SCIDaR
SOLINA CENTRE FOR INTERNATIONAL DEVELOPMENT AND RESEARCH

Insights Innovation Impact

Power of Place

A Compendium of local solutions for lasting impact

- Insights
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SCIDAR AT A GLANCE

Who we are

SCIDaR is an indigenous Nigeria-based non-profit organization dedicated to researching and developing evidence-based approaches for implementing high-impact interventions in Africa. We provide fund management services to optimize the effective allocation and utilization of donor resources, ensuring accountability, efficiency, and measurable impact.

Through data driven learning, we develop innovative solutions to address pressing development challenges in underserved communities. We hold ourselves to the highest standards of transparency, prudency, collaboration and excellence in ensuring that gaps are filled, needs are met, and impact is delivered.

Our mission to improve health and social outcomes through effective program implementation, capacity building and dissemination of insights … for policy change drives us to be unwavering in our bias for impact.

SCIDaR is guided by an outstanding board of directors and a vibrant league of principals who anchor various portfolios, supported by a diverse team of over 350 young professionals. Our highly qualified team, with deep expertise in health systems, is a unique asset that enables us to consistently deliver value.

What we do

Given the deep understanding of the health system and landscape at clinical, national, regional and global levels we offer varied, fit-for-context- solutions to emerging development issues.

We offer Strategic Advisory that enables our partners to develop strategic plans and frameworks for important health issues. We also develop actionable operational plans to translate strategies into actions to achieve desired impact.

Our Innovative Program Design and Implementation service enables us to co-create impactful programs with lasting change. We devise sustainability strategies to ensure that project impact outlives project lifespan.

Through embedded Capacity Building across all our projects, we equip individuals with the skills and knowledge they need to achieve desired outcomes at micro and macro levels. Our innovative framework for capacity building and evaluation ensures self-sufficiency and long term growth through tailored and creative learning mechanisms.

We offer Health Systems Consulting to healthcare providers, policymakers, and institutions to optimize healthcare systems, improve service delivery, and implement innovative solutions.

Our Advanced Analytics and Market Research Capability enables us to generate new evidence through implementation Research and learning. We measure results and share insights to empower staff, participants, and the development community.

IMPACT & FOOTPRINT

We have implemented over 60+ projects and have impacted the lives of over 25 million Africans in health services delivery. We have raised and managed over 100 million USD

60+

Projects implemented across Nigeria and other parts of Africa where we work

$103.5M

Total investment deployed towards improving the lives of vulnerable women and children

25.6M+

Lives impacted through improved access to health care services

26,000+

Health Personnel trained to deliver quality care at all levels of health care

Countries we've worked in

SCIDaR is present in all 36 Nigerian states + the Federal Capital Territory.

We are also contributing to social outcomes regionally in over 15 African countries including Chad, DRC, Niger, Burkina Faso, Guinea Bissau, Liberia, Ghana, Cameroon, Uganda, and Malawi.

MESSAGE FROM OUR BOARD

From my earliest days as a young physician in Kaduna to leading reforms as Commissioner of Health during the COVID-19 pandemic, I have seen first hand how fragile systems can be transformed when knowledge, leadership, and partnerships come together. That journey is why SCIDaR's story resonates deeply with me. Over the past decade, the Solina Centre for International Development and Research (SCIDaR) has grown from a bold Nigerian vision into a trusted African institution, embodying the same conviction that has guided my own career: that Africa's challenges demand African-led solutions, grounded in evidence and sustained through collaboration.

This Compendium is more than a record of projects or technical achievements. It is a testament to what becomes possible when research is coupled with implementation, and when communities are treated not as beneficiaries but as partners. Over the years, in the course of interacting with mothers who have put their faith in the health system as their safety net, I am reminded why their stories and the numbers in this Compendium matter: behind every statistic is a life whose dignity depends on whether systems deliver.

Our work at SCIDaR has been anchored in some of the most pressing health challenges of our time: strengthening immunization systems so no child is left behind, improving maternal and child health so families can thrive, and helping governments design financing and workforce solutions that make health systems resilient. We have invested in frontline health workers, nurtured the next generation of leaders, and piloted tools and approaches that are shaping practice farbeyond Nigeria's borders.

As SCIDaR's first female Board Chair, I carry both pride and responsibility. Pride in our staff, whose dedication continues to inspire me. Gratitude to our partners; governments, donors, civil society, and communities, whose trust makes this work possible. And deep appreciation for my fellow Board members, whose vision and governance allow SCIDaR to flourish.

Looking forward, our mandate is to deepen our impact, expand the frontiers of knowledge, and ensure that evidence translates into equitable outcomes for all. I see this moment as standing on the shoulders of those who came before us, while leaving a path for those who will come after. Together, we remain committed to building a future where resilient health systems and empowered communities are not exceptional, but expected.

On behalf of the Board of Directors, I invite you to explore this Compendium not only as a record of the past, but as a window into the possibilities ahead.

Amina Baloni

Dr. Amina Mohammed Baloni
Ag. Chair, Board of Directors

MESSAGE FROM OUR ORGANIZATION

This compendium is more than a collection of findings, it is the fulfilment of a vision 13 years in the making. All of my development career has unfolded at SCIDaR, alongside colleagues and partners working to strengthen health systems and improve lives across Africa. In those years, we poured ourselves into projects and programs, often with little time to pause and capture what was being built. The work was real, with tangible results.

We always dreamed of changing that. We wanted not only to deliver programs, but to share what we were learning with the wider field, to spark innovations beyond our walls, to shape policies and investments that scale what works, and to prompt a rethinking of what does not. Power of Place: A Compendium of Local Solutions for Lasting Impact is, for me, a proud moment because it brings that dream into reality.

Within these pages are stories of lives improved and systems strengthened: the mother in Kano who survived childbirth through timely care, frontline health workers in Yobe championing immunization. These are not just data points, they are the proof that progress is possible when evidence, design, and determination come together in context. They also reflect the core areas that SCIDaR has long been passionate about; maternal health, immunization, and the capacity building that sustains frontline systems. At the same time, the compendium points to new and exciting frontiers such as digital health and access to finance for private-sector providers, areas with immense potential to transform how care is delivered and sustained across Africa.

Yet I see this work as only a drop in the ocean. The challenges facing Africa remain vast, vaccine-preventable diseases, maternal deaths, fragile systems that still bend under shocks. This compendium does not solve them all, but it does show what is possible. And it invites others to do the same: to document, to reflect, and to share, so that collective knowledge can multiply our impact.

I see this as standing on the shoulders of those who came before us, leaders like Dr. Muyi Aina who laid the groundwork, while leaving a path for those who will come after. The young leaders and practitioners who will carry this work further than we can imagine. That is why these pages are not just about past achievements. They are a call to governments, partners, philanthropies, and peer organizations: let us turn knowledge into action, and action into lasting change.

Uchenna Igbokwe

Dr. Uchenna Igbokwe
Executive Director/CEO, SCIDaR

INTRODUCTION

Health systems are the backbone of social and economic development.They protect communities in times of crisis, sustain well-being in times of stability, and reflect a nation's priorities through the care they deliver. In Nigeria and across Africa, these systems have achieved notable gains in recent years. From expanded immunization coverage to improved access to skilled birth attendants. Yet persistent inequities and systemic gaps continue to undermine progress. Too many lives are still lost to preventable causes, not only in maternity wards, but in under-resourced clinics, overstretched emergency units, and communities cut off from timely care.

Africa's health systems face a dual challenge: meeting immediate service delivery needs while also building resilience for the future. The continent carries a disproportionate burden of preventable diseases, maternal and child mortality, and under-nutrition, alongside emerging threats such as pandemics, climate-related health impacts, and non-communicable diseases. These issues are deeply intertwined with socio-economic conditions, gender dynamics, geographic inequities, and governance structures.

The Power of Place compendium brings together a curated selection of SCIDaR's recent work, a record of practical solutions, tested approaches, and implementation insights addressing some of the most pressing health challenges across Nigeria and other African countries. It is designed for policy makers, program managers, researchers, and development partners seeking interventions that are grounded in evidence and proven in the field.

SCIDaR's work spans multiple domains, including maternal and newborn health, where efforts focus on addressing the leading causes of maternal death such as postpartum haemorrhage, strengthening referral systems, and ensuring respectful maternity care. In primary healthcare, public health, and nutrition, interventions aim to improve service integration, strengthen supply chains, and ensure essential health and nutrition services reach underserved populations. In the area of health security, SCIDaR enhances readiness for epidemics and emergencies through surveillance, coordination, and rapid response systems. Health systems strengthening work supports governance reforms, sustainable financing, data-driven decision-making, and quality assurance mechanisms. Finally, in gender and demand generation, SCIDaR ensures that services are inclusive, equitable, and shaped by the voices of the people who use them.

By presenting both the successes and the complexities, we aim to provide a realistic view of what it takes to design and implement high-impact interventions in real-world settings.

The evidence presented here comes from diverse contexts. From urban centres like Lagos, where technology-enabled solutions are reshaping access to primary care, to rural and conflict-affected areas where mobile outreach teams and community networks are the lifeline for hard-to-reach populations.

We highlight not only the quantitative gains in immunization coverage, stock-out rates, and care-seeking behaviour;

But also the qualitative shifts, such as strengthened community trust, policy alignment, and capacity gains within local health systems.

Quality and equity are not accidental outcomes. They are the result of intentional design, consistent investment, and the integration of lived experience into policy and practice. By aggregating and sharing these lessons, this compendium serves two purposes. First, it provides a detailed record of what has worked, rooted in data, informed by context, and tested in real-world settings. Second, it invites others to adopt, adapt, and scale these solutions so that they can deliver impact in other settings facing similar challenges. At the same time, it flags critical gaps in the literature and practice that should drive further implementation research, ensuring that future interventions are strengthened not only by evidence of success but also by systematic learning from what remains unresolved.

The challenges ahead are significant, but so are the opportunities. The solutions in this compendium are not abstract concepts; they are working models tested in communities across Africa. They show that transformation is possible when evidence, innovation, and collaboration converge.

Now is the time to move from knowledge to action. Together, we can take these proven approaches to scale, ensuring that quality health care is not a privilege for the few, but a right enjoyed by all.

A

QUALITY OF OBSTETRIC/ ANTENATAL CARE AND SERVICE DELIVERY

Once women reach the facility, what determines the quality of care, and how do both health workers and patients contribute to it?

© SCIDaR 2021
Focus group discussion with women participating in the Routine Immunisation Buddy System Programme waiting to access immunisation services in Kaduna.

Alade was known
as the child that killed his mother
“a wicked child” that arrives
to the wailing of his family

His father would not look him in the eye but
slid away to find the wall, the floor.
His sister said he robbed them of a mother

but it was the taxi that didn’t arrive earlier
The oxytocin on the shelf
That forced his father to choose
between his first son
and the wife of his youth -
the loving mother of his daughters

Who can be at peace after such decision?

Years later, the son becomes the father
His wife, Awolu, promises her daughter
a life of joy, of love, of possibilities

She prays the others keep theirs too
her husband, her midwife, her government,
and God.

These nine months of waiting
should end in rejoicing
a baby in hand,
a mother in tow.

Yet too many women
fear the day of birth.

We remember Chinenye.
We remember Shade.
We remember Saratu.

But no woman…
no woman…
Should have to die
giving life.

> “No woman should die giving life, and no child should be born into preventable suffering. Safe motherhood is not just a health agenda—it is a moral obligation, a measure of our progress as a nation

-Muhammad Ali Pate (The Coordinating Minister of Health and Social Welfare)

Ministerial Press Briefing on Commemoration of 2025 Safe Motherhood Week (April, 2025)

Research Question:

What helps or hinders access to and appropriate use of quality uterotonics for PPH prevention and management?

Background

In Nigeria, postpartum haemorrhage (PPH) remains the leading direct cause of maternal death, responsible for roughly one in every five maternal deaths [1]. For many women, the danger is not just the bleeding itself, but the broken chain of protection that should have prevented it. Too often, the medicines women receive fail them at their most vulnerable moment.

Oxytocin, the first-line drug for preventing PPH, is widely available but frequently ineffective. National potency surveys reveal that up to 74% of oxytocin vials arrive sub-standard, and one-third of misoprostol tablets fail quality tests by the time they reach lower-tier facilities [2]. The reasons are layered. Cold-chain lapses, dosing errors, and widespread misuse of oxytocin for labour augmentation all blunt the medicine's impact.

This is not merely a supply problem but a health system problem. It reflects gaps in the systems meant to protect women's lives: from procurement, regulation, storage, to bedside decision-making. In response, SCIDaR contributed to a set of studies to understand the challenges with using oxytocin in Nigeria and explore heat-stable carbetocin (HSC), a WHO-recommended uterotonic that does not require refrigeration as a viable option. The intervention also included bedside mentoring for providers and a Drug-Revolving-Fund financing model.

Research Contributions

To improve protection for women against postpartum haemorrhage (PPH) and increase access to quality Uterotonics, SCIDaR contributed to a series of interlinked studies across Nigeria. Through this research, we explored not only how medicines are currently administered, but also critically examined whether the health systems intended to safeguard mothers during and after childbirth are functioning effectively.

SCIDaR's findings have significantly expanded the body of knowledge, highlighting practical areas for strengthening maternal care and influencing policy and implementation strategies nationwide.

The first study a nationwide clinical audit, examined how 6,299 providers across different cadres were using oxytocin. The findings revealed critical gaps in provider knowledge and widespread misuse, with many women receiving multiple doses due to poor quality [2].

A second study, was a multicenter intervention involving 18 referral hospitals as part of our MSD for Mothers' funded Smiles for Mothers (SfM) program. It followed 18,364 births to assess the real-world uptake, safety, and acceptability of heat-stable carbetocin (HSC) compared to oxytocin or misoprostol, particularly in settings where refrigeration and consistent dosing are a challenge [1].

The third activity was an implementation initiative aimed at strengthening health systems. It increased access to heat-stable carbetocin (HSC) by adding it to national and state Essential Medicines Lists, distributing 69,000 ampoules through Drug-Revolving Funds, and training 770 health workers on proper storage and use. As a result, 87 public health facilities could reliably provide this life-saving medicine [3].

© SCIDaR 2021
A joyful mother and her baby, smiling after surviving postpartum haemorrhage.

What helps or hinders access to and appropriate use of quality uterotonics for PPH prevention and management?

What was found

We found a strong connection between how confidently providers perform, how reliably the system supports them, and how effectively postpartum haemorrhage (PPH) is prevented. These three factors (clinical performance, provider confidence, and system reliability) reinforce each other across the following result areas:

1. Provider confidence and decision-making at the bedside
A national audit revealed that 66.7% of providers, including nearly half of all community health workers, used oxytocin inappropriately for labour augmentation [2]. Much of this misuse involved overdosing, driven by poor training, lack of clear protocols, and concerns over oxytocin's quality or effectiveness. The findings highlight the need for unified guidelines, better drug quality assurance, and continuous provider education.

