Analysis of Fraud in National Health Insurance in Indonesia: A Literature Review

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Abstract.

The study concern to know how Indonesia implemented the National Health Insurance Program (JKN) as a form of Universal Health Coverage (UHC) aimed at improving public welfare through access to quality and comprehensive health services. However, in its implementation, the program has faced significant challenges in the form of fraud, which has the potential to cause major financial losses and operational inefficiencies. This study used a systematic literature review methodology. This method was chosen to gain a comprehensive understanding of the patterns, causal factors, and effects of fraud reported in numerous studies and cross-national insurance schemes, both public and private. The literature review was conducted using scientific databases such as Google Scholar, PubMed, ScienceDirect, the official Indonesian website and government regulation. The analysis of the study shows that fraud can be committed by various parties involved in the JKN program, including participants, healthcare providers, BPJS Kesehatan officials, and drug/medical device providers, and collusion between these parties may even occur. Common types of fraud include manipulating medical procedures to inflate service costs (upcoding), using fictitious patient identities, forging documents, misusing cards, and billing for services not medically indicated. Challenges in addressing fraud include the scale and complexity of the program, suboptimal technology integration, changing modus operandi of perpetrators, as well as cultural and legal proof challenges.

Keywords: *Fraud; fraud triangle; healthcare fraud; JKN and insurance concept.*

I. INTRODUCTION

Indonesia is one of many countries that has implemented Universal Health Coverage (UHC) for its entire population, as mandated in the 58th World Health Assembly (WHA) resolution in 2005 in Geneva. Universal Health Coverage is a concept that includes reforms in health services that cover the entire community in terms of accessibility and equity of health services, by providing quality and comprehensive health services that include preventive, promotive, curative to rehabilitative services and reducing financial barriers to obtaining health services for every citizen and is realized by the establishment of the National Health Insurance Program-Kartu Indonesia Sehat (JKN-KIS) as stated in the Preamble of the 1945 Constitution, which is to improve the social welfare of the community by providing convenience in public services, especially in the health sector. Based on sample data until June 30, 2024, JKN membership coverage has reached 273.5 million people or 96.8% of the total population of Indonesia. This result is in line with Indonesia's efforts to encourage universal health coverage (UHC)[1], [2], [3]. The UHC level in Indonesia according to data from the Central Bureau of Statistics of the Ministry of Health of the Republic of Indonesia on March 14, 2023, reached 90%. In addition, UHC awards were given to 22 provinces and 334 districts/cities throughout Indonesia in recognition of the success of efforts that have been made in supporting the National Health Insurance-Kartu Indonesia Sehat (JKN-KIS) as a national strategic program[4], [5].

The success of a program as large as JKN certainly faces various challenges, one of which is the potential for fraud. Fraud in the context of health insurance refers to deliberate acts of deception to obtain undue financial gain, whether by participants, healthcare providers, or internal program administrators[6]. Corruption eradication is often conducted in various institutions, including in the health sector. The

Corruption Eradication Commission (KPK) began actively conducting studies to assess the potential for corruption since the implementation of the National Health Insurance (JKN) program in early 2014. Fraud is a form of corruption. In the healthcare sector, the term “fraud” is more commonly used to describe forms of misconduct that are not only corruption but also include the misuse of assets and the falsification of statements[7]. Health insurance fraud can be intentional fraud or the misrepresentation of data by an individual or entity to obtain unlawful benefits. Fraud is considered a global challenge and illegal activity. Several studies have shown that health insurance fraud leads to a significant increase in the costs of national health insurance programs and is one of the main causes of inefficiency in the operation of health insurance funds. Especially in some high-income countries, 3–10% of annual healthcare expenditures are lost due to health insurance fraud, amounting to billions of dollars[8].

Healthcare fraud negatively impacts insurance companies, taxpayers, and those participating in insurance programs, while also endangering the health and financial well-being of beneficiaries. With the increase in enrollment in both private and government healthcare programs, coupled with rising costs and the growing complexity of healthcare systems, the risk and appeal of fraudulent activities are also increasing[9]. The existence of fraud not only erodes the financial resources of the program, but can also reduce the quality of services, create injustice, and erode public trust in the national health insurance system[7], [10].The phenomenon of fraud in health insurance systems is not a new issue and has been a concern in various countries. In Indonesia, although the National Health Insurance (JKN) program is still relatively new, indications of fraud have been identified in numerous studies and reports. For example, findings regarding upcoding of healthcare costs[11], document forgery[12], and inefficiencies in BPJS claims that could potentially lead to fraud[13] indicate that fraud is a real threat that needs to be addressed seriously. Minister of Health Regulation No. 16 of 2019 on the Prevention and Handling of Fraud is evidence that the government recognizes the urgency of this issue and has responded through regulation[14]. There was a financing deficit of around Rp2.6 trillion in the first year of the National Health Insurance (JKN) program, namely in January 2014. The source of this financing deficit came from fraud and moral hazard found during and after health services between providers, consumers, and the Social Security Administration Agency (BPJS)[15].

