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NATIONAL HEALTH INSURANCE AUTHORITY (NHIA)ACT AND HEALTHCARE FINANCING AT THE FEDERAL TEACHING HOSPITAL (FTH) LOKOJA, KOGI STATE

BY

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ABSTRACT

This study assesses the implementation of the National Health Insurance Authority (NHIA) Act 2022 as a mechanism for healthcare financing at the Federal Teaching Hospital (FTH) Lokoja, Kogi State. The research was necessitated by the transition from the voluntary National Health Insurance Scheme (NHIS) to a mandatory framework designed to achieve Universal Health Coverage (UHC) and financial sustainability for tertiary health institutions. Guided by the principal-agent theory, the research adopted a descriptive survey design, determining a sample size of 345 respondents from a population of 20,550 using the Taro Yamane formula. Data were collected through the Questionnaire and semi-structured interviews and analysed using descriptive statistics and SPSS. Findings reveal a statistically significant relationship between the NHIA Act 2022 and the financial sustainability of FTH Lokoja, helping mitigate bad debt and providing a consistent revenue stream through the Vulnerable Group Fund (VGF). However, significant administrative friction was identified, including HMO reimbursement delays, drug stock-outs from fixed tariff inflation, and inadequate ICT infrastructure. The study concludes that while the legislative framework is robust, its effectiveness is undermined by administrative bottlenecks. Recommendations include claims digitalization, bi-annual tariff reviews, and aggressive informal sector sensitization.

Key words: NHIA Act, Healthcare Financing, Universal Healthcare coverage, Vulnerable Group Fund, Principal-Agent Theory

Introduction

budgetary allocations heavily supplemented by international donor support. This model proved inadequate, consistently hovering far below the 15% threshold recommended by the 2001 Abuja Declaration (Aregbeshola & Khan, 2024). Consequently, the financial burden shifted to individuals, with out-of-pocket expenditure accounting for approximately 70% of total health spending (World Bank, 2022). This structural reliance on immediate payments has led to catastrophic financial outcomes for households, particularly with nearly 83 million people living below the poverty line (Buhari, 2022). To address these gaps, the National Health Insurance Scheme was established under Act 35 of 1999 but struggled for two decades, achieving an enrollment rate under 5% due to its voluntary nature, administrative inefficiencies, and a narrow public formal-sector focus that excluded the informal sector and vulnerable groups (Eze & Adeloye, 2024; Uzochukwu et al., 2022).

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A paradigm shift occurred in May 2022 with the National Health Insurance Authority (NHIA) Act, which established mandatory health insurance for all citizens and legal residents (NHIA, 2022). At the tertiary level, capital-intensive facilities like the Federal Teaching Hospital, Lokoja require steady financial inflows to cover advanced diagnostics, specialized personnel, and medical consumables (Bassey, 2021). Despite the legislative mandate, a significant problem persists at the facility where healthcare financing remains fraught with operational deficiencies. A large majority of patients—particularly within the informal sector and rural hinterlands—remain completely uninsured, forcing them into catastrophic health expenditures (Oshonwoh et al., 2025). Concurrently, the hospital faces a liquidity squeeze caused by severe delays in fee-for-service claims processing by Health Maintenance Organisations (HMOs) and inadequate capitation payments that fail to reflect inflationary pressures (Agha-Emmanuel & Uzomba, 2023). This financial lag directly results in frequent drug stock-outs, poorly maintained machinery, and a decline in clinical outcomes, creating a paradox where a pinnacle of healthcare struggles with basic financial sustainability (Akinlolu & Olufemi, 2023).

A critical knowledge and administrative gap exists regarding the execution of this new framework. While national health policies are evaluated on a macro scale, there is a severe dearth of empirical research addressing localized operational friction within tertiary facilities in the North-Central region, specifically at the Federal Teaching Hospital, Lokoja. Existing health economics literature focuses either on historical failures of the predecessor scheme or analyzes financial sustainability as a detached concept, failing to dissect the billing, claims, and revenue transmission interface under the 2022 Act (Effiong et al., 2025). Furthermore, the direct impact of the newly integrated Vulnerable Group Fund and mandatory enrollment mandates on the hospital's Internally Generated Revenue (IGR) remains insufficiently documented (Ajala-Damisa & Agbaoye, 2022). This lack of localized data leaves administrators without a diagnostic framework to negotiate tariff adjustments, prevents regulators from adapting reimbursement timelines to high national inflation, and leaves policymakers blind to barriers hindering informal sector enrollment in Kogi State.

