

Health Insurance in Nigeria: From Statutory Reform to Effective Financial Protection A Critical Narrative Review

¹Musa Saulawa Ibrahim, ^{2,3}Aliyu Zakariya, ³Hassan Farouk Hassan, ³Umar Shu'aibu,
^{2,3}Muhammad Ibrahim Jalo and ^{3,4}Abubakar Isa Sadiq

¹ Department of Community Medicine, Faculty of Clinical Sciences, Federal University Dutse, Jigawa State, Nigeria.

² Department of Community Medicine, Faculty of Clinical Sciences, Yobe State University

³ Department of Community Medicine, Aminu Kano Teaching Hospital, Kano State, Nigeria.

⁴ Department of Community Medicine, Faculty of Clinical Sciences, Bayero University Kano, Nigeria.

*Corresponding authors' email: musaibrahim995@gmail.com

ABSTRACT

Nigeria has replaced the National Health Insurance Scheme framework with the National Health Insurance Authority Act 2022, which makes health insurance participation mandatory and establishes a Vulnerable Group Fund. This critical narrative review examines the evolution and architecture of Nigerian health insurance and synthesises evidence on enrolment, service use, financial protection, beneficiary experience, provider participation and implementation constraints. Official legal and policy documents were considered alongside purposively selected peer-reviewed Nigerian studies and international health-financing sources, with a targeted supplementary search and source verification completed on 1 October 2026. Evidence from programmes operating before the 2022 reform, particularly the Kwara programme combining subsidised insurance with facility improvements, indicates increased utilisation and reduced out-of-pocket expenditure among enrollees. These findings do not establish the nationwide effects of the NHIA Act. Household out-of-pocket payments accounted for approximately 71.9% of current health expenditure in 2023. Survey and stakeholder evidence identifies uneven enrolment, limited informal-sector participation, funding constraints, fragmented pools, provider-payment problems and administrative barriers. The synthesis supports recommendations to strengthen public subsidies for vulnerable groups, improve informal-sector enrolment and payment arrangements, review provider tariffs transparently, and coordinate coverage and claims information. Evaluation should distinguish registration from active coverage and assess access, quality, residual payments and financial hardship. The 2022 Act provides a stronger statutory foundation, but its long-term effects on equitable coverage and financial protection remain to be established.

Received: 25 Sept. 2026

Accepted: 05 Oct. 2026

Published: 08 Oct. 2026

Keywords:

Health insurance, Universal health coverage, Financial protection, Out-of-pocket expenditure, Strategic purchasing, Nigeria

INTRODUCTION

Health insurance pools prepaid contributions or public subsidies so that illness costs are shared rather than borne entirely when care is needed. Effective pooling can improve access and protect households from financial hardship. The World Health Organization and World Bank identify financial protection and effective service coverage as central dimensions of universal health coverage (World Health Organization & World Bank, 2023).

The issue is especially important in Nigeria because households have historically relied heavily on out-of-pocket payments. The WHO Global Health Expenditure Database, disseminated through World Development Indicators, reports that household out-of-pocket expenditure accounted for approximately 71.9% of current health expenditure in Nigeria in 2023 (World Bank, n.d.). This is the share of national current health expenditure financed directly by households, not the percentage of households experiencing catastrophic spending. A WHO country report published in August 2026 corroborates the rounded 2023 figure of about 72% (World Health Organization Regional Office for Africa, 2026).

Nigeria has therefore spent several decades attempting to build a broader system of prepayment and risk pooling. The National Health Insurance Scheme (NHIS) was established by

law in 1999 and its formal-sector programme became operational in 2005 (National Health Insurance Scheme Act, 1999; Alawode & Adewole, 2021). The National Health Insurance Authority (NHIA) Act, which commenced on 19 May 2022, repealed the earlier framework and established a broader regulatory mandate, mandatory participation and mechanisms for vulnerable-group financing (National Health Insurance Authority Act, 2022).

Effective coverage requires that an insured person can obtain needed services of adequate quality without unaffordable financial costs. It depends on functioning relationships among beneficiaries, healthcare providers, health maintenance organisations (HMOs), state insurance agencies and the national regulator. Nigerian programme and stakeholder evidence identifies benefits for some covered populations alongside persistent gaps in enrolment, financing, provider payment and service experience. The distinction between statutory entitlement and effective protection therefore guides this review.

This review aims to examine the evolution and current architecture of health insurance in Nigeria, synthesise evidence on enrolment, utilisation and financial protection, and identify implementation priorities and evidence gaps relevant to the NHIA Act 2022.

Review Methodology

This paper is a critical narrative review and policy analysis. Sources were selected purposively to explain Nigeria's health-insurance architecture and the relationship between statutory entitlement and effective financial protection. The evidence comprises primary legislation, official health-expenditure and programme information, Nigerian empirical studies, and relevant evidence syntheses. A targeted supplementary search and source verification was completed on 1 October 2026, the final search cutoff for this review.

The supplementary search used web-indexed PubMed and PubMed Central records, original journal and publisher websites, and the websites of NHIA, NPHCDA, WHO, World Bank and FUDMA Journal of Sciences. Search expressions included 'Nigeria health insurance financial protection', 'Nigeria NHIS NHIA enrolment utilisation', 'Nigeria health insurance provider payment HMO implementation', and 'Nigeria health insurance beneficiary satisfaction'. Additional searches combined health insurance with state-supported schemes, community-based insurance, informal-sector participation and universal health coverage. Journal searches included 'health insurance' on the FJS website. Exact titles and DOI identifiers were used to locate and verify cited publications; Crossref and DataCite records supported bibliographic checks.

