

Review Article

The Promises and Perils of Mandatory Health Insurance in Nigeria Under the National Health Insurance Authority

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Abstract

This narrative review examines the potential of Nigeria's National Health Insurance Authority (NHIA) to achieve universal health coverage (UHC), with a focus on implementation challenges and policy gaps. The study synthesizes peer-reviewed literature (2013-2023), policy documents, and grey literature sourced using Boolean search strategies across PubMed, Scopus, Web of Science, and Google Scholar. Expert consultations with public health specialists further informed the analysis. The review highlights major barriers including limited public awareness and trust, underfunded health budgets, poor infrastructure, a critical healthcare workforce shortage, and concerns about service quality. Socioeconomic obstacles—such as widespread poverty and high out-of-pocket payments—compound these issues. Despite its potential, the NHIA's effectiveness is constrained by these structural challenges. To enhance impact, the study recommends multi-sectoral reforms: sustainable financing beyond donor dependency, strengthened governance and accountability, strategic investments in health systems and workforce, integration of NHIA with essential services, and broad-based community engagement. Addressing these gaps is essential for the NHIA to fulfill its mandate and advance Nigeria's progress toward UHC.

Keywords

Nhia, Nhis, Universal-Health-Coverage, Mandatory Health Insurance, Health Financing, Health Policy

1. Introduction

Globally, health systems are tasked with generating financial resources and ensuring their effective use to achieve equity in health care delivery — a critical component of universal health coverage (UHC), which aims to provide everyone with access to necessary services without financial hardship [1]. In Nigeria, the National Health Insurance Scheme (NHIS), established in 1999 to provide equitable health care access, has been hindered by low enrolment rates, the exclusion of vulnerable populations, and inadequate state regulatory involvement, largely due to Nigeria's complex

social, political, and cultural landscape [2, 3].

The transition from the NHIS to the NHIA in 2022 was driven by several critical shortcomings of the NHIS, including low enrolment rates, the exclusion of vulnerable populations, and a lack of state involvement in regulatory improvements [4]. Recognizing these challenges, key stakeholders sought a more effective framework to achieve UHC in Nigeria. It was in this context that the Lancet Nigeria Commission's 2022 report on health reform, titled "Investing in Health and the Future of the Nation," provided pivotal recommendations [5].

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The report emphasized the need for mandatory health insurance to overcome these gaps and ensure the inclusion of marginalized groups, particularly the informal sector. This guidance significantly shaped the design of the NHIA, which introduces mandatory health insurance for all Nigerians, a move that could dramatically increase enrolment rates and improve access to essential health services.

The NHIA faces high stakes. Failure could exacerbate health disparities, increase financial burdens on low-income households, and undermine Sustainable Development Goal Three (SDG 3). Currently, about 80% of Nigerians rely on out-of-pocket healthcare payments, which disproportionately affects low-income households [6]. Public skepticism and eroded trust would hinder future health initiatives, making it difficult for Nigeria to meet its SDG commitments. The NHIA's Vulnerable Group Fund (VGF) provisions are crucial for supporting vulnerable groups. Failure could lead to a continued lack of access to health care, further marginalizing them and violating SDG 10.

Despite the critical importance of mandatory health insurance for Nigeria's UHC goals, existing literature largely consists of studies examining the historical performance of the NHIS or general analyses of health financing mechanisms within the Nigerian context [7-10]. While valuable, few reviews have specifically and comprehensively addressed the complexities of the NHIA's *transition and early implementation* through a multi-faceted lens [11]. Prior work often overlooks the nuanced interplay of policy design with on-the-ground challenges, and there is a notable absence of direct comparative analysis with other African nations that have progressed further in mandatory health insurance [11, 12]. Furthermore, critical socio-cultural factors beyond economic barriers, such as public trust and religious influence, are frequently under-explored in their direct impact on health insurance uptake and sustainability in Nigeria [14].

