# Administrative Perspectives on the Implementation and Sustainability of State-Supported Health Insurance Schemes in Nigeria: A Descriptive Qualitative Study

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**ABSTRACT**

**Background:**
Since the state-supported health insurance schemes (SSHIS) began in Nigeria, perspectives of implementers and other administrative actors have been under-documented in the program evaluations. Bridging this information gap is crucial to addressing the challenges impeding the scheme's impact. Therefore, this study investigated the administrative stakeholders' perspective on the implementation and sustainability of the SSHIS in Nigeria.

**Methods:**
This study adopted a descriptive qualitative design. Participants were state actors, public and private healthcare providers, and ward committee members purposely selected from six states with a functional SSHIS, representing Nigeria's six geo-political zones. The states included Cross River (South-South), Enugu (South-East), Oyo (Southwest), Kwara (North-Central), Sokoto (Northwest) and Taraba (Northeast) states. 30 key informant interviews (KII) were conducted among these stakeholders exploring the design, successes, challenges, and personal recommendations relating to the SSHIS operation in their states. Data analysis was performed using NVIVO version 11.

**Results:**

Across the states, the SSHIS design was adaptive covering formal, informal, and low-income vulnerable groups. Reported impact of the scheme related to improved state health indices, infrastructure, access equity, and funding systems. Challenges threatening the coverage and sustainability of the SSHIS included low public awareness and buy-in and other governmental (processes and payments), economic (funding and costs), manpower, and environmental (insecurity and facility inaccessibility) factors to which possible corrective measures were suggested.

**Conclusion:**
Administrators offer critical policy action points to enhance SSHIS impact in Nigeria towards universal health coverage. Future studies may investigate the key challenges and the effectiveness of the suggested solutions.

**Keywords:** Health Insurance; Implementers; Stakeholders; SSHIS; States; Nigeria.

**BACKGROUND:**

Universal health coverage aims to guarantee that individuals and families can access necessary healthcare services without encountering financial difficulties. It includes the entire spectrum of essential, high-quality health services, ranging from prevention to treatment, rehabilitation, and palliative care for people of all ages [1]. The functioning of health systems and the achievement of universal health coverage largely depend on health financing. Healthcare systems should establish an effective mechanism to gather and pool resources, and to strategically procure essential health services for those in need [2]. Enrollment in public health insurance has been shown to improve the physical and mental health status of beneficiaries, reduce the prevalence of acute or chronic diseases, and increase the likelihood of good health and satisfaction [3]. Therefore, there is a need to minimize out-of-pocket (OOP) expenditure as a predominant method of payment for healthcare. This will facilitate good health and satisfaction, as well as steady progress toward achieving universal health coverage.

Nigeria's heavy reliance on OOP expenditure prevents millions of people from accessing needed healthcare and has pushed millions into poverty [4]. Health financing in Nigeria is characterized by low government investments, poorly designed and implemented health insurance schemes, high out-of-pocket spending, and significant dependence on external sources [4]. In Nigeria, the National Health Insurance Scheme (NHIS) has been the major health insurance scheme for years. The NHIS, officially launched in 2005, currently covers only about 5% of Nigeria's population, primarily consisting of federal government employees [5]. Thus, a huge percentage of the Nigerian populace still bears the brunt of directly paying for their healthcare. This has resulted in tardive progress towards UHC in the country, as Nigeria ranks 142 out of 195 countries in health system performance in 2022 [6].

To improve health insurance coverage, the Federal Government of Nigeria incorporated a regulated community-based health insurance (CBHI) model and the state-supported health insurance schemes (SSHIS) into its NHIS [5, 7]. These initiatives are mechanisms through which both the informal and formal sector population groups in both the rural and the urban areas can better obtain affordable healthcare services [8]. Additionally, a 2022 National Health Insurance Act was ratified which proposed mandatory insurance coverage for all Nigerian citizens and legal residents [9]. For the SSHIS, the 36 states (together with the Federal Capital Territory (FCT)) were given the authority to design, implement, and operate a type of social health insurance program for citizens in their states [10]. Since the bill was passed in 2015, about 20 states in the country have launched their SSHIS towards better stakeholder engagements and UHC progress for their people.

A few studies have attempted to evaluate the performance of the SSHIS since its inception; mostly reporting coverage challenges across states. For instance, a 3-year post-implementation study of the Oyo state's SSHIS (OYSHIA), Adewole et al [10] reported a 1% coverage relative to the state's population, 18,373 person/year growth rate and 35% enrollee dropout rate. In another study from Lagos state, out of the 2490 study participants, only 15.9% of the 270 people who had any form of health insurance, were enrolled in the state-owned scheme tagged "ILERA EKO" [11]. Similarly, in our multi-site survey of the SSHIS coverage in six zonally representative states, four states (Cross-River, Enugu, Taraba, and Sokoto

States) recorded SSHIS enrollment rates below 5%, while 1 in 8 and 1 in 3 respondents from Oyo state and Kwara state, respectively, were enrolled in an SSHIS (in press). Furthermore, Ikechukwu et al [12] reported higher enrollment in the Abia state SSHIS (ABSHIA) in the rural areas compared to the urban areas (27% vs 18%), though with similar satisfaction and re-enrollment intention rates among beneficiaries in the two settings.