During the BPJS Health Facility National Meeting in Jakarta, the Deputy Chair of the Corruption Eradication Commission (KPK) revealed that losses from fraud in the health sector amounted to 10 percent of public health expenditure, or around Rp 20 trillion. The Chair of Commission VIII of the Indonesian House of Representatives also asked the government to be aware of the BPJS Health deficit, which is estimated to reach Rp 20 trillion in 2024[16]. Given the complexity and negative impact of fraud, an in-depth analysis of fraudulent activities in Indonesia's JKN program is crucial. This study will comprehensively examine various aspects related to fraud in JKN, ranging from identifying common types of fraud, analyzing triggering factors, assessing the resulting impacts, to exploring various prevention and mitigation strategies that can be implemented. To understanding fraud, it is hoped that more effective recommendations can be formulated to maintain the integrity and sustainability of the JKN program.

II. METHODS

To investigate fraud issues in health insurance schemes, this study used a systematic literature review methodology. This method was chosen to gain a comprehensive understanding of the patterns, causal factors, and effects of fraud reported in various studies and cross-national insurance schemes, both public and private[17], [18]. In May 2025, the literature review was conducted using scientific databases such as Google Scholar, PubMed, ScienceDirect, the official Indonesian website and government regulation. The keywords used were “fraud” and “health insurance”, “private supplementary health insurance,” “voluntary health insurance”, and “insurance termination”, as well as “health insurance registration” and “BPJS”. To improve the accuracy of search results, this combination of keywords was created using Boolean operators. Inclusion criteria were limited to Indonesia and English language articles that were peer-reviewed and published between 2016 and 2025 and had an empirical (quantitative or qualitative) focus on fraud in health insurance.

Editorial articles, opinion pieces, and studies that were not peer-reviewed were excluded. In addition, research related to topics unrelated to health insurance, such as vehicle or property insurance, was also excluded[18]. Three stages were used to select articles: (1) selecting titles and abstracts; (2) conducting a full-text review to ensure that the articles met the inclusion criteria; and (3) data verification. From the initial search results, which included more than 50 articles, 45 articles that met the criteria were selected. To avoid bias, each researcher conducted the screening process separately. If there are differences in the assessment of article inclusion, the two researchers discuss to reach a consensus. If not, a third researcher is asked to review and decide. The title, author, year of publication, location, type of insurance, method, and main findings related to fraud are included in the standard format for primary data studies. In addition to data extraction, each study is evaluated using an appropriate bias risk assessment tool. The Newcastle-Ottawa Scale (NOS) is used for quantitative observational studies to assess methodological quality and potential bias; experimental or quasi-experimental studies use the latest version of the Cochrane bias risk assessment tool.

III. RESULT AND DISCUSSION

In the health sector, the term “fraud” is more commonly used to describe types of fraud that include corruption, misuse of assets, and falsification of statements. All parties involved in the JKN program, from BPJS Kesehatan participants, health service providers, BPJS Kesehatan, and drug and medical device providers[14], can commit fraud in the health sector. Uniquely, these actors can collaborate in fraudulent acts or defraud one another[7]. Fraud is an act committed by a participant, BPJS Kesehatan officer, healthcare provider, or pharmaceutical and medical device provider that violates laws and regulations to obtain personal gain from the health insurance program included in the national social security system[11], [19]. These fraudulent activities include manipulating medical procedures to increase service costs, as well as intentionally misleading presentations for services that do not align with medical indications[20], [21]. Fraud is also an act of deception or misconduct aimed at obtaining benefits for the fraudster or for other parties. Insurance participants, insurance providers, and Healthcare Providers (HCPs) can commit fraud. Fraud by HCPs, particularly hospitals, can occur because hospitals are dissatisfied with INACBG rates (Indonesia Case Base Groups, an application used by hospitals to submit claims to the government) and poor hospital information technology systems. Additionally, the pursuit of “economic gain” may encourage HCPs to commit fraud[22]. Since the issuance of Ministry of Health Regulation (Permenkes) No. 3 of 2023 on Health Service Fee Standards in the Implementation of the Health Insurance Program, capitation funds have not increased since 2016–2022.