Sources were retained when they addressed Nigerian insurance law, scheme design or implementation, enrolment, utilisation, financial protection, beneficiary experience or provider participation, and had a traceable original publication or institutional source. Legislation and official databases were prioritised for legal and national expenditure claims. International reports and the SANRA paper were retained for conceptual and methodological context. Sources unrelated to Nigerian insurance or these contextual purposes, duplicate reports, and claims unsupported by the accessible source were excluded from the synthesis. No publication-year restriction was imposed because the review includes historical legislation and programme evidence.

For the selected studies, the synthesis considered setting, population, design, data-collection period, outcomes and limitations. Publication year was distinguished from data year; evidence collected before May 2022 was treated as historical, while later or overlapping study periods were assessed without assuming that observed outcomes were caused by the Act. The World Bank indicator SH.XPD.OOPC.CH.ZS, sourced from WHO's Global Health Expenditure Database, was checked for Nigeria and the 2023 data year. Selection remained purposive and non-exhaustive: no pooled effects, exhaustive screening counts or comprehensive inventory of state schemes are reported.

The six SANRA domains guided the narrative review by establishing the review's importance and explicit aim, describing source identification, checking references against original sources, relating interpretation to study design and evidence strength, and reporting relevant outcome data with their populations and periods (Baethge et al., 2019). SANRA was used as an editorial guide; no numerical score or independent formal rating is claimed.

RESULTS AND DISCUSSION

Evolution of Health Insurance in Nigeria

The NHIS Act 1999 established a national scheme intended to improve access to healthcare and protect families from large medical bills (National Health Insurance Scheme Act, 1999). Its formal-sector programme became operational in 2005 (Alawode & Adewole, 2021).

The original model was largely organised around formal employment. Employers, employees and government institutions could be identified more easily, and contributions could be collected through employment arrangements. This was administratively convenient but created a structural limitation: the Nigerian labour market contains a very large informal sector made up of traders, farmers, artisans, transport workers, domestic workers and other self-employed people. Under the earlier NHIS framework, stakeholder research conducted in Ibadan in 2016 identified limited informal-sector reach, low awareness, poverty, inefficient payment arrangements and weak administration as barriers to expansion (Alawode & Adewole, 2021). These findings describe implementation of the earlier scheme and should not be presented as an evaluation of the 2022 Act.

States subsequently developed their own health insurance arrangements. This created opportunities to extend coverage to informal and vulnerable groups and to design programmes around local circumstances. The Basic Health Care Provision Fund (BHC PF), established under the National Health Act 2014, added a dedicated financing mechanism for primary healthcare and vulnerable populations (National Primary Health Care Development Agency [NPHCDA], n.d.).

The NHIA Act 2022 repealed the earlier NHIS law and expanded the statutory framework for coordinating and regulating insurance schemes. Section 14 requires residents to obtain health insurance, while sections 25–30 establish and govern the Vulnerable Group Fund (National Health Insurance Authority Act, 2022). These provisions expand legal entitlement; their implementation and effects require separate empirical assessment. Table 1 compares the principal provisions of the two Acts.

Table 1: Comparison of the Principal Provisions of the 1999 and 2022 Insurance Laws

Feature	NHIS Act 1999	NHIA Act 2022
Institution and remit	Establishes the NHIS and its governing council; sets scheme objectives and functions (ss. 1–6).	Establishes the NHIA to promote, regulate and integrate health insurance schemes (ss. 1–3).
Participation	Section 16 uses permissive contribution wording for employers with at least ten employees; no equivalent universal resident mandate.	Requires residents to obtain insurance, including formal and informal workers and other residents (s. 14).
State schemes	Provides zonal offices and state/FCT arbitration arrangements (ss. 21–27).	Expressly enables state/FCT insurance schemes and specifies requirements and support (ss. 3(j), 13).
Vulnerable-group financing	No separate Vulnerable Group Fund established by this Act.	Provides for BHC PF implementation and a dedicated Vulnerable Group Fund (ss. 24–30).

Feature	NHIS Act 1999	NHIA Act 2022
Provider and purchasing oversight	Registers providers and HMOs and defines HMO functions (ss. 18–20).	Licenses schemes, accredits purchasing actors and integrates scheme information (ss. 3, 15–23, 33–34).

Note. Sources: National Health Insurance Scheme Act (1999), No. 35, reproduced in Cap. N42, Laws of the Federation of Nigeria 2004; National Health Insurance Authority Act (2022), No. 17. The table summarises statutory provisions, not implementation outcomes. BHCPF = Basic Health Care Provision Fund; FCT = Federal Capital Territory.

Types and Categories of Health Insurance in Nigeria

Formal-sector Health Insurance

Formal-sector insurance is built around people whose employment makes regular contribution collection relatively straightforward. Its advantage is administrative simplicity. Its weakness is that payroll-based arrangements do not naturally reach people whose work is informal or irregular.

State-supported Health Insurance

State-supported schemes allow states to organise coverage for formal, informal and subsidised vulnerable groups. A six-state cross-sectional study published in 2025 collected data between August 2023 and February 2024 on enrolment and its correlates in Cross River, Enugu, Oyo, Kwara, Sokoto and Taraba (Effiong, Dine, et al., 2025). Its timing makes it relevant to the post-2022 context, but its design cannot isolate the effects of the NHIA Act.

Private Health Insurance and HMOs

Private health insurance provides coverage purchased by individuals, families or employers. HMOs play important purchasing and administrative roles in many arrangements, including managing provider networks, claims and utilisation. Their position between the financing and service-delivery sides makes their performance important to both beneficiaries and providers.