To resolve this problem and close these gaps, this study provides a systematic, empirical evaluation of the NHIA as a healthcare financing tool at the Federal Teaching Hospital, Lokoja, between 2022 and 2026. The specific objectives are to evaluate patient coverage boundaries, assess the effect of insurance reimbursements on the hospital's capacity for quality service delivery, and identify the systemic challenges militating against effective healthcare financing within the hospital.

Literature Review and Theoretical Framework

Conceptualizing Healthcare Financing, Social Health Insurance, and Universal Health Coverage

Healthcare financing is defined as the mobilization, accumulation, and allocation of financial resources to cover the health needs of a population, both individually and collectively. Within the Nigerian public health landscape, it is characterized by three core functions: revenue collection, risk pooling, and strategic purchasing (Uzochukwu et al., 2022). Revenue collection involves generating funds from various sources, such as federal budgetary allocations, donor agencies, and private out-of-pocket payments. Risk pooling refers to the

collective management of these funds to ensure that the financial risk of illness is shared across a large population, while strategic purchasing involves the efficient allocation of these funds to healthcare providers (World Health Organisation [WHO], 2023).

Effective healthcare financing aims to ensure that resources are available to provide essential services while protecting citizens from catastrophic health expenditure, which occurs when medical costs exceed a household's capacity to pay (Aregbeshola & Khan, 2024). As noted by Aregbeshola (2023), the sustainability of any healthcare system is intrinsically linked to its financing structure, and a system heavily dependent on out-of-pocket spending, as historically seen in Nigeria, is prone to systemic inequality and operational inefficiency. For an institution like the Federal Teaching Hospital, Lokoja, the shift toward structured financing through the National Health Insurance Authority represents a strategic move from unpredictable patient-led revenue to more stable, institutionalized funding streams.

Universal Health Coverage (UHC) is a global health priority that ensures all individuals and communities receive the health services they need without suffering financial hardship, encompassing the full spectrum of essential, quality health services ranging from promotion and prevention to treatment, rehabilitation, and palliative care (WHO, 2023). For a tertiary institution like the Federal Teaching Hospital, Lokoja, UHC implies that the high cost of specialized care, such as surgery, intensive care, and advanced diagnostics, should not be a barrier to the citizens of Kogi State. The concept is theoretically modeled through the universal health coverage cube, which measures three vital dimensions: the population covered, the services included in the benefit package, and the proportion of costs covered through financial protection (Eze & Adeloye, 2024). In Nigeria, the National Health Insurance Authority serves as the primary administrative vehicle designed to move the nation toward this goal by integrating fragmented health insurance schemes into a unified, mandatory framework. Achieving this at the tertiary level requires not just the presence of insurance, but the administrative capacity of public hospitals to manage the surge in demand that increased coverage inevitably brings.

Social Health Insurance (SHI) is a financing mechanism where financial contributions are pooled into a common fund to pay for the healthcare costs of members. Unlike private health insurance, social health insurance is typically mandatory, governed by public law, and deeply rooted in the principle of social solidarity where the healthy subsidize the sick and high-income earners subsidize the poor (Nyman, 2003). Under the national framework, enrollees contribute regular premiums, or have them subsidized through mechanisms like the Vulnerable Group Fund, and in return, healthcare providers receive payments via capitation for primary care and fee-for-service for specialized care (Ajala-Damisa & Agbaoye, 2022). This mechanism is considered the most viable path for Nigeria to reduce its seventy percent out-of-pocket expenditure rate because it ensures a predictable revenue stream for hospitals while providing a vital safety net for patients (World Bank, 2022). Administratively, social health insurance shifts the hospital's role from a simple independent service provider to a core stakeholder in a complex financial ecosystem involving Health Maintenance Organisations (HMOs) and regulatory authorities. This necessitates robust financial management systems at the Federal Teaching Hospital, Lokoja, to accurately track claims, manage electronic health records, and ensure that the cost-of-service delivery aligns with official reimbursement rates.

