda and Google Scholar, employing the Publish or Perish tool. This search resulted in 13 journals that met the inclusion and exclusion criteria. The potential for fraud arises from several factors: Opportunities stem from weak control measures, pressure results to inappropriate workloads, rationalization is driven by inadequate income, and capabilities, therefore, are affected by competence, ineffective policies, lack of internal controls, financial pressure, and lack of transparency. Conclusion: Fraud typically stems from factors such as opportunity, pressure, rationalization, and capability. Therefore, it is essential to enhance control and supervision, invest in education and technology, and foster collaboration with insurance institutions to effectively combat fraud.

INTRODUCTION

Fraud is a pervasive global issue with significant implications. In healthcare, it not only incurs substantial financial costs but also jeopardizes the quality of patient care by exposing them to excessive and unsafe medical treatments.1 Globally, fraud has consumed approximately 10% of the world's health budget.2 Indonesia ranks third among 30 surveyed countries in terms of the highest number of fraud cases.3 According to the 2019 Indonesian Fraud Survey (SFI) by the Association of Certified Fraud Examiners (ACFE) Indonesia Chapter, the health industry accounted for 4.2% of reported fraud cases in Indonesia.
JKN claims involve hospitals submitting patient care costs to BPJS Kesehatan on a monthly basis. During the process of submitting claims for national health insurance, billing is directed to BPJS Kesehatan rather than directly to the government. This process introduces the potential for fraud within health services, such as intentional fraud in claim submissions. Various actors involved in the JKN Program can exploit this potential for fraud through different methods and motivations.

Fraud in health services involves intentional actions aimed at obtaining undue financial benefits and can adversely affect other parties. According to Article 1 Point (1) of Minister of Health Regulation Number 36 of 2015 regarding the prevention of fraud in the implementation of health insurance programs under the national social security system (JKN), "JKN Fraud" refers to intentional acts committed by participants, BPJS Kesehatan officers, healthcare providers, and suppliers of medicines and medical devices. These acts aim to gain financial benefits from health insurance programs through fraudulent practices that violate regulations. Fraud in health services is considered a deliberate effort to gain unauthorized benefits that can harm individuals or institutions.

Alleged fraud does not only occur in Indonesia, which is still in the process of organizing its healthcare and financing system, but also occurs throughout the world, which has an impact on various aspects. The impact that arises from fraud is that it can affect the aspects of reputation, clinical service quality, and finance. Based on the explanation above, researchers are interested in conducting research with Systematic Literature Review regarding fraud in JKN claim billing. This research aims to deepen understanding of potential fraud in healthcare facilities and develop preventive measures.

**RESEARCH METHOD**

The research method employs a systematic literature review by first determining research questions including what potential fraud in health services is identified in the literature. Furthermore, the literature search was carried out with the help of Publish or Perish (PoP) with the Google Scholar database and the Garuda Portal with the keywords "healthcare fraud" OR "potential fraud in JKN claim billing", OR "health fraud" OR "health fraud risk" and selected literature according to the inclusion and exclusion criteria as determined in this study are (1) research time with a range of the last 10 years; (2) Articles in English or Indonesian; (3) Not a type (review article); (4) Articles are not duplicated; (5) Can be accessed full text and free; (6) Articles are relevant to the title and according to keywords and exclusion criteria are articles that do not meet the inclusion criteria. The next stage is data extraction from selected articles regarding types of fraud, risk factors, and fraud prevention. The following is a PRISMA diagram of the article extraction process.
Figure 1. Source: PRISMA diagram David Moher et al (2009).10

The final stage is data analysis and synthesis, including the results of the research analyzed and synthesized to find patterns and conclusions. The results of data analysis and synthesis are presented in the table below.