However, these evaluation studies are often based on analysis of program documents or the perception or experience of potential or actual users of the schemes while the perspective of the program implementers is seldom considered. Meanwhile, administrators and service providers within a public health program do have unique perspectives of the program issues of which users may not be aware, such as resource allocation, staff management, policy adherence, regulatory challenges, internal and external engagements, sustainability considerations, among others issues affecting the program performance [5, 13-15]. Also, while program report data may indicate where the program targets were not achieved, program implementers remain an important source for understanding why such gaps exist and the setting-specific solutions that may work [14, 15]. Thus, evaluating the SSHIS through an administrative lens is essential for a complete and accurate understanding of this newer scheme's contributions and challenges relative to its objectives. To this end, this study investigates the administrative actors' perspectives on the implementation and sustainability of the SSHIS in Nigeria. Findings will assist in identifying gaps and areas of success which can inform appropriate policy or actions to ensure the scheme is kept on track and achieve its objectives.

## 2. METHODS

### Study design, setting, and participants

This study was designed as a descriptive multi-site qualitative study where participants were purposefully selected from six states with a functional SSHIS, representing the six geo-political zones in Nigeria. The selected states were Cross River, Enugu, Oyo, Kwara, Sokoto, and Taraba states corresponding to the South-South, South-East, South-West, North-Central, North-West, and North-East zones respectively (Table 1). This was done to enhance representativeness and obtain nationally relevant insights, given the significant political and socioeconomic diversity among states and zones in the country and its potential impact on state health financing programs. According to the National Bureau of Statistics, gross domestic product (GDP) per capita for the states ranged from $609 for Enugu State to $2255 for Cross River State, and population size ranged from 3.2 million people in Kwara State to 7.4 million people in Oyo State in 2022 [16].

Next, we identified, as potential participants, administrative stakeholders within each state's SSHIS who have been actively involved in the scheme implementation or service delivery for a minimum of six months. Specifically, they included the SSHIS agency officers, senior

healthcare providers from participating primary, secondary, or private facilities, and community leaders of ward committees in each state. Invitations were sent to our interview prospects via calls, visits, and emails, and appointments and interview dates were scheduled with consenting participants. A letter of introduction was written to all the participants and a written informed consent to participate was obtained in return. Ethical approval for the study was obtained from the National Health Research Ethics Committee (NHREC/01/01/2007-04/08/2023), and ethical committees of each state's ministry of health [Appendix 1].

**Data collection and analysis**

Based on scheduled appointments, the principal investigator and a research assistant conducted face-to-face key informant interviews (KIIs) with each participant between August 2023 and February 2024. A total of 30 KIIs were conducted across the six states. The KIIs investigated the personal and professional background of the participants, the design of the SSHIS in their states, its successes and performances, implementation challenges, and recommendations to mitigate identified challenges.

The KIIs guide employed in the study was adapted and modified from the framework used by Alawode & Adewole [5] in a study among subnational actors of the NHIS. To ensure rigor, the preliminary interview guide was reviewed by two experts in prepayment schemes and social health insurance after which it was piloted for clarity and flow among members of the research team. The field pretest of the interview guide was carried out with representatives from the stakeholders who were not included in the study sample. Questions and comments were entertained, and amends were made to the guide as appropriate.

Upon completion of each interview, the audio recordings were transcribed verbatim and a draft of the respective interview transcript was mailed back to each participant to approve their submission accuracy and validate our findings. Then, the transcriptions were anonymized to safeguard the identity of the informants and uploaded into NVIVO software package version 11 for analysis. An inductive approach was used where initially created codes were enriched as the transcripts were being read and coded. Coded data were then categorized according to predetermined themes and key points, facilitating a comprehensive narrative of key concepts. Themes were defined, named, organized, and presented following the study's main domains: design of the scheme, success, implementation challenges, and recommendations addressing identified challenges (Table 2). Finally, a report was generated to summarize the findings.

**Table 1**: Overview of the operating SSHIS in our six study states

| State | Operating SSHIS | Year of Launch | Overview |
|---|---|---|---|
| **Oyo** | Oyo State Health Insurance Agency (OYSHIA) Scheme | 2017 | ● The OYSHIA scheme has over 300,000 enrollees in 6 years and works to expand its vision of universal health coverage to all Oyo state residents.<br>● Managed by OYSHIA who is the major purchaser<br>● Operates plans for individuals, families, businesses and corporations, and special subpopulations like pregnant women (similar plans for formal and informal worker subpopulations)<br>● Website: www.oyshia.oy.gov.ng (active and responsive) |
| **Taraba** | Taraba State Contributory Health Insurance Agency (TSCHIA) Scheme | 2021 | ● The TSCHIA scheme has enrolled over 30,000 beneficiaries in 3 years with the vision to expand coverage to all people in Taraba.<br>● Managed by TSCHIA who also oversees scheme funding and co-payment system and attracts funds for enrollment aids for low-income households and vulnerable groups.<br>● Operates disparate plans for formal and informal sector and a free or subsidized plan for vulnerable groups.<br>● Website: https://tschiaportal.net.ng (active and fairly responsive) |
| **Cross River** | Cross River Health Insurance Agency (CRSHIA) Scheme | 2021 | ● The CRSHIA scheme has over 40,000 enrollees as of early 2023. The program morphed from the 2016 "AyadeCare" proposed mandatory health insurance initiative for all Cross River State residents.<br>● Managed by CRSHIA and kicked off primarily targeting civil servants and vulnerable groups via provisions for an equity fund to support low-income individuals and families. A memorandum of understanding between CRSHIA and local hospitals ensures service availability for enrollees. |