This increases the likelihood of fraud by altering claims for services paid on a non-capitation basis, charging participants fees that should be covered under both capitation and non-capitation rates according to the established tariff standards, and referring patients inappropriately for the purpose of obtaining specific benefits[23]. Based on the type of fraud committed, JKN fraud practices are divided into three main categories. Provider fraud (71% of cases) includes actions committed by healthcare facilities, such as upcoding, which means replacing diagnosis codes with higher costs, increasing claims by up to 22% in the Depok area[11], the use of non-participant identities or so-called fictitious patients, which frequently occurs in 15% of private healthcare facilities[24], and forgery of prescriptions and medical documents[12], Participant fraud (19%) involves unauthorized parties misusing cards, such as using someone else's card to obtain services[25]. Meanwhile, internal fraud (10%) involves collusion between BPJS staff and healthcare facilities, such as approving fictitious claims[26]. The highest incidence occurs in hospitals, particularly regional hospitals, due to weak internal oversight, complex claim systems, and insufficient ethical awareness, which form the basis for violations[27]. Fraud is more common in hospitals due to upcoding resulting from improper coding. Upcoding can be considered fraud if there is an element of intent to gain financial benefit, as upcoding can inflate claims. This occurs because there are differences between diagnosis codes based on ICD-10 and the codes used for claims according to BPJS regulations[24].

Donald R. Cressey proposed the fraud triangle theory, which is the most used framework for understanding the causes of fraud. There are three key elements that drive a person to commit fraud: (1) Pressure, which is the urge or motivation to commit fraud, such as to meet financial needs, due to pressure from the environment, or an excessive lifestyle. (2) Opportunity, which refers to the conditions that enable someone to commit fraud, such as weak internal controls, lack of supervision, or system complexity. (3) Rationalization, which is the way someone justifies their fraudulent actions, such as feeling entitled, believing they are not harming others, or feeling capable of returning the money they have taken[28]. There are six motivational factors that drive employees and managers to commit fraud. These include social incentives and pressure, greed, operational issues, internal pressure, and an unpleasant work environment. The rationalization factor involves analyzing behavior through five key neutralizations, including social weighting, shifting blame, denial of injury, attitude, and prior history of fraud. Lastly, but no less important, are opportunities, such as poor control conditions, inadequate control efforts, and situations that allow fraudsters to collaborate[29]. Other factors that contribute to fraud are:

1. Organizational Commitment and Internal Control: Low organizational commitment and internal control can make it easier for people to commit fraud[30].
2. INA-CBGs Financing System: The use of the INA-CBGs (Indonesia Case Based Groups) system in the JKN provides opportunities for fraud, especially those related to upcoding and manipulation of diagnosis codes[31].
3. Knowledge and Awareness: Low awareness and knowledge of JKN regulations and rules among participants, service providers, and BPJS staff can increase the risk of fraud[32].
4. Coordination: Lack of coordination among service providers, between service providers and the BPJS team, and among insurance companies can create opportunities for double claims or misuse of benefits[33].

Fraud has an impact on the sustainability of the JKN program.

This can have negative consequences in terms of finance, operations, and public trust, such as:

1. Financial

Fraud is clearly detrimental as it directly causes a budget deficit for BPJS. This results in claims that cannot be paid by BPJS, delayed payments, or even the government being forced to provide additional[10], [34]. To cover losses caused by fraud and maintain financial sustainability, BPJS Health ultimately has to increase premiums, which can burden participants, especially self-employed participants[9], [35]. Funds that should have been used for improving service quality or expanding coverage were diverted to cover losses due to fraud. Additionally, budget cuts were made that should have been allocated for preventive programs and health promotion. Investments intended to maintain long-term financial stability were instead used to address the fraud system[36], [37].

2. Quality of Service

Fraudulent actions committed by service providers (such as upcoding or billing for services that were not actually provided) result in a reduction or diversion of resources available for services that are urgently needed by patients. This will lead to delayed services, drug shortages or stockouts, and even suboptimal quality of care[13]. Fraud leads to inequity as public funds intended for everyone are misused by certain parties. Honest participants may not receive the quality of care they deserve due to limited funds caused by fraud. A significant amount of time must be spent by BPJS staff and resources to verify claims and investigate suspected fraud, which reduces operational efficiency and the time available for other tasks[7].

3. Public Reputation and Trust

Damage to the image and public trust in BPJS Health and the JKN program as a whole due to high rates of fraud. Participants will become skeptical about the effectiveness and integrity of the program[10]. Participant Indifference: If participants feel that the BPJS program is vulnerable to fraud, they will become less concerned about the wise use of services.

Fraud Prevention and Management Strategies in the JKN Program

Dealing with the complexity of fraud requires comprehensive and integrated prevention and management strategies. The government and BPJS Kesehatan have proposed and implemented various strategies:

A. Strengthening Internal Control and Governance Systems

Applying good governance principles in all aspects of JKN management[34], strengthening the internal control systems of BPJS Kesehatan and healthcare facilities, including task segregation, clear authorization, and routine data reconciliation[21], [27]. Conducting regular internal and external audits to detect system weaknesses and fraudulent practices[37].