Table 1. Results of Data Synthesis

<table>
<thead>
<tr>
<th>No</th>
<th>Author</th>
<th>Title</th>
<th>Sample</th>
<th>Research Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tatk Sri Hartati (2017)11</td>
<td>Fraud Prevention in Implementation of the Health Insurance Program On the Health Social Security System (SJSN) at Menggala Regional General Hospital</td>
<td>Fraud Prevention Team</td>
<td>Qualitative</td>
<td>Fraud in the form of overwriting diagnosis codes, false claims and recurring bills at RSUD Menggala can be done through the complaint system or reports of JKN fraud made in writing addressed to the fraud prevention team.</td>
</tr>
<tr>
<td>2.</td>
<td>Rocky Soputan, Jantje Tinangon, Linda Lambey (2018)12</td>
<td>Fraud Risk Analysis of the National Health Insurance Capitation Fund Management System at FKTP in Bitung City Government</td>
<td>The sample is BPKP Auditor Representative of North Sulawesi Province, FKTP Treasurer, FKTP Head, Head of Subdivision, Health Office Finance, National Health Insurance Manager, Commitment Making Officer (PPKOM) and the Bitung City Inspectorate.</td>
<td>Qualitative</td>
<td>Fraud occurs due to a weak capitation fund management system and weak internal control due to no supervision.</td>
</tr>
<tr>
<td>3.</td>
<td>Zafirah Rizka, Sutopo Patria Jati, Syamsulhuda BM (2018)13</td>
<td>Analysis of the Implementation of the National Health Insurance Fraud Prevention Program at Puskesmas</td>
<td>Members of the JKN Fraud Prevention Team at the Semarang City Health Center include the</td>
<td>Qualitative</td>
<td>The main reason for the late formation of the team is the lack of legality of the DKK decree on the JKN fraud prevention</td>
</tr>
</tbody>
</table>
Semarang City Health Office, BPJS Kesehatan KC Semarang, the Semarang City Indonesian Medical Association, the Association of Indonesian Primary Health Care Clinics and Facilities, the Semarang City Secretariat, the Kedungmundu Semarang Outpatient Health Center, and the Mijen Semarang Inpatient Health Center.

