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RESEARCH ARTICLE

HEALTH INSURANCE FRAUD MANAGEMENT IN SELECTED PRIVATE HOSPITALS: A CASE STUDY FROM MOWE, OGUN STATE, NIGERIA

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ABSTRACT

Health insurance fraud remains a significant challenge to healthcare financing, yet existing research in Nigeria has focused predominantly on public hospitals, with little attention given to private healthcare facilities. This study investigates how three selected private hospitals in Mowe, Ogun State, manage health insurance fraud, examining the types of fraud encountered, the strategies employed to address them, the challenges faced, and the solutions developed. Guided by Routine Activity Theory, the research adopted a case study and exploratory design. Primary data were collected through nine key informant interviews with representatives of Health Maintenance Organisations (HMOs), intelligence and investigating police officers, and pharmaceutical experts, alongside nine in-depth interviews with Chief Medical Directors, Financial Managers, and Administrative Officers. Secondary sources included books, journal articles, internet resources, and unpublished works. The findings revealed multiple forms of fraud such as falsified receipts, patient fraud under false identities, billing for services not rendered, ghost patient fraud, and overcharging for treatment. Hospitals responded with strategies including maintaining detailed health records, hiring adequate personnel, and raising community awareness. However, these efforts were constrained by challenges such as aggressive patients, poorly trained staff, and deliberate delays in claims approvals. In response, hospitals introduced measures such as designated verification offices, monthly financial audits, regular personnel training, collaboration with law enforcement agencies, and partnerships with regulatory bodies. The study concludes that while private hospitals in Mowe actively engage in health insurance fraud management, continuous adaptation and stronger institutional support are required to enhance the effectiveness and sustainability of these efforts.

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INTRODUCTION

Fraud remains one of the most pervasive crimes across organisations worldwide (ACFE, 2018). Within healthcare systems, health insurance fraud has emerged as a particularly damaging form, diverting resources from genuine medical needs and undermining the sustainability of health programmes. The Federal Bureau of Investigation (FBI) estimates that fraudulent billings in public and private healthcare programs account for between 3–10% of total health expenditure, translating to annual losses of up to USD 250 billion (Morris, 2009). Similarly, the Global Healthcare Anti-Fraud Network reports that approximately USD 260 billion—equivalent to 6% of healthcare disbursements—is lost annually to health insurance fraud. Such practices not only weaken financial systems but also compromise access to quality care and erode public trust in health services. Although much of the literature has concentrated on developed countries, evidence from Africa also points to widespread challenges. In Kenya, fraudulent billing and ghost patients have undermined confidence in health insurance schemes (Mutie, 2019), while in Ghana, double billing practices have eroded service quality (Owusu, 2020). Rwanda has equally struggled with fraudulent claims that redirect scarce resources away from essential services (Nshimiyimana, 2019). In Nigeria, where the National Health Insurance Scheme (NHIS) covers over 10 million people, estimates suggest that about 30% of NHIS funds are lost annually to fraudulent claims (NHIS, 2021), implicating both public and private hospitals. While the management of fraud in public hospitals has received some scholarly attention (Onoka et al., 2019; Olaopa et al., 2021), there remains limited understanding of how private hospitals, which deliver a significant share of healthcare services, address the problem. This gap is particularly salient in Mowe, Ogun State, where private hospitals serve as the primary point of access for much of the population. Despite the financial and social costs of health insurance fraud, little empirical research has examined how these facilities detect, prevent, and manage fraudulent

practices. Weak regulatory enforcement, poor claims verification systems, and limited technological infrastructure exacerbate the problem, leaving hospitals vulnerable to fraudulent activities such as inflated billing, ghost patients, and collusion between providers and insurers. While health insurance is designed to reduce out-of-pocket spending and improve healthcare access, its potential is undermined when resources are diverted away from genuine beneficiaries through fraud. Addressing this gap has both academic and practical implications. Without a nuanced understanding of how fraud is managed within private hospitals, policies risk remaining disconnected from ground realities, leaving systemic vulnerabilities unresolved. Likewise, the absence of documented hospital-level strategies constrains knowledge-sharing across facilities, preventing the scaling of effective practices. Against this backdrop, the present study investigates health insurance fraud in selected private hospitals in Mowe, Ogun State. Specifically, it identifies the forms of fraud perpetrated within these institutions, examines the strategies adopted to manage fraud, explores the challenges that hinder their effectiveness, and assesses the ways hospitals respond to and overcome these challenges. By addressing these questions, the study contributes context-specific evidence to an area that has received little scholarly attention, while highlighting practical lessons that may inform broader policy and institutional reforms in Nigeria's health insurance landscape.