Health workers who received training and bedside mentoring showed greater confidence in using HSC. Among clinicians surveyed, 99% thought it was easy to administer, 96% safe to use, 94% effectiveness in reducing blood loss.

2. Clinical outcomes when heat-stable uterotonics are used
Women were significantly less likely to experience PPH when heat-stable carbetocin (HSC) was used. In 56% of tracked births, 10,284 out of 18,364, HSC was administered prophylactically. In this scenario, only 0.8% of recipients developed PPH [1]. This finding suggests that consistent access to effective uterotonics can save lives when paired with proper use.

3. Integrated approaches to strengthening systems
Efforts to stabilize uterotonic supply had tangible effects. A coordinated rollout placed 69,000 ampoules of HSC in public facilities through Drug-Revolving Funds stimulated demand through clinical experience and enabled states to sustainably integrate HSC in the supply systems. Normative policy updates ensured that HSC was added to both national and state Essential Medicines Lists and registered for use by NAFDAC [3]. Capacity building initiatives for state and facility logisticians improved last mile distribution for commodities and as a result, stock-outs were eliminated in 31 (75%) out of the 43 supported high-volume centres [3].

© SCIDaR 2024
A happy family moment, made possible by timely care and the use of heat-stable carbetocin to prevent postpartum hemorrhage.

What we learned

1. Researchers emphasized that quality uterotonics alone are not enough. Women's lives are saved when policy, product, and provider support move in unison. A single intervention, like introducing a drug that doesn't require cold storage, will fall short if it's not accompanied by systems that ensure equitable access and, informed use.
2. Clinicians in the study expressed strong confidence in using heat-stable carbetocin (HSC), largely because of their firsthand experience with its ease, safety, and effectiveness. Among those surveyed, 99% said it was easy to administer, 96% believed it was safe to use, and 94% affirmed its effectiveness in reducing blood loss. While price played a role, it was the combination of direct experience, bedside mentorship, and structured training that solidified provider's trust in HSC.
3. Researchers also found a serious concern: two-thirds of community health workers still misused oxytocin for labour augmentation, despite national guidelines [2]. This isn't just a policy failure; it reflects a lack of investment in supervision, communication, and role clarity. Without addressing these systemic blind spots, women remain at risk, even in the presence of life-saving drugs.
4. A path forward requires more than clinical rollout. Researchers call for a national intrapartum oxytocin guideline that clearly defines who can administer the drug and when. But technical reforms alone are not enough. Sustained change will come from valuing frontline providers, investing in trust, and building a system where the safe birth of every woman is the expectation, not the exception [3].

Why it Matters

Nigeria's government has made maternal health a national priority, exemplified by the Maternal and Neonatal Mortality Reduction Innovation Initiative (MAMII), launched in November 2024. This sector-wide, multi-stakeholder programme aims to cut maternal mortality by 30% over three years through strengthened community engagement, health system support, and provider capacity building, targeting 172 LGAs responsible for 55% of Nigeria's maternal deaths. In-line with these strong policy commitments, PPH is one of the government's key priorities, given its role in nearly one in

every five maternal deaths in Nigeria [1].

National surveys highlight specific challenges: approximately 74% of oxytocin vials and one-third of misoprostol tablets fail potency tests before reaching health facilities [2]. Further compounding this problem, only 52% of lower-tier healthcare providers are aware that oxytocin requires cold storage, and misuse of oxytocin during labour remains widespread [2]. These gaps underline critical weaknesses in both training and infrastructure.

Addressing these challenges requires policy action that goes beyond broad commitments. For Nigeria, this should include strengthening supply-chain quality assurance to safeguard the potency and efficacy of uterotonics, scaling up frontline provider training and supervision, and adopting clear policies that prioritize heat-stable options such as HSC as first-line for prevention, given the documented risks of poor-quality oxytocin in the country.

Importantly, Nigeria has an opportunity to scale bundled innovations such as the EMOTIVE package, an evidence-based set of clinical and operational practices for PPH response.

When deployed alongside comprehensive preventive measures, such as adherence to WHO's eight recommended ANC contacts, routine anaemia screening with iron supplementation, and the use of quality uterotonics like heat-stable carbetocin (HSC), and reinforced by national guidelines, mentoring, and sustainable financing models like Drug-Revolving Funds, maternal care can be transformed.

This integrated approach has the potential to significantly reduce preventable maternal deaths each year while laying a stronger foundation for dignified, high-quality care.

Ultimately, aligning Nigeria's maternal health policies with focused and actionable solutions at the point of care will not only save lives but also reinforce trust in the health system, ensuring women receive dignified and respectful care during childbirth.

However, gaps remain in the evidence base, including detailed understanding of provider's behaviour drivers, long-term effectiveness of interventions like heat-stable carbetocin, and optimal financing mechanisms for sustainable implementation. SCIDaR is actively working to fill these critical knowledge gaps through a range of targeted initiatives. These include cost-effectiveness studies comparing HSC to oxytocin, implementation research through the Smiles for Mothers and FOR M(om) programs, and new pilots under the Catalytic Opportunity Fund to scale lesser-used medicines like tranexamic acid. These efforts aim to generate the local evidence needed to inform smarter policies and more equitable maternal health outcomes.

© SCIDaR 2021
Our staff holding a neonate at a postnatal care visit

Research Question:

What makes training and coaching interventions effective in driving improvements in maternity-care quality across facilities?

Background

Facility births are rising in Nigeria, with roughly half of all deliveries now happening in health facilities [4]. Yet maternal health outcomes do not follow this trajectory of progress at scale. Quality of care remains uneven, sometimes dangerously so. Recent assessments put the average quality score of primary health centres at 39 out of 100 [5], far below what the WHO Quality-of-Care framework demands: respectful, evidence-based care backed by continuous audit and feedback [5]. The gap is not only in access, it is in practice. Training must shift from one-off lectures to targeted, hands-on learning that solves real clinical problems and is reinforced over time. Coaching turns guidelines into muscle memory. Skilled coaches help teams apply protocols correctly, troubleshoot workflow breakdowns, and sustain new habits under real conditions. Quality assurance (QA) mechanisms provide clear standards, routine measurement, transparent feedback, and consequences that keep performance from sliding back.

Quality improves when competence and accountability improves in tandem, bolstered by coaching. That is the larger question this analysis seeks to answer: can focused training, structured coaching, and credible QA mechanisms, working together raise quality affordably and at scale within government and private systems?

Against that backdrop, we tested complementary interventions: through the MSD for Mothers-funded FOR M(om) program in-class training to close frontline healthcare worker knowledge gaps and on the job coaching which walks facilities through implementing quality improvement activities, and the MSD for Mothers-funded Smiles for Mothers (SfM) program's in-class competency-based refresher training approach.

The first, FOR M(om), is a series of two-day in-class training designed to close knowledge gaps healthcare workers from health facilities across Lagos and Kano States, and an on the job coaching approach which guides health facility quality improvement teams through implementing critical activities within their quality improvement plans to assure quality in service delivery.

The second is the MSD for Mothers' funded Smiles for Mothers (SfM) in-class refresher, a three-day, competency-based maternal health training delivered across health facilities in Lagos, with knowledge checked through identical pre- and post-tests among participating providers. The aim is not just higher scores, but lasting improvements that can be reinforced and maintained through the state's training system.

Research Contributions

To address persistent gaps in maternity-care quality, SCIDaR tested complementary approaches to shift provider practice and support facility performance at scale.

The first study, FOR M(om) in-class training. A two-day, modular package delivered across 150+ facilities in Lagos and Kano. It showed that tightly scoped bursts of learning can move provider knowledge quickly. It also signaled the need for follow-on support to make gains stick.

The second study, structured on-the-job coaching. Facility teams worked from improvement plans and expected reassessment. Teams completed more quality tasks such as instituting standard operating procedures and maintaining handwashing stations. The experience highlighted the need for steady coaching to embed durable change.

The third activity, Smiles for Mothers in-class refresher. A three-day, competency-based package in Lagos covering ANC, EmONC, postnatal care, and MPDSR. It reinforced the feasibility of competency refreshers at scale without disrupting operations.

© SCIDaR 2025
A mother and child at the FOR M(om) training in Lagos

What makes training and coaching interventions effective in driving improvements in maternity-care quality across facilities?

What was found

We found that steady mentoring, structured training, and capacity-building interventions across the FOR M(om) and Smiles for Mothers (SfM) programmes supported measurable improvements in provider performance, supply chain reliability, and maternal outcomes.

1.) Facility performance and engagement in quality improvement
Program reports show that out of 14 facilities with approved results, 5 advanced by two QI levels and 10 by one level.*

82% of facilities completed at least 70% of their QI tasks at endline, indicating consistent follow-through when support was continuous [6,7].

2.) Provider practices and confidence in maternal care Process improvements included updated stock cards, standardised emergency trays, and functional hand-washing stations. Behaviour-dependent practices such as consistent partograph use also improved, showing that mentoring translated into clinical adherence.

Provider confidence in using heat-stable carbetocin (HSC) increased, with 99% finding it easy to administer, 96% safe to use, and 94% effective in reducing blood loss [3].

3.) Knowledge and skills gained through structured training A two-day in-class training for 436 providers across 154 facilities reportedly increased provider knowledge by 37 percentage points ($p < 0.001$). Participants highlighted the clarity of modules as key to applying new practices [6].

Training for pharmacists and logisticians produced significant knowledge gains in quantification, storage, distribution, data management, and pharmacovigilance, with post-test scores nearly doubling in some modules [3].

4.) Integrated approaches to strengthening supply chains Mentoring and pharmacist support cut uterotonic stock-out rates by 50%. Among 43 supported high-volume facilities, 31 (72%) recorded no stock-outs during the intervention period [3].

* *Data from endline results approved as at July 30, 2025 Insights are extracted from the FOR M(om) and Smiles for Mothers Programs funded by MSD for Mothers across Delta, Kano, Lagos and Niger States*

What we learned

1. In-class training should always be paired with ongoing coaching. Combining targeted training with facility-level coaching enables consistent application of new knowledge and supports gradual, yet consistent improvement in clinical performance

2. Regulatory bodies should integrate Quality Assurance metrics into national accreditation systems. Researchers estimate that standardising these quality measures could raise the average health facility score from 39 to 55 within three years [4][5], significantly enhancing the quality of care provided at the primary level

Why it Matters

Maternal health is a priority for the Government of Nigeria, however, translating that commitment into consistent quality at the PHC and private facility levels not without its challenges. Our evaluations point to two persistent issues: frontline providers often lack up-to-date clinical knowledge, and when protocols exist, compliance is rarely tracked or reinforced.

The third delay in the continuum of maternal care: the delay in receiving adequate care upon reaching a health facility contributes to 40% of the maternal deaths reported in Nigeria. A study of 42 tertiary hospitals in Nigeria revealed that the third phase of delay accounted for over 1,625 maternal deaths per 100,000 live births, with lack of competent staff identified as a root cause for the outcome. This emphasises the importance of closing knowledge gaps for healthcare workers providing maternal care to women visiting public and private health facilities.

The Government's prioritisation of maternal health through the MAMII program, investing in facility revitalization, health worker training, access to quality commodities, and improved financial protection, is charting an optimistic path forward. While training is essential for closing knowledge gaps, evidence shows it is insufficient on its own to reduce maternal mortality. To achieve lasting impact, training must be reinforced with structured on-the-job coaching and flexible online learning, ensuring real-time application of skills and continuous refreshment for sustained improvement.

The FOR M(om) two-day in-class training lifted knowledge scores by 37 percents among 436 staff, However, it was the quality improvement coaching adopted which leveraged dedicated facilitators and efforts on in-facility continuous quality improvement, that saw these facilities moving up two levels on the SafeCare QA scale between baseline and endline timelines [6, 7].

Preliminary data on the FOR M(om) program also indicates a sustained 0% in-facility maternal deaths in Delta and Lagos and a 75% reduction in Kano states.

Several areas still require further inquiry: how durable knowledge gains are without refreshers, what intensity of coaching delivers the highest return, and how quality scores correlate with clinical outcomes like PPH rates or referral speed. SCIDaR intends to explore these questions through follow-up audits, retention tracking, and a cost–benefit analysis of coaching models that connect scorecards to outcome-level indicators.

(c) SCIDaR 2022
Practical training on applying the Non-Pneumatic Anti-Shock Garment (NASG) for emergency maternal care.

Research Question:

How can simple digital risk-scoring tools drive earlier identification of high-risk pregnancies and prompt timely action?

Background

In Nigeria, approximately 60% of maternal deaths are linked to complications, such as severe anaemia or hypertension, that could have been detected during pregnancy [8]. Despite this, fewer than half of primary health-care (PHC) facilities use any formal triage algorithm, and paper-based checklists are rarely completed or consistently applied. This gap in routine risk identification contributes to preventable delays in recognizing and responding to danger signs.

Meanwhile, mobile-phone penetration exceeds 85% nationwide, presenting a critical opportunity to support earlier detection through digital means. If designed well, a self-administered antenatal risk tool could help flag high-risk pregnancies in minutes. This is especially valuable in low-resource settings, provided that the algorithm is accurate and the referral system is both affordable and accessible.

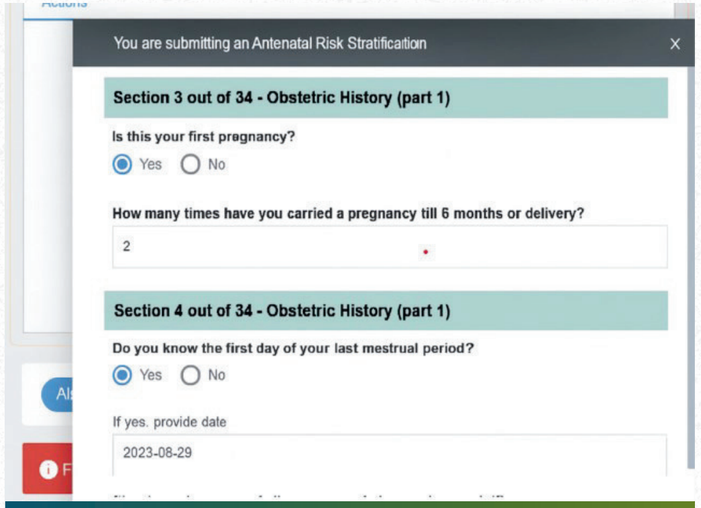
To explore this possibility, this study co-developed and validated a functional Antenatal Risk-Stratification (ARS) tool. The accuracy of the tool was tested to ensure its as close as possible to that of a medical practitioner considered the gold standard, while ensuring it is user-friendly to different categories of women.

Research Contributions

Due to social norms and oral traditions, many pregnant women with low literacy levels may ignore warning signs in pregnancy. To address this, The Gates Foundation funded Antenatal Risk Stratification (ARS) project was launched as a human-centred design initiative co-developed by SCIDaR and Helium Health. The project focused on validating the digital ARS tool for early detection of pregnancy risk, delivered via HeliumDoc for internet-enabled smartphones and via USSD for basic phones.