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The National Health Insurance Authority (NHIA) Act of 2022 and its Vulnerable Group Fund

The enactment of the National Health Insurance Authority Act in May 2022 marked a strategic pivot in Nigeria's health governance, transitioning from a voluntary scheme to a mandatory regulatory authority. This legislative reform was necessitated by the failure of the predecessor National Health Insurance Scheme Act of 1999 to cover more than five to ten percent of the population over two decades of operation (Eze & Adeloye, 2024). The 2022 Act formally transforms the organization from a scheme to an authority, a nomenclature shift that carries profound administrative weight (National Health Insurance Authority [NHIA], 2022). As a regulatory authority, the organization is fully empowered to promote, integrate, and regulate all health insurance schemes in Nigeria, including those managed by state governments and the private sector. This eliminates the fragmentation of the previous system and centralizes standards for healthcare quality and financial accountability. For a tertiary facility like the Federal Teaching Hospital, Lokoja, this shift means that the authority now possesses enhanced powers to intervene in disputes regarding delayed reimbursements and to sanction HMOs that fail to meet their structural obligations. Furthermore, the Act mandates the widespread adoption of Electronic Health Records and digital claims processing, which is explicitly intended to reduce the bureaucratic lag and transparency gaps that historically plagued the interface between public hospitals and the insurance scheme.

A critical innovation of the 2022 Act is the establishment of the Vulnerable Group Fund, aimed at providing coverage for the medically indigent, including children under five, pregnant women, the elderly, and persons with disabilities (Ajala-Damisa & Agbaoye, 2022). Unlike previous social safety nets, the fund is backed by diverse and sustainable funding streams, including a portion of the Basic Healthcare Provision Fund, special federal interventions, and a proposed health insurance levy (Eze & Adeloye, 2024). For the Federal Teaching Hospital, Lokoja, the Vulnerable Group Fund acts as an administrative lifeline. As a federal teaching hospital, it serves as a last resort for impoverished patients who previously contributed significantly to the hospital's bad debt accounts or required management to provide uncompensated waived services (Bassey, 2021). This fund provides a structured mechanism where the hospital is reliably reimbursed for treating these vulnerable populations, thereby stabilizing the institution's Internally Generated Revenue and allowing for better investment in clinical consumables and infrastructure.

Section 13 of the Act mandates that every Nigerian citizen and legal resident must obtain health insurance, effectively criminalizing non-participation (NHIA, 2022). This provision is designed to enlarge the risk pool, ensuring that the contributions of healthy enrollees subsidize the treatment of the chronically ill. For the hospital, this shift signifies a move toward a volume-driven financial model. As the Kogi State Social Health Insurance Agency domesticates the Act and enrolls the informal sector, the hospital anticipates a surge in patient volume (Effiong et al., 2025). However, this mandatory status also exerts immense pressure on the hospital's administrative capacity, meaning that the institution must scale its diagnostic equipment, pharmaceutical inventory, and human resource strength to prevent severe service congestion.

Comparative Models of Healthcare Financing

The quest for a sustainable healthcare financing model has historically oscillated between tax-based funding and contributory health insurance. Historically, the Nigerian health system has relied heavily on tax-based funding, often referred to as the Beveridge Model, which involves the mobilization of health resources from general government revenue, including petroleum royalties, companies' income tax, and Value Added Tax (Aregbeshola, 2023). In practice, this model sustains the fundamental operations of federal tertiary institutions like the Federal Teaching Hospital, Lokoja through annual budgetary allocations, primarily covering supply-side costs such as personnel salaries and capital infrastructure. The theoretical advantage of tax-based financing lies in its inherent progressivity and social solidarity, facilitating risk pooling across the entire population regardless of individual employment status. However, the implementation of this model in Nigeria has been undermined by chronic fiscal underfunding, with federal allocations stagnating between three and six percent, leaving a massive financing gap for essential drugs and clinical consumables (World Bank, 2022).

Conversely, the health insurance model, or the Bismarck Model, leverages earmarked contributions from employers and employees to create a dedicated, ring-fenced fund for healthcare (Nyman, 2003). The 2022 Act serves as the legislative cornerstone for this model, transitioning Nigeria from a voluntary, fragmented scheme to a mandatory, integrated authority (NHIA, 2022). Unlike the tax-based system, which is frequently subject to political redirection and budgetary delays, health insurance provides a more predictable and demand-driven revenue stream for hospitals. When an enrollee accesses care at the hospital, the institution is reimbursed via capitation for primary services or fee-for-service for specialized procedures, ensuring that clinical costs are absorbed by the insurance pool rather than the patient. Contemporary reforms indicate that Nigeria is adopting a robust hybrid approach to bridge these systemic gaps, most evident in the integration of the Basic Healthcare Provision Fund into the national health insurance framework, using tax-generated revenue to subsidize the Vulnerable Group Fund (Eze & Adeloye, 2024). For a tertiary institution like the Federal Teaching Hospital, Lokoja, this hybridity offers a dual financial cushion where tax revenue ensures the hospital remains staffed and powered, while the insurance gateway ensures that service delivery to both formal and vulnerable populations is adequately reimbursed.