Significance of the Study

This study is significant in several respects. First, it addresses an underexplored context: the management of health insurance fraud in private hospitals in Mowe, Ogun State. While much of the existing scholarship has concentrated on fraud in public healthcare systems, little empirical attention has been given to private healthcare facilities, despite their central role in service delivery. By focusing on this emerging urban setting, the study fills a critical gap in knowledge. Second, the research advances scholarly understanding by not only identifying the types of fraud and existing management practices but also by examining in detail the strategies used to manage the challenges that hinder fraud control. This dimension is often absent in the literature, where discussions tend to end with identifying challenges without proposing or analysing concrete responses. The findings therefore provide sustainable strategies that can be replicated by other private hospitals within and beyond Mowe. Third, the study has direct practical value for healthcare administrators and policymakers. By uncovering how private hospitals actively manage health insurance fraud, the research offers evidence-based recommendations for developing policies that safeguard clients and protect health insurance funds from misuse. Health Maintenance Organisations (HMOs), hospital administrators, and regulatory bodies can adapt the strategies highlighted in this study to strengthen institutional responses. Finally, the study contributes to the broader body of knowledge on healthcare fraud and governance in developing contexts. It provides a foundation for future research, offering empirical insights that other scholars can build on to further explore fraud management in different regions and healthcare systems.

LITERATURE REVIEW

Health insurance fraud has emerged as a persistent challenge globally, undermining both healthcare financing and service delivery. Scholars highlight that fraud takes multiple forms, including false billing, upcoding, phantom patients, and exaggerated claims, all of which strain the financial sustainability of health systems (Baicker, 2015; Ojo et al., 2024). In high-income settings, advanced detection technologies have significantly improved oversight. For example, Baicker (2015) underscores the value of public–private partnerships in deploying machine learning algorithms for fraud detection, where private sector innovations can be adapted for large-scale public programmes like Medicare and Medicaid. Such collaborations pool resources and technical expertise, strengthening fraud monitoring capacity.

Recent global scoping reviews (2025) extend this perspective by demonstrating how community engagement enhances fraud prevention. Through awareness campaigns and grassroots monitoring, patients are empowered to report suspicious practices, increasing transparency and accountability within health systems. Evidence from India (Naib et al., 2024) further supports this, showing that when communities understand how insurance schemes function, they are more likely to recognise irregularities and demand accountability, thereby reinforcing formal audit mechanisms. At the operational level, robust documentation systems are consistently identified as essential for curbing fraud. Ojo et al. (2024) argue that accurate and comprehensive patient records establish transparent audit trails, enabling investigators to cross-check claims against actual services delivered. Al-Amin and Ibrahim (2021) similarly stress that meticulous documentation reduces risks of phantom treatments and inflated charges, particularly when supported by digital record systems that minimise human error. These findings suggest that reliable record-keeping not only deters fraud but also fosters institutional trust. Another critical dimension is the human resource capacity dedicated to fraud management. The National Health Care Anti-Fraud Association (2023) and the Centres for Medicare & Medicaid Services (2021) both emphasise that well-staffed and properly trained anti-fraud units are vital. When sufficient personnel are available, insurers can conduct timely pre-payment reviews, post-payment audits, and respond effectively to whistleblower alerts. Conversely, staff shortages or inadequate training often delay fraud detection and weaken deterrence.

Despite these strategies, persistent challenges constrain fraud management. In Nigeria, weak regulatory enforcement creates loopholes that healthcare providers and HMOs exploit, often escaping sanction due to infrequent audits or poor oversight (Uzochukwu et al., 2018). Technological barriers also remain significant, especially in rural and peri-urban contexts where unreliable internet and electricity restrict the use of e-claims and biometric systems. Coordination between agencies is frequently weak, leading to delays in investigation and prosecution of fraud cases (Eze et al., 2020). Sparrow's (2008, 2011, 2006) categorisation of administrative, technological, and regulatory controls illustrates the tension between potential and practice: while technology-driven systems accelerate fraud detection, fraudsters quickly adapt to bypass automated checks, and smaller providers or insurers often lack resources to implement these solutions fully. International experiences provide further lessons. In the United States, the CMS has deployed rule-based, anomaly detection, predictive modelling, and social network analysis to screen all Medicare claims before payment, combining these with "boots-on-the-ground" investigations through Zone Program Integrity Contractors (Chhabra et al., 2018). The Philippines, meanwhile, has

pursued a decentralised model where regional offices manually process claims and conduct random audits. Although the Philippine Health Insurance Corporation has introduced anti-fraud task forces and profiling systems, weak digital integration and reliance on superficial post-payment reviews limit effectiveness (Chhabra et al., 2018). Both contexts demonstrate that technology alone is insufficient without continuous monitoring, institutional investment, and staff capacity. In sub-Saharan Africa, administrative constraints remain central. Studies highlight how incompetent or unmotivated hospital personnel undermine fraud control by neglecting documentation and failing to recognise irregularities (Onwujekwe et al., 2019; Adamu et al., 2025). Amref (2025) adds that delays in claim processing further weaken oversight, as fraudulent claims can escape detection in slow and inefficient systems.

To address these constraints, scholars propose a range of remedial strategies. Education and public awareness are repeatedly emphasised as essential for empowering patients and deterring providers (Passard et al., 2013; Sparrow, 2015). Technological innovations, particularly artificial intelligence and blockchain, offer opportunities to enhance fraud detection, provided they are combined with human oversight and continuous system updates (Kang et al., 2020; Reddy & Singh, 2021; Smith et al., 2019). Regulatory reform, international collaboration, and organisational investment in ethics and accountability cultures also emerge as critical (Jones & Sakai, 2018; Luo et al., 2017; Fowlie & Tillema, 2021). At the hospital level, consistent staff training, whistleblower mechanisms, and closer communication with HMOs and law enforcement agencies are noted as practical and immediately implementable measures (Kasim et al., 2025; Nicholas, 2019; Trousdale, 2019; Yange, 2020).