As the NHIA embarks on this ambitious journey to achieve universal health coverage, this study applies a conceptual framework to examine whether it can deliver on its promises amidst funding constraints, governance issues, and socio-cultural barriers. Beyond identifying challenges, this review makes an innovative contribution by providing a context-specific synthesis that incorporates comparative insights from Rwanda and Ghana—two African countries with more advanced implementation of mandatory health insurance. Unlike prior studies that focus narrowly on NHIS or health financing, this review adopts a policy implementation lens and integrates peer-reviewed literature, grey sources, and expert consultations. It highlights often-overlooked factors—such as public trust and religious influence—that shape program uptake, offering actionable guidance for improving NHIA's early implementation and long-term success.

2. Conceptual Framework

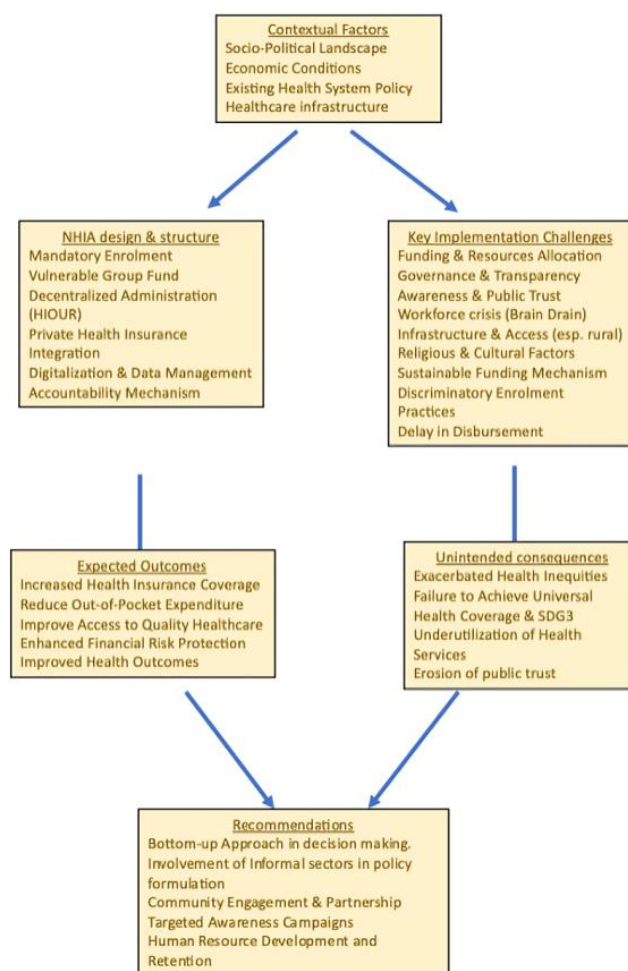


Figure 1. Conceptual framework.

3. Methodology

3.1. Study Design

This study employed a narrative review methodology to evaluate the implementation and challenges of Nigeria's National Health Insurance Authority (NHIA). A narrative review was chosen for its suitability in synthesizing diverse data sources and expert perspectives on a rapidly evolving policy area. To ensure a comprehensive and rigorous review, a structured and transparent approach was adopted.

3.2. Search Strategy

A systematic literature search was conducted between October and November 2024 using multiple electronic databases, including PubMed, Scopus, Web of Science, and Google Scholar. The search covered publications from January 2013 to December 2023. Boolean operators were used to combine keywords such as:

A systematic literature search was conducted across several electronic databases, including PubMed, Scopus, Web of Science, and Google Scholar, covering the period from 2013 to 2023. The search strategy employed Boolean operators to combine key terms related to the NHIA and mandatory health insurance in Nigeria. The following search strings were used (with variations for each database):

1. ("NHIA" OR "National Health Insurance Authority") AND ("mandatory health insurance" OR "compulsory health insurance") AND "Nigeria" AND ("challenges" OR "barriers" OR "implementation" OR "impact")
2. ("NHIS" OR "National Health Insurance Scheme") AND ("transition" OR "reform") AND "Nigeria"
3. "Universal Health Coverage" AND "Nigeria" AND ("health financing" OR "policy evaluation")

In addition to peer-reviewed literature, grey literature such as policy briefs, operational guidelines, and government reports were included and cross-referenced for reliability.