| State | Operating SSHIS | Year of Launch | Overview |
|---|---|---|---|
| | | | ● Website: https://www.crossriverstate.gov.ng/ (active but unresponsive). |
| **Enugu** | Enugu State Universal Health Coverage Scheme (ESUHCS) | 2020 | ● The ESUHCS has had over 200,000 enrollees in its 5 years of operation. The program is envisioned to help achieve UHC in the state i.e. access to quality healthcare services without suffering financial hardship. The scheme also emphasizes preventive care.<br>● Managed by the Enugu State Agency for Universal Health Coverage (ESAUHC) , which is responsible for policy implementation and monitoring.<br>● ESAUHC operates plans for formal sector workers, informal sector workers, low-income earners, and tertiary students.<br>● Website: https://www.esauhc.org/index.html (active and responsive). |
| **Kwara** | Kwara Health Insurance Agency (KWHIA) scheme [Kwara Care] | 2018 | ● KwaraCare has over 70,000 enrollees as of 2024 third quarter. The state-owned program evolved from the previous community-based health insurance model halted in 2017. The program envisioned equity of healthcare access for all demographics in the state.<br>● Managed by KWHIA overseeing both upstream (implementation and partnership) and downstream (promotion) activities<br>● Operates 3 plans: formal sector (pays highest premium), informal sector, and equity plan (free/subsidized for vulnerable groups). Individual and family subplans exist. A revised premium structure (158% increase for informal sector plan; 100% for formal sector plan) took effect in December 1, 2024 due to rising medical costs.<br>● Website: https://kwaracare.com.ng/ (active and responsive) |

| State | Operating SSHIS | Year of Launch | Overview |
|---|---|---|---|
| **Sokoto** | Sokoto State Contributory Health Management Agency (SOCHEMA) Scheme | 2018 | ● The SOCHEMA scheme recorded over 6000 beneficiaries in 2020 post launch. The program pushes for mandatory health insurance for all residents.<br>● Managed by SOCHEMA which oversees the policy implementation and promotion<br>● Operates plans primarily designed for vulnerable groups, including pregnant women and children. The Agency planned to integrate the formal sector in 2024.<br>● Website: https://sochema.sk.gov.ng (inactive but has an active social media page with limited information) |
| **Source: Authors' review of official websites, social media pages, and reliable press media articles on the schemes** | | | |

**Table 2**: Thematic framework for study data analysis

| **Themes** | **Definition** | **Subthemes** |
|---|---|---|
| Design of the scheme | We define scheme design as the operational structure of the SSHIS in that state indicating the target population, funding mechanisms, and benefit packages. | Beneficiary categories |
| | | Funding/Premium structures |
| | | Benefit packages |
| Success | We define scheme success as any positive health-related outcome of any dimension related to the scheme (the state's SSHIS) as perceived and reported by the informant(s). | Improved UHC-related indices |
| | | Improved infrastructure |
| | | Care access equity |
| | | Funding acquisition |
| Implementation challenges | We define this as any perceived barrier by the informant (s) to the smooth running or outlook of the SSHIS in the state. | Public awareness |
| | | Governmental factors |
| | | Economic factors |
| | | Manpower factors |
| | | Environmental factors |
| | | Size of the pool |
| Recommendations | Recommendations here refer to the informant(s) view of the solution to identified challenges | Coverage/uptake strategies |
| | | Sustainability strategies |

## 3. RESULTS

Findings are presented according to the study aim, which includes: informant characteristics, design of the scheme, success, and implementation challenges of state-supported health insurance schemes (SSHIS) in Nigeria. Stakeholders' recommendations for improving coverage and sustainability were also reported.

### 3.1 CHARACTERISTICS OF THE STAKEHOLDERS/INFORMANTS

Thirty (30) informants were interviewed across the six states for this study. Their demographic characteristics are shown in Table 3

**Table 3: Demographic characteristics of the stakeholders interviewed**

| **Characteristics** | **Numbers (n) (N=30)** |
|---|---|
| **Sex** | |
| Male | 23 |
| Female | 7 |
| **State/Affiliations** | |
| Cross-River / CRSHIA | 3 |
| Enugu / ESA UHC | 4 |
| Kwara / KWHIA | 7 |
| Oyo / OYSHIA | 8 |
| Taraba / TSCHIA | 3 |
| Sokoto / SOCHEMA | 5 |
| **Job Title** | |
| SSHIS Agency Officers | 6 |
| Health Ministry officer | 5 |
| Healthcare provider | |
| a. public- primary health center | 8 |

| | |
|---|---|
| b. public - secondary facility | 5 |
| c. private | 3 |
| Community leader | 3 |

## 3.2 DESIGN OF THE SSHIS ACROSS THE STATES

**Beneficiary categories and premium structures**

The health insurance schemes across the six states cover vulnerable groups, the formal sector, and the informal sector. The Basic Health Care Provision Fund (BHCPF) ensures free healthcare for vulnerable individuals such as children, pregnant women, and the elderly. The informal sector pays a nominal annual premium, while the formal sector often has payroll deductions. Each state has unique enrollment processes and premium rates, aiming to provide broad access to healthcare through government support and community contributions. While some states have included both the formal and informal sectors in the scheme, others like Enugu and Cross-river states were yet to fully capture the informal sector, and Sokoto state was yet to integrate its formal sector workers.