Empirical Review

Empirical studies consistently indicate that the transition from the old scheme to the new authority has positively correlated with increased service utilization in tertiary hospitals (Onuorah, 2025). Research conducted across selected federal health institutions found a statistically significant difference in healthcare-seeking behavior between enrolled patients and those paying out-of-pocket, revealing higher immunization uptake and routine check-up utilization among insured patients. Similarly, it has been observed that the expanded benefit package has significantly improved utilization rates for preventive screenings, such as hypertension and diabetes screenings, suggesting that the insurance model effectively lowers the financial threshold for accessing tertiary-level care (Oshonwoh et al., 2025). A critical theme in recent empirical literature is the role of insurance in protecting patients from catastrophic health expenditure, with data showing that a large majority of insured members

experience no financial hardship when accessing tertiary services compared to non-insured patients (Aregbeshola & Khan, 2024).

However, the impact on the financial sustainability of the hospitals themselves remains a subject of ongoing academic debate. Scholars note that most federal health institutions in Nigeria fail the intermediate standard of financial sustainability, as their Internally Generated Revenue ratios remain between forty and sixty percent of recurrent expenditure (Bassey, 2021). While the health insurance framework provides a more predictable revenue stream than out-of-pocket payments, this predictability is often undermined by reimbursement lag, which is the systemic delay between service delivery and actual payment by HMOs that creates liquidity crises for hospital managements (Agha-Emmanuel & Uzomba, 2023).

Despite the legislative progress of the 2022 Act, empirical evidence points to several persistent administrative bottlenecks, such as authorization code delays which act as a major barrier to efficient service delivery in tertiary centers (Ipinnimo et al., 2025). Enrollees often experience long wait times at pharmacies and diagnostic units while waiting for approvals, which significantly diminishes patient satisfaction and trust in the system. Furthermore, studies highlight the drug stock-out phenomenon, where hospital pharmacies are frequently unable to provide essential medicines covered under the insurance drug list, forcing patients to purchase them at private outlets and defeating the primary goal of financial protection (Akinlolu & Olufemi, 2023). Recent data also shows varied success across different states in domesticating the mandate, creating a landscape of state-level heterogeneity where disparities in enrollment directly affect the volume of insured patients seen at federal institutions, as lower state-level enrollment directly translates to lower revenue from the insurance pool (Effiong et al., 2025). Moreover, researchers have discovered that informal sector workers continue to face systemic barriers to enrollment, including income instability and a lack of awareness of group and individual social health insurance programmes, suggesting that the mandatory nature of the Act has yet to achieve total penetration in the informal economy (NOIPolls, 2023).

The review of literature establishes a clear context but also reveals several critical gaps that this study seeks to address. First, most existing studies focus on older data or the predecessor framework, leaving a significant temporal gap in understanding how the new authority status and mandatory provisions have specifically altered the administrative landscape between 2022 and 2026 (Eze & Adeloye, 2024). While legislative change is nationwide, institutional response is often highly localized, yet there is a severe dearth of empirical literature specifically centered on the Federal Teaching Hospital, Lokoja. Lokoja's unique position as a major national transit hub and the primary tertiary center for Kogi State introduces specific demographic and socioeconomic pressures that are not captured in studies focused on other geopolitical zones. Furthermore, while previous research has touched upon hospital revenue generally, there is a lack of detailed analysis regarding the direct impact of these contemporary reimbursements on the Internally Generated Revenue of this specific institution (Bassey, 2021). Most studies treat financial sustainability as a general concept without dissecting how the hospital's accounting and administrative departments navigate the complexities of the new financial protocols (Agha-Emmanuel & Uzomba, 2023). This study, therefore, fills these voids by providing a localized, current, and administratively-focused assessment of the insurance framework as a healthcare financing tool.

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Theoretical Framework

To provide a robust analytical framework for understanding the implementation of the National Health Insurance Authority (NHIA) Act 2022 at the Federal Teaching Hospital (FTH), Lokoja, this study adopts the Principal-Agent Theory. Adopted from Ross (1973) and Jensen and Meckling (1976), the Principal-Agent Theory models bureaucratic relations as contracts featuring information asymmetry and goal divergence. At FTH Lokoja, multi-tiered principal-agent structures exist between the NHIA, HMOs, and the hospital. The theory effectively diagnoses institutional challenges such as liquidity lags resulting from delayed reimbursements, throughput bottlenecks from authorization requirements, and tariff-market gaps causing drug stock-outs.