3.3. Inclusion/Exclusion Criteria

Only English-language sources were considered. Included materials focused on the NHIA or the NHIS-NHIA transition and addressed implementation challenges, reforms, or health system outcomes in Nigeria. Studies focusing solely on the NHIS without transition context were excluded, as were articles published before 2013. No restrictions were placed on

study design, allowing inclusion of qualitative, quantitative, and mixed-methods research.

3.4. Data Extraction and Synthesis

Data from eligible documents were extracted manually into a thematic matrix under categories such as health financing, governance, workforce, infrastructure, public perception, and equity. While a standardized data extraction form was not used, consistent criteria were applied to all documents. Thematic synthesis was conducted inductively, allowing for the emergence of recurrent themes and policy patterns across sources.

3.5. Bias Identification and Mitigation

To address potential bias inherent in narrative reviews, several steps were taken:

1. Use of multiple databases and grey literature to diversify sources
2. Triangulation of findings from peer-reviewed articles, policy documents, and expert opinion
3. Cross-checking grey literature for consistency with published research
4. Explicit exclusion criteria to avoid overrepresentation of outdated or tangential material

Table 1. Comparison of Health Insurance Systems: Nigeria, Rwanda, and Ghana.

| Key Features | Nigeria | Rwanda | Ghana |
|--|---|---|---|
| Mandatory | Yes | Yes | Yes |
| Total Population (approx.) | 235 million [15] (2025 est.) | 14.4 million [16] (2025 est.) | 34 million [17] (2025 est.) |
| Doctor/Population Ratio (approx.) | 0.4 doctors per 1,000 people [18] (2022) | 0.1 doctors per 1,000 people [18] (2019) | 0.1 doctors per 1,000 people [18] (2022) |
| Funding Mechanism | Combination of: Consolidated Revenue Fund (CRF) Vulnerable Group Fund (VGF) Basic Health Care Provision Fund (BHCPF) State Health Insurance Schemes Employer/Individual contributions (formal sector) [19] | Largely community-based health insurance (Mutuelles) with government subsidies and donor support [20] | National Health Insurance Levy (2.5% of formal sector employee salaries), Social Security and National Insurance Trust (SSNIT) contributions, government subsidies [21] |
| Coverage Rate (approx.) | 5% (18.7 million) 2024 est.) [22] | 90% [23] | 60% [23] |
| Current Healthcare Budget (% of GDP approx.) | 5.15% (2025) [24] (fluctuating, below Abuja Declaration target) | 7.2% (2023/24) [25] (relatively higher and more consistent) | 6-7% (2023) [26] |

Table 1 presents a cross-country comparison of key health insurance system characteristics in Nigeria, Rwanda, and

Ghana to contextualize NHIA's implementation within broader African experiences. Rwanda and Ghana were se-

lected due to their relative success in achieving high health insurance coverage under mandatory schemes. The comparison of coverage rates, financing mechanisms, and healthcare budgets provides a reference point to identify gaps and transferable lessons. This cross-country analysis helps frame Nigeria's progress and challenges in a broader context, illustrating what structural reforms might be needed to improve outcomes under NHIA.

4. The Promises of the Mandatory National Health Insurance Authority

Mandatory health insurance under the NHIA promises to transform Nigeria's health care landscape. The success of Rwanda's policy changes, which led to an 83% health insurance coverage rate, demonstrates how mandatory health insurance can effectively expand access to health care [27]. By legally mandating all citizens to enroll in a health insurance plan, the NHIA aims to rectify the shortcomings of the previous voluntary system, which benefited most of those in the formal sector while excluding many in the informal sector [28]. Central to this is the aspiration to achieve UHC, ensuring that all Nigerians have access to quality health care services without the risk of financial ruin [29]. This aligns with global health goals, particularly SDG 3, and reflects Nigeria's commitment to equitable health care access for all.