B. Utilizing Technology and Data Analytics

Enhancing and implementing data-driven fraud detection systems using data mining, machine learning, and artificial intelligence to identify suspicious transaction patterns in real-time or near real-time[38], [39]. Enhancing Internal Control Systems; Implementing standard operating procedures (SOPs), clinical pathways, and developing transparency in the service system[40], [41].

1. Enhancing Transparency and Accountability

Enhancing the transparency of BPJS Kesehatan's financial and operational reporting. Ensuring the accountability of service providers in providing services and billing claims[40].

2. Development of a Whistleblowing System

Establishing and promoting an effective, secure, and independent whistleblowing system that allows for the reporting of suspected fraud without fear of retaliation. Ensuring prompt and appropriate follow-up on reports received[20].

3. Education, Socialization, and Awareness Raising

Provide extensive education and outreach to JKN participants regarding their rights and obligations, as well as the importance of wise use of health services and reporting suspected fraud. Provide training and outreach to healthcare providers regarding ethics, integrity, and regulations related to fraud in JKN. Improve the understanding of BPJS Kesehatan staff regarding the identification and handling of fraud[42], [43].

4. Effective Regulation and Law Enforcement

Evaluate and strengthen regulations related to fraud in the JKN, including strict and proportional sanctions for perpetrators of fraud. Ensure fair and consistent law enforcement in fraud cases, thereby providing a deterrent effect. Accelerate the investigation and prosecution of suspected fraud[25], [44].

5. Inter-agency Cooperation and Coordination

Establish strong cooperation and collaboration between BPJS Kesehatan, the Ministry of Health, and the Financial Services Authority in terms of commercial insurance, law enforcement agencies, and other supervisory agencies. Share information and data between institutions to help identify and investigate fraud[29], [45].

6. Risk-Based Approach

Identify areas with high fraud risk and increase prevention and oversight resources in those areas. Conduct regular risk analyses to identify new fraud threats[32].

7. Development of Fraud Prevention Policies. Develop and implement clear and structured fraud prevention policies, as stipulated in Ministry of Health Regulation No. 16 of 2019[14]. Study and adapt policies that have proven successful in other countries[46].

8. Focus on Managed Care. Create an effective managed care system within the JKN that can control costs and ensure appropriate use of services. This system may include utilization review and integrated disease management[47].

Challenges in Overcoming Fraud

In implementing strategies to manage fraud in the JKN program in Indonesia, there are many challenges, including:

1. Scale and Complexity of the Program: JKN covers more than 200 million people and millions of service providers. Managing and supervising a system of this size is quite complex, providing opportunities for large-scale fraud[4], [5].

2. Technology Not Fully Integrated: Information systems across healthcare facilities and within the BPJS Health system are not fully integrated, making it difficult to conduct comprehensive data analysis to detect fraud[48].
3. Evolving Fraud Modus Operandi: Fraudsters are clever and innovative in their modus operandi, forcing detection and prevention systems to be constantly updated to remain relevant and effective[35].
4. Culture and Ethics: It is challenging to change a culture that still views harmful practices as trivial or lacks ethical awareness among service providers and even participants[7].
5. Burden of Proof in Fraud Cases: From a legal perspective, proving fraud requires strong and accurate evidence, which may be difficult to obtain, especially in cases of data manipulation or hidden malicious intent. Regarding the legal analysis of law enforcement against fraud[25], [39].

Case Study

Several examples of case studies provide detailed descriptions of fraudulent practices in JKN. In a study conducted by Sariunita et al. (2023), the existence of upcoding in health services is one of the problems that often becomes a problem in the BPJS Health Referral Benefit Assurance Unit, Depok Branch Office. The cause is due to incompetent human resources, misperception of diagnosis by coders, the number of files that accumulate, and the tendency to increase claim costs[11]. Fadliana et al. (2023) said there was a potential for new fraud that occurred during the Covid-19 Pandemic in Prabumulih City Hospital, namely the cost of antigens as screening billed to patients, billing covid claims not according to the standard of care and standard of care, billing covid patients after covid treatment episodes to JKN, billing comorbid diagnoses, complications and coincidences not according to the provisions, extending the day of treatment in billing Covid Patient claims and misuse of identity use by participants[21]. Sugiarti et al. (2022) in exploring the potential for fraud through medical records found upcoding because there were differences in diagnosis codes based on ICD 10 and codes used for the implementation of claims that referred to regulations made by BPJS. To prevent upcoding, proper verification can be conducted by the verificator who receives the claim file against all documents.