Piloted in healthcare facilities across six LGAs in Kano and Lagos States, the tool was applied to 1,879 pregnancies. The goal was to provide a reliable, self-administered risk assessment that could support women in identifying pregnancy complications at home, and as early as possible.

This work contributes to Nigeria's broader maternal health agenda by introducing a potentially scalable tool for earlier, more inclusive risk detection: especially in low resource settings and underserved population.



© SCIDaR 2025
A snapshot of the Antenatal Risk-Stratification (ARS) tool

What was found

The Antenatal Risk Stratification (ARS) tool was evaluated across multiple dimensions, including accuracy against clinical benchmarks, reliability over time, and ease of use in community settings. Together, these findings provide early evidence of a tool that is both highly sensitive and user-friendly, though still requiring refinement to improve specificity.

1. Diagnostic sensitivity and specificity in real-world screening When benchmarked against clinician assessments of 1,879 pregnancies, the ARS tool achieved a diagnostic sensitivity of 3–14%.

This means the tool is highly effective at flagging potential risks but also produces false positives, underscoring the need for further refinement before wider adoption [8].

2. Reliability of results across repeated screenings Test–retest analysis demonstrated stable performance. Women who repeated the screening about two weeks apart received consistent results, yielding a reliability coefficient above 0.90 [8]. This stability suggests the tool can perform reliably over time, strengthening its case for routine integration.

3. User experience when adapted for local languages and contexts Community resource persons helped translate the screening questions into Hausa and Yoruba, making the tool more accessible in diverse settings. As a result, 79% of women rated the interface as “easy” or “very easy” to use, with a median completion time of just three minutes. This indicates strong feasibility as a self-screening option in low-resource environments [8].

What we learned

1. While many tools demonstrate high sensitivity, there is also the need to enhance specificity to reduce false positives. Refinements are almost always needed to improve the accuracy.
2. Given persistent internet instability in many regions, developers should prioritize progressive web applications or other lightweight designs that allow tools to function effectively in poor network conditions.
3. To minimize challenges such as session timeouts or complex navigation, tools should consider SMS-based prompts or similarly user-friendly alternatives to ensure a seamless experience, especially for users with basic devices or limited digital literacy.

Why it Matters

Maternal health has become a central focus in Nigeria, with the launch of the Maternal and Neonatal Mortality Reduction Innovation Initiative (MAMII) in late 2024 marking a bold step toward systemic reform. The initiative aims to strengthen health systems, mobilize communities, and build frontline capacity to drive meaningful change in maternal outcomes. One of the most cost-effective ways to cut maternal deaths is early risk detection. The Antenatal Risk-Stratification (ARS) app has shown strong potential in this area, reliably flagging high-risk pregnancies with a sensitivity of 98–99%. Its use has already helped reduce delays in deciding to seek care and in reaching facilities.

To build on this momentum, routine risk screening should be standardized at the household level, making ARS or an approved equivalent a required tool. Financial incentives can be tied to completed referrals, with The Nigeria's Basic Health Care Provision Fund (BHCPF) or state basket funds used to cover transport only when referrals are confirmed, ensuring that resources are linked to measurable outcomes.

Further, a national triage dashboard should be introduced, giving State Primary Health Care Development Agencies (SPHCDA) and Local Government Area (LGA) real-time visibility of high-risk pregnancies to plan for blood, theatre capacity, and specialist coverage. Follow-up protocols must also be standardized, requiring nurse or midwife call-backs within 48 hours for every flagged case, with outcomes systematically documented.

Sustainability depends on robust data protection and reliable connectivity. Simple governance rules covering anonymisation, consent, and access control, coupled with investment in offline functionality and periodic syncs, will help ensure the tool remains effective even in low-connectivity areas.

Despite promising results, critical knowledge gaps remain. While the ARS tool demonstrates high sensitivity and has begun to shift household care-seeking, little is known about its long-term impact on maternal mortality reduction at scale, its effectiveness among rural populations with limited literacy, and the sustainability of financing models that tie incentives to referrals. Addressing these questions is central to SCIDaR’s agenda, generating rigorous evidence on how digital risk-stratification tools can be institutionalized within Nigeria’s health system, equitably reach underserved women, and ultimately translate early detection into improved maternal outcomes.

© SCIDaR 2025
A snapshot of the Antenatal Risk-Stratification (ARS) tool

Research Question:

What shapes women'sunderstanding, prevention practices, and care-seeking for pre-eclampsia and eclampsia?

Background

Pre-eclampsia and eclampsia (PE/E) remain major drivers of maternal mortality in Nigeria, contributing to up to 23% of maternal deaths in states like Kano [9]. But the danger is not only clinical. It is systemic. For many women, the problem begins long before symptoms emerge. It begins with limited understanding of the condition, and deep structural barriers to seeking care when warning signs appear. National data show that while some women are aware of danger signs like high blood pressure, far fewer translate that awareness into preventive behaviours.

A recent KAP study across 10 primary health facilities found that although 80% of respondents identified high blood pressure as a risk, only 14.5% consistently practised evidence-based behaviours like early antenatal care, salt reduction, proper diet, and rest [10].

But even when symptoms are recognized, care is not guaranteed. In Kano, over half of surveyed women said they would not seek facility care if transport costs exceeded ₦1,000. Nearly one-third required spousal permission.

Focus groups also revealed mistrust of the health system, including fears of unnecessary Caesarean sections and doubts about drug availability, which further delay treatment.

This is not just a knowledge gap. It is a trust gap, an access gap, and a power gap. Women's ability to act on what they know is shaped by household decision-making, cost, and confidence in the system. These researches explores both ends of that continuum: how women understand and practise PE/E prevention, and what structural and social factors determine whether they access care when complications arise.

Research Contributions

To address persistent gaps in care for pre-eclampsia and eclampsia (PE/E) in Northern Nigeria, SCIDaR led the Ferring Pharmaceuticals' funded complementary studies between 2022 and 2023 to examine knowledge, behaviour, and system responsiveness.

The first, a 2022 mixed-methods study across 16 PHCs in Kano, engaged 828 pregnant women alongside husbands, mothers-in-law, and frontline workers. It quantified the steep drop in attendance when costs exceeded ₦1,000 and showed how cultural norms and stock-outs combined to delay care. Insights informed the co-design of a dual intervention: transport vouchers linked with community drama.

A 2023 follow-up Knowledge, Attitudes and Practices survey of 602 women across 10 facilities revealed that while 80%

recognised high blood pressure as a danger sign, only 14.5% practised all four preventive behaviours. Low literacy and high parity emerged as consistent predictors of poor knowledge and practice.

Together, these studies provide actionable evidence for layered interventions, combining financial relief, social mobilisation, and targeted counselling, to strengthen timely, respectful, and evidence-based PE/E care.

What shapes women's understanding, prevention practices, and care-seeking for pre-eclampsia and eclampsia?

What was found

Multiple, overlapping factors shape how women in Northern Nigeria engage with maternal health services, particularly in the context of pre-eclampsia and eclampsia (PE/E). These include social norms, beliefs, financial constraints, system-level mistrust, and deep sociodemographic inequities. Some of these factors include:

1.) Personal and Cultural Factors Over half of respondents (54.2%) cited personal or cultural beliefs as key reasons for not utilizing maternal health services. Family influence (32.5%), especially from husbands or mothers-in-law, and traditional medicine practices (16.5%) were also significant, often reinforcing hesitation or avoidance of facility-based care.

2.) Economic and Access Barriers Financial constraints were the most frequently reported deterrent, cited by 54.7% of women. Geographic and ethno-religious factors further restricted access to services.

These factors compounded existing inequities and isolated certain groups from timely care.

3.) Health System Trust and Awareness Gaps
Mistrust in the healthcare system (10.8%) and lack of information (30.8%) contributed to low uptake of maternal services. These findings highlight weak provider–client relationships and insufficient public awareness about PE/E danger signs and care options.

4.) Knowledge, Attitudes, and Practices (KAP)
Only 33.9% of women demonstrated adequate knowledge of PE/E prevention. While 83.6% expressed positive attitudes toward preventive measures, only half (50.2%) reported practising them consistently. This gap between attitude and action suggests that awareness alone is not sufficient to change behaviour.

5. Sociodemographic Inequities and Vulnerable Groups
KAP outcomes were significantly shaped by sociodemographic variables, particularly education, geographic location, and ethno-religious identity. Women with lower educational attainment showed markedly poorer knowledge and less favourable attitudes. Younger women and those from lower-income or marginalized groups faced compounded barriers. These patterns point to the need for more targeted, equity-driven interventions.

What we learned

1. Knowledge alone does not guarantee preventive action. Although 80% of surveyed women recognised high blood pressure as a danger sign, only 14.5% practised all four recommended behaviours: early antenatal care, healthy diet, reduced salt intake, and adequate rest. Women with high parity and low literacy were most vulnerable, scoring lowest on knowledge and struggling to translate advice into practice.

2. Researchers stressed the need for simple, actionable counselling. Pictograms and visual aids proved useful in breaking down complex messages, especially for underserved groups. Behaviour change was more durable when reinforced over multiple ANC visits and supported with reminders such as SMS alerts.

3. Even when motivated, many women faced financial and social barriers to care. Transport vouchers alone had limited impact where spousal permission or mistrust of the health system deterred use. Fears of unnecessary Caesarean sections and drug shortages further

discouraged timely care. Community drama performances emerged as an effective tool to reshape male perceptions and normalise supportive involvement.

4. Supply readiness was also critical. The presence of magnesium sulphate at facilities determined whether women followed through on referrals, underscoring stock availability as both a lifesaving and trust-building factor.

5. Finally, the study identified a behavioural threshold: women were far less likely to seek care when transport costs exceeded ₦1,000. This finding has clear implications for the design of financial support schemes, which must reflect local economic realities to drive real change.

Why it Matters

Preventing complications like pre-eclampsia and eclampsia (PE/E) requires more than awareness, it demands practical tools, consistent support, and system-level action. In Kano, where delays in care remain a leading cause of maternal deaths, barriers are both economic and behavioural.

Although 80% of women recognized high blood pressure as a danger sign, only 14.5% consistently practised all recommended behaviours such as early ANC, dietary adjustments, salt reduction, and adequate rest [10]. This gap between knowledge and practice represents a missed chance for early prevention.

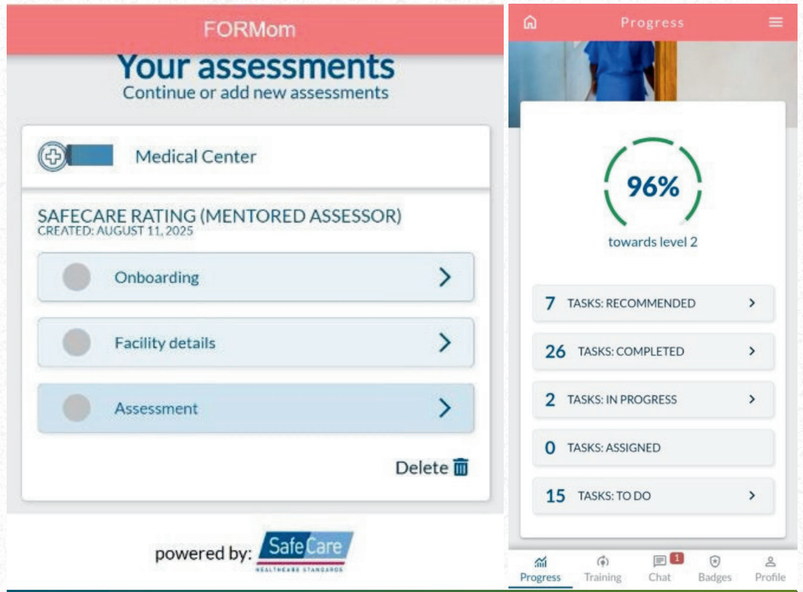
When symptoms appear, cost and social norms limit care-seeking. Facility attendance dropped sharply when transport costs exceeded ₦1,000 [9]. Yet combining modest vouchers with community drama to shift husbands' perceptions doubled referral success. This shows that reducing maternal deaths means tackling both household decision-making and affordability.

National policies such as the Safe Motherhood Strategy (2021–2025) and RMNCAEH+N provide direction, while the BHCPF and NHSRII have created financing mechanisms. Still, funding shortfalls, under-resourced PHCs, and weak MPDSR coverage constrain progress.

Scaling the bundled intervention tested here could give 11,000 more high-risk women annual access to magnesium sulphate, cutting mortality from hypertensive disorders by over one-third. Simplified counselling aids and peer support could triple uptake of preventive behaviours and avert 5,800 severe PE/E cases over three years [10].

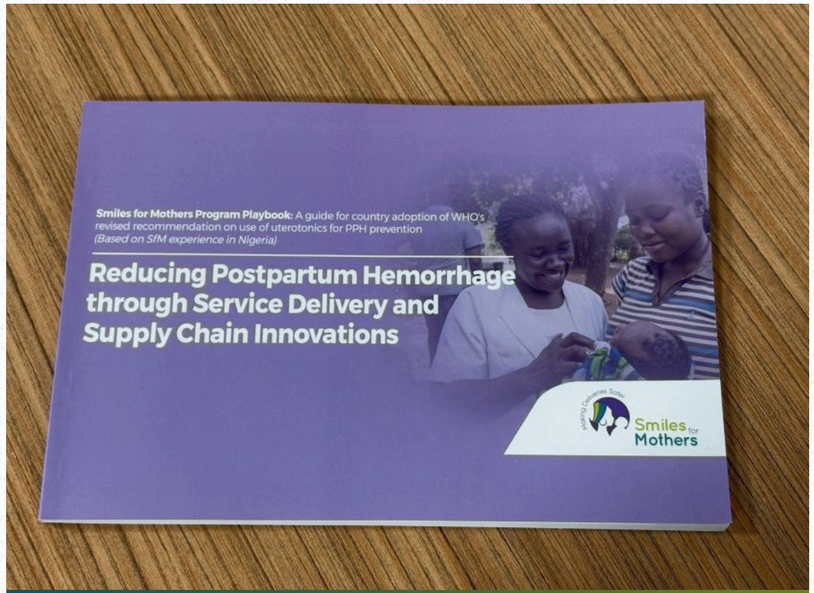
The lesson is clear: frameworks exist, but impact depends on resourcing community-informed, equity-driven solutions. With the right tools, affordable pathways, and trusted networks, preventive care can shift from aspiration to reality; saving lives and reducing emergency burdens.