The NHIA aims to expand health care coverage to underserved populations, including vulnerable groups historically excluded from health insurance. Mandatory enrollment will extend benefits to millions, especially in rural and remote areas. By decentralizing the administration of health insurance through the Health Insurance Under One Roof (HIUOR) approach, the NHIA aims to streamline processes and eliminate bureaucratic bottlenecks [19]. The HIUOR model empowers state governments to manage and promote health insurance, driving demand and increasing uptake at the sub-national level. This decentralized approach is crucial for reaching populations with unique health care needs across Nigeria's diverse regions [30].

In addition to expanding coverage, the NHIA is also addressing issues related to the availability and quality of health care services [31]. Through strategic initiatives like the NHIA Medicine Supply Initiative, the authority promises to ensure a consistent supply of quality medications, thereby addressing a long-standing issue of drug stockouts, especially for chronic conditions and emergencies [19]. This will boost trust in the health care system and reduce financial burdens for patients who previously paid out-of-pocket for essential drugs.

A critical goal of the NHIA is to reduce out-of-pocket (OOP) health care expenditure, which has historically been a major cause of financial hardship for Nigerian households [32]. Many families face financial catastrophe due to health care costs, pushing them deeper into poverty [33]. Recent estimates show an increasing trend in out-of-pocket spending,

varying across regions and rural areas most affected by catastrophic health care expenditure [6]. The NHIA's pooling of funds and prepayment for services helps provide financial risk protection, ensuring that citizens are not left vulnerable to unpredictable health crises. This approach is similar to those employed in Colombia and India [34]. By reducing reliance on out-of-pocket payments, the mandatory health insurance system promises a more sustainable and equitable health care financing mechanism, with the potential to significantly improve health care affordability [35].

Moreover, the NHIA seeks to support the most vulnerable populations using the Vulnerable Group Fund, which subsidizes health care for the poorest Nigerians [36]. This initiative is complemented by the Basic Health Care Provision Fund (BHC PF), which allocates 1% of the nation's Consolidated Revenue Fund (CRF) to improve primary health care services and provide financial protection to all citizens [37]. A recent study has confirmed the utilization of BHC PF to improve primary health care services in Northern Nigeria [38]. Together, these funds ensure that even the lowest-income groups are not left behind in the pursuit of UHC, reinforcing the NHIA's commitment to addressing inequities in health care access [39].

The NHIA's Tertiary Institution Social Health Insurance Program (TISHIP) is a promising initiative that extends coverage to tertiary students [40]. The scheme encourages institutions to improve their health centers to meet NHIA standards [19]. The scheme requires annual student contributions but eliminates co-payments for health care services, ensuring that students have access to quality health care both on and off campus. The NHIA will improve student health, reduce absenteeism, and promote preventive care by providing affordable and accessible health care, fostering a comprehensive approach to student well-being.

In addition to the mandatory health insurance plan, the NHIA also facilitates Private Health Insurance (PHI) options, offering supplemental and complementary coverage. This dual-tiered system allows individuals and employers to purchase coverage for services not included in the basic plan, such as specialized treatments [19]. However, it is critical to ensure that the introduction of PHI does not inadvertently create disparities in service quality between those who can afford supplemental coverage and those who cannot. The introduction of an International Health Insurance Plan (IHIP), which enables patients to seek overseas care for complex surgeries and treatments, further strengthens NHIA's commitment to providing access to advanced health care interventions [19].

Lastly, the digitalization and data management efforts by NHIA are key to improving the efficiency, transparency, and overall quality of service delivery. By leveraging technology, the NHIA aims to enhance health care financing systems, reduce administrative inefficiencies, and improve decision-making processes, ensuring better outcomes for both patients and providers.