*"For now, we have the BHCPF covering for the vulnerable. So, as we are saying, this category of service is being provided in all the 168 facilities in the state, and as I'm talking to you, we have over 50,000 enrollees accessing the services in these 168 facilities. Apart from that, you have what is called formal sector and we have what is called informal sector, informal sector, they pay a little token, whereby they can access service."* **TSCHIA Agency officer, Taraba**

*"SOCHEMA has a few different enrollment groups. There are formal sector workers, but they can't join yet. For informal sector workers, there's an annual premium of 12,000 Naira to enroll in SOCHEMA. Finally, there are vulnerable people like pregnant women and children who get covered for free through a government program or donations through the BHCPF."* **SOCHEMA Agency officer, Sokoto**

*"This scheme is actually free for the poor of the poorest and at least in Oyo State today we have registered 45,000 people under it this year and the people make use of it statewide. It is the same amount whether you are a civil servant or a shoemaker. The only difference is the mode of payment and plan your purchase. The plan ranges from 4,000 Naira (pensioners plan) to 485,000 Naira (no longer available)."* ***OYSHIA*** **Agency officer, Oyo**

*"We have the BHCPF - a government-sponsored program for the vulnerable. We are yet to start the state social insurance. The formal and informal sectors are not yet fully participating in the program due to a lack of government enforcement. However, the proposed premium fee is 12,000 Naira per year."* **ESA UHC Agency officer, Enugu**

*The BHCPF covers five key categories: children, pregnant women, elderly, displaced people, and disabled. For the formal sector, a monthly deduction of N1,000 is made to their salary for enrollment into the health insurance scheme. In the informal sector, we have begun the*

*process, although it is slow. A few people have registered from the informal sector. So right now, the process is on to accredit some private health facilities that will cater to their health needs.* **CRSHIA Agency officer, Cross River**

*"Everybody and anybody resident in the state is classified into 3 sections. We have the indigents, the informal, and the formal. Indigents, of course, are people who don't demonstrate the capacity to pay. They are 100% subsidized through the equity fund of the government through the BHCPF, as well as community development associations. The premium is 6000 Naira per year for the informal, and 9000 Naira for the formal sector. We are in the process of doing another actuarial review so it may change."* **KWHIA Agency officer, Kwara**

**Benefits Packages: Services covered by the SSHIS**

According to all agency officers, primary healthcare centers (PHCs) serve as the initial contact point, offering essential diagnostic and treatment services. When PHCs cannot provide necessary care, patients are referred to secondary or tertiary facilities. Health insurance generally covers essential services, with primary and secondary services often provided under a capitation model, where a fixed amount per person covers various tests and treatments throughout the year. However, some secondary and tertiary services, especially specialist care, may require additional fees based on specific tariffs. For instance:

*"Services like teeth polishing may be covered only once per year by Kwara Care, with costs settled separately outside the capitation arrangement."* **PHC Provider, Kwara**

## 3.3 SUCCESS OF THE SSHIS

**Improved health indices**

Across the states, the SSHIS was associated with improved health indices related to UHC goals. In Oyo and Kwara states, for example, this was reported in terms of improved service quality, better health behaviors and health services utilization, reduced number of sick days and economic loss, and financial risk protection for the ill. In Enugu and Cross River states, increased satisfaction with the health system and quality of life was reported among beneficiaries:

*"Our health indices have improved. The overarching goal is to have a healthier state so that we can grow more economically. Having better health reduces disease burdens and gets more people back on their feet and ready to take care of their families. Those are the success stories that we have."* **Kwara Care Stakeholder**

*"There is improvement in the health indices and that is key. Also, there is a renovation of the primary health care center as the agency brought a standard which the government is following."* **OYSHIA Stakeholder**

*"The community is happy with the health facility. In fact, this health center has helped us so much because the majority of the people living here are commoners. Our women are delivering*

*for free. So many people. There are people that [would have] preferred to deliver in their house[s] but because of this universal health coverage thing, they now come to the facilities, they deliver and they go, they have no problem, and they don't pay. So many people benefit when they get sick, including myself...they give me some medications. The community is happy with it*." **Community Leader, Enugu**

*"When we initially called for enrollment, people saw it as fake. Some reluctantly came out and were captured. The [enrolled] people were so happy that they received free healthcare services without paying a dime. When they are happy, I am!"* **Secondary facility provider, Cross River**

**Improved health infrastructure**

Improved health infrastructures were also noted across the states due to extensive facility renovation exercises following the launch of the schemes. In particular, renovation of the primary healthcare centers enhanced access to quality services resulting in increased healthcare service uptake. This was particularly emphasized by stakeholders from Enugu, Cross-River, and Oyo states:

*"The scheme has undeniably improved healthcare facilities since its introduction. Access to quality healthcare services has increased, with more people opting for hospital services over traditional medicine due to the availability of free healthcare under the scheme."* **CRSHIA Agency Officer**

*"The introduction of the State health insurance scheme has indeed helped improve healthcare services. Facilities that were previously underutilized have seen an increase in activity, with more clients and patients accessing services. The scheme has provided financial support to health centers for infrastructure upgrades and day-to-day operations, leading to improved service delivery."* **ESA UHC Agency Officer**

**Enhanced care access equity**

Access to free healthcare services for the vulnerable and poor represents a big impact of the SSHIS, especially in the states with an indigent or equity plan for the least financially capable residents. This has improved the equity of access to care in the states. In Taraba, for instance, the TSCHIA successfully provides free healthcare services to over fifty thousand people, improving access to primary healthcare, especially for children, women, and pregnant women in rural areas. Similarly, in Sokoto and Enugu states, state, the health insurance scheme has received positive feedback, increased antenatal care attendance, reduced maternal deaths, and provided support for people with disabilities:

*"I'm happy that more than fifty thousand are accessing care free of charge that makes me sleep well, and that is what the government wants to see, to ensure that lives have been impacted, especially in the areas of health."* **TSCHIA Agency Officer**

*"The program has enabled individuals, especially in rural areas, to access primary healthcare services, particularly for children, women, and pregnant women, leading to better uptake."* **MOH Taraba**

*"The feedback we are getting is mostly positive, that they've been to the hospital, and they have been attended to, and they have not paid any money. We have also witnessed an increase in ANC attendance, and also a reduction in maternal death in some of the basic healthcare provision fund-supported facilities. Also, People living with disabilities that cannot take care of themselves in terms of healthcare now know that there is a scheme that works for them."* **SOCHEMA Agency Officer**

**Strengthened health finance system**

Furthermore, the SSHIS was noted to enrich the health financing system in some of the states, with increased funding acquisition from external bodies and partners who are interested in supporting care for specific subpopulations. In Taraba state, for instance, some organizations like UNICEF support maternal and child health services, and ProHealth, an NGO, supports care for children living with HIV/AIDS:

*"...The federal government bears like 75% of the cost, and we provide the remaining 25%. We pool the resources for this from... I mentioned we enrolled people from the formal sector who make contributions, the informal sector, and private companies who pay premium. We tell them, your husband and you and four children, we'll provide free health services to them. Aside from this, we have organizations and NGOs that support us. We are talking with UNICEF for example to support our services to like 10,000 children and pregnant women. Paying a N12,000 premium for them amounts to around 120 million Naira. We also have RICE supporting us in terms of training, capacity building, and infrastructure. We also have ProHealth. Currently, they are doing enrollment in the villages, any child below five years having HIV, directly or indirectly, we will be providing health services to them free of charge. So, we're working with a lot of partners to get quality healthcare services to their [Taraba residents] doorsteps."* **MOH Officer, Taraba**

## 3.4 IMPLEMENTATION CHALLENGES OF THE SSHIS

Despite the successes, several implementation challenges were reported with the SSHIS operations across the states, affecting coverage, sustainability, and efficiency. Overall, the issues relate to public awareness and buy-in, governmental factors (processes and payments), economic factors (funding and inflation), manpower factors, and environmental factors (insecurity and facility inaccessibility) involved in catering to the increasing number of enrollees. A run-down of the challenges across the states is given below showing overlaps:

In Kwara State, challenges like funding issues, public apathy, affordability concerns, inflation, drug shortages, and insecurity were reported. Delayed business plan approvals and facility accessibility are also problems:

*"There have been many external factors affecting the implementation of the scheme. Funding, apathy towards governmental initiatives, and perceptions about the affordability of the scheme have been significant challenges. Additionally, issues like inflation, reduced buying power, lack of drug sufficiency, and even security concerns pose obstacles to effective implementation."* **Kwara Care Agency Officer**

*"Delayed approval of business plans by the State Primary Health Care Development agency affects the smooth running of facilities and leads to stock shortages. Also, distance to facilities is a challenge for many patients, impacting accessibility and service utilization.* **PHC Kwara**

In Cross River state, SSHIS implementation faces challenges such as manpower shortages and inadequate distribution of beneficiary cards, particularly among civil servants, and low inclusion of the ward development committees:

"*The major challenge lies in the shortage of manpower, particularly health workers. Many facilities lack sufficient staff, impacting the delivery of comprehensive care to beneficiaries. This shortage has a ripple effect, affecting the overall implementation of the state health insurance scheme.*" **CRSHIA Agency Officer**

*One of the primary challenges facing CRSHIA is the inadequate distribution of cards to eligible beneficiaries, particularly among civil servants. This issue is attributed to a human resource capacity gap. As a result, many contributors are unable to access healthcare services despite their contributions.* **MOH, Cross River**

*"Challenges include poor infrastructure maintenance and lack of support for Ward Development Committees (WDCs). Many WDC members provide undervalued voluntary services, leading to feelings of being overlooked."* **Community leader, Cross River**