TOOLS



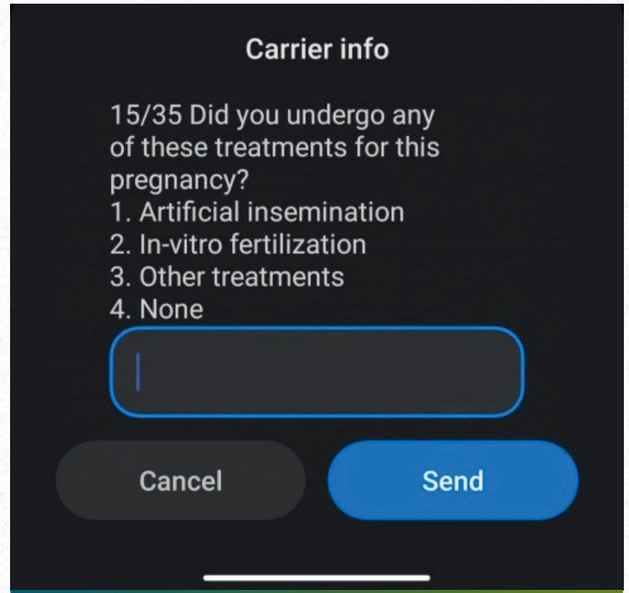
SafeCare Quality-Improvement plan

SafeCare is owned by PharmAccess, JCI(Joint Commission International) and COHSASA (Council for Health Service Accreditation of Southern Africa)



SfM playbook

Developed by the smile for mothers Consortium



Digital Antenatal Risk-Stratification (ARS) tool (USSD)

The ARS tool is developed by the Helium-SCIDaR Consortium

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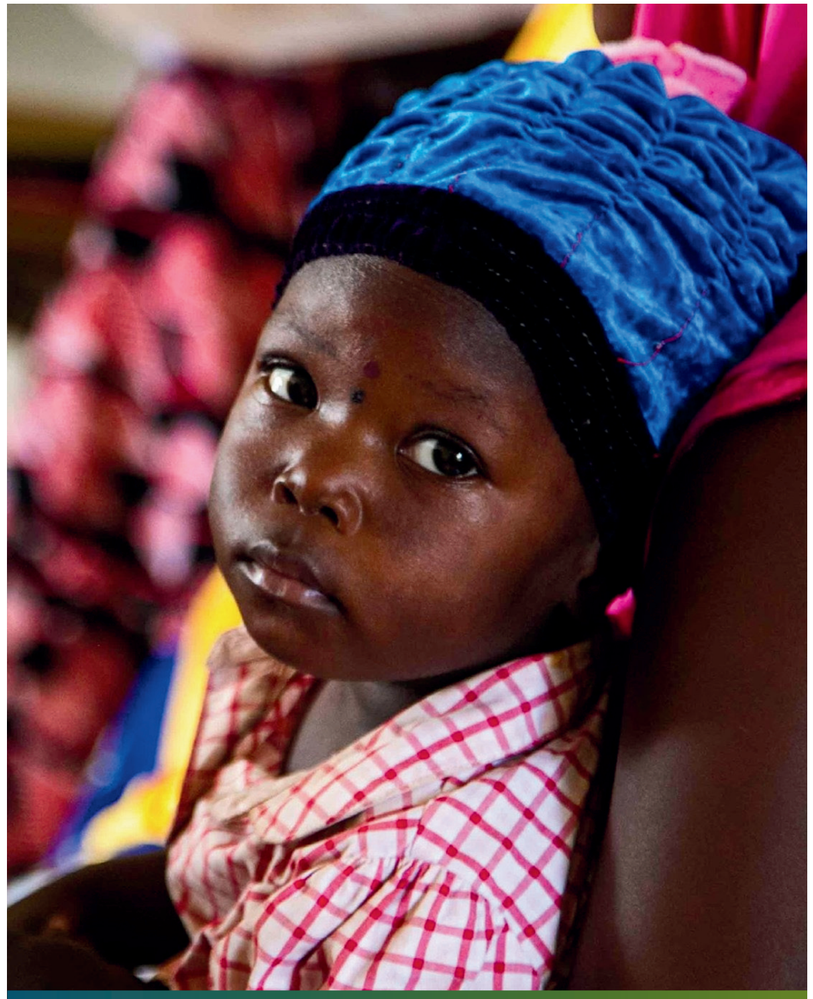

© SCIDaR 2019
A curious little girl stares at the camera as her mother engages in a peer support circle

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B

SYSTEM-LEVEL REFORMS TO STRENGTHEN IMMUNIZATION DELIVERY

What key reforms can strengthen Nigeria's immunization delivery system and close gaps in workforce, supply chains, and access?

© SCIDaR 2025
Women in Abuja protecting their children from vaccine-preventable diseases during a polio campaign round.

Amadu runs across the dusty field.
Five days ago, he was chasing Kelvin,
carefree, laughing.

Today, he drags one leg.
The ball rolls past him,
The game leaves him behind.

Some say it is a curse.
The nurses say it is Polio,
A vial of a vaccine could have stopped it.

We must shield our children,
so laughter keeps running,
and no field falls silent again,
leaving a happy childhood behind

> “ Immunisation is a national duty — for our children, our families, and the future of our health system

-Dr. Muyi Aina (The Executive Director, NPHCDA)

Multi-Stakeholders' Technical Workshop on Optimising a Sustainable Immunisation Financing Model 2.0 (July 2025)

Research Question:

How can immunization service delivery be strengthened to address equity gaps by improving supply systems and community demand?

Background

Nigeria continues to face persistent outbreaks of vaccine-preventable diseases (VPDs) such as measles, polio, and yellow fever. These outbreaks expose deep weaknesses in vaccine supply and delivery systems, which disproportionately affect marginalized and conflict-affected communities [1,2].

Before COVID-19, nearly half of health facilities already reported vaccine stock-outs due to fragmented procurement, storage, and distribution systems [1]. The pandemic further revealed structural vulnerabilities, as some of our key primary health centers (PHCs) struggle with adequate cold-chain capacity for vaccine management [1,3].

Insecurity compounds these challenges. Conflict in Northern states has displaced over 5.6 million people and led to the destruction of more than 40 health facilities since 2019, leaving 42% of children unreached by routine immunization compared to just 8% in the Southeast [2]. These conditions have created “immunity deserts”, where diseases spread easily, and last-mile delivery is often impossible.

Against this background, this section discusses the interventions that have contributed to strengthening immunization service delivery by addressing the supply-side weaknesses in the vaccine chain while also building demand and access in underserved, mobile, and conflict-affected populations.

Research Contributions

SCIDaR’s work across six studies has helped redefine what immunization equity in Nigeria through supply chain innovation with deep community engagement to improve vaccine access.

A multi-center evaluation in Northern Nigeria revealed that direct-to-facility vaccine deliveries and outsourced logistics reduced stockouts from 41% to just 10%. This improvement meant that PHCs had vaccines available when and where they were needed most. However, nomadic populations still faced challenges due to delivery breakdowns in remote areas.

During the COVID-19 pandemic, our research across six Northern states uncovered stark disparities. While state-level vaccine supply remained stable at 98%, routine immunization sessions dropped by 30% in conflict-affected areas. This was largely due to health worker shortages, limited funding, and movement restrictions. Encouragingly, pooled donor financing and real-time monitoring systems helped cushion these shocks and maintain service delivery.

Community-led strategies also made a powerful difference. In rural areas, traditional leaders used name-based tracking to identify missed children, raising coverage by 21%. In security-challenged zones, engaging nomadic leaders in microplanning resulted in a 38% reduction in the number of zero-dose children.

Finally, our cost-effectiveness analysis for HPV vaccination delivery revealed that tailored approaches such as school-based programs in urban areas and mobile outreach for nomadic and displaced populations are significant for enhanced coverage. Notably, Northern states require 2.3 times more investment to reach nomadic communities effectively.

© SCIDaR 2025
A happy mother cradles her newly vaccinated daughter

How can immunization service delivery be strengthened to address equity gaps by improving supply systems and community demand?

What was found

We found that vaccine access and equity were shaped by how efficiently supply chains performed, and how well communities were integrated into service delivery. Some of the effective strategies to strenghten delivery include:

1. Supply Chain Optimization

Direct-to-facility deliveries reduced vaccine stockouts in Kano from 41% to 10%, though cascade failures could still leave some communities (e.g., nomadic) underserved [4]. Outsourced logistics proved more cost-effective, costing $0.70 per child per year compared to $1.20 under legacy systems [4].

2. Pandemic Response: Health System Resilience amidst Covid-19 Disruptions

COVID-19 strained Nigeria's health system. Although state-level vaccine stocks remained 98% adequate, routine immunization in conflict zones dropped by 30% due to health worker shortages [5]. Governance gaps widened, with only 49% of LGAs completing action points during lockdowns, down from 79% pre-pandemic [5].

Private-sector partnerships sustained 87% on-time deliveries despite movement restrictions [5]. Pooled financing and strong M&E systems raised LGA-level vaccine availability from 21% to 98% [6]. Supply chain redesign improved delivery timeliness from 58% to 92% [6].

3. Community Integration

Name-based defaulter tracking and conflict-adaptive solutions saw 50% of Mai Unguwas conducting line-listing, reducing dropouts by 21% in rural wards [8]. However, unpaid incentives led to a 60% decline in volunteer participation [8].

4. Equity-focused service delivery redesign

HPV program subcategorization showed school-based strategies achieved 77% coverage in urban areas, compared to 49% for nomadic outreach [7]. Northern regions required 2.3 times more investment to reach mobile populations, driven by logistical, cultural, and infrastructural barriers [7].

What we learned

1. Immunization equity in Nigeria demands a multi-pronged approach centered on streamlined supply chains, conflict-smart delivery strategies, and active engagement of traditional leaders. For instance, direct vaccine deliveries that bypass broken LGA cold stores reduced stockout rates to 10% [4], demonstrating the efficiency of simplified distribution models.

2. However, equity comes at a higher cost—reaching nomadic populations in Northern Nigeria for HPV vaccination required 2.3 times more investment than urban populations [7].

3. Traditional leaders are effective mobilizers, but only when incentivized. In Kaduna, Mai Unguwas increased routine immunization by 21%, yet the program saw a 60% attrition rate once incentives were withdrawn [8].

4. During the COVID-19 pandemic, while state-level vaccine stocks remained 98% full, health facility sessions dropped 30% in conflict-affected areas [5], highlighting the fragility of subnational delivery. Achieving equity thus requires targeted investments, incentive structures, decentralized systems, local leadership, and adaptive planning for fragile settings.

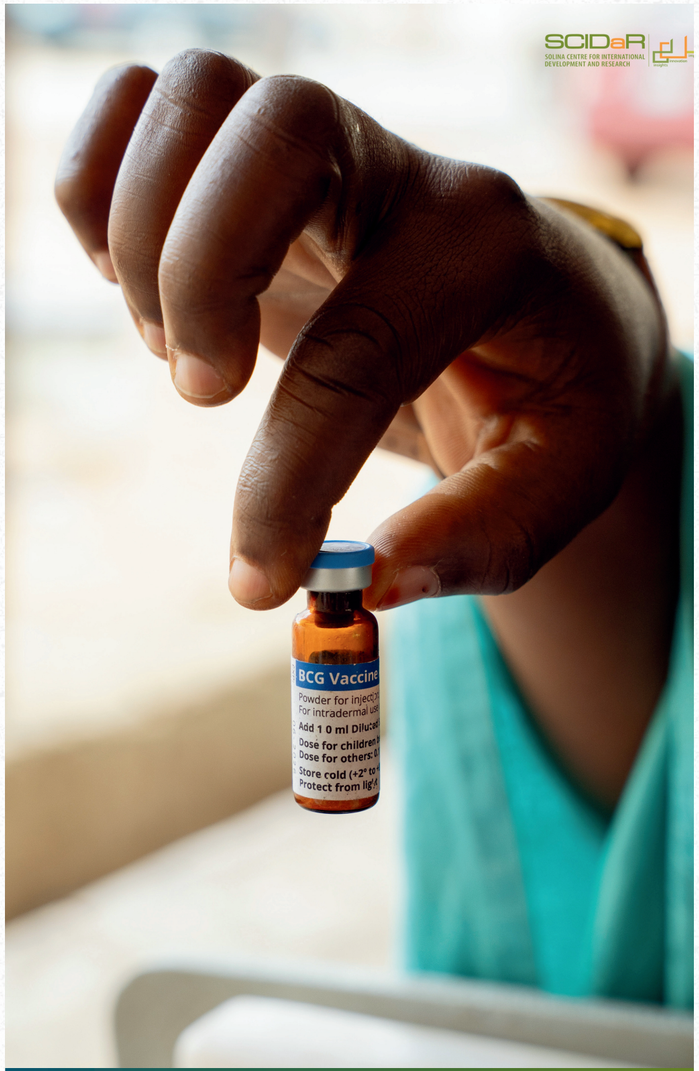
Why it Matters

Nigeria's immunization system faces persistent challenges, with northern regions home to a significant proportion of the country's estimated 2.2 million zero-dose children - one of the highest in the world [4]. Chronic supply chain breakdowns result in vaccine stockout rates of 41% in high-risk areas, while ongoing conflict, insecurity, and large-scale population displacement further restrict consistent access to essential life-saving immunization services [5]. These barriers are compounded by weak last-mile delivery systems, health worker shortages, and limited community engagement mechanisms, all of which hinder efforts to close immunity gaps and sustain vaccination coverage.

In response, the government's Nigerian Vaccine Policy (2023) outlines a commitment to begin local vaccine production by 2030, supported by the Abidjan Declaration pledge to fully self-finance immunization by 2028. Complementary initiatives, including the Basic Healthcare Provision Fund, the Immunization Recovery Plan, and the Big Catch-Up Campaign, aim to reduce zero-dose children by 80% by 2028 and reach 6.2 million children who missed vaccines between 2019 and 2022. Building on this momentum, Nigeria's successful introduction of the HPV vaccine in 2023, one of the largest such campaigns in sub-Saharan Africa, reached more than 14 million adolescent girls within its first year. This set a new benchmark for adolescent health interventions and demonstrated the country's capacity to deliver high-impact immunization at scale.

Scaling SCIDaR's equity-focused bundle, which combines direct deliveries, normadic outreach, and innovatively-incentivised community networks, offers a proven path to accelerate progress. This approach could prevent 250,000 missed vaccinations each year, cut stockouts to less than 10%, boost coverage in marginalized communities by 21–38%, and save $1.2 million annually through more efficient nomadic outreach.

However, significant evidence gaps remain, including the lack of cost-per-child data for mobile populations, limited understanding of the spillover effects of engaging traditional leaders, and untested performance of solar-powered storage in conflict zones. With Gavi transition looming in 2028, bridging these gaps is essential to protect gains and sustain progress.



© SCIDaR 2025
Examining a BCG Vaccine from a cold chain storage

Research Question:

How do geographic and sociocultural barriers affect immunization coverage and disease risk in hard-to-reach populations, and what strategies can help overcome these challenges?

Background

Immunization efforts in Nigeria's most underserved regions face layered challenges that disrupt both access and uptake. Geographic inaccessibility, driven by difficult terrain, armed insurgency, and displacement, hinders vaccination and surveillance activities, creating pockets of unimmunized populations and sustaining disease transmission. In addition, sociocultural and behavioral barriers, including vaccine hesitancy, misinformation, mistrust, and restrictive social norms, further limit uptake even where vaccines are physically available.