5. Perils of Mandatory National Health Insurance Authority

The NHIA's ambitious goals are undermined by real-world challenges such as insufficient funding, weak governance, inadequate infrastructure, and sociocultural barriers. Achieving health insurance coverage and financial risk protection depends on resource availability and strong government commitment. Inadequate health care funding is a major impediment to the success of the NHIA. Despite the Abuja Declaration of 2001, which mandated African nations to allocate 15% of their national budgets to health, Nigeria has consistently fallen short, dedicating only around 5% in recent years [41-43]. The funding shortfall hampers the NHIA's ability to expand coverage, enhance service quality, and lower out-of-pocket costs, with frequent delays in releasing allocated funds leading to failed initiatives and poor health care delivery [44]. The funding gap has hindered rural health care infrastructure development, restricting access to essential services and jeopardizing the NHIA's success.

Awareness of the NHIA remains low in rural areas, where around half of Nigeria's population resides, according to the World Bank [45]. Evidence from the NHIS indicates that the informal sector, a large part of the rural population, is often excluded from coverage [28]. Studies among auto-technicians, market women, and patients in Lagos show many are unaware of the NHIS or how to register [46-49]. Even civil servants and tertiary students lack universal awareness [39, 49-51]. This highlights the urgent need for a robust, inclusive communication strategy.

Trust in the NHIA and government performance is crucial to its success. Past experiences like poor governance, delayed HMO payments, unmet patient expectations, and facilities rejecting patients over low capitation fees have eroded public confidence. [53] Additionally, some facilities refused to accept patients due to low capitation fees. [53] This skepticism is especially pronounced among informal workers and women traders. [45, 48]

Quality of care is a key concern for health insurance enrollees, with common complaints including long wait times, lack of prescribed medications in NHIA-approved pharmacies, and poor service delivery. These issues affect both TISHIP beneficiaries and users of other NHIA services. [39, 53] The shortage of essential drugs undermines health insurance by forcing patients to pay out-of-pocket. A study revealed that 47.6% of respondents reported drug unavailability in NHIA-accredited facilities, highlighting a key challenge in NHIA implementation. [31] The cumbersome registration process is a barrier for civil servants and poses an even greater challenge for informal sector workers and those with limited education. [50]

A key factor in the uptake of mandatory health insurance is the willingness to enroll and pay for the scheme. Studies across East and West Africa show 78.8% willingness to pay for health insurance. [54, 55] Affordability varies signifi-

cantly between urban and rural households, with factors such as income instability—particularly for informal sector workers—and family size influencing willingness to pay. [55, 56] These economic uncertainties make it challenging to enroll many citizens into the NHIA.

Religion plays a significant role in shaping health care decisions in Nigeria and can influence perceptions of insurance schemes. For instance, Catholic teachings may discourage contraceptive use, while Islamic principles can impact views on interest-based banking and insurance. In Southwest Nigeria, some communities have raised concerns about conflicts between religious beliefs and health insurance participation. [45, 46] While the exact impact of religion as a barrier to mandatory health insurance remains uncertain, it is a potentially influential factor.

6. Addressing Critical Barriers to Mandatory NHIA Implementation: Strategic Recommendations

Two years after the mandatory NHIA was enacted, enrollment remains below expectations, with over 18 million enrolled, even with economic challenges and rising medical costs [58]. While the NHIA represents a bold step toward achieving UHC, its implementation faces significant challenges. A key barrier is the widespread lack of trust in government policies, which has previously undermined various programs, including health care reform. Past misconduct and misappropriation of funds have further eroded public trust in the NHIA [59].

Despite 11% increase in coverage, NHIA's low coverage rate becomes more apparent when compared to countries like Ghana (60%) and Rwanda (90%), where mandatory enrollment and stronger governance have driven higher rates of health care access [21, 22, 59]. To rebuild trust, the Nigerian government must prioritize transparency and public engagement. Health campaigns should involve community leaders and civil society organizations in promoting the NHIA's benefits and accountability. An independent monitoring body to audit NHIA activities would further demonstrate commitment to safeguarding public health investments.