Taken together, the literature suggests that combating health insurance fraud requires a multi-level approach combining public education, technological innovation, regulatory reform, institutional capacity-building, and inter-organisational collaboration. Yet, the applicability of these solutions in developing contexts such as Nigeria remains constrained by infrastructural weaknesses, inconsistent enforcement, and limited human resource capacity. In *Mowe, Ogun State*, where private hospitals operate within these systemic constraints, it is unclear which anti-fraud strategies are feasible and effective in practice. By focusing on this setting, the present study not only contextualizes global and regional lessons but also contributes new evidence on how health insurance fraud is being managed, the challenges encountered, and the strategies developed to overcome them in a resource-limited environment.

Theoretical Framework: The theoretical foundation of this study is rooted in the Routine Activity Theory (RAT), developed by Cohen and Felson in 1979. The theory posits that crime emerges when three conditions converge in time and space: the presence of a motivated offender, the availability of a suitable target, and the absence of a capable guardian. Unlike perspectives that attribute criminality to broad structural or economic conditions, RAT emphasises the role of everyday patterns of behaviour and institutional routines in shaping opportunities for crime. Applied to health insurance fraud, RAT provides a useful lens to understand how systemic vulnerabilities in hospital and insurance operations create windows for fraudulent activity. Motivated offenders in this context may include patients, healthcare providers, or insurance agents who exploit insider access to claims and billing processes for personal gain. The health insurance system itself, particularly its claims verification mechanisms and reimbursement structures, represents a suitable target when these safeguards are weak or inconsistently applied. The absence of capable guardians—such as strong auditing systems, effective inspections, and regular claim verifications—further exacerbates the risk, enabling fraudulent practices to go undetected. RAT therefore shifts the question from why individuals commit fraud to how institutional routines and systemic weaknesses facilitate fraudulent behaviour in health financing systems.

Nevertheless, the theory is not without its limitations. While it offers valuable insights into the role of opportunity structures, RAT largely assumes offender motivation and does not interrogate deeper socio-economic drivers of fraud, such as poverty, inequality, or systemic corruption. Moreover, as a framework originally designed to explain conventional street-level crimes, it requires adaptation to adequately account for the complexity of white-collar and institutional fraud such as health insurance manipulation. The literature on health insurance fraud in Nigeria, while steadily growing, reveals important gaps that this study seeks to address. Much of the existing scholarship has concentrated on describing the regulatory and technological frameworks established to combat fraud. However, there has been limited effort to evaluate how effective these mechanisms are in practice, particularly in resource-constrained environments. Similarly, while scholars have examined the types and drivers of health insurance fraud, there is scant attention to how hospitals and health systems actually manage the operational challenges of fraud detection and prevention on a day-to-day basis. Another gap lies in the predominance of studies focused on government hospitals and national health insurance schemes, with relatively little attention paid to private hospitals, where vulnerabilities are equally significant. Furthermore, most studies adopt a generalized national perspective, neglecting localised contexts such as Mowe in Ogun State, where infrastructural limitations, regulatory weaknesses, and institutional dynamics may interact in unique ways. By addressing these lacunae, this study contributes context-specific insights into the management of health insurance fraud in private hospitals in Mowe. It not only extends the theoretical application of RAT to the Nigerian health financing system but also advances empirical understanding of how fraud-related challenges are being navigated in practice, thereby enriching the broader discourse on health insurance fraud management in developing health systems.

METHODOLOGY

Research Design: This study employed a qualitative approach, combining case study and exploratory designs. The case study design was adopted to generate an in-depth understanding of the contemporary issue of health insurance fraud within selected hospitals (Coombs, 2022), while the exploratory design was particularly suited for investigating the underexplored phenomenon of fraud management in private healthcare facilities (Singh, 2021). Together, these designs ensured that the study was both comprehensive and responsive, allowing for the development of practical recommendations for tackling health insurance fraud.

Study Area: The research was conducted in Mowe, a developing town situated along the Lagos-Ibadan Expressway in Obafemi-Owode Local Government Area of Ogun State, Nigeria. Owing to its proximity to Lagos, Mowe has emerged as a suburban settlement for commuters and a hub for growing businesses. The town hosts numerous residential estates alongside retail enterprises, real estate developments, and light manufacturing. According to the 2006 national census, Mowe had an estimated population of 235,000 people, a figure that has likely increased considerably given the rapid pace of urban expansion.

Study Population: The study population consisted of three private hospitals—Beachland Hospital, Redeemed Hospital, and Medic Plus Hospital—along with Health Maintenance Organisations (HMOs), hospital administrators (including Chief Medical Directors, Financial Managers, and Administrative Officers), pharmaceutical experts, police officers, and representatives of relevant anti-corruption agencies such as the Independent Corrupt Practices Commission (ICPC) and the Economic and Financial Crimes Commission (EFCC). A forensic investigator was also targeted as part of the population.