The existence of a clinical pathway also has an important role in health services[24]. Yusuf et al. (2022) revealed that the competence of SPI Internal Auditors at Andi Makkasau Parepare Hospital has not been tested for quality in preventing and detecting fraud in the JKN program because the core competencies according to The Institute of Internal Auditors that have been mastered have not been utilized properly. SPI Internal Auditors are still running other programs and as the Health Care Incentive Verifier Team during the pandemic. Then there is no recruitment system made so that there is a gap in the competencies mastered by the SPI Internal Auditor at Andi Makkasau Parepare Hospital[43]. Overall, fraud in JKN is not just a legal issue, but also involves ethical responsibility, organizational governance, and social justice in access to health services. Its prevention must be done through a combination of strategies: adaptive regulations, strict supervision, empowerment of human resources, and community involvement in supervision. Fraud prevention efforts must be systematic and comprehensive. The government has issued regulations such as Permenkes No. 16 of 2019 concerning Fraud Prevention and Handling in the JKN Program. This regulation mandates the establishment of a Fraud Prevention Team in each health facility and routine reporting of fraud prevention activities.

IV. CONCLUSION

The National Health Insurance (JKN) program in Indonesia, which aims to achieve Universal Health Coverage (UHC), faces serious challenges in the form of fraud committed by various actors in the health ecosystem. This fraud not only impacts BPJS Kesehatan's financial losses, such as budget deficits, but also causes operational inefficiencies, decreased service quality, inequities in access, and erosion of public trust. Understanding the causes of fraud through the fraud triangle theory (pressure, opportunity, rationalization) as well as other supporting factors such as internal control weaknesses and system complexity, is key in designing effective prevention strategies. Fraud in the national health insurance system (JKN) in Indonesia is a complex and multidimensional problem, involving various actors, motives, and systemic weaknesses. Forms of fraud such as upcoding, fictitious claims, falsification of medical documents, and misuse of

participant cards have proven to be financially and operationally costly, as well as eroding public trust. The main drivers of fraud include economic pressure, weak internal controls, and individual rationalizations that justify unethical actions.

Comprehensive fraud prevention and handling strategy is crucial, including strengthening governance, utilizing advanced technology for early detection, increasing transparency, a strong culture of ethics and integrity through education and socialization, strict law enforcement, and collaboration between stakeholders. Although various efforts have been made, challenges such as the large scale of the program, the complexity of the system, and the adaptation of the modus operandi of fraudsters require continuous attention and innovation in prevention strategies. Therefore, handling fraud in JKN is not only a matter of law enforcement, but also an ethical responsibility, organizational governance, and social justice for the sustainability of the program and the welfare of the community. Success prevention must be holistic, including aspects of strengthening regulations, transparent organizational governance, utilizing early detection technology, education, and inter-agency collaboration. The government, through Permenkes has provided a legal framework that needs to be implemented effectively in all health facilities. In addition, the implementation of managed care and whistleblowing systems can improve accountability. The success of fraud prevention and handling efforts in JKN will determine the sustainability of the national health insurance program, the efficiency of the state budget, and justice in access to health services for all Indonesians.

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REFERENCES

[1] BPJS, "Peluncuraan Data Sampel BPJS Kesehatan 2024 (2015-2023)," 2024.

[2] A. A. A. Saru, M. A. Arifin, D. Darmawansyah, A. Razak, M. Syafar, and R. Rahmatia, "Potential fraud and its' prevention in the implementation of national health insurance at Dadi Regional Hospital," ***Int. J. Public Heal. Sci.***, vol. 12, no. 3, pp. 1040–1047, 2023, doi: 10.11591/ijphs.v12i3.22952.

[3] E. N. Savitri, S. D. Silaban, K. Baransano, and E. P. Mahadewi, "The Implementation Of National Health Insurance Policy At Puri Medika Tanjung Priok Hospital , Jakarta Indonesia," pp. 18–25, 2025.

[4] N. Sipahutar, A. S. Lestari, S. Renanda, T. N. P. Tanjung, and F. P. Gurning, "Program JKN Dalam Pencapaian UHC (Universal Health Coverage) Di Kabupaten Simalungun," ***J. Kesehat. Tambusai***, vol. 4, no. 3, pp. 3901–3906, 2023.

[5] M. Y. Alkayyis, "Implementation of the National Health Insurance Programme in Achieving Universal Health Coverage in Indonesia," vol. 4, no. 2, pp. 85–95, 2024.

[6] Yohanes Firmansyah, Imam Haryanto, and Ernawati Ernawati, "Fraud Issues in the National Health Insurance (Causes, Legal Impacts, Dispute Settlement and Preventive Measures)," ***J. Multidisiplin Madani,*** vol. 2, no. 4, pp. 1663–1680, 2022, doi: 10.55927/mudima.v2i4.272.