Under the NHIA Act 2022, FTH Lokoja's institutional landscape features a multi-tiered principal-agent structure. In the *mandate tier* at the macro-regulatory level, the NHIA (principal) delegates risk-pool and enrollee management to Health Maintenance Organisations (HMOs), who act as intermediate agents. Goal divergence disrupts this link: the NHIA seeks to expand equity, whereas HMOs prioritize corporate liquidity (Agha-Emmanuel & Uzomba, 2023). This leads to agency "shirking," manifesting as delayed claims processing and arbitrary billing queries (Waterman & Meier, 1998).

In the secondary *clinical tier*, the HMO acts as the principal purchasing service, while FTH Lokoja operates as the executing agent. The hospital holds an informational advantage regarding clinical needs and costs. To mitigate agency moral hazard—such as over-billing to increase Internally Generated Revenue (IGR)—the HMO principal imposes strict contractual controls, including rigid drug tariffs and mandatory authorization codes (Ipinnimo et al., 2025; Nyman, 2003).

The principal-Agent Theory uniquely isolates the behavioral friction choking policy implementation at FTH Lokoja, as detailed in this study. First, it explains the *liquidity lag*, showing that delayed reimbursements are a self-serving strategy by HMO agents to exploit information asymmetry and extend cash flow at the hospital's expense (Jensen & Meckling, 1976). Second, it diagnoses *throughput bottlenecks*, showing that persistent delays in obtaining HMO authorization codes (mean score = 4.28) stem from intrusive monitoring mechanisms deployed to control agency costs (Eisenhardt, 1989). Finally, it illuminates the *tariff-market gap*: when the principal enforces fixed tariffs that ignore inflation, the executing agent (FTH Lokoja) faces financial erosion and is forced into defensive operations, resulting in chronic drug stock-outs (mean score = 4.07) (Akinlolu & Olufemi, 2023). This theory offers a clear diagnostic framework for how mismatched incentives directly undermine hospital sustainability.

Methodology

This study adopts a descriptive survey research design utilizing a mixed-methods approach. The study population comprises primary stakeholders within the hospital's insurance ecosystem at the Federal Teaching Hospital (FTH), Lokoja. To maintain statistical consistency throughout the paper, the total study population is defined as 20,550 individuals, representing the verified pool of registered enrollees and relevant administrative staff. Using

the Taro Yamane formula with a 5% margin of error, a representative sample size of 345 respondents was determined.

To ensure a balanced representation of both institutional and service-user perspectives, stratified random sampling was employed. The sample was divided into two strata based on a proportionality weight of approximately 13% for institutional oversight and 87% for service utilization. This mathematical allocation resulted in the distribution of 45 questionnaires to hospital staff (administrative, accounting, and insurance desk officers) and 300 questionnaires to enrolled patients across the hospital's outpatient units.

For the qualitative component of the study, a purposive sub-sample of n=5 senior administrative staff was utilized. These key informants included the Head of the National Health Insurance Desk, two Senior Finance Directors, and two Principal Administrative Officers. Data from these experts were gathered via a semi-structured interview guide to provide a nuanced context to the quantitative findings regarding the implementation of the National Health Insurance Authority (NHIA) Act 2022.

Data Analysis and Discussion

The empirical findings from Table 1 and Figure 1 below present a dual-sided perspective on the implementation of the NHIA Act 2022 at the Federal Teaching Hospital (FTH), Lokoja.