Sample Size and Sampling Strategy: In total, 18 participants were interviewed, comprising nine in-depth interviews (IDIs) and nine key informant interviews (KIIs). The participants were grouped into two categories: (a) hospital management, which included three Chief Medical Directors, three Financial Managers, and two Administrative Officers; and (b) external stakeholders, including representatives from three HMOs, two police intelligence officers, two police investigators, and two pharmaceutical experts. A convenience sampling technique was employed, given its suitability for accessing participants who were both readily available and directly relevant to the research objectives. Selection criteria included hospitals registered under at least one HMO, institutions with prior exposure to health insurance fraud cases, and the willingness of respondents to participate. This approach ensured that data were drawn from individuals with practical knowledge and direct experience of the phenomenon under investigation.

Data Sources and Collection Instruments: Both primary and secondary data were utilised. Primary data were collected through semi-structured interviews, guided by an interview schedule developed in line with the study's objectives. Open-ended questions facilitated in-depth exploration, while an audio recorder and field notes were used to capture responses. Secondary data were sourced from books, peer-reviewed journals, theses, and reputable online resources to complement and contextualise the primary findings.

Data Collection Procedure: Data collection involved face-to-face interviews, conducted in English or Yoruba depending on participants' preference. Where interviews were conducted in Yoruba, translations were made into English during transcription. While the initial design included focus group discussions, these could not be held due to logistical constraints and participants' non-availability. Nevertheless, the combination of IDIs and KIIs yielded rich and diverse insights into the management of health insurance fraud.

Inclusion and Exclusion Criteria: Participants were included if they held direct responsibilities or expertise relevant to the subject matter—for example, hospital administrators involved in financial management, police officers with investigative roles, and pharmaceutical experts with insights into prescription fraud. Law enforcement officers from anti-corruption agencies were also targeted due to their mandate in fraud detection and prosecution. Individuals without such responsibilities or expertise were excluded from the study.

Data Analysis: All interviews were transcribed verbatim, translated where necessary, and coded manually. Thematic analysis was employed to identify patterns across the data. Codes were organised into themes and sub-themes aligned with the research objectives, allowing for a descriptive and interpretive narrative that captured both the experiences of participants and the broader contextual realities of fraud management.

Ethical Considerations: Ethical standards were upheld throughout the study. Participants were fully briefed on the purpose of the research and gave informed consent prior to participation. Confidentiality was ensured by anonymizing participants' identities through the use of pseudonyms. Data were used exclusively for academic purposes, and interviews were scheduled at the convenience of respondents to avoid undue burden. No participant was harmed in any way during the research process.

Challenges of Data Collection: The study faced several challenges in data collection. Access to forensic investigators and officials from agencies such as the EFCC and ICPC proved difficult, limiting the diversity of perspectives from regulatory bodies. In addition, some respondents required repeated visits before granting interviews, prolonging the data collection process. Planned focus group discussions were also not conducted because participants failed to attend the scheduled sessions. Despite these setbacks, the interviews conducted provided sufficient depth to address the research objectives.

RESEARCH FINDINGS

Research Question 1: Types of Health Insurance Fraud in Selected Private Hospitals in Mowe

Falsification of Receipts by Personnel: Previous studies have highlighted diverse forms of health insurance fraud. Adegboyega and Ojo (2021), Mensah and Boateng (2024), and Daramola et al. (2019) identified falsification of receipts, ghost patients, billing for unrendered services, and overcharging, among others, as recurring fraudulent practices. However, their analyses were situated outside the specific context of Mowe. This study contributes to the literature by contextualizing these forms of fraud in private hospitals in Mowe, Ogun State. The findings are presented under the following subthemes: falsification of receipts by personnel, patient fraud, bill denial by hospitals, billing of services never rendered, ghost patients, and overcharging for treatment. A recurrent finding across respondents was the falsification of receipts by hospital personnel. This practice was consistently identified as one of the most common fraudulent schemes. Asnoted by the Financial Manager of Redeemed Health Centre:

We discovered that our personnel falsify receipts to get money into their pockets. Of course, they engage in this fraudulent activity in connivance with the Health Maintenance Organisation. (Respondent 1, Financial Manager, Redeemed

Health Centre, Mowe, Ogun State, 24 March 2025). This observation was echoed by the Financial Manager of Beachland Hospital, who linked receipt falsification to broader ethical lapses within the healthcare sector:

The falsification of receipts speaks to the high level of greed and moral decadence in our society. Some of our staff are complicit when it comes to health insurance fraud. One of the ways we are defrauded is through falsified receipts being claimed as bills." (Respondent 2, Financial Manager, Beachland Hospital, Mowe, Ogun State, 26 March 2025). The consistency of these accounts was further reinforced by external stakeholders. Both an Investigating Police Officer (Respondent 15) and an Intelligence Police Officer (Respondent 12) affirmed that falsification of receipts is a prominent strategy employed to exploit weaknesses in hospital and HMO oversight systems. Similarly, a staff member of NEM Health Maintenance Organisation (Respondent 17) corroborated these findings, highlighting collusion between hospital staff and HMO officers in perpetrating fraud. Taken together, these insights demonstrate that falsification of receipts is not an isolated occurrence but a systemic challenge across private hospitals in Mowe. This finding aligns with existing scholarship on fraud typologies while emphasising the localised dynamics of fraud in Nigeria's peri-urban healthcare settings.