Community-based and Informal-Sector Arrangements

Community-based and micro-insurance arrangements have been used or proposed to reach people outside formal employment. Nigerian evidence indicates that informal-sector populations can be interested in insurance, but awareness, trust, affordability and convenient payment arrangements are important (Adewole et al., 2017; Bolarinwa et al., 2021).

Vulnerable-group Arrangements

Subsidised arrangements are essential because a purely contributory system can exclude the people most in need of financial protection. The NHIA Act provides for a Vulnerable Group Fund, while the BHCPF supports essential primary healthcare and vulnerable populations (National Health Insurance Authority Act, 2022; NPHCDA, n.d.).

Private Health Insurance and the HMO Industry

Private health insurance is an important component of Nigeria's health-financing system. The National Health Insurance Authority regulates private health-insurance arrangements and Health Maintenance Organisations (HMOs). Entitlements vary by contract, so the existence of cover should not be equated with a uniform national benefit package (National Health Insurance Authority Act, 2022). This relationship is therefore best understood as a purchasing relationship rather than simply an administrative one. The HMO is expected to purchase appropriate healthcare on behalf of the beneficiary. For private insurance to perform this role effectively, the purchasing process should reward quality, provide predictable payment and use transparent rules. Evidence from Nigeria suggests that these arrangements still

require improvement (Onoka et al., 2016; Aloni-Alali et al., 2023).

Private insurance depends on a functioning relationship between HMOs and healthcare providers. Providers must be adequately reimbursed if they are to continue participating, while HMOs must control costs if premiums are to remain affordable. When tariffs are too low, claims are delayed or rejected without clear justification, or administrative requirements are excessive, providers may become dissatisfied with participation. Conversely, insurers need mechanisms to discourage inappropriate utilisation and fraudulent claims.

The Provider-HMO Relationship

Aloni-Alali et al. (2023) surveyed 180 healthcare personnel in 60 private facilities in Port Harcourt using data collected between May and August 2022. Satisfaction was 55.6% for HMO administrative processes, 41.5% for claims administration and 37.8% for billing rates. These are local provider-experience measures from a period overlapping the reform's commencement, not estimates of its effects on financial protection.

Pre-authorisation and Delays in Accessing Care

Pre-authorisation is another important issue in private health insurance. HMOs may require approval before certain investigations, procedures, admissions or specialist services are provided. From the insurer's perspective, pre-authorisation helps control inappropriate utilisation and protect the financial sustainability of the risk pool. From the beneficiary's perspective, however, a slow approval process can become an additional barrier to care.

When a clinician considers a service necessary, slow pre-authorisation may delay diagnosis or treatment and increase provider workload. This reflects competing incentives: beneficiaries seek timely care, providers seek clinical continuity, and HMOs seek to ensure that requested services are appropriate and contractually covered.

Limited Benefit Packages and Out-of-Pocket Payments

Another concern is the adequacy of benefit packages. A private insurance policy is a contract with defined benefits, exclusions, limits and conditions. A beneficiary may therefore discover that a clinically necessary medicine, investigation, procedure or specialist service is excluded, subject to an annual or frequency limit, or requires a co-payment. In such situations, insurance reduces the financial burden but does not eliminate it.

This is particularly important for expensive investigations, chronic disease management and specialised treatment. The existence of an insurance policy can create an expectation that the insurer will meet the cost of all medically necessary care. When the actual package is narrower, the difference between expectation and entitlement can become a major source of dissatisfaction. In an Abuja study, enrollees reported poor referral arrangements, delays in receiving required services and the unavailability of some required services among reasons their expectations were not met (Obembe et al., 2017).

High Premiums and Affordability

The cost of private insurance is an important barrier to wider uptake. Premiums vary according to the level of coverage, provider network, age, family size and other factors. A study of primary healthcare facilities in Abuja estimated the costs of a technology-supported insurance model and showed that scheme design must account for both household affordability and provider viability (Chukwu et al., 2016). The study does not establish national private-premium levels; conclusions about affordability should therefore remain scheme- and population-specific.

Affordability also has an equity dimension. Households with higher and more stable incomes are better positioned to purchase comprehensive private cover, whereas poorer households may either remain uninsured or select less expensive plans with narrower benefits. Private insurance can therefore improve access for those who can afford it without necessarily reducing the underlying inequalities in healthcare financing. This is one reason why private insurance should complement rather than replace publicly supported risk-pooling arrangements.

For beneficiaries, private insurance can offer important advantages, including access to private providers and potentially greater choice of facilities and services. However, the benefits available depend heavily on the particular plan purchased. The central concern is therefore not simply whether a person has private insurance, but whether the package provides adequate protection for the conditions and services that the person is likely to need.

The private health insurance market has, however, developed within a relatively fragmented health-financing environment. Onoka et al. (2016), in a study of the Nigerian HMO industry, found that the market was characterised by multiple risk pools, product differentiation, imperfect competition and risk selection. Their findings suggest that private insurance can contribute to broader coverage, but it is unlikely to achieve universal health coverage on its own. Its contribution is more likely to be useful when it operates within a strong regulatory framework and alongside publicly financed and social insurance arrangements.

Enrolment and Population Coverage

A comparative analysis of Demographic and Health Surveys reported insurance ownership of 2.8% among the Nigerian respondents included in the 2018 survey analysis, comprising women aged 15–49 and men aged 15–59. Insurance ownership was associated with socioeconomic characteristics, including education, wealth and employment (Akokuwebe & Idemudia, 2022). This is a historical estimate for the surveyed age groups, not a current estimate for all Nigerians.

The NHIA publishes administrative coverage information, including a presentation reporting coverage as of Q4 2025 that was posted on 30 January 2026 (National Health Insurance Authority, 2026). Such registrations should not be equated with household-survey insurance estimates or verified active coverage. Their interpretation requires the reference date, population denominator, treatment of dependants and definition of active membership; administrative counts alone do not demonstrate access or financial protection.