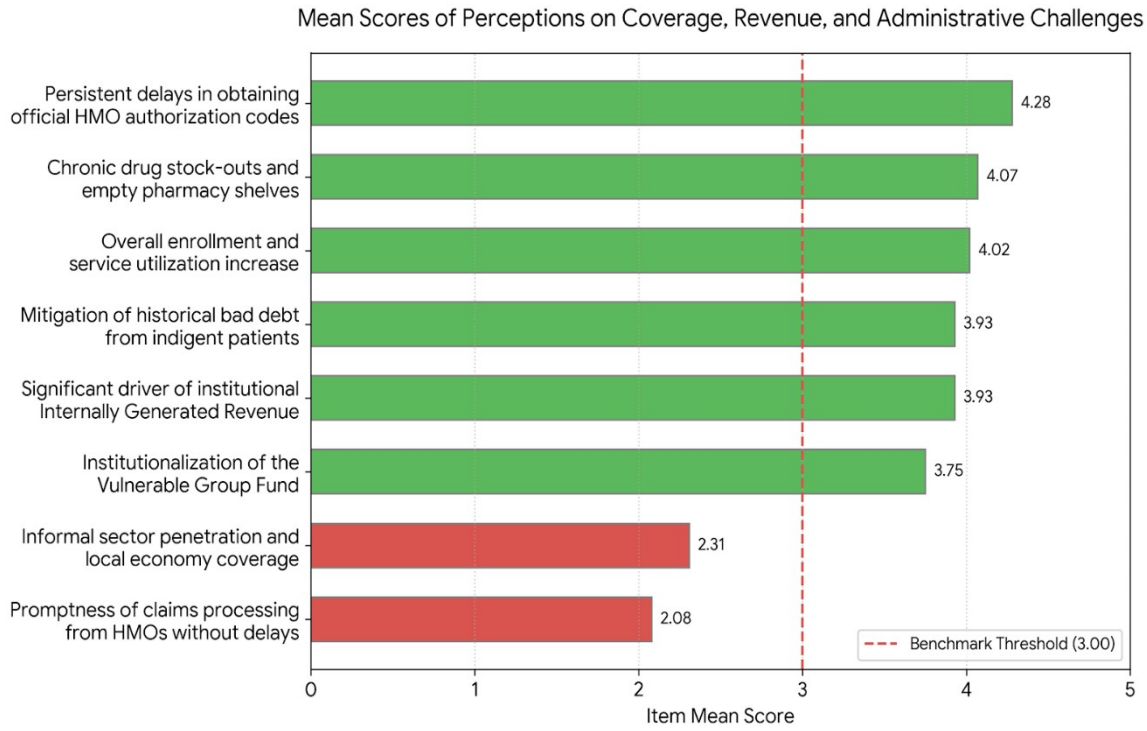
Table 1: Perceptions on Coverage, Revenue, and Administrative Challenges

Research Dimensions and Key Metrics	**Item Mean**	**Decision**
Section B: Coverage and Access (Cluster Mean = 3.14)		
Overall enrollment and service utilization increase	4.02	Accepted
Institutionalization of the Vulnerable Group Fund	3.75	Accepted
Informal sector penetration and local economy coverage	2.31	Rejected
Section C: Revenue and Financial Sustainability (Cluster Mean = 3.16)		
Significant driver of institutional Internally Generated Revenue	3.93	Accepted
Mitigation of historical bad debt from indigent patients	3.93	Accepted
Promptness of claims processing from HMOs without delays	2.08	Rejected
Section D: Administrative Challenges (Cluster Mean =		

3.67)		
Persistent delays in obtaining official HMO authorization codes	4.28	Accepted
Chronic drug stock-outs and empty pharmacy shelves	4.07	Accepted

Source: Author's fieldwork,2026

Figure 1



Source: Author's fieldwork,2026

For the first research dimension, which focuses on Coverage and Access, while overall enrollment and service utilization scored high with a mean of 4.02, a critical metric failed to meet the 3.00 benchmark. Specifically, informal sector penetration and local economy coverage were flatly rejected with an item mean score of 2.31. This quantitative deficit directly aligns with the third qualitative theme, digital deficit and infrastructure deficiencies, where key informants revealed that manual, semi-automated registration workflows create high administrative barriers that alienate informal sector workers who lack access to structured corporate enrollment platforms. Commenting on this barrier, a principal administrative officer noted that the hospital's internal registration framework remains heavily reliant on manual inputs, which complicates onboarding for non-salaried individuals who lack institutional enrollment portals (Personal communications, February 2026).

A similar operational disconnect is observable under Revenue and Financial Sustainability. Although respondents strongly agree that the Act drives internal revenue with a mean of 3.93

and mitigates bad debt with an identical mean of 3.93, they emphatically rejected the assertion that claims processing from HMOs occurs promptly and without delays, yielding a critical low score of 2.08. This quantitative rejection explicitly cross-references with, and is explained by, the qualitative theme of bureaucratic lag and the middleman bottleneck. Interview data from insurance desk officers confirmed that Health Maintenance Organisations intentionally exploit the hospital's operational gaps to query valid fee-for-service submissions, creating a severe liquidity lag that chokes the hospital's cash flow. Highlighting this specific strategic friction, an insurance desk officer observed that "the middleman role of these organizations often acts as a bureaucratic barrier to real-time clinical care" because "they intentionally create delays in releasing authorization codes and processing payments, which causes immense frustration for both hospital staff and patients awaiting urgent interventions".