Patient Fraud under False Identity: Patient fraud under false identity emerged as one of the dominant forms of health insurance fraud across the study sites. Respondents explained that patients sometimes used health insurance cards not belonging to them, taking advantage of familiarity with hospital staff. A financial manager observed:

"One health insurance fraud that stands out in this hospital has to do with patients trying to play fast on us by using the cards that are not theirs originally. Since they are familiar with us, the staff take it for granted by not checking in detail the identity on the card. It has happened here not once." (Respondent 3, Financial Manager, Medic Plus Hospital, Ogun State, 21 March 2025). This account was supported by the financial manager of Redeemed Health Centre, who noted that card theft and impersonation were common, though such cards were impounded once identified. Staff members from Hygeia Health Maintenance Organisation confirmed that fraudulent use of another patient's card was a recurrent challenge in their operations.

Billing for Services Never Rendered: The submission of claims for services not delivered was also frequently reported across hospitals. A financial manager explained:

"In this hospital, the personnel had presented bills for services that were never rendered to the Health Maintenance Organisation Companies. The actions of the staff concerned are a result of greed. How can a few benefits from the fraudulent gains?"

(Respondent 2, Financial Manager, Beachland Hospital, Ogun State, 14 March 2025). This perspective aligned with that of another financial manager, who recounted that personnel occasionally misrepresented vaginal deliveries as caesarean sections in claims to HMOs. Staff at NEM Health Maintenance Organisation confirmed the practice, noting that discrepancies were detected through random follow-up calls with patients. Several respondents, including a police intelligence officer, corroborated that billing for unprovided services was under investigation.

Ghost Patient Fraud: Ghost patient fraud was another prominent theme in the dataset. Respondents described cases where hospitals billed HMOs for fictitious patients. A police intelligence officer reported:

"Some hospital personnel are now sending bills to HMO for ghost patients to receive extra cash, all of which results from greed."

(Respondent 13, Intelligence Police Officer, Ogun State, 17 April 2025).

This finding was corroborated by an investigating police officer and HMO staff, who confirmed that some hospitals generated fraudulent claims for patients not enrolled in their systems. An HMO consultant explained that their organisation uncovered such practices during due diligence checks, which revealed that certain patients in submitted claims did not exist.

Overcharging for Treatment: The practice of overcharging for treatments was also identified as a form of health insurance fraud. An HMO staff member recounted:

"I have firsthand experience with hospitals charging more than they are supposed to charge for a treatment given to a patient. Quite a number of hospitals registered under our company overcharge for treatment they give to some of our insured clients."

(Respondent 16, Staff, Reliance HMO, Ogun State, 17 April 2025). This theme suggested that hospitals exploited price mark-ups to increase reimbursements, creating further financial strain for health insurance providers. Research Question 2: How are the selected private hospitals managing health insurance fraud in Mowe?

The management of health insurance fraud in the selected hospitals was examined in light of prior literature (Al-Amin and Ibrahim, 2021; Ojo et al.; Akande et al., 2018; National Health Care Anti-Fraud Association, 2023; Centres for Medicare & Medicaid Services, 2021). The findings of this study identified three main approaches: maintaining well-documented patient health records, employing adequate staff, and fostering community awareness.

Maintaining well-documented patient health records: Hospitals reported that maintaining accurate patient health records was critical to verifying the identities of patients presenting health insurance cards. The Chief Medical Director of Redeemed Health Centre explained:

"Making sure to keep the health record of our patients is very important in order to keep up with their health status and to also check the profiles of patients who have brought insurance cards to make sure we're treating the right person." (Respondent 4, Chief Medical Director, Redeemed Health Centre, Ogun State, 24 March 2025)

This assertion corresponded with the experience of an HMO staff member from Reliance Health Maintenance Organisation, who explained that accurate records enabled cross-checking

when cards were presented again, thereby ensuring that only the legitimate card owner received treatment.

Employing adequate staff: Another strategy involved employing sufficient and well-trained staff to minimize errors and enhance fraud detection. The financial manager of Redeemed Health Centre stated:

"To manage health insurance fraud in our hospital, we employed enough staff to ease the workload on a daily basis to avoid lapses and to be able to detect any trace of health insurance fraud."

(Respondent 1, Financial Manager, Redeemed Health Centre, Ogun State, 24 March 2025). Similarly, the financial manager of Beachland Hospital affirmed that staff capacity was central to managing fraud, emphasising that overstretched personnel could easily overlook fraudulent activities.

Fostering community awareness: Hospitals also engaged in sensitization efforts to discourage fraudulent practices. The Chief Medical Director of Medic Plus Hospital reported:

"Ensuring that patients are informed of the danger of committing Health Insurance Fraud is paramount. So [we] carry out community awareness to sensitize people on the dangers of health insurance fraud. The programme is conducted on regular basis serving as positive reinforcement to our patients and community at large." (Respondent 5, Chief Medical Director, Medic Plus Hospital, Ogun State, 21 March 2025)

This was reinforced by the financial manager of the same hospital, who explained that community awareness campaigns served as a preventive measure. These programmes often involved law enforcement officers and HMO representatives, further legitimising the initiative and strengthening deterrence.

Research Question 3: What are the challenges associated with the management of health insurance fraud in the selected private hospitals in Mowe?