In Enugu state, stakeholders reported issues around government accountability, economic factors like inflation and insecurity, manpower shortages, and skepticism. Reliance on NHIS price lists and reimbursement issues relating to inadequate or delayed capitation/service charges payment also hinder operations:

*"Challenges in the implementation of the scheme include government accountability, economic factors such as inflation, and insecurity, which affects enrollment in certain areas due to restricted movement. Additionally, issues such as manpower shortages, poor facility location, and initial public skepticism have posed obstacles to effective implementation."* **ESA UHC Stakeholder**

*"One significant challenge faced in the implementation of the scheme is the reliance on NHIS price lists, leading to restrictions on the use of certain medications. Inflation further compounds these challenges, making it difficult for providers to sustain operations solely*

*through the scheme. Moreover, the scheme's popularity among providers has waned due to perceived profit limitations and reimbursement issues."* **Secondary facility provider, Enugu**

In Sokoto state, non-commencement of the formal sector plan, poor awareness and uptake, and lack of political will were the overarching challenges. Similar issues including security challenges were also pressing in Taraba state.

*"Lack of commencement of the formal sector. It is the backbone of health insurance. Second, is the poor awareness and uptake of the scheme among the populace. Lastly, there is a lack of political will from the government.* **SOCHEMA Agency Officer**

*"Community members report that there are many essential services that are not covered by SOCHEMA."* **Community leader, Sokoto**

*Awareness creation and sensitization were significant challenges initially as people were not aware of the program. Also, security challenges in some areas hindered access to certain communities."* **TSCHIA Agency Officer**

*"Lack of awareness regarding the operation of the scheme leads community members to request free treatment without the necessary registration procedures."* **PHC provider, Taraba**

*"Lack of enrolment of the formal sector, which is more enlightened and should take the lead in enrolment is a significant challenge.* **MOH Officer, Taraba**

Lastly, in Oyo state, OYSHIA challenges include high staff turnover especially among private sector partners, inadequate capitation rates, delays in approvals, and financial constraints:

*"For private hospitals, it is staff turnover, we have to keep training. You train some people today and in a month they are no longer in the system. That really affects us so much."* **OYSHIA Agency Officer**

*"We don't have many problems, the only challenge is that we want the Agency to increase their capitation because it is very poor and we don't blame them.*" **Private facility provider, Oyo**

*"At times it takes time for follow-up to get to them. So, if OYSHIA could shorten the number of days between the time the letter is being submitted and the time it's being approved, it would be so much appreciated."* **PHC provider, Oyo**

*"The only areas I can say we have challenges are finances. At times you have to write, revise, and repeat your visit before you can get your approval from OYSHIA to buy drugs and operation packs so it usually takes time at times. At times, our staff at OYSHIA don't get their salary on time. Most times we will have to borrow and pay our staff because we do not like them to go because of money."* **Secondary facility provider, Oyo**

## 3.5 STAKEHOLDERS RECOMMENDATIONS TO THE CHALLENGES OF THE SSHIS

We thematized the recommendations from our informants across the states into those promoting uptake or coverage of the scheme and those promoting the scheme sustainability.

**Recommendations to improve the coverage of the SSHIS**

Creating better awareness of the SSHIS and the benefits of enrollment in each state was a common recommendation to promote the scheme coverage among the informants. Strategies suggested to improve awareness and subsequent enrollment include consistent advocacy and community engagement via the WDCs, door-to-door campaigns, SMS technologies, and word-of-mouth promotion by current beneficiaries; and also by addressing security challenges in conflict-affected zones to expand access. Expanding the portfolio of covered services, levying affordable premium, and attracting more private investment and private providers into the scheme were also suggested:

*"Advocacy and community engagement is key. Community mobilization through the community leaders and religious leaders should be explored in scaling up our advocacy efforts"* **MOH, Kwara**

*"We can explore sending bulk SMS for people to come out and enroll in the scheme".* **Secondary facility provider, Cross River**

*"Enhance WDC recognition and support, provide proper incentives, ensure inclusive health insurance coverage, and improve infrastructure maintenance. Also, strengthen community involvement and government support to sustain healthcare initiatives."* **Community leader, Cross River**

*"Government should increase funding to improve awareness creation, provide commodities, treatments, renovate facilities, and enhance human resources for health. Also, stakeholders should address security challenges to ensure access to all communities."* **TSCHIA Agency Officer**

*"Stakeholders should encourage beneficiaries to inform others about the program to enhance coverage."* **PHC provider, Taraba**

*"There is a need for private investment in healthcare to expand coverage and facilities, especially in areas lacking adequate infrastructure."* **MOH, Taraba**

*"I am calling on the government and key players involved to keep putting efforts to increase the [service] capacity of the scheme."* **Community leader, Sokoto**

*"They should not rely solely on radio communication but should instead find more direct ways to engage with the communities, such as going door-to-door as they do for other health programs. Additionally, if they want to talk to us, they should invite us. They need to increase the staffing levels, make the program more accessible to the community, and allocate more resources to it. Also, reducing the price of enrollment could potentially increase participation."* **Community leader, Oyo**