<p>| 4. | Ayu Mitriza, Ali Akbar (2019) | Analysis of Potential Fraud Control in Hospitals General Regional Achmad Moechtar Bukittinggi | Potential Fraudontrol Staff at Dr. Achmad Moechtar Bukittinggi Hospital. Validity Check | Qualitative | Factors driving the potential for fraud are differences in understanding between the verifier and the doctor in charge of the patient about the diagnosis. hospital real cost gap with the INA CBGS rate. |
| 5. | Febby Mandolang Chamariyah Subijanto (2019) | The Effect of Internal Control, Organizational Commitment and Individual Morality on Fraud Prevention of National Health Insurance Providers | All General Practitioners and Specialists who served at Mohammad Noer General Hospital Pamekasan with a total of 31 people. | Qualitative | Organizational commitment is responded very well by respondents so that it has an influence dominant against prevention fraud provider assurance national health. |
| 6. | Rizki Nurul Fatimah | Determinants of | 20 people | Qualitative | Potential fraud in |</p>
<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Context</th>
<th>Methodology</th>
<th>Findings</th>
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</thead>
<tbody>
<tr>
<td>Misnaniarti, Rizma Adlia Syakurah (2021)&lt;sup&gt;16&lt;/sup&gt;</td>
<td>Potential Fraud in the JKN Program at Puskesmas X City</td>
<td>consisting of the Head of the Health Center, Registration Officer of the Section Head at the Health Office and BPJS Health patients.</td>
<td>the implementation of national health insurance (JKN) can occur when viewed from the opportunity factor, pressure factor, rationalization factor and ability factor.</td>
<td></td>
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<tr>
<td>Fitri Indayani, Reza Aril Ahri, A. Rizki Amelia, Fatmah Afriyanti Gobel, Fairus Prihatin Idris, Andi Surahman Batara (2021)&lt;sup&gt;17&lt;/sup&gt;</td>
<td>The Implementation of Fraud Prevention on the National Health Insurance at Salewangan Maros Hospital, Indonesia: A Qualitative Study</td>
<td>Head of Service, Head of Hospital Medical Committee, Head Nursing Sub Division, Head of Finance Sub Division, Casemix Team</td>
<td>Qualitative Efforts to improve the culture of fraud prevention are still weak. Although efforts to detect and resolve fraud have been made, efforts to detect fraud have not been continuous. In addition, monitoring and evaluation by the Fraud Prevention Team at Salewangan Maros Regional Hospital has been implemented but is still sub-optimal.</td>
<td></td>
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<tr>
<td>Zulfadli Yusuf, Andi Nurwanah, Ratna Sari (2022)&lt;sup&gt;18&lt;/sup&gt;</td>
<td>Fraud in the National Health Insurance Program context: Internal Auditor Competence with Phenomenological Approach</td>
<td>SPI, Internal Verifier, and Coder.</td>
<td>Qualitative Five main factors that can drive someone to commit fraud, namely pressure (pressure), opportunity (opportunity), rationalization, competence and arrogance.</td>
<td></td>
</tr>
<tr>
<td>Ida Sugiarti, Imas Masturoh, Fery Fadly (2022)&lt;sup&gt;19&lt;/sup&gt;</td>
<td>Search Potential Fraud in Guarantee Health National Via Medical Records at Hospital</td>
<td>Officers who are members of the Fraud prevention Team and Coder</td>
<td>Qualitative Upcoding can change the claim to be higher. The existence of a clinical pathway is important as a reference for health service actions</td>
<td></td>
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<td>No.</td>
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<td>10</td>
<td>Nadira Sariunita, Rizma Adlia Syakurah (2023)&lt;sup&gt;20&lt;/sup&gt;</td>
<td>Analysis of the Incidence of Upcoding of Health Service Costs in the Region BPJS Health Work in Depok Branch</td>
<td>BPJS Health Verifier Staff KC Depok and Health Service Utilization Staff Referral and Anti-Fraud</td>
<td>Qualitative</td>
</tr>
<tr>
<td>11</td>
<td>Made Subianta Adnyana, Harti Budi (2023)&lt;sup&gt;21&lt;/sup&gt;</td>
<td>Potential Fraud in Reimbursement Claims Covid-19 Patient Service Fee COVID-19 patient service reimbursement claim process</td>
<td>Auditors or examiners who are experienced in conducting examinations related to the</td>
<td>Qualitative</td>
</tr>
<tr>
<td>12</td>
<td>Gede Indrawan, I Nyoman Lemes, I Nyoman Surata (2023)&lt;sup&gt;22&lt;/sup&gt;</td>
<td>The Role of the Health Office in Prevention and Handling Fraud in Implementation Health Insurance Program Based on Regulation Minister of Health of the Republic of Indonesia Number 16 of 2019 in Buleleng Regency</td>
<td>Health Office Staff</td>
<td>Qualitative</td>
</tr>
<tr>
<td>13</td>
<td>Muhammad Akbar, Prasetyono, Tarjo (2024)&lt;sup&gt;23&lt;/sup&gt;</td>
<td>Uncovering Fraud in Health Centers Capitation Fund</td>
<td>BLJD Leader, Technical Officer, Finance</td>
<td>Qualitative</td>
</tr>
</tbody>
</table>
RESULTS

Based on the results of this systematic literature review, of the 435 articles identified, 13 articles were obtained, all of which used 100% qualitative research methods, this method is very relevant to describe the situation to be observed in the field more specifically, transparently and in depth. The research was conducted at various health facilities in Indonesia. The most commonly used keywords in the research articles found were "Fraud", "JKN" and "Prevention".

DISCUSSION

Various types of fraud identified in the literature includes billing fraud, such as upcoding, billing for services not rendered, and duplicate billing for the same service, alongside real rate disparities. Fraud in insurance claims includes false or exaggerated claims, identity theft of patients, and manipulation of patient information to secure payments. Additionally, fraud committed by providers involves issues like falsifying licenses, abusing authority, and prescribing unnecessary medications.\textsuperscript{11,12,14,18,19,20,21}

Fraud can potentially occur in hospitals due to coding inaccuracies that lead to upcoding. Upcoding involves intentionally selecting higher-level diagnosis or procedure codes to increase financial reimbursement. However, upcoding is considered fraud only when there is an intent to gain financially. This practice can inflate claims, primarily due to discrepancies between diagnosis codes under the ICD-10 system and those required by BPJS Kesehatan regulations. Diagnosis coding errors, such as selecting inappropriate codes that do not accurately reflect the patient's condition, can also contribute to upcoding. The consequences of upcoding in health services impact BPJS Kesehatan in several ways, including increased claim costs, higher financial burden on health service costs borne by BPJS Kesehatan, and discrepancies between statistical data and actual case descriptions in the field.\textsuperscript{19,20}