The six-state enrolment study and its companion qualitative investigation collected data between August 2023 and February 2024. The quantitative study examined 3,732 adult respondents; the qualitative study interviewed 30 scheme officials, healthcare providers and ward committee members. The former assessed enrolment and its correlates, while the

latter identified perceived implementation and sustainability constraints, including awareness, funding, inflation, staffing and insecurity (Effiong, Dine, et al., 2025; Effiong, Hassan, et al., 2025). Their findings are relevant to contemporary implementation but do not establish national policy effects.

The informal sector remains particularly difficult to reach. Research among market women in Ibadan found educational status to be a significant predictor of awareness of NHIS (Adewole et al., 2017). A separate Nigerian perspective on informal-sector willingness to participate and pay concluded that there is a basis for engagement, but affordability and programme design remain important (Bolarinwa et al., 2021). A Kaduna State survey of 400 respondents, using field data from 2023, examined demographic and socioeconomic correlates of NHIS awareness and participation (Ekpo et al., 2024). Its local, cross-sectional findings support attention to community information and socioeconomic barriers. They do not establish that awareness campaigns cause enrolment or improve financial protection, and the study's use of NHIS terminology does not make it an evaluation of the NHIA Act. Mandatory participation therefore requires affordable contributions or subsidies, workable enrolment arrangements and confidence that covered services will be available. These are implementation priorities arising from the synthesis; the legal obligation alone cannot establish active membership or effective service use.

Utilisation of Health Services and Financial Protection

The value of insurance is reflected in whether people obtain needed healthcare and whether the associated financial burden is reduced. Utilisation and financial protection are related but distinct outcomes: increased service use can coexist with residual payments, and lower spending can sometimes reflect forgone care. They should therefore be examined together and interpreted within the study's population and design.

Bonfrer et al. (2018) analysed panel data from 3,509 people collected in 2009 and 2011 using propensity-score matching. The Kwara intervention combined subsidised voluntary insurance with improvements in participating facilities. Among insured individuals, the programme was associated with a 36% increase in healthcare utilisation and a 63% reduction in out-of-pocket expenditure. However, 67% of the treatment-area population did not enrol, and comparable utilisation gains were not demonstrated among the uninsured. These estimates concern an earlier, combined insurance-and-service intervention and cannot be attributed to the 2022 reform.

After the Kwara community insurance programme was suspended in 2016, Bolarinwa et al. (2022) conducted a mixed-methods study in 2018, including a cross-sectional survey of 600 former enrollees. Although 95.3% continued using programme facilities, 95.8% reported a return to out-of-pocket payment and 67% reported payment constraints. These self-reported experiences illustrate the consequences of losing subsidised cover; the study was not a longitudinal follow-up of the Bonfrer panel and does not estimate effects of the NHIA Act.

Insurance does not remove every barrier to utilisation. Distance, medicine availability, waiting time, referral arrangements and perceived quality can still prevent people from obtaining care. Financial protection must therefore operate alongside adequate facilities, health workers, medicines and efficient administration.

Beneficiary Satisfaction and Experience

A systematic review of 21 studies published between 2011 and 2020 across 11 Nigerian states summarised overall satisfaction with NHIS at about 64%. Satisfaction was higher for provider attitudes and the healthcare environment and lower for pharmaceutical services, waiting times, billing and referrals (Nwanaji-Enwerem et al., 2022). This evidence concerns the earlier NHIS framework and combines studies with differing settings and satisfaction measures.

A separate facility-based survey published by Ujah et al. (2024) interviewed 1,043 enrollees in Aba, Kano, Lagos and Onitsha and reported 89% overall satisfaction. Data were collected from February to April 2022, before the NHIA Act commenced, despite the article's use of NHIA terminology. Time spent in hospital, marital status and services received were associated with satisfaction. The findings are neither a national estimate nor directly comparable with the pooled descriptive satisfaction measure in the earlier review, and satisfaction alone does not establish financial protection.

A Lagos study involving 252 questionnaires and 15 interviews across nine facilities found mixed perceptions of service quality. Respondents expressed positive views about some aspects of care, but long waiting queues and problems associated with access and referrals remained concerns (Mkperedem et al., 2023).

Healthcare Providers' Perspectives

Healthcare providers are essential to insurance because a scheme cannot function if accredited facilities are unwilling or unable to provide services to members. Provider participation is influenced by reimbursement, administrative requirements, patient volume and the relationship with the insurer.

Using data collected between December 2017 and February 2018, a mixed-methods study of 60 healthcare facilities in Lagos found that increased patient volume and revenue encouraged insurance participation, whereas low tariffs, delayed or denied payments and unrealistic patient expectations discouraged it (Shobiye et al., 2021). These historical provider accounts support attention to contracting and payment arrangements; they do not quantify current nationwide participation or the effects of the 2022 Act. These findings indicate a purchasing problem: beneficiaries require timely access to covered services, while providers require reimbursement sufficient to deliver those services. Clear contracts, predictable payment and appropriate oversight are therefore priorities for maintaining provider participation. The effect of any proposed tariff or administrative change should be evaluated rather than assumed.

Perspectives of Scheme Staff, Leaders and HMO Management

Alawode and Adewole (2021) conducted nine key informant interviews in Ibadan between August and October 2016, including two regulators, three healthcare providers, three HMO managers and a state political leader. Their accounts illuminate the operation of the earlier NHIS framework and its expansion constraints.