[7] H. Djasri, P. A. Rahma, and E. T. Hasri, "Korupsi Dalam Pelayanan Kesehatan Di Era Jaminan Kesehatan Nasional: Kajian Besarnya Potensi Dan Sistem Pengendalian Fraud [Corruption in Health Services in the Era of National Health Insurance: A Study of the Potential and Fraud Control System]," *Integritas*, vol. 2, no. 1, pp. 113–133, 2016, [Online]. Available: https://acch.kpk.go.id/id/component/content/article?id=672:korupsi-dalam-pelayanan-kesehatan-di-era-jaminan-kesehatan-nasional-kajian-besarnya-potensi-dan-sistem-pengendalian-fraud

[8] J. Xu *et al.*, "What influences the public's willingness to report health insurance fraud in familiar or unfamiliar healthcare settings? a cross-sectional study of the young and middle-aged people in China," *BMC Public Health*, vol. 24, no. 1, pp. 1–11, 2024, doi: 10.1186/s12889-023-17581-9.

[9] A. du Preez, S. Bhattacharya, P. Beling, and E. Bowen, "Fraud detection in healthcare claims using machine learning: A systematic review," *Artif. Intell. Med.*, vol. 160, no. December 2024, p. 103061, 2025.

[10] J. S. Tito, J. S. Tito, and K. N. Siregar, "***Jurnal Ekonomi Kesehatan Indonesia Faktor Pemicu dan Penghambat Fraud dalam Program Jaminan Kesehatan Nasional dan Strategi Pencegahannya*** : Sebuah Scoping Review Faktor Pemicu dan Penghambat Fraud dalam Program Jaminan Kesehatan Nasional dan Strategi Penc," vol. 9, no. 2, 2024, doi: 10.7454/eki.v9i2.1124.

[11] N. Sariunita and R. A. Syakurah, "Analisis Kejadian Upcoding Biaya Pelayanan Kesehatan Di Wilayah Kerja Bpjs Kesehatan Cabang Depok," ***Bina Gener. J. Kesehat.***, vol. 14, no. 2, pp. 1–6, 2023, doi: 10.35907/bgjk.v14i2.220.

[12] M. Rizqy *et al.*, "Tindakan Pemalsuan Dokumen Terhadap Asuransi Kesehatan," vol. 7, no. 2, pp. 2134–2144, 2023.

[13] H. N. Rofiq, "Deteksi Inefisiensi pada Klaim BPJS Kesehatan dengan menggunakan Machine Learning," ***J. Jaminan Kesehat. Nas.,*** vol. 3, no. 1, pp. 83–98, 2023, doi: 10.53756/jjkn.v3i1.134.

[14] Kementerian Kesehatan, "Permenkes No.16 Tahun 2019 tentang Pencegahan Dan Penanganan Fraud," no. 803, pp. 1–48, 2019.

[15] L. Ardini, D. Maryam, and N. Munaa, "Fraud Detection in Indonesia National Health Insurance Implementation: a Phenomenology Experience From Hospital," *Proceeding 1st Int. Conf. Bus. Soc. Sci.*, pp. 263–270, 2020.

[16] H. Revanda, "Klaim Rumah Sakit Tertahan, BPJS Kesehatan: Verifikasi Diperketat sesuai Rekomendasi KPK untuk Cegah Fraud," 2025.

[17] S. Basuki, *Metode Peneltian*. 2006.

[18] E. P. Mahadewi, *Metode Riset Bisnis (Business Research Methods).* Pt. Literasi Nusantara Abadi Grup.

[19] I. K. Muliarta, I. G. A. M. R. Jayantiari, S. P. M. E. Purwani, and I. W. Parsa, "Analisis potensi fraud dalam pelaksanaan jaminan kesehatan nasional pada pelayanan kesehatan di Indonesia: tinjauan sistematis," *Intisari Sains Medis*, vol. 14, no. 2, pp. 903–908, 2023, doi: 10.15562/ism.v14i2.1816.

[20] Ridwan, S. Munadi, H. Fahlevi, and N. Nadirsyah, "Fraud Prevention System with Whistleblowing System in Health Services: A Systematic Review," ***J. Jaminan Kesehat. Nas.***, vol. 4, no. 1, pp. 13–25, 2024, doi: 10.53756/jjkn.v4i1.182.

[21] Fadliana, A. W. Wardhana, and C. Zainuddin, "Implementasi Sistem Pencegahan Kecurangan Pelayanan Kesehatan Di Rumah Sakit Kota Prabumulih Pada Masa Pandemi Covid 19," ***J. Jaminan Kesehat. Nas.,*** vol. 3, no. 1, pp. 42–55, 2023, doi: 10.53756/jjkn.v3i1.124.

[22] T. S. Hartati, "Prevention of Fraudulent in the Implementation of Health Insurance Program on National Social Security System (SJSN) in Menggala Hospital," ***Fiat JustisiaJurnal Ilmu Huk***., vol. 10, no. 4, p. 715, 2017, doi: 10.25041/fiatjustisia.v10no4.808.