The findings of this study were contextualised within prior scholarship on challenges in fraud management (Passard et al., 2013; Sparrow, 2015; Akokuwebe & Idemudia, 2023; Yange, 2020; Bondi, 2025). Three interrelated challenges emerged in the Mowe context: aggressive patients, incompetent personnel, and delays in approving claims.

Aggressive patients: Respondents consistently reported that aggressive patients posed a major challenge to fraud management. The Chief Medical Director of Redeemed Health Centre explained:

"We encounter aggressive patients who try to dictate to our staff that they have the right to give their HMO card to other people, other than their families, who are insured. The patients tell the staff that they have not been using their health insurance card for a long time, so the hospital should do a checkup and run all tests, and these patients, their insurance doesn't cover what they are asking for." (Respondent 4, Chief Medical Director, Redeemed Health Centre, Ogun State, 24 March 2025). This view was echoed by the financial manager of the same hospital, who noted that violent patients and their relatives sometimes pressured staff to bend rules, leading to lapses in fraud detection. A pharmaceutical expert similarly highlighted that impatient or confrontational patients often demanded immediate treatment without insurance approval, which occasionally resulted in fraudulent claims.

Incompetent personnel: The lack of adequately trained and skilled staff also emerged as a challenge. The Chief Medical Director of Medic Plus Hospital explained:

"In my hospital, the obstacles we encounter are the lack of good personnel because some of these staff members that we employ overbill the patients and submit false claims to the HMO offices, and as we keep sending the staff away, the new ones that we are getting are also showing signs of fraud." (Respondent 5, Chief Medical Director, Medic Plus Hospital, Ogun State, 21 March 2025). This narrative was consistent with the financial manager of Beachland Hospital, who reported that unskilled staff frequently disregarded procedures for obtaining approvals. A pharmaceutical expert at Cross Medic Pharmacy added that some doctors were complicit, charging HMOs for branded drugs while prescribing cheaper, unbranded alternatives. Several respondents from HMOs further confirmed that incompetence and complicity among hospital staff facilitated fraudulent activities.

Delay in approving claims: Delays in the approval process for insurance claims were also identified as a persistent obstacle. A financial manager noted:

"One of the policies of health insurance is to gain approval before treating patients. However, these approvals take a very long time and it is complex and rigid. Sometimes we call the HMO and they do not pick, and it results in delay in attending to a patient." (Respondent 1, Financial Manager, Redeemed Health Centre, Ogun State, 24 March 2025). An intelligence police officer confirmed that systemic delays complicated fraud detection, creating opportunities for misrepresentation. However, other respondents highlighted that delays were not always systemic; in some cases, personnel deliberately stalled claim approvals, which made it more difficult to identify fraudulent practices.

Research Question 4: How are the selected private hospitals handling the challenges associated with the management of health insurance fraud in Mowe?: The findings of this study build on prior scholarship on hospital-level strategies for addressing health insurance fraud (Passard et al., 2013; Jones & Sakai, 2018; Luo et al., 2017; Reddy & Singh, 2021; Sparrow, 2015; Kang et al., 2020), but provide contextual insights from Mowe. Five key strategies were identified: creating designated offices for insurance verification, conducting monthly account audits, offering regular personnel training, collaborating with law enforcement agencies, and partnering with regulatory bodies.

Creating designated offices for health insurance verification: Respondents consistently emphasised the establishment of specialised offices dedicated to verifying patient insurance claims. An administrative officer explained:
"One [of] the ways our organisation has handled the challenges of managing health insurance fraud is the creation of designated office manned by highly skilled personnel who are saddled with the responsibility to verify the health insurance status of patients. The patients do not have direct access. The

personnel are directly attached to the office of the Chief Medical Director. Through this office we have been able to manage the challenges to some extent. Of course it is not foolproof. Human beings will still be human beings. In terms of a scale of one to ten, I can say seven." (Respondent 7, Administrative Officer, Redeemed Health Centre, Ogun State, 24 March 2025). Similar practices were reported by administrative officers in Medic Plus Hospital and Beachland Hospital, who explained that these offices facilitated transparent claim processing and ensured that patients presenting health insurance were the rightful beneficiaries.

Conducting monthly account audits: Financial managers highlighted the role of regular audits in reducing fraudulent practices. A financial manager noted:

"Inviting auditors on a regular basis is a way the hospital has been managing the challenges of health insurance fraud. Because if we don't do this, the hospital will run on a loss." (Respondent 2, Financial Manager, Beachland Hospital, Ogun State, 14 March 2025)./ Other respondents reported variations in practice, with some institutions conducting annual audits but increasingly adopting monthly account reviews as a fraud control measure.

Offering regular personnel training: Continuous training was identified as a central strategy for strengthening staff capacity and awareness. An administrative officer described:

"We do continuous training about the awareness of health insurance fraud for our staff. Also, for the incoming staff, we do compliance training when we are onboarding them." (Respondent 7, Administrative Officer, Redeemed Health Centre, Ogun State, 24 March 2025). This perspective aligned with that of other hospital managers, who described education programmes focused on fraud prevention, penalties, and ethical practices. One administrative officer explained that their hospital incorporated values-based training, including weekly sessions on honesty and professional ethics, although change was described as "slow but gradual."

Collaborating with law enforcement agencies: Collaboration with law enforcement was also reported as an important approach. A financial manager explained: "We are collaborating with law enforcement agencies on how our hospital can better manage the challenges of health insurance fraud."