Regulators and scheme officials identified low awareness, weak administrative capacity, inadequate monitoring and political commitment as important problems. They also recognised that the old voluntary framework was poorly suited to achieving wide population coverage. These views matter because scheme staff often have to absorb complaints

from beneficiaries and providers while operating within rules and budgets they do not control (Alawode & Adewole, 2021). HMO managers occupy a particularly difficult position. They are expected to control costs and protect the insurance pool while ensuring that beneficiaries receive entitled services. The stakeholder study showed concerns about provider payment, referrals and financial risk, while providers raised concerns about reimbursement and authorisation processes (Alawode & Adewole, 2021).

In the six-state qualitative study, interviews conducted between August 2023 and February 2024 elicited stakeholder accounts of improvements in access, equity, infrastructure and financing, alongside constraints involving awareness, funding, government processes, staffing and insecurity (Effiong, Hassan, et al., 2025). These are participants' perceptions of state-supported schemes, not controlled measurements of outcomes attributable to the NHIA Act.

Taken together, stakeholder accounts identify interacting institutional constraints across beneficiaries, providers, HMOs and scheme agencies. They help explain implementation bottlenecks but cannot by themselves establish the size or cause of changes in access, quality or financial protection.

Achievements and Positive Developments

- i. The establishment of the NHIS in 1999 created a national legal framework for health insurance and introduced risk pooling as an important component of healthcare financing (National Health Insurance Scheme Act, 1999).
- ii. State-supported schemes have created additional routes to coverage and have allowed states to develop approaches suited to local circumstances. Recent evidence shows that some schemes cover formal, informal and vulnerable populations (Effiong, Hassan, et al., 2025).
- iii. The Kwara programme demonstrates potential gains in utilisation and out-of-pocket expenditure among participating individuals when subsidised insurance is combined with improvements in healthcare provision (Bonfrer et al., 2018).
- iv. The BHCPF has created a dedicated financing mechanism for primary healthcare and vulnerable populations, and its NPHCDA gateway has been implemented across several northern states (Igbokwe et al., 2024; NPHCDA, n.d.).
- v. The NHIA Act 2022 created a stronger legal and institutional framework, including mandatory participation and mechanisms for vulnerable-group financing (National Health Insurance Authority Act, 2022).
- vi. The 2022 Act gives the NHIA explicit regulatory and coordination functions, including support for state schemes and integrated information systems. The effectiveness of monitoring, complaint resolution and data coordination remains an implementation question (National Health Insurance Authority Act, 2022).

These achievements should nevertheless be viewed in context. A programme can produce meaningful benefits for enrolled people and still fall far short of universal coverage. Nigeria's experience demonstrates that both dimensions must be considered.

Persistent Challenges

Benefit-Package Limitations, Exclusions and Partial Coverage

Benefit limitations should be communicated before care is received. Beneficiaries need to know whether a service is covered, partially covered, subject to a ceiling or excluded. Clear information about entitlements and referral arrangements is a recommendation arising from reported service-experience problems, including those documented in Abuja (Obembe et al., 2017).

Insurance schemes operate with finite resources, so benefit packages require explicit priorities. A transparent review process should consider essential healthcare needs, evidence of effectiveness, available financing and the financial consequences of excluding services. These are proposed purchasing principles, not demonstrated outcomes of the 2022 Act.

An insured household may remain financially vulnerable if a necessary service is excluded or only partly covered. Financial protection should therefore be assessed through residual payments and measures of catastrophic or impoverishing expenditure, alongside service use and unmet need. The national out-of-pocket share cannot substitute for these household-level outcomes.

The NHIA's frequently asked questions acknowledge exclusions and partial exclusions in its programmes (NHIA, n.d.). This supports the distinction between nominal insurance cover and the services actually financed; it does not establish the magnitude of residual household spending or the adequacy of every scheme's benefit package.

Low Coverage and Informal-sector Exclusion

The largest problem remains limited reach. Formal employment provides an easier route into contributory insurance than informal employment. The result is a system in which people with stable employment are more likely to be insured, while many poorer and informally employed Nigerians remain outside the main risk pools.

Affordability and Poverty

People may understand the benefits of insurance but still lack sufficient or regular income to pay premiums. Subsidies for poor and vulnerable groups are therefore central to equitable coverage.

Public Awareness and Trust

Awareness is repeatedly identified as a barrier to enrolment. Informal-sector studies show that knowledge and education affect understanding of insurance, while trust depends partly on whether people believe that services will actually be available when they need them (Adewole et al., 2017; Bolarinwa et al., 2021).

Provider Payment and Tariffs

Low or outdated tariffs and delayed reimbursement can undermine provider participation. Evidence from Lagos shows that these concerns are reported directly by facility managers (Shobiye et al., 2021). Inflation makes the issue more difficult because the costs of medicines and other inputs change rapidly.

Administrative and Referral Problems

Delays in authorisation, claims processing and referrals can turn an insurance benefit into a practical barrier to care. Lagos evidence identifies long waiting times and referral concerns, while provider research identifies delays and payment disputes (Mkperedem et al., 2023; Shobiye et al., 2021).

Fragmentation and Uneven State Capacity

The expansion of state schemes creates opportunities for local innovation but can also produce differences in benefit packages, administrative capacity and quality. National UHC therefore requires coordination among the NHIA, state agencies, HMOs and other financing mechanisms.

Data and Accountability

Reliable information is necessary to identify registered beneficiaries, verify active membership, assess service use and determine whether subsidies reach intended groups. Integrated administrative records should be linked, where feasible, to household evidence on unmet need and financial hardship. Registration totals alone cannot establish equitable financial protection.

Interpretation: from Legal Coverage to Effective Coverage

The evidence supports benefits for some insured populations alongside persistent gaps in uptake and service experience. Registration, active entitlement, utilisation, satisfaction and financial protection measure different aspects of performance and should be reported separately. Table 2 summarises selected studies and the limits of their interpretation.