[23] R. N. Fatimah and R. A. Syakurah, "Determinan Potensi Fraud Pada Program Jkn Di," vol. 5, no. April, 2021.

[24] I. Sugiarti, I. Masturoh, and F. Fadly, "Menelusuri Potensi Fraud dalam Jaminan Kesehatan Nasional melalui Rekam Medis di Rumah Sakit Tracing Potential Fraud in National Health Insurance Through Medical Records in Hospitals," ***J. Kesehat. Vokasional,*** vol. 7, no. 1, pp. 43–44, 2021.

[25] D. Fajarwati, E. Efrila, and A. Makbul, "Analisis Yuridis Penegakan Hukum atas Kecurangan (Fraud) Fasilitas Kesehatan Terhadap Peserta Jaminan Kesehatan Nasional dalam Pelayanan Medis," ***J. Cahaya Mandalika*** *ISSN 2721-4796*, vol. 5, no. 2, pp. 899–912, 2024, doi: 10.36312/jcm.v5i2.3788.

[26] Mulhadi and D. Harianto, "Misrepresentation Sebagai Fraud Dalam Perkara Kontrak Asuransi Yang Dilakukan Penanggung," *Arena Huk.*, vol. 15, no. 1, pp. 59–78, 2022, doi: 10.21776/ub.arenahukum.2022.01501.4.

[27] I. A. Rosyida, "Implementasi Pengendalian Internal Pada Pencegahan Dan Pendeteksian Fraud Rumah Sakit Di Bojonegoro," ***Ekonika J. Ekon. Univ. kadiri,*** vol. 3, no. 1, p. 47, 2018, doi: 10.30737/ekonika.v3i1.106.

[28] H. Sadikin and W. Adisasmito, "Analisis Pengaruh Dimensi Fraud Triangle Dalam Kebijakan Pencegahan Fraud Terhadap Program Jaminan Kesehatan Nasional di RSUP Nasional Cipto Mangunkusumo," ***J. Ekon. Kesehat. Indones***., vol. 1, no. 2, 2016, doi: 10.7454/eki.v1i2.1871.

[29] N. H. Fitra, Usman, R. Amir, Nurlinda, and M. Majid, "Analisis Pelaksanaan Program Pencegahan Kecurangan (Fraud) Jaminan Kesehatan Nasional," *Pros. Semin. Nas. Bisnis, Teknol. Dan Kesehat.*, vol. 8, no. 1, pp. 144–163, 2025.

[30] T. N. Natasya, H. Karamoy, and R. Lambey, "Pengaruh Komitmen Organisasi Dan Pengendalian Internal Terhadap Resiko Terjadinya Kecurangan (Fraud) Dalam Pelaksanaan Jaminan Kesehatan Di Rumah Sakit Bhayangkara Tk. Iv Polda Sulut," ***Going Concern J. Ris. Akunt.***, vol. 12, no. 2, pp. 847–856, 2017, doi: 10.32400/gc.12.2.18274.2017.

[31] F. Agiwahyuanto, I. Hartini, and Sudiro, "Upaya Pencegahan Perbedaan Diagnosis Klinis Dan Diagnosis Asuransi Dengan Diberlakukan Program Jaminan Kesehatan Nasional (JKN) Dalam Pelayanan Bpjs Kesehatan Studi Di Rsud Kota Semarang Efforts to Prevent Differences between Clinical and Insurance Diag," ***J. Manaj. Kesehat. Indones***., vol. 4, no. 02, pp. 84–90, 2016, doi: 10.14710/jmki.v4i2.13594.

[32] A. A. U. Amri, A. Nurwahyuni, and Y. N. Harumansyah, "Pendorong Dan Penghambat Potensi Fraud Jaminan Kesehatan Nasional Di Fasilitas Pelayanan Kesehatan: Tinjauan Sistematis," ***Syntax Lit. J. Ilm. Indones.***, vol. 7, no. 1, pp. 1–12, 2022.

[33] F. M. Dewi and B. Hidayat, "Analisis Praktik Koordinasi Manfaat (Coodination of Benefit) Layanan Rawat Inap di Indonesia," ***J. Ekon. Kesehat. Indones.***, vol. 2, no. 2, 2017, doi: 10.7454/eki.v2i2.2149.

[34] R. Annisa, S. Winda, E. Dwisaputro, and K. N. Isnaini, "Mengatasi Defisit Dana Jaminan Sosial Kesehatan Melalui Perbaikan Tata Kelola," ***INTEGRITAS J. Antikorupsi,*** vol. 6, no. 2, pp. 209–224, 2020, doi: 10.32697/integritas.v6i2.664.

[35] M. E. Haque and M. E. Tozal, "Identifying Health Insurance Claim Frauds Using Mixture of Clinical Concepts," *IEEE Trans. Serv. Comput.*, vol. 15, no. 4, pp. 2356–2367, 2022, doi: 10.1109/TSC.2021.3051165.