In response, adaptive strategies such as Reaching Every Settlement (RES), Reaching Inaccessible Children (RIC), and Community Informants in Inaccessible Areas (CIIA) have enabled targeted interventions in such difficult environments. These approaches deploy flexible delivery systems responsive to evolving security threats, improve real-time data reporting, and foster trust through community engagement. Mobile outreach teams, risk-informed microplanning, and coordination with security agencies have also helped vaccinators reach previously inaccessible high-risk settlements [1-4].

The studies referenced [1-4] here explore how evolving threats and local dynamics shape immunization outcomes and how tailored strategies can help close persistent gaps in coverage, offering critical lessons for global health delivery in fragile settings.

Research Contributions

Three of our studies examined how conflict and insecurity in hard-to-reach areas affect immunization coverage and disease transmission, while proposing context-specific mitigation strategies. Forbi et al. [1] quantified inaccessibility in Borno and Yobe States (2010–2020), linking insurgent control to polio outbreaks and validating satellite-tracked population displacement as a proxy for missed vaccinations. Their Reaching Inaccessible Children (RIC) initiative, paired with military collaboration, vaccinated 123,561 children in high-risk zones, demonstrating the feasibility of delivering vaccines despite intense insecurity.

Beyond physical access, addressing socio-cultural and behavioral barriers to vaccine uptake is particularly challenging in conflict-affected regions. The CIIA built trust by engaging local informants such as Mai Unguwas and Bulamas (ward heads) to identify and reach unreached settlements. Their presence fostered community acceptance, reduced misinformation, and enabled vaccination in previously resistant or inaccessible areas. As of 2024, 3 million zero-dose children have been reached—many through CIIA-supported campaigns [9].

These studies highlight the importance of multi-sectoral collaboration, locally grounded innovations, and adaptive delivery models in fragile settings. They also provide scalable blueprints for other countries facing complex humanitarian emergencies that threaten immunization continuity and public health progress.

How do geographic and sociocultural barriers affect immunization coverage and disease risk in hard-to-reach populations, and what strategies can help overcome these challenges?

What was found

Years of conflict carved invisible corridors for poliovirus, leaving nearly half a million children in Borno unvaccinated and allowing strains from 2011 to re-emerge in 2016. These findings show that only integrated strategies, pairing geospatial mapping, military escorts, and community intelligence, can close the gaps insecurity creates.

1.) Insecurity takes a toll on immunization coverage. Difficulty reaching certain areas because of conflict has had a

severe impact on immunization coverage, leaving over 468,800 children unvaccinated in Borno State in 2016 and creating pockets of susceptibility that allowed undetected wild poliovirus transmission [1]. Prolonged lack of access between 2014 and 2016 enabled silent poliovirus circulation, with genomic evidence linking the 2016 outbreaks to strains last detected in 2011 [1].

2.) Ongoing Barriers and the Need for Integrated Solutions.
Gender disparities remain a significant barrier, as female caregivers in conflict zones often face mobility restrictions and limited decision-making power, which worsen immunization gaps [3]. Overall, combining geospatial mapping, military collaboration, and community-led outreach has been essential in restoring immunization access in insecure and hard-to-reach areas [1][4].

3.) Strategies Used to Restore Access and Improve Surveillance.
To address these gaps, the Reaching Inaccessible Children (RIC) strategy used satellite-tracked vaccination teams with military escorts, immunizing 123,561 children in high-risk conflict zones [1]. The Community Informatics in Inaccessible Areas (CIIA) initiative improved acute flaccid paralysis (AFP) surveillance by training locals to report cases via mobile phones, reaching 5,691 settlements [1]. The name-based strategy also reduced pentavalent dropout rates by up to 4.8 percentage points through village heads tracking defaulters [4].

What we learned

1. Rigid health systems cannot function in conflict zones. Reaching trapped populations requires real-time geospatial tracking, mobile delivery models, flexible community networks, and in some cases, military partnership. The Reaching Inaccessible Children (RIC) initiative proved this by using armed escorts to ensure access and safety for vaccination teams in volatile settlements [1].

2. Technology alone, such as satellite imagery, cannot fully identify immunity gaps. Local informants provide essential on-the-ground intelligence, guiding interventions with nuanced, real-time insights [1]. Community leaders, especially Mai Unguwas (ward heads), bridged health teams and residents, reducing dropout rates, and fostering lasting behavioral change [4].

3. Conflict intensifies restrictions on women's mobility, creating additional hurdles for child immunization. Effective strategies must ensure caregiver safety, strengthen decision-making autonomy, and integrate gender-sensitive outreach mechanisms tailored to the realities of women in conflict-affected areas [2].

4. Approaches like CIIA's mobile surveillance and RIC's tactical vaccinator teams have shown success in reaching underserved, high-risk communities.

5. Overall, these cost-effective, adaptable digitally-enabled and co-created models offer replicable solutions for delivering health services equitably, especially in humanitarian settings.

© SCIDaR 2024
Resilient health workers bringing vaccines to children in hard-to-reach, high-risk areas.

Why it Matters

Nigeria's conflict-affected regions continue to face dangerous immunity gaps, as seen in the 2016 polio resurgence caused by undetected virus circulation in inaccessible areas for over five years [1]. In response, national frameworks like the Immunization Recovery Plan (2022–2025) and the NSIPSS have prioritized outreach in insurgent-held zones, including military collaboration. Proven strategies such as RES, RIC and CIIA, which vaccinated millions of children, show how alignment with national plans can restore vaccine delivery and prevent outbreaks of diseases like polio and measles [1].

Despite strong national frameworks and promising field interventions, critical evidence gaps threaten the scalability and sustainability of immunization efforts in conflict-affected regions. First, the cost-effectiveness of strategies like CIIA in active insurgency zones remains unquantified, limiting their integration into long-term planning. Second, the broader influence of community leader engagement, particularly its potential to shape cross-border health-seeking behaviors, is poorly understood. Third, predictive models that link land-use changes, displacement patterns, and disease outbreaks are still underdeveloped, leaving planners without the foresight needed to preempt emerging risks.

With Nigeria's transition from Gavi support accelerating by 2028, the urgency to strengthen immunization systems in fragile settings has never been greater. Scaling conflict-ready delivery bundles, combining mobile outreach, geospatial mapping, military-escorted access, and leader-led accountability, offers a proven pathway to reach previously inaccessible populations. Closing these evidence gaps will be essential to ensure that these innovations are not only impactful but also replicable and resilient in the face of future crises.

However, doing so effectively requires robust, context-specific evidence to guide implementation under the dual pressures of fiscal constraints and persistent security threats. Without such evidence, scaling risks inefficiencies, unsustainable costs, and uneven coverage.

SCIDaR's research directly addresses some prevailing gaps by generating operational insights, measuring cost-effectiveness, and identifying adaptive strategies that work in the most volatile environments. This knowledge equips policymakers, funders, and frontline implementers to transform zero-coverage zones into protected populations, thereby safeguarding health gains, preventing the resurgence of vaccine-preventable diseases, and advancing global elimination goals, even in the midst of ongoing instability.

To close the identified gaps, SCIDaR will prioritize research that rigorously evaluates the cost-effectiveness of conflict-informed immunization strategies under fiscal and security constraints, ensuring limited resources yield maximum impact. It will also investigate how integrated community leader engagement strategies strengthen AI-supported approaches to enhance cross-border vaccination and coverage, especially in regions fragmented by insurgency or displacement. Additionally, SCIDaR will pursue developing predictive models that integrate land-use changes, migration patterns, and surveillance data to anticipate outbreaks and guide proactive immunization efforts. By generating context-specific evidence, SCIDaR provides guidance for scalable, resilient delivery models that transform zero-coverage zones into protected populations and sustain immunization gains in volatile environments.

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Hit-and-run vaccination team preparing to reach children in a security-sensitive community.

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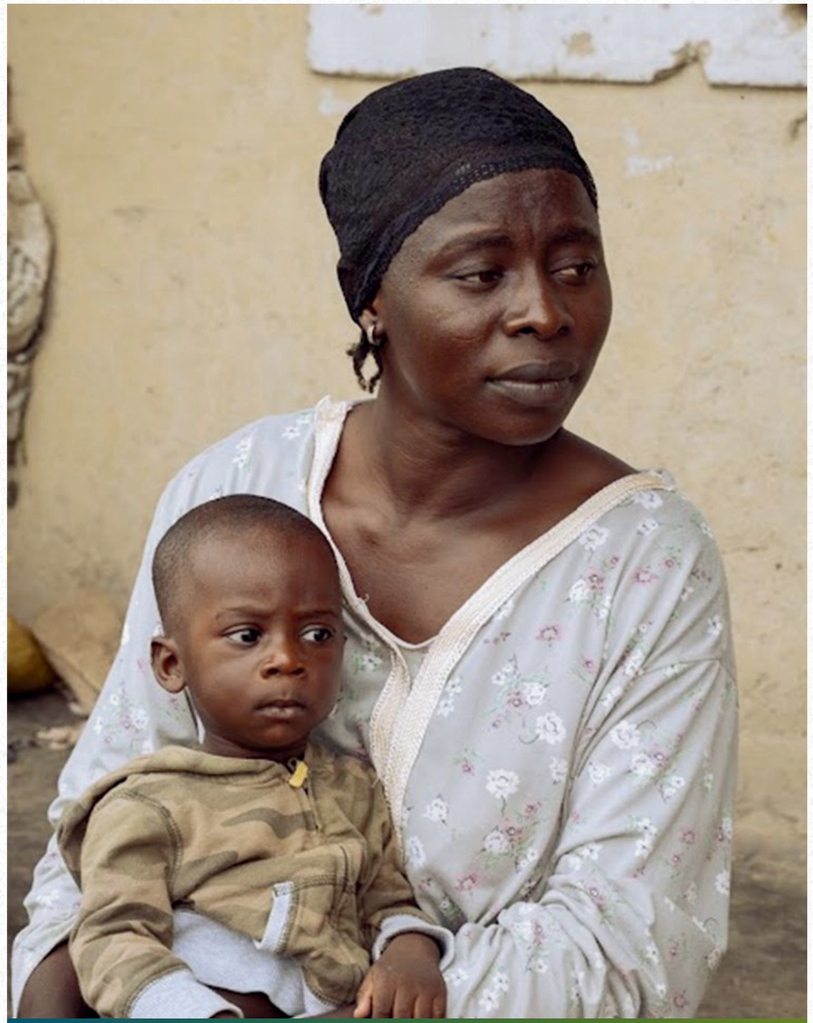

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A mother holds her son in anticipation of his vaccination

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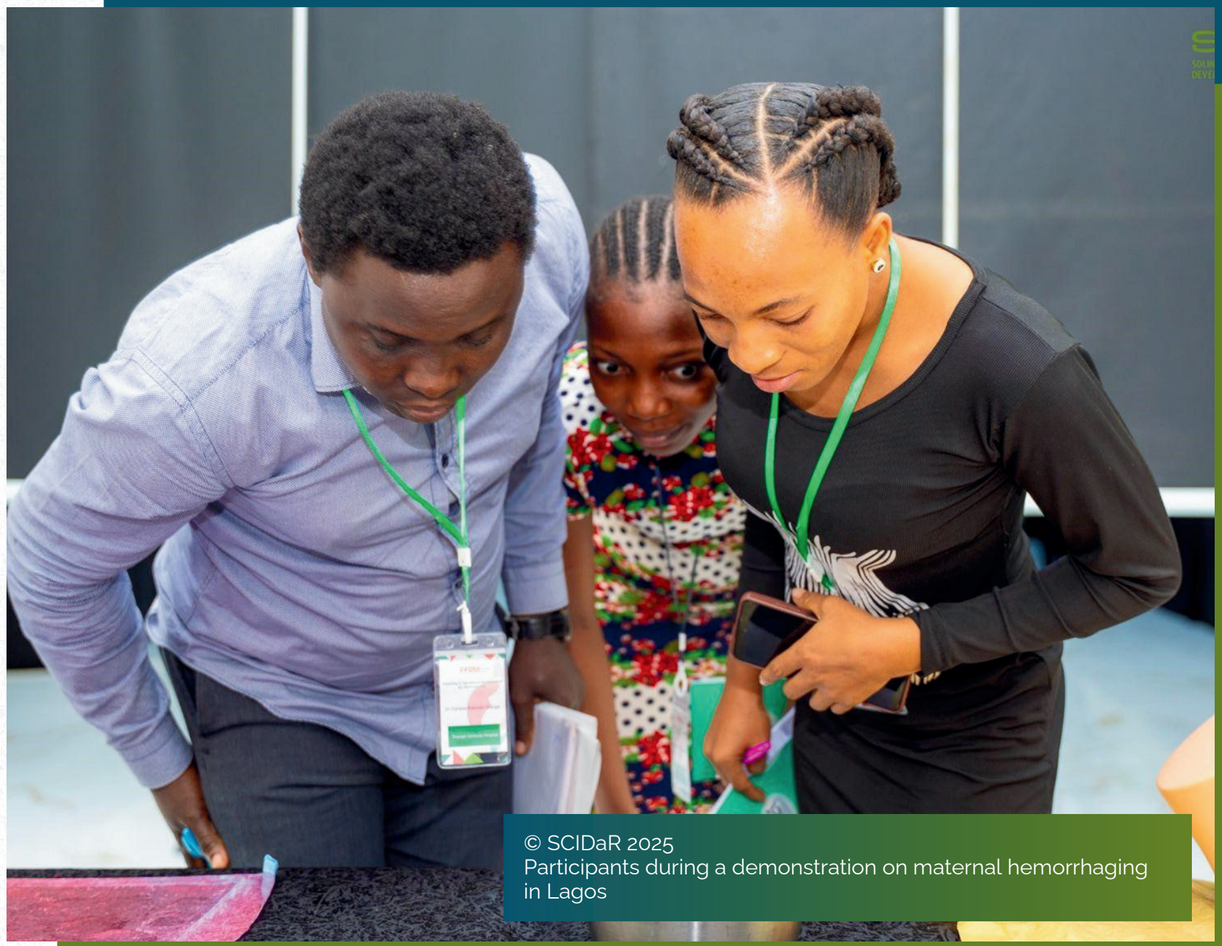
C

HEALTH SYSTEMS STRENGTHENING FOR SUSTAINABILITY

What does it take to build health systems that deliver for everyone, everywhere?



© SCIDaR 2025
Participants during a demonstration on maternal hemorrhaging in Lagos

How do we ensure that the systems built in Abuja
speak to the daily realities of clinics in Ilesa?

That every structure strengthened,
every capacity built,
every institution transformed
reaches every level of care.