The comparative Kwara evidence concerns an intervention implemented before the NHIA Act. The 2023–2024 six-state studies add contemporary information on enrolment and stakeholder experience, but neither provides a counterfactual evaluation of the national reform. Local programme gains and cross-sectional associations therefore cannot establish nationwide post-2022 effects.

Implementation priorities arising from this synthesis include predictable financing, workable enrolment, adequate provider networks, timely purchasing arrangements and credible accountability. They require evaluation using active coverage, equitable access, quality and household financial-hardship outcomes.

Table 2: Selected Nigerian Studies and the Outcomes Investigated

Study	Population and data period	Design	Outcomes and principal findings	Interpretation and limitations
Akokuwebe and Idemudia (2022)	Nigeria respondents: women 15–49 and men 15–59; 2018 data.	Secondary cross-sectional survey analysis.	Insurance ownership 2.8% in the analysed Nigerian respondents; socioeconomic associations.	Historical ownership estimate for surveyed age groups; no national reform-effect estimate.
Bonfrer et al. (2018)	3,509 people in Kwara; panel data, 2009 and 2011.	Panel evaluation with propensity-score matching.	Among insured participants: utilisation +36%; out-of-pocket expenditure –63%; 67% in the treatment area did not enrol.	Combined subsidised insurance and facility improvements; non-random uptake; pre-2022 intervention.

Bolarinwa et al. (2022)	600 former enrollees plus client/provider interviews; 2018, after 2016 suspension.	Kwara plus cross-sectional survey.	Mixed methods with cross-sectional survey.	95.8% returned to out-of-pocket payment; 67% reported payment constraints.	Retrospective self-report; not a follow-up of the Bonfrer panel or an NHIA evaluation.
Shobiye et al. (2021)	60 Lagos facilities and managers; December 2017–February 2018.		Mixed-methods facility study.	Participation linked in provider accounts to patient volume, tariffs, payment delays and administrative burden.	Local provider experience; not household financial-protection measurement; historical data.
Nwanaji-Enwerem et al. (2022)	21 studies across 11 states; publications, 2011–2020.		Systematic review.	Overall satisfaction about 64%; lower satisfaction with medicines, waiting, billing and referrals.	Heterogeneous settings and measures; earlier NHIS evidence; satisfaction is not financial protection.
Ujah et al. (2024)	1,043 facility attendees in Aba, Kano, Lagos and Onitsha; February–April 2022.		Cross-sectional exit interviews.	89% overall satisfaction; associations with waiting time, marital status and services received.	Data pre-date the Act despite NHIA wording; facility sample; no current national estimate.
Effiong, Dine, et al. (2025)	3,732 adults in six states; August 2023–February 2024.		Cross-sectional multi-site survey.	Enrolment varied between sampled states; awareness and socioeconomic factors associated with participation.	Post-2022 observations without a national counterfactual; no causal reform attribution.
Effiong, Hassan, et al. (2025)	30 officials, providers and ward committee members in six states; August 2023–February 2024.		Descriptive qualitative case study.	Perceived access and system gains alongside awareness, funding, staffing and insecurity constraints.	Purposive stakeholder accounts; perceived outcomes rather than measured causal effects.
Ekpo et al. (2024)	400 respondents in selected Kaduna LGAs; field survey, 2023.		Cross-sectional survey and correlation analysis.	Demographic and socioeconomic correlates of NHIS awareness and participation.	Local associations; NHIS terminology; neither campaign-effect nor financial-protection evaluation.

Note. Study years in the first column are publication years; the second column identifies the data period or, for the systematic review, the included publication range. DHS = Demographic and Health Survey; LGA = local government area. Enrolment, satisfaction, utilisation and expenditure are distinct outcomes.

Policy Priorities

The following recommendations arise from the evidence synthesis. They are priorities for implementation and evaluation, not effects already demonstrated for the NHIA Act 2022.

- i. Build a practical strategy for informal-sector enrolment. The NHIA and state agencies should use associations, cooperatives, markets, community structures and convenient digital payment channels. Payment arrangements should recognise irregular incomes.
- ii. Expand and properly fund subsidies for poor and vulnerable groups. The Vulnerable Group Fund and BHCPF should be financed predictably, targeted transparently and monitored for actual benefit.
- iii. Establish predictable provider payment and tariff review. Capitation and fee-for-service rates should be reviewed periodically using evidence on inflation, service costs and utilisation. Payment timelines should be clear and enforceable.
- iv. Simplify authorisation, claims and referral processes. Digital systems should reduce avoidable delays without creating new barriers. Emergency care should be protected from administrative delays.
- v. Make public education a permanent function. Beneficiaries should know what is covered, what is excluded, how referrals work, where to complain and what they should expect from providers and HMOs (Adewole et al., 2017).
- vi. Strengthen regulation while improving collaboration. Regulation should protect beneficiaries from denial of entitled services and inappropriate charges while protecting providers from unjustified payment delays and disputes.
- vii. Harmonise data systems across federal and state programmes. Interoperable enrolment and claims information would reduce duplication and improve measurement of active coverage and utilisation.
- viii. Evaluate schemes on meaningful outcomes, not enrolment alone. Indicators should include active coverage, utilisation, waiting times, medicine availability, provider payment timeliness, satisfaction, quality and out-of-pocket expenditure.
- ix. Give greater attention to scheme staff and HMO managers. Their operational experience can reveal bottlenecks that household surveys do not capture.