These delayed payments directly trigger the severe administrative challenges highlighted in Section D, where persistent delays in obtaining official HMO authorization codes scored a high mean of 4.28, and chronic drug stock-outs scored 4.07. This critical bottleneck is perfectly illuminated by the qualitative theme of the tariff-market gap and financial erosion. Because HMOs enforce rigid, fixed insurance price guides while market prices for medical consumables fluctuate due to macroeconomic inflation, the hospital faces direct financial erosion. This macro-economic pressure forces management into an operational defense mechanism of minimizing stock to avoid trading at a loss, thereby driving the high quantitative mean for empty pharmacy shelves. Explaining the dilemma, a senior finance director stated that "the hospital is caught between a rock and a hard place" because "failing to stock drugs provokes public outcry, while stocking them under the current tariff structure leads to direct institutional financial erosion because we are essentially subsidizing enrollee care at a loss to our internal revenue".

Inferential Statistics and Hypothesis Testing

To determine the empirical validity of the core research proposition, a Chi-Square test of independence was performed using SPSS. This statistical test was explicitly configured to cross-tabulate two specific categorical variables, which are the Level of NHIA Act 2022 Implementation, measured by enrollment, authorization speed, and claims processing timelines, and Institutional Financial Sustainability Metrics, measured by Internally Generated Revenue stability and bad debt reduction ratios.

Table 2: Chi-Square Test of Independence

Statistical Metric	**Value**
Tested Variable 1	Level of NHIA Act 2022 Implementation
Tested Variable 2	Institutional Financial Sustainability Metrics
Calculated Chi-Square (chi^2)	192.16
Degrees of Freedom (df)	4
Critical Table Value (alpha = 0.05)	9.488
Asymptotic Significance (2-sided)	< 0.001

Source: *Author's fieldwork, 2026*

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The mathematical output displayed in Table 2 reveals that the calculated Chi-Square value of 192.16 significantly exceeds the critical table value of 9.488 at a 0.05 level of significance with 4 degrees of freedom, yielding an asymptotic significance of $p < 0.001$. Consequently, the null hypothesis is rejected. This mathematically confirms a highly significant statistical relationship between the independent execution of the NHIA Act 2022 and the dependent financial sustainability of the Federal Teaching Hospital, Lokoja. The structural transition to a mandatory insurance framework has fundamentally transformed the hospital's fiscal architecture, proving that institutional revenue flows are directly dependent upon the regulatory efficiency of the health insurance gateway.

Conclusion and Recommendations

A critical synthesis of the empirical findings with the reviewed literature reveals that the implementation of the National Health Insurance Authority Act of 2022 at the Federal Teaching Hospital, Lokoja has created a complex administrative reality. The high incidence of drug stock-outs and the inadequacy of the current ICT infrastructure directly link back to the structural gaps identified within the wider healthcare financing literature. Previous studies highlighted that when insurance tariffs are not dynamically indexed to national inflation, public hospitals inevitably experience a severe financing gap. The results obtained at the hospital empirically confirm this reality, as contemporary market prices of medical consumables have dramatically outpaced fixed insurance rates, leading to empty pharmacy shelves and forcing a reliance on private purchases. This operational friction is further exacerbated by authorization code delays, which represent a primary barrier to achieving a seamless, digitalized healthcare experience under the new Act.

The findings of this research hold significant implications for the administrative landscape and operational efficiency of the Federal Teaching Hospital, Lokoja, serving as an empirical blueprint for understanding the practical consequences of national health policy on localized tertiary healthcare management. The study implies that the role of hospital management is rapidly shifting from purely clinical oversight to complex financial and contract management. With insurance reimbursements becoming a absolute cornerstone of Internally Generated Revenue, the administrative efficiency of the accounts and insurance desk departments now directly dictates the hospital’s ability to procure life-saving equipment and basic clinical consumables. Any failure in the paperwork chain, such as delayed claims submission or poorly coded billing, now has an immediate, direct negative impact on the hospital’s operational liquidity. Furthermore, the low empirical rating of the current ICT infrastructure suggests that the hospital cannot achieve the high efficiency levels envisioned by the 2022 Act using manual or semi-automated processes. The practical implication is a persistent administrative lag where patient wait times will remain high due to manual authorization code verification. For the hospital to remain viable in a mandatory enrollment era, a complete transition to a fully integrated Electronic Health Record system is no longer an optional institutional upgrade but a fundamental survival necessity.