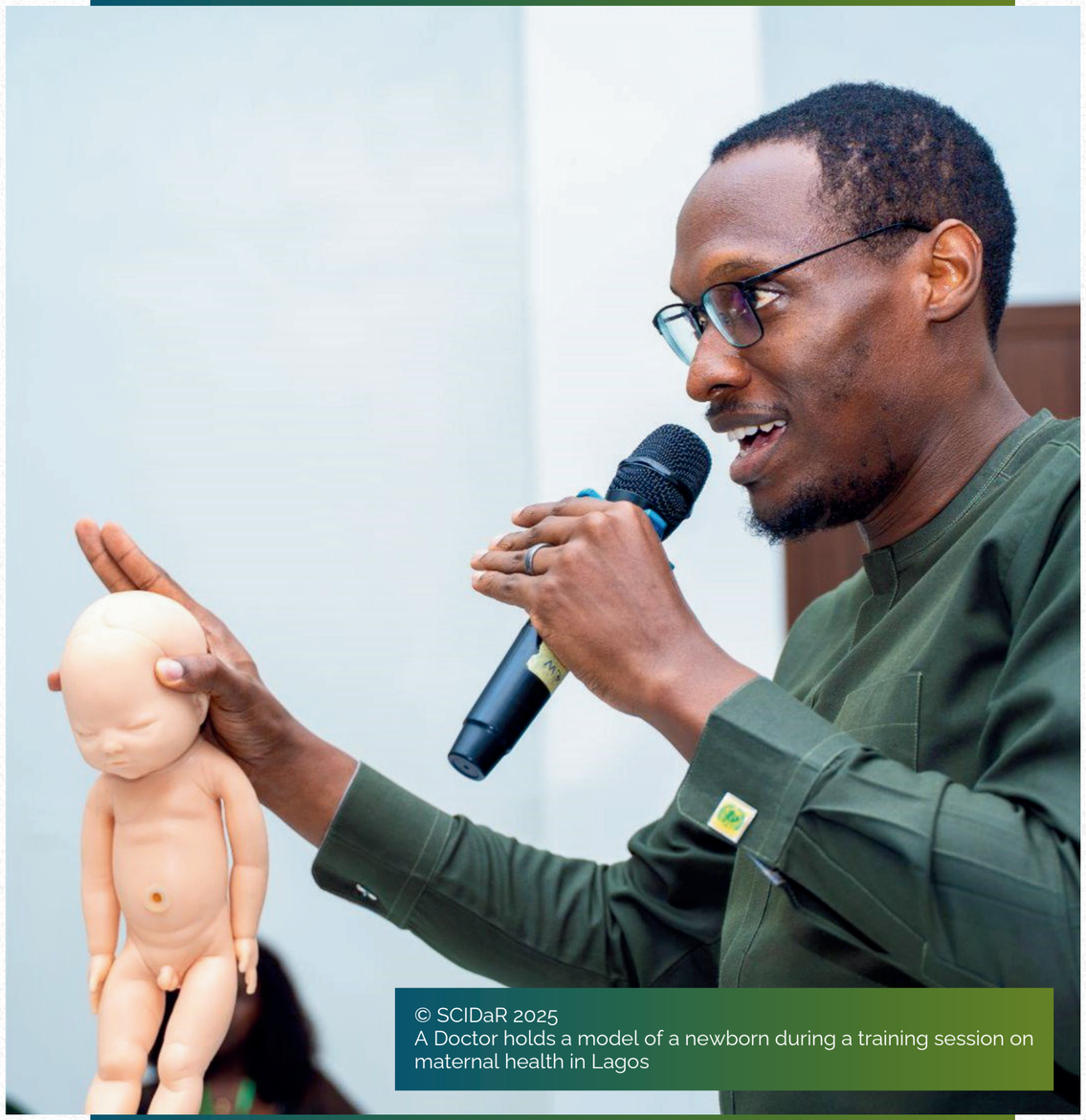
From national corridors
to PPMVs in rural communities,
from a researcher's desk in Lagos
to the community health worker's kit in Moduganari.

How do we build systems that not only survive
but grow stronger?
Institutions that endure, evolve, and adapt,
bending without breaking.

Because when systems work,
the nurse in Ikom doesn't have to choose
between what's needed and what's available.
The patient in Ogun receives the care they deserve.
The health worker in Cross River
carries the confidence of an institution
designed to empower.

This is the outcome we seek:
structures translated into strength,
institutions into impact,
capacity into care that travels every road,
touches every community,
and reaches all who need it.

Because healthcare is people.
And systems are the promise we make,
the promise that every person matters.



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A Doctor holds a model of a newborn during a training session on maternal health in Lagos

Research Question:

How can leadership and feedback systems strengthen frontline worker motivation and effectiveness?

Background

Nigeria's primary health care system, the bedrock for achieving Universal Health Coverage (UHC), faces enduring challenges that hinder its ability to deliver quality, equitable care [1]. Preventable diseases remain prevalent, with low immunization coverage and high maternal and child mortality rates. Structural issues, such as weak program management, fragmented service delivery, poor data utilization, and underfunding, have contributed to these outcomes. Despite national efforts such as launching the Gates-funded Leadership Development Academy (LDA) by the National Primary Health Care Development Agency, significant gaps remained, especially at sub-national levels [2,3].

Recognizing these systemic weaknesses, organizations like SCIDaR have focused on strengthening institutional capacity through targeted interventions [2,3]. One such approach involves building leadership and management competencies among health officials, particularly at the local government and health facility levels [4,5]. By promoting data-driven decision-making, coordinated service delivery, and mentorship-based supervision, these initiatives aim to create a more resilient and responsive primary health care (PHC) system [2,3,6].

Building on this foundation, this section explores the capacity-building interventions that have helped strengthen Nigeria's primary health care system by improving frontline leadership, enhancing service coordination and competence, and fostering data-driven decision-making across diverse and underserved communities.

Research Contributions

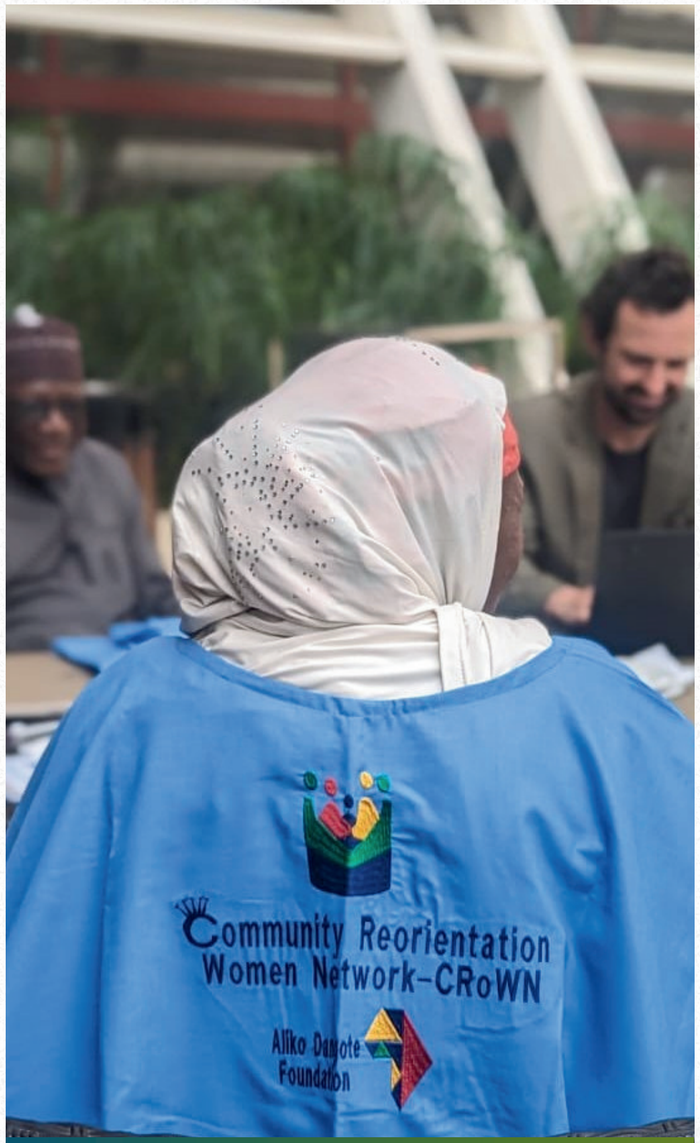
From the reviewed research pieces, it is easy to understand the gains from institutionalizing capacity building, as it remains the foundation for sustainable reform, local actor empowerment, and improved competency for equitable service delivery.

The Leadership and Management Development strategy strengthened the operational capacity of RI line managers. Equipped with tools for planning, coordination, and data interpretation, managers now show stronger ownership of programs. This has enabled more efficient resource use, quicker decision-making, and improved service delivery across LGAs.

The One-LGA Approach served as a powerful model for scalable reform. By focusing technical support and resources at the subnational level; including piloting in one LGA in Yobe state, SCIDaR created a high-performing hub that demonstrated best practices in effective capacity building where it is most needed. Replicating this model in other LGAs would result in substantial gains.

Through supportive supervision, the role of supervisors shifted from fault-finding to mentorship. This boosted morale, strengthened teamwork, and improved service quality. Frontline workers now receive real-time guidance, resulting in more consistent performance and better patient outcomes.

Together, these strategies form a cohesive model for strengthening Nigeria's primary health care system. By investing in leadership, showcasing scalable success, and fostering mentorship, SCIDaR demonstrated that transformation is possible.



© SCIDaR 2023
The CRoWN Ambasador increasing vaccine uptake in the northern part of Nigeria

How can leadership, coordination, and feedback systems equip and retain frontline workers to build a resilient, high-performing Nigerian health system?

What was found

We found that integration, training, and responsive feedback mechanisms reinforced one another in strengthening PHC systems. Across interventions, scalable localized strategies and supportive supervision models consistently improved provider performance, institutional capacity, and immunization outcomes. Together, these findings highlight practical, cost-efficient approaches for sustaining competence.

1.) Institutional Strengthening through Capacity Building and Responsive Feedback

Gates Foundation Funded Leadership development Academy and the PHC line manger Capacity Building Project implemented by the NPHCDA and SPHCBs deployed integrated capacity building approaches that proved most effective when paired with responsive feedback (RF) mechanisms [2–4].

Through the 3-domain (Institutional, Programmatic & Personnel) model, skills were sustainably transferred to government personnel, enhancing Primary Health Care Under One Roof implementation, financial management and programme perfromance [2,4]. Meanwhile, RF mechanisms embedded in leadership programs led to notable improvements in staff competencies (41% → 57%), and increased organizational agility for urgent responses, such as the COVID-19 vaccine rollout [3,4].

2.) Mentorship Over Monitoring: Rethinking Supervision in Primary Health Care

Rethinking supervision as mentorship rather than oversight unlocked frontline potential. SCIDaR's model: restructuring supportive supervision into distinct capacity-building and performance-assessment functions improved facility performance by 24% and cut costs by 31% [7]. This finding emphasizes that reforming health facility supervisory structures creates sustainable, cost-effective improvements in PHC delivery.

3.) Scaling What Works: Lessons from the One-LGA Approach

Tailored co-created approaches for sustained competence at the frontline, such as the "One LGA Approach", yielded measurable gains in immunization performance [5], This approach has fostered local ownership, driving accountability and innovation in service delivery [5,6]. This targeted investment builds sustainable systems by strengthening leadership, enhancing coordination, and enabling replicable success across Nigeria's PHC landscape, proving that transformation begins at the sub-regional level.

4.) From Evidence to Policy to Practice: Bridging the Gap in Nigeria's PHC System

Bridging the gap from evidence to policy to practice is essential for transforming Nigeria's PHC system. SCIDaR's

interventions, like the One-LGA Approach and mentorship-based supervision, demonstrate that locally adapted, evidence-driven models can improve outcomes and reduce costs. Embedding these proven strategies into national policy and frontline implementation strategy ensures sustainable, equitable health care that reaches every community and delivers lasting impact where it matters most. The creation of institutional structures such as the NPHCDA LDA that function as system-wide capacity-building platforms remains integral to health system strengthening through knowledge translation and transfer.

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A participant during a World Malaria Day event in Abuja.

What we learned

1. "Winning small and scaling big" may be the key to developing cost-effective health system strengthening strategies. Locally co-created interventions, such as the One-LGA Approach, have demonstrated effectiveness in addressing context-specific health system challenges. Focusing efforts on a single LGA, allocating sufficient resources, and using it as a learning hub has proven to be an effective strategy for developing adaptable, cost-efficient CB interventions. This localized approach enables rapid iteration, fosters community ownership, and creates scalable models that can be replicated across broader contexts with greater efficiency.
2. Rethinking supervision as mentorship rather than oversight unlocked frontline potential. SCIDaR's model, restructuring supportive supervision, improved facility performance. Lower cadre workers began to view their supervisors as guides rather than enforcers, fostering a sense of responsibility, collaboration, and improved service delivery. This finding emphasizes that reforming health facility supervisory structures creates sustainable, cost-effective improvements in PHC delivery.
3. Having a system like the NPHCDA LDA ensures institutional learning, effective translation of evidence into practice, and the development of sustainable strategies for continuous improvement in service delivery. We observed how its integrated capacity-building approach, which combined responsive feedback with a three-domain framework, led to measurable gains in PHCUOR implementation, financial management, staff competencies, and pandemic response. This structure demonstrates how technical skill transfer and adaptive learning systems reinforce institutional resilience.

Why it Matters

Our experience shows that technical design alone is not enough. CB interventions must be rooted in local realities, with every stakeholder, including the communities, actively shaping solutions. Contextual adaptation and shared ownership build trust, drive relevance, and ensure that reforms are not only accepted but sustained across diverse health system settings.

The One-LGA Approach demonstrates that starting small can deliver outsized impact. By concentrating resources and building capacity in a single LGA, SCIDaR created a learning hub for rapid iteration and people-centered innovation. This model has proven to generate cost-effective, scalable solutions tailored to local realities, making replication across wider geographies both practical and impactful.

Beyond scalability, the approach is highly adaptable for addressing health inequities. By directing more resources to the specific LGAs driving the heaviest burdens, whether in immunization coverage, malaria prevalence, or maternal mortality, it accelerates progress where it matters most. This principle underpins the design of the Z-Drop and MAMII initiatives, which concentrate resources on a small subset of

Nigeria's LGAs to tackle inequities in PHC access, focusing on zero-dose children and underserved pregnant women, the groups most affected by preventable childhood and maternal deaths, demonstrating how localized investment can drive national impact.

Being bold enough to step away from the norm is innovation in itself. Transforming supervision into mentorship has unlocked new levels of frontline performance. When lower cadre workers see supervisors as guides, not enforcers, collaboration flourishes. SCIDaR's dual-track model improved outcomes and reduced costs, showing that empowered teams are the backbone of resilient primary health care systems.