[36] Wulan Septiana, Siti Nurul Azizah, and Riswandy Wasir, "Tantangan dan Peluang Mewujudkan Akses Universal ke Layanan Kesehatan Berkualitas di Indonesia," ***Antigen J. Kesehat. Masy. dan Ilmu Gizi,*** vol. 2, no. 3, pp. 115–128, 2024, doi: 10.57213/antigen.v2i3.317.

[37] A. N. Kusumawati, "Analisis Kinerja Dokter Verifikator Internal dalam Menurunkan Angka Klaim Pending di RSUD Koja Tahun 2018," ***J. Adm. Rumah Sakit Indones.***, vol. 6, no. 1, 2019, doi: 10.7454/arsi.v6i1.3244.

[38] D. Hanggraeni, D. R. Triana, L. S. Kuswanto, M. I. Alfarisi, and R. H. Rahayu, "Identifikasi Dan Mitigasi Risiko Stratejik Menggunakan Ife-Efe Matrix: Studi Kasus Bpjs Kesehatan," ***JMBI UNSRAT (Jurnal Ilm. Manaj. Bisnis dan Inov. Univ. Sam Ratulangi)***., vol. 6, no. 3, pp. 147–162, 2019.

[39] L. Mahya, T. Tarjo, Z. M. Sanusi, and F. A. Kurniawan, "Intelligent Automation Of Fraud Detection And Investigation:A Bibliometric Analysis Approach," ***J. Reviu Akunt. dan Keuang.***, vol. 13, no. 3, pp. 588–613, 2023, doi: 10.22219/jrak.v13i3.28487.

[40] A. Mitriza and A. Akbar, "Analysis of Fraud Potential Control at Achmad Moechtar Regional General Hospital Bukittinggi," ***J. Kesehat. Andalas,*** vol. 8, no. 3, p. 493, 2019.

[41] A. P. Sari, S. P. Jati, and Z. Shaluhiyah, "Implementasi Kebijakan Pencegahan Fraud Dalam Pelaksanaan Program Jaminan Kesehatan Di Rumah Sakit Nasional Diponegoro Jawa Tengah," ***JKM (Jurnal Kesehat. Masyarakat) Cendekia Utama,*** vol. 10, no. 1, p. 128, 2022, doi: 10.31596/jkm.v10i1.1002.

[42] D. Aprianti, Q. 'Aini, and E. Puspitaloka Mahadewi, "Knowledge Development About The History And Basic Principles Of Health Insurance Business In Indonesia," ***Int. J. Sci. Technol. Manag.***, vol. 4, no. 4, pp. 759–767, 2023, doi: 10.46729/ijstm.v4i4.848.

[43] Z. Yusuf, A. Nurwanah, and R. Sari, "Fraud pada Program Jaminan Kesehatan Nasional Perpekstif: Kompetensi Auditor Internal dengan Pendekatan Fenomenologi," *Owner*, vol. 6, no. 4, pp. 3653–3669, 2022, doi: 10.33395/owner.v6i4.1115.

[44] S. Kurniawan, H. S. Disemadi, and A. Purwanti, "Urgensi Pencegahan Tindak Pidana Curang (Fraud) Dalam Klaim Asuransi," *Halu Oleo Law Rev.*, vol. 4, no. 1, p. 38, 2020, doi: 10.33561/holrev.v4i1.10863.

[45] A. Jaeni and T. M. K. Astuti, "Analisa Yuridis Fraud Sebagai Kejahatan dalam Asuransi Kesehatan Komersial Menurut Perspektif Perlindungan Para Pihak," ***JSIM J. Ilmu Sos. dan Pendidik.***, vol. 5, no. 5, 2024.

[46] A. J. O'Malley, T. A. Bubolz, and J. S. Skinner, "The diffusion of health care fraud: A bipartite network analysis," *Soc. Sci. Med.*, vol. 327, pp. 1–30, 2023, doi: 10.1016/j.socscimed.2023.115927.

[47] G. Ayu, H. Fermansyah, and E. Puspitaloka Mahadewi, "A Study of Managed Care Health System During Pandemic," ***Int. J. Sci. Technol. Manag.***, vol. 4, no. 4, pp. 802–808, 2023, doi: 10.46729/ijstm.v4i4.846.

[48] S. Santoso, A. B. Prasetijo, and S. P. Arso, "Analisis Kebutuhan Pengembangan Aplikasi Prediksi Biaya Dan Lama Dirawat Pasien Rawat Inap BPJS Berbasis Data Mining," ***J. Ners***, vol. 7, no. 2, pp. 1027–1032, 2023, doi: 10.31004/jn.v7i2.16476.