**Recommendations to promote the sustainability of the SSHIS**

Sustainability-focused recommendations from the stakeholders addressed the policy, funding, remuneration, and manpower challenges facing the scheme. Employing more health providers and ad-hoc staff and offering better remuneration packages were suggested to address staffing issues. Revising the capitation policies and payment and pricing system was recommended especially by private providers. Increasing funding for the scheme via regular disbursement and expansion of BHCPF support, timely release of equity funds, and leveraging political contributions towards healthcare funding were also emphasized. Other recommendations include publicizing research findings on the scheme's performance, improving basic and primary healthcare services, strengthening intra-state collaboration among SSHIS agency and other health agencies, and streamlining communication processes among stakeholders:

*"Government should enforce laws supporting the scheme and ensure timely payment of counterpart and equity funds. Also, the government should invest in staffing and infrastructure upgrades for healthcare facilities. Lastly, stakeholders should recruit and train healthcare professionals to improve service delivery. "* **ESA UHC Agency Officer**

*"Providing motivation and incentives to existing staff members is essential, considering the lack of ability to employ additional personnel."* **PHC Provider, Enugu**

*"A revised NHIS fee-for-service model would incentivize more healthcare providers to participate, ultimately benefiting the state's healthcare landscape."* **Secondary Provider, Enugu**

"*Provision for hiring ad-hoc staff to alleviate service delivery challenges is important. Also, the State Primary Health Care Development agency should expedite business plan approvals to address operational delays*. One way they can do this is *by redesigning their website to facilitate business plan submission and approval processes, ensuring timely execution of services."* **PHC provider 2, Kwara.**

"*Efforts should be made to impanel all contributors promptly to receive care, thereby aligning with the program's objectives. The government should provide 100% enabling environments and release the 25% counterpart funding to strengthen human resources for health, renovate and rehabilitate more health facilities, and expand BHCPF support."* **MOH officer, Cross River**

*"OYSHIA should re-examine the national policy regarding capitation, regarding fee for service payment. They should review their policy."* **Secondary Provider, Oyo**

*"All state governments should ensure a prompt release of equity funds to cover the vulnerable population. Political office holders should contribute a percentage of their salary towards funding healthcare for their constituency. Researchers should make their findings public to shed light on the challenges and help find solutions.*" **SOCHEMA Agency Officer**

*Let the state government improve basic healthcare and primary healthcare services. PHC is key to universal health coverage.* **Secondary facility provider, Sokoto**

*"We should strengthen synergy between SOCHEMA and its partners such as the ministry and PHCDA.*" **MOH, Sokoto**

## DISCUSSION

This study explored the design, impact, and implementation challenges of the state-supported health insurance schemes (SSHIS) in Nigeria, contributing the previously under-documented views of the state actors, and supporting the monitoring and evaluation efforts to strengthen this subnational health insurance initiative. Overall, our results suggest that the SSHIS across the Nigerian states are at different stages of implementation and have recorded measurable successes. However, the schemes also face significant implementation or operational bottlenecks requiring corrective policy actions.

The SSHIS initiative is considered a reform to correct the design and implementation defects of the parent NHIS such as over-centralization, the complexity of health maintenance organization (HMO) involvement, skewness to the formal sector, and voluntary participation [5]. Our data suggests SSHIS implementation across the states shows different fidelity levels in adhering to the prescribed design of the scheme. Fidelity in implementation research context is a measure of adherence to the standard protocol of a strategy or program. It may indicate the pragmatism and accessibility of the instructions and/or competency and hesitancy of the implementer [17]. In our study, none of the six states operated a mandatory SSHIS in contrast to the 2022 NHIA Act statutes, and they had different informal sector penetration in the early phases. However, they all implemented the BHCPF and vulnerable group fund to capture their least financially capable and special-need subpopulations. This may reflect the states' discretion to tailor their SSHIS design and implementation to their institutional capacity and socioeconomic realities. In agreement, Ipinnimo et al. [18] argued that Nigeria's large population size, high poverty level, low governmental priority of health funding, corruption, and health supply- and demand-related issues all pose an obstacle to implementing a mandatory insurance system in the country. The authors suggested that addressing these obstacles systematically is a prerequisite for a mandatory insurance scheme implementation [18]. However, in the meantime, stakeholders should organically build interest in the SSHIS to ensure the voluntary participation model does not impede the scheme coverage and impact, as seen with the NHIS [5].

Nevertheless, our findings revealed that SSHIS implementation has yielded significant positive outcomes in the operating states. Across our study states, there are reports of improved health indices such as improved healthcare utilization, antenatal care attendance, maternal mortality reduction, and free healthcare access for enrolled beneficiaries. We also found evidence of infrastructural development and health funding system strengthening due to the scheme implementation. These findings are similar to that of a study that performed an in-depth assessment of different health financing mechanisms across the Federal Capital Territory, Niger State, and Kaduna State where beneficiaries reported a significant reduction in OOP payments for healthcare services [19]. Similarly, a study that assessed the influence of healthcare access through health insurance on the health behaviors of the enrollees of the SSHIS in Anambra state, in southeast Nigeria, reported a positive change in enrollee's health-seeking behavior post-enrollment [20]. Additionally, Ikechukwu et al [12] also reported that about 95% of enrollees in Abia State scheme were willing to continue their enrollment due to the benefits of the scheme. However, it is important that the scheme is continually

strengthened to maintain its service quality, premium affordability, and positive impacts when the enrollee population grows. As pointed out by Adewole at al. [10] in the OYSHIA study, a cumulative 35% enrollee dropout rate in the third year was recorded as the enrollee base expands. The authors also noted the skewed formal sector participation might imply a better positioning to pay the premium compared to the informal sector enrollees [10].