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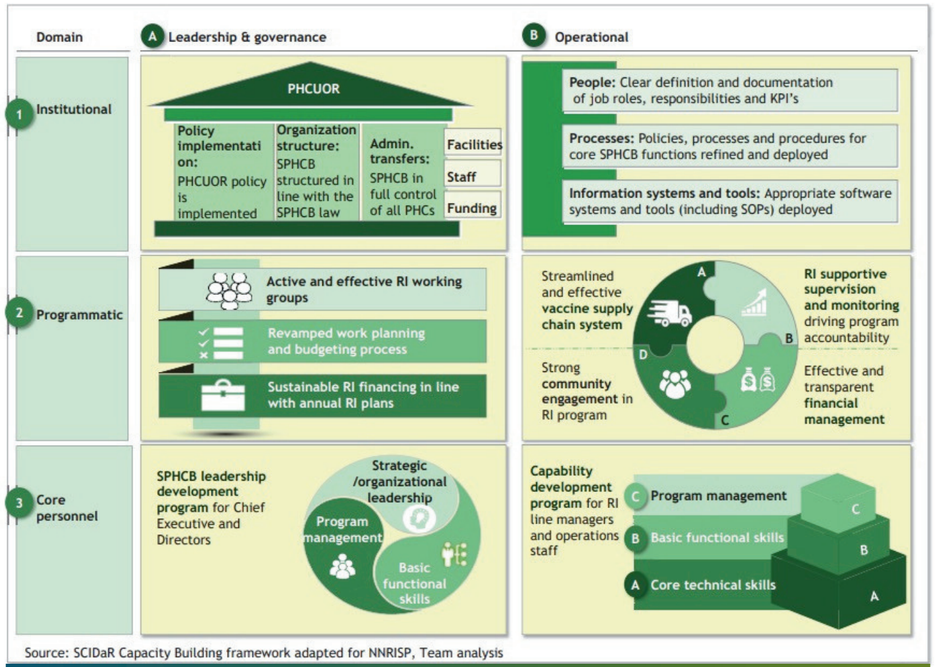
Polio workers go further, supported by stronger acceptance of life-saving vaccines.

TOOLS



Source: SCIDaR Capacity Building framework adapted for NNRISP, Team analysis

3-prong Capacity Building framework

Staff performance is assessed using a 5-point scale which determines the appropriate capacity building intervention to be deployed

Performance level	Symbol	Example	Potential interventions
1 **Does not conduct activity**	○	Health facility stock allocations are not conducted by primary staff	• Develop/revise staff ToR to include activities • Share necessary work tools with staff • Determine teaching approach either classroom or on-the-job coaching
2 **Conducts activity with support from partners**	◔	**Partners support assigned staff** to revise health facility stock allocations to meet deadlines	• Conduct on-the-job coaching sessions • Hold in-class training sessions • Share SOPs/guides with staff
3 **Conducts activity with prompting from partners**	◑	**Partners constantly remind assigned staff** to revise health facility stock allocations on time	• Engage supervisor to hold staff accountable • Share and paste SOPs with clear timelines • Set up reminders on computers/phones
4 **Conducts activity independently**	◕	**Assigned staff revises health facility** stock allocations (as required) by **him/herself within the stipulated timelines**	• Provide/train backstops to carry out activities • Plan for transitioning of thematic area to full SPHCDA support
5 **Activity institutionalised (at least one competent backstop & SOPs)**	●	Assigned staff revises health facility stock allocations by him/herself and **has a backstop that can do same in case of absence of the assigned staff**	• Completely transition thematic areas to SPHCDA

Figure 5: Five-point measurement rubric and corresponding interventions for assessing and optimizing personnel capacity

Innovative 5-point scale for measuring capacity

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An infant receiving the polio vaccine at a health facility

Research Question:

Howcandifferentiatedservicedelivery in private sector providers strengthen HIV treatment outcomes?

Background

Despite the remarkable global progress against HIV, a critical gap exists in ensuring that People Living with HIV (PLHIV) are retained in care, and attain a sustained viral load suppression. This is not just a clinical challenge, it's a systemic one, especially in low-income settings where geographical barriers and limited-service availability frequently disrupt consistent, high-quality care. This challenge translates directly into suboptimal health outcomes..

In enhancing HIV care, we have been nudged towards evaluating other service delivery models such as the implementation of the Differentiated Service Delivery (DSD) models in private sector providers (PSPs) while also assessing the overall health facility attributes. These strategies are not just theoretical concepts; they are proven, patient-centric approaches designed to optimize HIV treatment and support by tailoring care delivery to individual needs. This integration is essential for not only strengthening the immediate HIV response but also for ensuring its long-term financial and operational sustainability.

This vision formed the fundamental premise of three recent studies [1, 2, 3] we carried out which informed three key areas, highlighted thus:- Readiness of PSPs to implement DSD for HIV care-Impact of DSD Implementation on client retention- Facility attributes that are most associated with successful retention and virologic suppression.

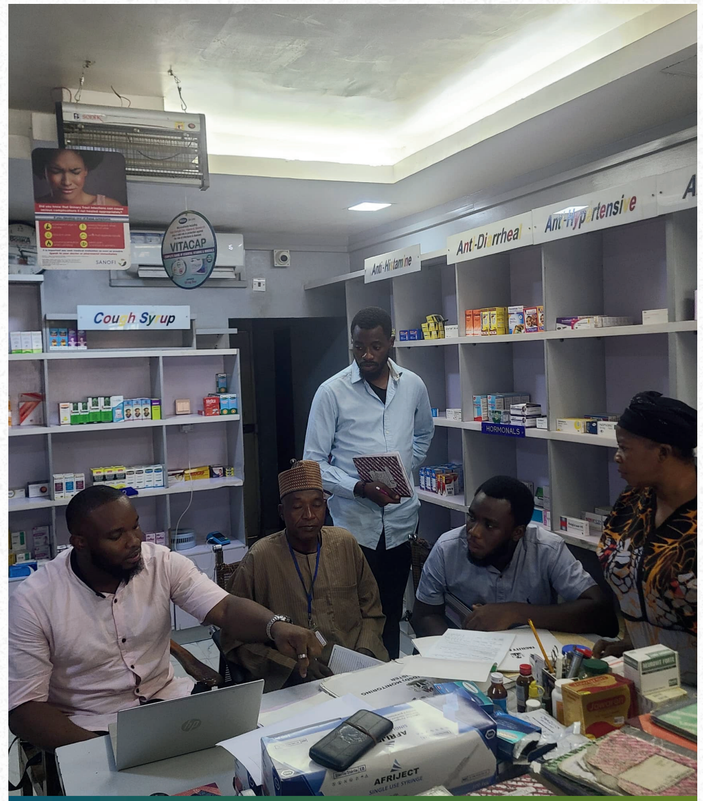
Research Contributions

SCIDaR applied a data-driven roadmap to test the feasibility and effectiveness of differentiated service delivery (DSD) models for HIV care in Nigeria's private sector providers (PSPs).

The process began with a multi-state readiness assessment across states infrastructure, workforce, and service scope. This assessment covered 157 private hospitals, 176 pharmacies, and 58 laboratories, generating the first evidence base on PSP capacity for HIV service delivery [1].

Building on these insight, SCIDaR piloted DSD implementation in Kwara and Niger States. An impact study involving 627 devolved clients, receiving care through facilities, pharmacies, and community support groups, demonstrated the potential of PSP-led DSD to maintain continuity of care while reducing facility congestion [2].

Further research expanded into Benue, Nasarawa, and the FCT, generating Nigeria's first large-scale outcome data from private facilities. A retrospective analysis (2013–2019) of 221 SCIDaR-IHVN–supported facilities compared DSD model sites against standard-support facilities, showing that patients in model facilities achieved significantly better retention and viral suppression outcomes [3].



(c) SCIDaR 2022
Collaborative efforts in data assessment to build stronger HIV programs and healthier communities.

What was found

High client retention and viral load suppression were underpinned by the readiness of private sector providers and the greater accessibility of care in model facilities. Together, these findings point to a DSD approach that is both feasible and effective across multiple dimensions of service delivery.

1. Readiness of Private Sector Providers (PSPs) and Community Lab and Pharmacists' Capacity

Readiness was strong across the private sector. Eighty-three percent of private hospitals met the eligibility criteria to serve as drug pickup sites. Similarly, 85% of community pharmacists and 98% of community laboratories met licensing and eligibility requirements, confirming their capacity to participate in DSD delivery.

2.) Client Retention Rate and Viral Load Suppression Among Devolved Clients with DSD

DSD models showed high effectiveness in sustaining treatment. Retention for ART refill visits stood at 95%, while viral load suppression rates reached 97% among devolved clients—demonstrating both continuity and clinical success.

3.) Accessibility of care in Model facilities vs Standard support facilities Increased access was evident in model facilities, where 44.5% of patients in the FCT and 33.7% in Nasarawa were enrolled. These facilities benefited from more intensive technical support, reflected in lower facility-to-QIT staff ratios, compared to standard support sites.

What we learned

1. The findings of the first study are significant, demonstrating substantial, untapped structural capacity within the private hospital sector that can be leveraged for immediate implementation of Differentiated Service Delivery (DSD). This high readiness rate challenges the perception that private facilities are inherently unsuited for this role and provides a strong foundation for scaling. Further reinforcing the readiness narrative, our data show that 85% of community pharmacists assessed met the eligibility criteria, while 98% of community laboratories met the licensing criteria. This also serves as a critical insight for decentralization [1].

2. The impact assessment of Differentiated Service Delivery (DSD) implementation on client retention revealed a 95% client retention rate for antiretroviral therapy (ART) refill visits within DSD models [2]. This finding directly addresses the overarching challenge of retention in HIV care, suggesting that when DSD models are effectively implemented, clients are highly likely to remain engaged in their treatment. These results affirm the utility and patient-centred nature of DSD models.

3. Study 3 findings, on the other hand, strongly support the concept that differentiated, intensified technical support to facilities leads to improved patient outcomes.

4. By classifying HIV care facilities into model facilities and standard support facilities based on the intensity of technical support received, the study found that receiving care in model facilities was associated with significantly lower risks of all-cause exit and loss to follow-up, as well as increased odds of viral suppression. Clients in model facilities were also significantly more likely to switch to a second-line antiretroviral therapy (ART) regimen.

5. These findings suggest that dedicated, intensive technical assistance and a lower Quality Improvement Team (QIT)-to-facility ratio are critical enablers for the successful adoption of HIV care within private for-profit health facilities and for increasing patient enrollment. This underscores the importance of a robust support infrastructure for effective scale-up, rather than relying solely on the inherent readiness of the facilities themselves.

Why it Matters

These findings show that strengthening HIV care in Nigeria does not require starting from scratch. By leveraging private sector providers (PSPs), a ready, underutilized infrastructure, the system can expand services quickly and at lower cost. This creates a clear opportunity to de-risk investments, accelerate scale-up, and strengthen resilience in national health systems.

The success of Differentiated Service Delivery (DSD) models reinforces this potential. High retention rates mean fewer interruptions, reduced loss to follow-up, and more efficient use

of resources. For policymakers and investors, this translates into greater impact for every naira spent. For international partners, it provides evidence to advocate for wider adoption of DSD in country programs and global strategies.

Technical assistance also plays a pivotal role. Targeting standard facilities and sustaining operational support enables more efficient and resilient HIV programs. This matters even more in the context of shrinking Official Development Assistance (ODA) flows, where Nigeria's historic reliance on PEPFAR and the Global Fund is increasingly fragile. As donor support plateaus, the pivot toward domestic financing and private sector engagement through insurance integration, workplace programs, and community models becomes essential. Initiatives like the Sustainable Financing Initiative (SFI) already show how private participation can expand access, reduce costs, and strengthen resilience.

The challenge now is ensuring long-term viability. Evidence on PSPs under domestic financing remains limited, and deeper research is needed to track retention, service quality, and financial sustainability. Closing these gaps will not only guide Nigeria's response but also provide lessons for other African countries navigating declining donor support. SCIDaR, alongside other partners, is well positioned to help drive this agenda and ensure the HIV response remains both effective and sustainable in the decade ahead.

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CRoWN women at work: raising immunization rates in northern Nigeria

Research Question:

What factors shape client uptake of differentiated HIV service delivery models in Nigeria?

Background

Conventional public health facilities in many settings are overburdened, resulting in long wait times, service bottlenecks, and geographical barriers that make it difficult for people living with HIV (PLHIV) to access consistent care. For a condition that requires lifelong treatment, this challenge is especially critical: availability of services alone is not enough, they must also be genuinely accessible and responsive to client needs. When access gaps persist, clients are more likely to miss appointments, interrupt treatment, and face poorer health outcomes, including lower rates of viral suppression.

At the same time, communities are not monolithic. They are shaped by distinct socio-cultural norms, varying levels of trust in public and private providers, and diverse expectations of how, where, and from whom care should be received. Socio-demographic realities, such as age, gender, education, and economic status, further influence how individuals navigate the health system. These human dimensions often determine whether services are embraced or avoided. Overlooking them risks undermining programme investments, limiting service uptake, and perpetuating inequities in health outcomes.

Against this backdrop, we sought to understand the client perspective more deeply. We asked: How do PLHIV perceive their available healthcare options? What strengthens or erodes their trust in different providers, including those in the private sector? What practical considerations, from proximity and convenience to privacy, cost, and perceived quality, shape their choices for accessing HIV care? And how do client demographics influence decisions to initiate and remain in long-term treatment? By grounding our inquiry in these questions, we aimed to surface client-centred insights that can guide the design of more responsive HIV programmes, improve community access, and ultimately strengthen treatment adherence and health outcomes.

Research Contributions

SCIDaR contributed pioneering evidence on how client preferences and facility attributes shape access to HIV care in Nigeria's private sector.

The first study analysed routine programme data from over 17,000 HIV clients across 18 public facilities in five states. When offered Differentiated Service Delivery (DSD) through private providers, 93% declined. The main reasons were loyalty to existing hub facilities (63%), distance to private providers (21%), and confidentiality concerns (9%). These unexpected findings highlight that adoption of innovative care models is driven less by client choice alone and more by trust, proximity, and privacy considerations.

A second study examined over 22,000 patients across 214 private facilities in Benue, Nasarawa, and the FCT using the PEPFAR RADET database. Facilities receiving intensive technical support ("model facilities") achieved stronger outcomes: lower risks of exit and loss to follow-up, higher rates of viral suppression, and improved management of treatment switches.

What was found

High client retention and viral suppression were challenged by strong loyalty to hub facilities and persistent demographic disparities in treatment outcomes. Together, these findings highlight the need to address access, gender, and regimen-related gaps for DSD models to succeed at scale.

1.) Client loyalty to current care facilities When offered differentiated service delivery (DSD) through private-sector providers, 93% of clients declined. The majority preferred their existing hub facilities (63%), while others cited distance to PSPs (21%) and confidentiality concerns (9%). These findings highlight the strength of client loyalty to established hubs and underline the need to address access and privacy barriers before scale-up

2.) Predictors of negative outcomes Analysis showed that men were at higher risk of death (HR 1.47) and loss to follow-up (HR 1.08). Younger clients starting ART had a lower risk of mortality but were more likely to be lost to follow-up and less likely to achieve viral suppression (OR 0.71). This indicates that younger age, while protective

against early mortality, poses challenges for long-term treatment adherence.