- x. Maintain political commitment beyond changes in government. Health insurance requires long-term institution building and stable financing.
- xi. Review benefit packages regularly and expand essential coverage. The NHIA and state health insurance agencies should establish a regular, transparent process for reviewing benefit packages. Decisions should consider disease burden, clinical effectiveness, cost-effectiveness, medicine prices, inflation and the financial consequences of illness. Essential investigations, medicines and treatments should be progressively added where exclusion creates substantial hardship.
- xii. Reduce excessive co-payments and improve protection for high-cost care. Partial coverage for essential investigations and treatment of serious or chronic conditions should be reviewed periodically. Where full coverage is not immediately affordable, public subsidies, dedicated funds or risk-pooling mechanisms should protect poor and vulnerable households from large residual bills.
- xiii. Improve transparency and speed in private insurance administration. HMOs should clearly state premiums, exclusions, benefit limits, co-payments and pre-authorisation requirements before enrolment and at the point of service. Routine pre-authorisations should have defined turnaround times, urgent requests should receive expedited consideration, and emergency care should not be unnecessarily delayed by administrative procedures. Claims processing and provider payment timelines should also be monitored by the regulator.

Strengths and Limitations of the Evidence Base

The evidence base combines legislation, household-survey analysis, a comparative programme evaluation, cross-sectional and mixed-methods studies, and stakeholder research. The Kwara evaluation provides stronger comparative evidence than descriptive accounts, but it assesses a combined intervention and remains subject to non-random enrolment. Many sources use local or facility-based samples, different definitions of coverage and satisfaction, or data collected before May 2022. Even later studies of state-supported schemes do not isolate national reform effects. The purposive search may omit relevant studies and unpublished experience. The synthesis identifies recurring constraints and plausible priorities but does not establish nationwide post-2022 causation.

CONCLUSION

Health insurance in Nigeria has expanded from the NHS framework to federal, state-supported and private arrangements under the NHIA Act 2022. Available studies show socially patterned enrolment and increased utilisation with reduced out-of-pocket expenditure among participants in some earlier programmes, particularly the combined insurance-and-facility intervention in Kwara. Beneficiary and provider studies also identify recurring problems with benefit access, administration and payment.

The 2022 Act strengthens the statutory basis for mandatory participation, regulation and vulnerable-group financing.

However, historical programme evaluations, administrative registrations, satisfaction surveys and later cross-sectional state studies measure different outcomes and cannot establish its nationwide or long-term effects on financial protection.

The unresolved questions are whether subsidies reach those who need them, registration becomes sustained active coverage, contracted providers deliver accessible services of adequate quality, and households experience lower residual payments and financial hardship. Addressing these questions requires reliable administrative information, repeated household measurement and credible evaluations that account for differences between schemes and states.

The synthesis supports predictable public subsidies, practical informal-sector enrolment, transparent benefit and tariff review, timely provider payment and coordinated information systems as implementation priorities. Their success should be judged by equitable access and financial protection, with enrolment treated as an intermediate measure.

REFERENCES

- Adewole, D. A., Akanbi, S. A., Osungbade, K. O., & Bello, S. (2017). Expanding health insurance scheme in the informal sector in Nigeria: Awareness as a potential demand-side tool. *Pan African Medical Journal*, 27, Article 52. <https://doi.org/10.11604/pamj.2017.27.52.11092>
- Akokuwebe, M. E., & Idemudia, E. S. (2022). A comparative cross-sectional study of the prevalence and determinants of health insurance coverage in Nigeria and South Africa: A multi-country analysis of Demographic Health Surveys. *International Journal of Environmental Research and Public Health*, 19(3), Article 1766. <https://doi.org/10.3390/ijerph19031766>
- Alawode, G. O., & Adewole, D. A. (2021). Assessment of the design and implementation challenges of the National Health Insurance Scheme in Nigeria: A qualitative study among sub-national level actors, healthcare and insurance providers. *BMC Public Health*, 21(1), Article 124. <https://doi.org/10.1186/s12889-020-10133-5>
- Aloni-Alali, M., Alali, A. A., & Ogaji, D. S. (2023). Healthcare providers' satisfaction with participation in private health insurance scheme in a city in the Southern Nigeria. *The Nigerian Health Journal*, 23(3), 810–818. <https://doi.org/10.60787/tnhj.v23i3.719>
- Baethge, C., Goldbeck-Wood, S., & Mertens, S. (2019). SANRA—a scale for the quality assessment of narrative review articles. *Research Integrity and Peer Review*, 4(1), Article 5. <https://doi.org/10.1186/s41073-019-0064-8>
- Bolarinwa, O. A., Afolayan, M. A., Rotimi, B. F., & Alatishe-Mohammad, B. (2021). Are there evidence to support the informal sector's willingness to participate and pay for statewide health insurance scheme in Nigeria? *Nigerian Postgraduate Medical Journal*, 28(1), 71–73. <https://doi.org/10.4103/npmj.npmj.392.20>
- Bolarinwa, O. A., Akande, T. M., Janssens, W., Boahene, K., & de Wit, T. R. (2022). Effects of a temporary suspension of community-based health insurance in Kwara State, North-Central, Nigeria. *Pan African Medical Journal*, 41, Article 10. <https://doi.org/10.11604/pamj.2022.41.10.27978>
- Bonfrer, I., Van de Poel, E., Gustafsson-Wright, E., & van Doorslaer, E. (2018). Voluntary health insurance in Nigeria:

- Effects on takers and non-takers. *Social Science & Medicine*, 205, 55–63. <https://doi.org/10.1016/j.socscimed.2018.03.035>
- Chukwu, E., Garg, L., & Eze, G. (2016). Mobile health insurance system and associated costs: A cross-sectional survey of primary health centers in Abuja, Nigeria. *JMIR mHealth and uHealth*, 4(2), Article e37. <https://doi.org/10.2196/mhealth.4342>
- Effiong, F. B., Dine, R. D., Hassan, I. A., Olawuyi, D. A., Isong, I. K., & Adewole, D. A. (2025). Coverage and predictors of enrollment in the state-supported health insurance schemes in Nigeria: A quantitative multi-site study. *BMC Public Health*, 25(1), Article 2125. <https://doi.org/10.1186/s12889-025-23329-4>
- Effiong, F. B., Hassan, I. A., Dine, R. D., Olawuyi, D. A., & Adewole, D. A. (2025). Administrative perspectives on the implementation and sustainability of state-supported health insurance schemes in Nigeria: A descriptive qualitative study. *BMC Public Health*, 25(1), Article 2697. <https://doi.org/10.1186/s12889-025-23941-4>
- Ekpo, R., Mamman, M., Akpu, B. I., & Arigbede, Y. (2024). Determinants in National Health Insurance Scheme awareness and participation in Kaduna State. *FUDMA Journal of Sciences*, 7(6), 288–297. <https://doi.org/10.33003/fjs-2023-0706-2192>
- Igbokwe, U., Ibrahim, R., Aina, M., Umar, M., Salihu, M., Omoregie, E., Sadiq, F. U., Obonyo, B., Muhammad, R., Isah, S. I., Joseph, N., Wakil, B., Tijjani, F., Ibrahim, A., Yahaya, M. N., & Aigbogun, E., Jr. (2024). Evaluating the implementation of the National Primary Health Care Development Agency (NPHCDA) gateway for the Basic Healthcare Provision Fund (BHC PF) across six Northern states in Nigeria. *BMC Health Services Research*, 24(1), Article 1404. <https://doi.org/10.1186/s12913-024-11867-3>
- Mkperedem, A. A., Ogunlade, P., Igbolekwu, C., Arisukwu, O., Afolabi, A. O., & Adedayo, R. A. (2023). Healthcare service delivery perception among NHIS-HMO enrollees in Lagos hospitals. *Humanities and Social Sciences Communications*, 10(1), Article 685. <https://doi.org/10.1057/s41599-023-02159-y>
- National Health Insurance Authority. (n.d.). *Frequently asked questions*. Retrieved October 1, 2026, from <https://www.nhia.gov.ng/faq/>
- National Health Insurance Authority. (2026, January 30). *HI coverage as of Q4 2025 presentation* [Presentation]. <https://www.nhia.gov.ng/download/hi-coverage-as-of-q4-2025-presentation/>
- National Health Insurance Authority Act, No. 17 (2022) (Nigeria). Federal Republic of Nigeria Official Gazette, 109(95), A625–A652. <https://www.nhia.gov.ng/wp-content/uploads/2024/03/NHIA-Act-2022-Gazetted-Copy.pdf>
- National Health Insurance Scheme Act, No. 35 (1999) (Nigeria), reproduced in Cap. N42, Laws of the Federation of Nigeria 2004. <https://www.placng.org/lawsofnigeria/print.php?sn=304>
- National Primary Health Care Development Agency. (n.d.). *Basic Health Care Provision Fund (BHC PF)*. <https://nphcda.gov.ng/bhcpf/>
- Nwanaji-Enwerem, O., Bain, P., Marks, Z., Nwanaji-Enwerem, P., Staton, C. A., Olufadeji, A., & Nwanaji-Enwerem, J. C. (2022). Patient satisfaction with the Nigerian National Health Insurance Scheme two decades since establishment: A systematic review and recommendations for improvement. *African Journal of Primary Health Care & Family Medicine*, 14(1), Article a3003. <https://doi.org/10.4102/phcfm.v14i1.3003>
- Obembe, O. O., Abodunrin, O. L., & Jegede, S. O. (2017). Health insurance enrollees' satisfaction with health maintenance organizations and non-enrollees' willingness to participate and pay for health insurance in Abuja, Nigeria. *International Journal of Community Medicine and Public Health*, 4(11), 3976–3982. <https://doi.org/10.18203/2394-6040.ijcmph20174805>
- Onoka, C. A., Hanson, K., & Mills, A. (2016). Growth of health maintenance organisations in Nigeria and the potential for a role in promoting universal coverage efforts. *Social Science & Medicine*, 162, 11–20. <https://doi.org/10.1016/j.socscimed.2016.06.018>
- Shobiye, H. O., Dada, I., Ndili, N., Zamba, E., Feeley, F., & de Wit, T. R. (2021). Determinants and perception of health insurance participation among healthcare providers in Nigeria: A mixed-methods study. *PLOS ONE*, 16(8), Article e0255206. <https://doi.org/10.1371/journal.pone.0255206>
- Ujah, I. A. O., Awa, M. J., Meshak, D. J., Garba, R. M., Ajibola, S., Onyekwelu, J., & Lamu, N. M. (2024). Assessment of patients' satisfaction with healthcare services provided under the Nigeria National Health Insurance Authority. *Nigerian Medical Journal*, 65(5), 621–631. <https://doi.org/10.60787/nmj-v65i3.413>
- World Bank. (n.d.). *Out-of-pocket expenditure (% of current health expenditure)—Nigeria* [Data set]. World Development Indicators. Retrieved October 1, 2026, from <https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS?locations=NG>
- World Health Organization, & World Bank. (2023). *Tracking universal health coverage: 2023 global monitoring report*. World Health Organization. <https://www.who.int/publications/i/item/9789240080379>
- World Health Organization Regional Office for Africa. (2026, August 11). *Nigeria strengthens health financing capacity for universal coverage*. <https://afro.who.int/countries/nigeria/news/nigeria-strengthens-health-financing-capacity-universal-coverage>