The success of the NHIA depends on adequate financial support. Public health experts question the government's ability to achieve UHC without significantly increasing health care funding. While the NHIA covers various services, infrastructure—especially in rural areas—is inadequate. Instead of relying on donor funding, the NHIA should develop a sustainable funding model, including public-private partnerships, increased health taxes (on tobacco and alcohol), and a tiered premium structure to encourage higher contributions from wealthier individuals. This approach would reduce reliance on foreign aid and ensure long-term sustainability.

A major threat to the NHIA's success is Nigeria's ongoing health care workforce crisis [61]. Brain drain continues to

deplete the country's ability to meet growing health care demands, with staff shortages and long waiting times in NHIS-accredited facilities affecting care quality. The government must invest in competitive salaries, improve working conditions, and offer career development opportunities to retain health care professionals. Additionally, retention programs and scholarships for medical students committed to serving in rural areas could ease the strain on the workforce.

To boost NHIA enrollment, the government could link access to essential services with proof of NHIA enrollment. This would encourage participation across various population segments and highlight health insurance as a key aspect of citizenship. The federal government must continue collaborating with state governments to ensure nationwide implementation that addresses regional health care access and coverage disparities.

Religion plays a significant role in shaping health care decisions in Nigeria and can influence perceptions of insurance schemes. Some religious groups may prefer traditional or faith-based healing methods, while others may have concerns about interest-based financial practices associated with insurance. However, religious institutions can also be powerful platforms for promoting health insurance enrolment. Trusted religious leaders can advocate for NHIA participation, dispel myths, and emphasize the importance of health insurance for community well-being. By collaborating with religious institutions, the NHIA can address concerns, foster understanding, and encourage enrolment, helping to overcome barriers to health care access and improve the scheme's effectiveness.

This study has several limitations. The narrative review approach, while suitable for the research question, is inherently subjective and may be influenced by the reviewer's interpretations. Although a systematic search strategy was employed, the reliance on specific databases might have resulted in the omission of relevant literature. The limited number of experts consulted may not fully represent the diversity of perspectives on the NHIA.

7. Conclusion

The establishment of the National Health Insurance Authority represents a pivotal reform in Nigeria's health financing landscape, offering a unique opportunity to expand health coverage and improve financial protection. However, this narrative review reveals that systemic barrier—ranging from insufficient funding and infrastructure to low public trust and sociocultural resistance—continue to constrain progress. Drawing on comparative insights from Rwanda and Ghana, this study underscores the urgent need for strategic policy action, including sustainable financing models, stronger governance mechanisms, targeted awareness campaigns, and integrated service delivery approaches. For NHIA to truly advance universal health coverage, it must prioritize inclusion, transparency, and long-term investment in human resources and primary healthcare systems. The success of the

NHIA will depend not only on legislation but on a sustained national commitment to health equity, implementation fidelity, and institutional accountability.

Abbreviations

| | |
|--------|--|
| BHCPF | Basic Health Care Provision Fund |
| CRF | Consolidated Revenue Fund |
| GDP | Gross Domestic Product |
| HMO | Health Maintenance Organization |
| HIUOR | Health Insurance Under One Roof |
| IHIP | International Health Insurance Plan |
| LMICs | Low- and Middle-Income Countries |
| NHIA | National Health Insurance Authority |
| NHIS | National Health Insurance Scheme |
| OOP | Out-of-Pocket |
| PHI | Private Health Insurance |
| SDG | Sustainable Development Goal |
| TISHIP | Tertiary Institution Social Health Insurance Programme |
| UHC | Universal Health Coverage |
| VGF | Vulnerable Group Fund |
| WHO | World Health Organization |

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Conflict of Interest

The authors declare no conflicts of interest.

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