Based on the search for articles that have been conducted, the potential for fraud is caused by several things due to the existence of cultural barriers to fraud prevention including lack of desire to change, indifference, busyness, and lack of communication. Fraud is often considered a sensitive topic as it can damage both individual and organizational reputations, leading to discussions that are private and confidential. Moreover, the potential for fraud in Primary Health Service Facilities (FKTP) is linked to various factors including human resources (HR), health service management practices, leadership policies, management of capitation funds, and the effectiveness of operational audits.\textsuperscript{13,17}

Addressing these aspects comprehensively is crucial for mitigating fraud risks effectively within healthcare settings. In addition, the driving factor of potential fraud can be seen from the opportunity factor, namely the lack of internal and external audits at the Puskesmas. In the pressure factor, it is found that situational and work pressures can cause errors in referring patients and patient complaints. In the rationalization factor, namely accepting patients who entrust treatment and delays in claim payments affect the income of the Puskesmas. The ability factor is that the training provided to employees is not comprehensive and a firm policy from the leader greatly affects the position in the job.\textsuperscript{16,18,23}

Monitoring the potential for fraud is crucial, particularly because of the significant costs incurred by
BPJS Kesehatan in analyzing service expenditures. That caused the Ministry of Health’s attention in this field to increase. Most of the costs of claims on actions are borne by the State budget and public contributions, so that misuse can be categorized as unlawful acts and classified as corruption. According to Minister of Health Regulation No. 36 of 2015, the prevention of JKN Fraud at Advanced Referral Health Facilities (FKRTL) necessitates the establishment of robust policies and guidelines. These should focus on developing health services that emphasize quality and cost control. Additionally, fostering a culture of fraud prevention within organizational and clinical governance frameworks is essential. This approach aims to enhance both the quality of care and fiscal responsibility within the healthcare system.  

There are several articles that identify strategies for fraud mitigation, namely prevention can be done by preparing JKN fraud prevention policies and guidelines as part of Advanced Referral Health Facilities (FKRTL) internal regulations as outlined in the form of organizational governance and clinical governance. JKN fraud prevention policies and guidelines must be able to regulate and encourage all human resources to work according to ethics, professional standards and service standards. The substance of fraud prevention policies and guidelines consists of arrangements to be applied and procedures for their implementation including standards of behavior and discipline, monitoring and evaluation that ensure compliance with implementation, and the application of sanctions for violators. In addition, another study states.

Based on the results of other studies in terms of fraud prevention, Regency/City health services are among the institutions that collaborate with BPJS Kesehatan, professional organizations and health facility associations to build a JKN fraud prevention system. DKK and the Ministry of Health become third parties when there is a dispute between BPJS Kesehatan and health facilities when fraud is suspected, so it is necessary to have quality human resources to be able to identify claims and fraud techniques and detect acts of fraud committed by the perpetrators. Therefore, based on PMK No. 36 of 2015 DKK must build a system for preventing JKN Fraud in First Level Health Facilities through the preparation of policies and guidelines for preventing JKN fraud, developing health services that are oriented towards quality control and cost control, and developing a culture of JKN Fraud prevention as part of organizational governance and management. Good clinical management, through the formation of a JKN Fraud prevention team at Primary Health Service Facilities (FKTP). In addition, DKK aims to receive complaints about fraud.

**CONCLUSION**

Potential fraud in JKN claims can be found in various forms, such as fraud in billing, fraud by providers, and fraud by patients. The potential for fraud in JKN arises from the factors of opportunity, pressure, rationalization, and capability. Opportunities arise from weak controls, pressure comes from inappropriate workloads, rationalization is caused by inadequate revenue, and capabilities include competence as well as ineffective policies, lack of internal controls, financial pressure, and lack of transparency. Fraud mitigation can be done through increased control and supervision, education, use of technology, and collaboration within insurance institutions. Further research is needed to explore more effective fraud prevention strategies in JKN claims. In addition, the study of the effectiveness of technology in detecting and preventing fraud in this sector is also a promising area for future research.

**CONFLICT OF INTEREST**

There have been no competing interests regarding this manuscript.

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**ETHICAL STATEMENT**
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AUTHOR CONTRIBUTION
The author fully contributed to the design, intelligent content description, literature quest, data collection, data processing, and manuscript writing.

REFERENCES