Despite the success, the implementation or operation of SSHIS across the states faces notable challenges threatening its sustainability and impact. We found a range of barriers relating to public awareness and uptake, governmental disposition, economic conditions and inflation, manpower shortage, and some insecurity and facility inaccessibility issues affecting the schemes as they expand. These challenges are familiar issues affecting the older social health insurance schemes in the country [21], and as well as in many other sub-Saharan African countries [22-28]. Insufficient government funding is a common challenge, complicated by lack of contribution by some beneficiaries which inadvertently reduces the pool of funds and sustainability prospects of the scheme [26-28]. This also affects quality of service and enrollee satisfaction and retention [21, 24]. Furthermore, addressing the regulatory complexities and problems of personnel integration, motivation, and remuneration is critical. Equally, surmounting the front-end challenges such as public apathy, distrust, and poor awareness of the health insurance system is also important. Some studies have reported that regulatory failures, complex operations with HMOs, and workforce insufficiency accounted for some lapses with the NHIS [29, 30].

The recommendations gathered in the study are relevant to the identified challenges [10, 20, 30]. Increasing government funding is important across all states to guarantee the financial sustainability of SSHIS, especially in the face of inflation and rising healthcare costs. However, some studies have emphasized that SSHISs need to be efficient in health spending, improve transparency and accountability, and consider affordability while setting insurance premiums for different categories of enrollees [31]. Promoting community engagement and advocacy is required to increase enrollment rates, reduce public apathy, and create a sense of ownership among citizens. Improved infrastructure, adequately equipped healthcare facilities, and consistent provision of drugs are necessary to improve service delivery. In addition, addressing human resource issues by hiring, training, and retaining qualified healthcare workers will reduce manpower shortages and improve service quality. In support, Nandi et al. also highlighted the need for state governments to improve the available health services and facilities as increased coverage does not translate to equitable healthcare access [32]. However, future studies may reassess and measure the identified key challenges in quantitative terms for adequate characterization and prioritization; for example, the extent and impact of insecurity on SSHIS service delivery in affected zones or revenue base analysis for SSHIS to identify source of funding constraints. Additionally, feasibility and cost-benefit analysis studies may investigate the effectiveness and viability of the proposed strategies and policy interventions e.g. impact of healthcare provider's workforce development programs on SSHIS coverage or sustainability outlook, where adopted.

Notwithstanding the strength of our findings, we acknowledge the limitations brought on by

our use of purposive sampling and reliance on self-reported data from participants. Possibility of bias from these sources warrants caution in the interpretation of the findings, especially in generalizing the recommendations offered. However, we contend that the broad geographic representation among the participants and the systematic approach to our analysis may offset the bias and enhance the validity and robustness of our findings.

## CONCLUSION

This study uncovered the views of the administrative stakeholders of the SSHIS in Nigeria towards a holistic evaluation of the scheme's performance and impact beyond user experience or report analyses. Findings from the study indicate that the SSHIS is relevant and adaptive toward achieving UHC in Nigeria with evidence of positive impact on state health indices, health infrastructure development, access equity, and health funding. Challenges standing in the way of these impacts include low awareness and apathy among the populace, complex governmental procedures, inadequate or delayed service charges and capitation payments, insufficient funding in the face of rising costs, healthcare provider workforce shortage, facility inaccessibility, and insecurity in some contexts. Addressing these barriers is critical for the scheme continual success and viability. To this end, stakeholders highlighted critical policy action points to enhance SSHIS coverage via concerted community engagement efforts. Additionally, raising the scheme funding and revenue base and improving the remuneration packages for participating service providers were most emphasized to promote quality service delivery and SSHIS sustainability in Nigeria. Future research should look into the impact of these strategies on the scheme objectives where and when adopted.

**List of Abbreviations**

- OOP**:** Out-of-pocket
- SSHIS**:** State-Supported Health Insurance Schemes
- CRSHIA: Cross River State Health Insurance Agency
- ESA UHC: Enugu State Agency for Universal Health Coverage
- KWHIA: Kwara State Health Insurance Agency
- OYSHIA: Oyo State Health Insurance Agency
- TSCHIA: Taraba State Contributory Health Insurance Agency
- SOCHEMA: Sokoto State Contributory Healthcare Management Agency
- HMO: Health Maintenance Organization (HMO)
- WDC: Ward Development Committee

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## DECLARATIONS

### Ethics Approval and Consent to Participate

Ethical approval was obtained from the National Health Research Ethics Committee (NHREC/01/01/2007-04/08/2023), and ethical committees of various state ministries of health [Appendix 1]. Written informed consent was also obtained from every respondent of the study [Appendix 2]. A letter of introduction was written to all the KII stakeholders who participated in the study.

### Consent for Publication

Not Applicable

### Availability of Data and Materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request

### Competing Interests

All Authors declare no conflict of interest

### Funding

Royal Society of Tropical Medicine and Hygiene (RSTMH)