(Respondent 1, Financial Manager, Redeemed Health Centre, Ogun State, 24 March 2025)Hospitals often worked with nearby police stations when cases exceeded their capacity to manage internally. Law enforcement officers confirmed that hospitals frequently approached them for support in fraud detection and investigation.

Partnering with regulatory bodies: Finally, respondents highlighted partnerships with regulatory bodies and HMOs as part of their strategy. An administrative officer described:"Partnership with different companies, the HMO companies and HMO officials in my hospital is what we also do to manage the challenges of health insurance fraud."(Respondent 7, Administrative Officer, Redeemed Health Centre, Ogun State, 24 March 2025). Respondents reported that such partnerships enabled hospitals to clarify insurance benefits, harmonise procedures across HMOs, and remain informed on emerging fraud risks.

DISCUSSION OF FINDINGS

This study explored patterns of health insurance fraud, strategies adopted for its management, challenges encountered, and approaches used to address those challenges in selected private hospitals in Mowe. Data were drawn from in-depth and key informant interviews, and the findings are presented under four major themes, each linked to existing literature and the Routine Activity Theory (Cohen & Felson, 1979).

Patterns of Health Insurance Fraud: Three dominant patterns of health insurance fraud were identified: impersonation, overbilling, and double claims.

Impersonation: Was reported as a recurrent challenge. Respondents described cases where patients presented HMO cards that did not belong to them. One Chief Medical Director observed: "We have encountered several patients presenting HMO cards that do not belong to them. On further checks, we discover discrepancies in their identities." (Respondent 4, Redeemed Health Centre, 24 March 2025). This finding echoes Akande et al. (2018) and Al-Amin and Ibrahim (2021), who documented patient impersonation as a common fraudulent practice. Within the Routine Activity Theory framework, impersonation reflects a motivated offender exploiting a system in the absence of capable guardianship.

Overbilling: Was also noted. A financial manager explained that: "Some personnel in hospitals exaggerate the cost of drugs or services to bill HMOs more than what was actually provided." (Respondent 1, Redeemed Health Centre, 24 March 2025). This supports Onwujekwe et al. (2019), who found that inflated claims remain a significant challenge in Nigerian healthcare. Overbilling represents the interaction between motivated offenders (staff) and suitable targets (insurance claims), particularly where oversight is weak.

Double claims: Emerged as another fraudulent pattern. An administrator revealed: "We have identified situations where claims are resubmitted to HMOs, even after payment had been made previously." (Respondent 7, Beachland Hospital, 14 March 2025). This finding is consistent with the Centres for Medicare & Medicaid Services (2021) and the National Health Care Anti-Fraud Association (2023), which highlight double billing as a widespread global issue. Routine Activity Theory suggests such practices occur where verification systems are inadequate.

Strategies for Managing Health Insurance Fraud: Hospitals in Mowe adopted several strategies to mitigate health insurance fraud, including maintaining well-documented health records, employing adequate staff, and fostering community awareness.

Maintaining well-documented health records: Was emphasised as a preventive strategy. One respondent explained: "Making sure to keep the health record of our patients is very important in order to keep up with their health status and to also check the profiles of patients who have brought insurance cards to make sure we're treating the right person." (Respondent 4, Chief Medical Director, Redeemed

Health Centre, 24 March 2025). This supports Ojo et al. (2024) and Al-Amin and Ibrahim (2021), who argue that meticulous documentation enhances transparency and fraud detection. In Routine Activity Theory, documentation serves as a capable guardian, deterring offenders.

Employing adequate staff: Was another approach. One financial manager observed: "Employing well-trained personnel to work for us is one of the ways we manage health insurance fraud because when there are not enough staff, the staff would be over-stressed and ignore important things to focus on." (Respondent 2, Beachland Hospital, 14 March 2025). This aligns with findings from the National Health Care Anti-Fraud Association (2023) and the Centres for Medicare & Medicaid Services (2021), both of which emphasise adequate staffing as critical for fraud detection.

Fostering community awareness: Was also highlighted. A Chief Medical Director explained: "Ensuring that patients are informed of the danger of committing Health Insurance Fraud is paramount. So, we carry out community awareness to sensitise people on the dangers of health insurance fraud." (Respondent 5, MedicPlus Hospital, 21 March 2025) This corresponds with the 2025 Global Scoping Review, which stressed the role of patient education in fraud prevention. Awareness campaigns function as external capable guardians by deterring motivated offenders.

Challenges in Managing Health Insurance Fraud: Despite these strategies, hospitals face significant challenges: aggressive patients, personnel incompetence, and deliberate delays in approving claims

Aggressive patients: Were reported as a recurring challenge. A financial manager stated: "We are often confronted with violent and aggressive patients and their relatives who insist that they have the right to give their HMO card to people other than their families… Sometimes our staff compromise." (Respondent 1, Redeemed Health Centre, 24 March 2025) This aligns with reports from several respondents who admitted staff occasionally yield to threats of violence. Routine Activity Theory frames such behaviour as motivated offenders exploiting the absence of effective guardianship.