Another critical implication of the high drug stock-out rate is the potential erosion of the insurance brand at the facility level. When insured patients are continuously forced to purchase drugs at private external pharmacies due to hospital stock-outs, it creates a hidden, regressive out-of-pocket burden that defeats the core policy goal of financial protection. Administratively, this implies that the hospital faces a severe reputational risk where

enrollees may perceive the entire national insurance scheme as ineffective, potentially leading to a sharp decline in future utilization or increased physical friction between patients and frontline hospital staff. The structural mismatch between fixed tariffs and volatile market prices implies that the hospital is currently subsidizing the national insurance scheme from its own dwindling internal resources. If the administrative framework for tariff adjustment remains rigid at the regulatory level, the hospital faces the risk of long-term financial decapitalization, where the cost of providing tertiary care under the insurance framework far exceeds the reimbursements received. This necessitates a more proactive administrative stance by hospital management in negotiating service level agreements that account for current inflationary pressures. Finally, the surge in enrollees without a corresponding increase in dedicated administrative staff implies that the existing workforce is severely overstretched, leading to operational burnout and increased margins of error in medical coding and billing, which in turn leads to more queried claims from Health Maintenance Organisations, further delaying the hospital's vital revenue cycle.

In summary, this research evaluated the implementation of the National Health Insurance Authority Act of 2022 as a mechanism for healthcare financing at the Federal Teaching Hospital, Lokoja. The study was necessitated by the historic legislative shift from a voluntary scheme to a mandatory system aimed at achieving Universal Health Coverage. Using a descriptive survey research design, data were successfully collected from 318 respondents, including hospital staff and enrollees. The empirical findings revealed that the Act has successfully expanded patient utilization and significantly boosted the hospital's Internally Generated Revenue by providing a structured alternative to regressive out-of-pocket payments. However, the study also identified critical administrative bottlenecks, including a significant reimbursement lag from Health Maintenance Organisations, frequent drug stock-outs due to inflationary pressures, and an inadequate internal ICT infrastructure. While the Vulnerable Group Fund has noticeably improved access for the indigent, awareness and enrollment in Lokoja's vast informal sector remain low, suggesting that the Act's mandatory status has yet to be fully realized in the local economy.

Based on the empirical evidence generated, the study concludes that the National Health Insurance Authority Act of 2022 is a potent tool for improving healthcare financing and institutional sustainability at the Federal Teaching Hospital, Lokoja. It has successfully moved the hospital toward a more predictable fiscal model and provided a vital social safety net for vulnerable populations. However, the final administrative verdict is that the internal administrative throughput is currently the weakest link in the entire policy chain. The persistence of manual authorization processes, delayed payments, and outdated drug tariffs severely undermines the financial gains recorded. Therefore, while the framework has noticeably improved the quantity of revenue and patients, it has not yet optimized the quality of administrative efficiency. For the hospital to truly benefit from the provisions of the Act, it must evolve from being a passive recipient of insurance enrollees to a digitally-driven system capable of actively managing the complexities of mandatory social health insurance in a volatile economic environment.

Based on these findings and conclusions, the following recommendations are offered to improve the administrative and financial performance of the insurance implementation at the hospital.

First, the hospital management should transition immediately from legacy manual systems to a fully integrated, automated claims management platform, allowing for real-time verification of enrollees and instant digital submission of claims to significantly reduce the reimbursement lag currently experienced with Health Maintenance Organisations.

Second, to combat chronic drug stock-outs, management should strategically leverage capitation and fee-for-service revenue to specifically bolster its internal Drug Revolving Fund, creating a dedicated procurement channel that accounts for current market inflationary trends to ensure essential medicines are always available, thereby reducing out-of-pocket expenses.

Third, the hospital should expand its dedicated administrative workforce by hiring and training more specialized medical coders and insurance desk officers to match the enrollment surge, reducing billing errors and claim queries. Fourth, the national regulatory authority should institute a dynamic, biannual review of its drug and service tariffs in direct collaboration with tertiary provider institutions to ensure reimbursement rates remain realistic amidst prevailing macroeconomic inflation.

Finally, the Kogi State Social Health Insurance Agency must intensify localized public sensitization campaigns and collaborate with local trade associations to establish flexible premium collection mechanisms, thereby driving penetration within Lokoja's informal sector and fully realizing the mandatory intent of the 2022 Act.

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