Personnel incompetence: Was another obstacle. A financial manager explained: "The obstacles we face in our hospital are the lack of skilled personnel who do not follow the procedures, rules and regulations of approving claims before attending to a patient. They also overbill the insurance companies registered under my hospital, and when payment is made, they remove their gains." (Respondent 2, Beachland Hospital, 14 March 2025). This corroborates Onwujekwe et al. (2019) and Adamu et al. (2025), who stress that unskilled staff weaken internal controls. Routine Activity Theory highlights that incompetent personnel fail as capable guardians, creating opportunities for fraud.

Deliberate delay in approving claims: Was also reported. One Chief Medical Director explained: "Some personnel in the accounts section deliberately delay processing of claims and make it hard to detect fraud because sometimes… we later discover that some of the patients we treated without getting approval for them have defrauded the hospital." (Respondent 5, MedicPlus Hospital, 21 March 2025) This resonates with Amref Health Africa (2025), which identified systemic inefficiencies and intentional delays as enablers of fraud.

Handling the Challenges of Health Insurance Fraud: In response to these challenges, hospitals adopted several approaches, including establishing designated offices for insurance verification, instituting monthly audits, offering value-based training, and collaborating with law enforcement and regulatory agencies.

Creating designated offices for insurance verification: Was a common practice. One administrator stated: "One of the ways our organisation has handled the challenges of managing health insurance fraud is the creation of a designated office manned by highly skilled personnel who are saddled with the responsibility to verify the health insurance status of patients." (Respondent 7, Redeemed Health Centre, 24 March 2025). This reflects the role of capable guardianship in Routine Activity Theory.

Monthly auditing of hospital accounts: Was also introduced. A financial manager explained: "Initially, our organisation did yearly audits. But part of our strategy for handling the challenges… is to institute monthly audits of our accounts." (Respondent 3, MedicPlus Hospital, 21 March 2025). This finding supports Fowlie and Tillema (2021), who emphasised regular auditing to promote accountability.

Regular value-based training: Was described as another intervention. An administrator reported: "We have incorporated value-based training into our module for members of staff. We teach moral ethics, honesty, and the concept of 'do unto others' in our weekly training programmes." (Respondent 9, Beachland Hospital, 14 March 2025) This finding is consistent with Kasim et al. (2025), who argue for combining technical competence with values-based reasoning.

Collaborating with law enforcement agencies: Was another strategy. One financial manager noted: "We have been able, to some extent, to handle the challenges associated with fraud management by collaborating with law enforcement agencies, especially the police station near our hospital." (Respondent 2, Beachland Hospital, 14 March 2025). This aligns with Nicholas (2019), who emphasised the importance of hospital–law enforcement collaboration.

Partnering with regulatory bodies: Also emerged. An administrator remarked: "We frequently make sure we communicate with all the Health Maintenance Organisations registered under our hospital to assist us in detecting fraud because we cannot do this alone." (Respondent 9, Beachland Hospital, 14 March 2025) This supports Yange (2020), who observed that collaboration with HMOs enhances fraud detection. Such partnerships act as external surveillance structures, strengthening internal capacity.

CONCLUSION AND RECOMMENDATION

This study has demonstrated that health insurance fraud is not confined to public healthcare institutions but is equally pervasive within private hospitals in Mowe, Ogun State. By examining the experiences of three selected hospitals, the research revealed that fraudulent practices take multiple forms,

including falsification of receipts, impersonation by patients, billing for services never rendered, ghost patient fraud, and overcharging. These practices expose the vulnerability of private institutions to exploitation and challenge the assumption that fraud is primarily a public-sector problem. Despite these challenges, the study found that hospitals are not passive victims but are actively developing strategies to mitigate fraud. Measures such as the establishment of designated verification offices, the conduct of monthly financial audits, regular value-based staff training, collaboration with law enforcement agencies, and partnerships with HMOs demonstrate a growing culture of accountability and systemic reform. These strategies, interpreted through the lens of Routine Activity Theory, highlight the importance of strengthening capable guardians both within the hospital system and through external collaborations.

The findings contribute to the broader discourse on healthcare governance by drawing attention to the operational realities of private hospitals, which are often overlooked in anti-fraud scholarship. They also provide a practical framework for policymakers and healthcare providers seeking to design sustainable anti-fraud interventions. Strengthening transparency and accountability in private hospitals is essential not only to protect healthcare resources but also to rebuild trust and ensure equitable service delivery. In light of the findings, this study recommends that hospitals implement stronger patient identification systems, including biometric verification, to prevent impersonation and unauthorised use of health insurance cards.

Auditing practices should be improved by introducing both routine and surprise checks, ensuring that fraudulent activities cannot be easily concealed. Collaboration should extend beyond the police to include national anti-corruption agencies such as the EFCC and ICPC, thereby providing more robust investigative and enforcement mechanisms. Furthermore, the training of hospital personnel must go beyond technical skills to include ethical awareness and value-based reasoning, reducing the likelihood of internal complicity in fraud. Finally, the introduction of anonymous reporting channels, such as whistleblowing hotlines, would empower staff and patients to report suspicious activities without fear of retaliation. Together, these measures represent a holistic approach to curbing health insurance fraud in private hospitals. If consistently applied, they would enhance institutional integrity, safeguard healthcare financing, and contribute to building a more transparent, efficient, and equitable health system in Nigeria.

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