3.) Predictors of regimen switch Patients in model facilities were more than twice as likely to switch regimens (OR 2.16), reflecting stronger monitoring and clinical responsiveness. Those on AZT-based regimens (OR 2.00) or with low baseline CD4 counts (OR 2.40) also showed significantly higher switching rates, underscoring the importance of proactive treatment management.

4.) Viral suppression outcomes Overall, 75.6% of patients achieved viral suppression. However, men (OR 0.84), patients on AZT-based regimens (OR 0.72), and younger patients (OR 0.71) were less likely to achieve this outcome. These findings highlight persistent gender and regimen-related gaps that need to be addressed to optimise viral suppression rates.

What we learned

1. Our investigations into Differentiated Service Delivery (DSD) in Nigeria reveal a crucial paradox: despite the promise of private sector engagement, 93% of clients initially declined DSD models delivered through private sector providers (PSPs) (1). This substantial demand-side challenge stemmed from a strong preference for existing facilities, distance-related barriers, and confidentiality concerns. These findings underscore the need for service design to be grounded in a deep understanding of client preferences and trust.
2. Beyond initial uptake, our findings reveal critical demographic vulnerabilities. Male patients consistently experienced worse outcomes, including higher risks of death and loss to follow-up, as well as lower odds of viral suppression. Likewise, younger patients—despite a lower mortality risk, had increased risks of loss to follow-up and reduced odds of viral suppression (2). These insights highlight the need for tailored, age- and gender-responsive DSD models to ensure equitable outcomes.
3. Clinically, although an overall viral suppression rate of 75.6% is encouraging, specific factors were found to hinder it. Male gender, use of zidovudine (AZT)-based regimens, and younger age were significantly associated with lower odds of viral suppression. Furthermore, care in “model facilities” and a lower baseline CD4+ count were strongly associated with regimen switches. These findings underscore the importance of optimising initial regimens and ensuring robust, ongoing clinical support.
4. In summary, the success of HIV care and Differentiated Service Delivery (DSD) in Nigeria depends on addressing client-centred barriers and adapting services to patient demographic profiles. Strategic investments that build trust, enhance accessibility, and deliver targeted support to vulnerable groups are essential to unlocking the full potential of DSD in the national HIV response.

Why it Matters

Translating raw evidence into tangible impact requires converting our findings into targeted strategies that directly address identified challenges while leveraging proven successes.

Our results reveal a striking 93% initial client rejection rate of DSD models, underscoring the critical importance of demand-side interventions. Evidence supports the implementation of targeted, multi-pronged client engagement and education campaigns specifically designed for DSD delivery through private sector providers (PSPs). Building trust and safeguarding confidentiality must remain central to the design of HIV care models, as these are key patient concerns.

Greater impact may be achieved through flexible “hybrid” models that enable gradual transition for clients reluctant to move fully from public to private facilities. In addition, geographic accessibility should guide the placement of DSD service points and inform broader public health delivery strategies.

Addressing the evidence from the second study, we propose shifting from a one-size-fits-all approach to highly targeted DSD models. Developing and piloting gender and age specific DSD packages, aligned with male work schedules, leveraging male-friendly spaces, and incorporating discreet follow-up methods’ offers promising approaches to achieving equitable care. Similarly, HIV care

models can integrate peer support, youth-friendly services, digital health tools to enhance engagement, and educational components that address adherence challenges specific to younger clients.

The superior outcomes observed in “model facilities” receiving intensive technical support underscore its essential role. This is not a luxury; it is a critical area for sustained healthcare investment. Programs should allocate resources to deploy dedicated Quality Improvement Teams (QITs) with low facility-to-staff ratios, ensuring ongoing mentorship, training, and performance monitoring for PSPs to guarantee high-quality DSD implementation and continuous improvement.

By translating these evidence-based insights into deliberate, actionable strategies, focusing on client engagement, targeted interventions for vulnerable groups, and optimised clinical and support models—Nigeria can fully harness the potential of DSD through private sector partnerships. This will accelerate progress towards HIV epidemic control and achievement of the 95-95-95 targets. The data from these studies provide more than insights; they form a strategic blueprint for impactful action in Nigeria’s HIV response.

Finally, these recommendations must be viewed within today’s funding realities. With U.S. Government (USG) support gradually receding and a shift toward country-led HIV programs, Nigeria must urgently embed sustainability into DSD models, mobilise domestic resources, and strengthen public–private partnerships. Building resilient, country-owned systems is now the defining challenge, and opportunity, for the next phase of Nigeria’s HIV response.

© SCIDaR 2024
Ensuring HIV antiretroviral drugs reach those who need them, where and when they need them.

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D

DIGITAL SOLUTIONS FOR EQUITABLE PRIMARY HEALTH CARE DELIVERY

What does it take to build health systems that deliver for everyone, everywhere?

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What if
the first line of health
came to you at home
through a simple phone call,
or a kiosk on your street,
familiar as the market stalls.

What if care was nearer
than the distance to a clinic,
closer than the cost of transport,
ready in the language you speak.

What if digital was not a screen,
but a doorway to dignity,
a system that remembers
no one should be left behind.

© SCIDaR 2025
An elderly lady receives care at a Telehealth Screening in Lagos

Research Question:

How do telehealth models differ in reach, acceptability, and effectiveness for underserved populations?

Background

Mobile phone coverage remains remarkably high, estimated at 90–92% even in hard-to-reach and underserved areas. This widespread connectivity presents a critical opportunity to leverage telehealth as a means of addressing persistent gaps in access to primary healthcare (PHC), particularly among women and individuals from lower socioeconomic backgrounds.

Recognizing this potential, these studies set out to design and iteratively test a set of contextualized telehealth models aimed at extending and improving PHC delivery for underserved populations. By evaluating different models ranging from hotlines to kiosk-based the research seeks to determine which approaches are most viable, scalable, and impactful in promoting inclusion.

Ultimately, the goal is to generate actionable insights that inform policy and practice, while contributing to the global evidence base on digital health innovations for advancing equitable healthcare access in low-resource settings.

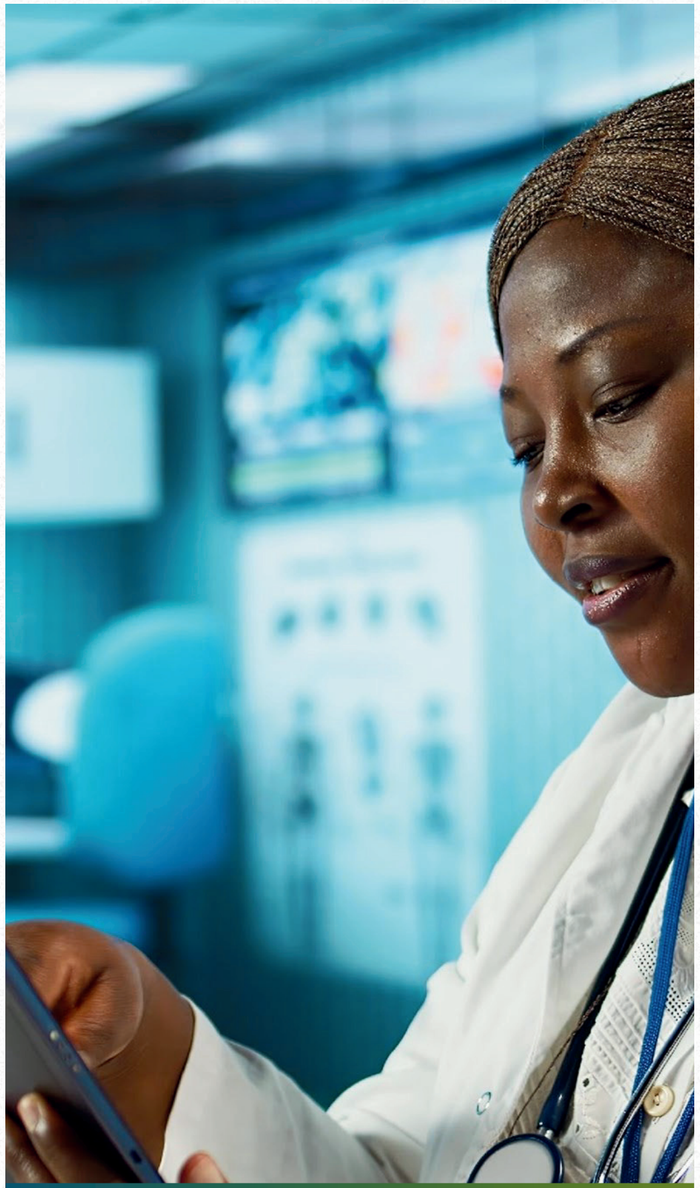
Research Contributions

This research advances understanding of equitable primary healthcare access in Lagos through digital-first solutions. While grounded in a shared context, each study represents a distinct phase, formative design, strategic framing, and early implementation, collectively building a strong evidence base on the feasibility and performance of contextualized telehealth models.

The first study develops a formative design framework, introducing a replicable mixed-methods approach that combines household surveys, geospatial mapping, and provider interviews to generate rare demand-side insights into digital health readiness in low-resource urban settings.

The second study provides a strategic overview of the 18-month project, linking design with iterative implementation and emphasizing the development of “suitable costed models” that are scalable, sustainable, and rooted in public–private partnerships.

The third study presents the first implementation results from the initial PDSA cycle, offering evidence on model uptake, service patterns, and user satisfaction. It also validates the role of community engagement in mobilizing demand and offers practical guidance for scaling digital health interventions in similar contexts.



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How do telehealth models differ in reach, acceptability, and effectiveness for underserved populations?

What was found

High willingness to adopt telehealth was underpinned by widespread phone access and clear user preferences for delivery models. Together, these findings point to a solution that is both financially acceptable and scalable for underserved populations.

1. Telehealth's Untapped Potential: What Underserved Communities Really Want

Among 1,064 households surveyed across 64 underserved wards, only 6% had prior awareness of telehealth services. However, 93% expressed willingness to pay for telehealth, indicating strong demand. Phone-based access was preferred by 58% of respondents, while 36% favored kiosk-based models. Notably, over 70% were willing to pay at least ₦3,000 ($5) annually, demonstrating high financial acceptability among low-income populations.

2. Telehealth That Listens: Designing Care Around Real Needs

User preferences and readiness for telehealth informed the design of three tailored delivery models. Survey data showed strong favorability toward community-based access points and phone-based services. In response, physical telehealth hubs were established in markets and community pharmacies, while a voice-based hotline was developed to meet the 58% preference for phone access. These models reflect user preference and are grounded in the lived realities of underserved populations.

3. Face-to-Face Wins: Kiosks Outshine Remote Services

The study enrolled nearly 141,000 individuals, with women comprising 36% and children 40% of participants. Over 11,000 consultations were recorded. Service utilization was highest at community pharmacy kiosks (53%) and market kiosks (41%), while hotline usage was notably low (6%) These findings suggest that in-person kiosk models are significantly more effective in engaging underserved populations than remote access channels.

4. High Satisfaction, Low Access: The Kiosk Paradox

User interactions at kiosks focused on health information (85%) and consultations (15%), with additional triaging and referrals. Top concerns included chronic disease, body pain, malaria, SRH, and general care. Satisfaction was high (4.2/5 for quality, 4.1/5 for speed), yet 67% cited financial barriers to completing care.

What we learned

1. Despite the promise of digital health, physical models, like market and CP kiosks, proved indispensable in reaching underserved populations, especially women and vulnerable groups. With over 94% of total engagement stemming from these touchpoints, the evidence suggests that human presence and physical proximity remain central to building trust, encouraging repeat use, and bridging the digital divide in healthcare delivery.

2. The hotline's uptake was constrained by its hard-to-remember 11-digit number and the inability to deploy a short code during the IR timeframe; introducing a shorter, user-friendly code could greatly enhance it's adoption.

3. The health concerns most frequently addressed, *chronic disease (22%), general care (19%), body pain (15%), malaria (9%), and sexual and reproductive health (7%)*, reflect the pressing realities of underserved communities. These five areas alone accounted for more than 72% of all interactions, signaling a need for telehealth providers to tailor service packages around these priorities to ensure relevance, uptake, and impact.

4. While telehealth platforms have expanded access, financial constraints continue to hinder the completion of care. Referrals and prescriptions often introduce costs that many users cannot afford, revealing a critical gap. To truly serve the underserved, telehealth must evolve into integrated models that not only connect users to care but also make downstream services financially accessible.

5. Scaling kiosks will require cost-effective, simple models that remain appealing to vulnerable populations for long-term sustainability. In 11 months, over 7,000 users generated 11,000 interactions, with fluctuating utilization suggesting the need for continuous monitoring to strengthen engagement. Regulatory constraints prevented testing CP kiosks in PPMVs, limiting insights into scalable pharmacy-based telehealth models despite their potential as trusted access points.

Why it Matters

This research directly supports the Nigeria's Digital Health Initiative (NDHI) and the FMOH telemedicine guidelines by offering real-world evidence to guide telehealth design, deployment, and policies towards improving health indices in underserved communities. It reinforces digital innovation as a tool to strengthen PHC, improve equity, and expand access, especially in low-resource and hard-to-reach settings where traditional systems fall short.

Findings show that telehealth must go beyond digital platforms in the immediate term to build trust with underserved populations until the pathway is established and communities become more knowledgeable and comfortable with the mode of delivery. Solutions must be rooted in user preferences, financial accessibility, and tailored to local realities to drive meaningful adoption.

The identification of costed, scalable models, tested through over 11,000 consultations and 141,000 enrollments; offers a blueprint for equitable service delivery. Looking ahead, SCIDaR is translating these insights into a roadmap for expansion across Nigeria.

These models can inform national strategies, guidelines and global investments, including the NPHCDA PHC digitization agenda, state-level telemedicine initiatives, and framework for optimising health care service delivery by the scarce human resource for health for improved health indices. Future implementation will explore how telehealth can improve PHC operationalization by optimizing the available workforce, reducing overcrowding in facilities, and ultimately ehealthcare-seeking behavior.. Continued research is needed to evaluate long-term impact, improve affordability, and ensure telehealth evolves as a sustainable pillar of primary care.

© Telehealth 2024
Telehealth keeps the doors of care open 24/7, meeting people where they live

Research Question:

What strategies effectively driveuptake of digital-first telehealth in urban slum communities?

Background

Despite recent gains in primary healthcare (PHC) indicators across Lagos State, significant disparities persist, particularly in urban slum areas. These underserved communities face ongoing financial, geographic, and systemic barriers that limit their access to timely and quality care, resulting in disproportionately poor health outcomes.

Digital health innovations, particularly telehealth, offer a promising pathway to address these inequities. Mobile phone ownership is exceptionally high in Nigeria, with coverage reaching approximately 90% to 92% even in hard-to-reach areas.

However, formative research conducted across 64 underserved wards in Lagos revealed a critical disconnect between infrastructure and utilization. While mobile phone access was nearly universal (92%), awareness of telehealth services was remarkably low. Only 6% of surveyed households had heard of such services.

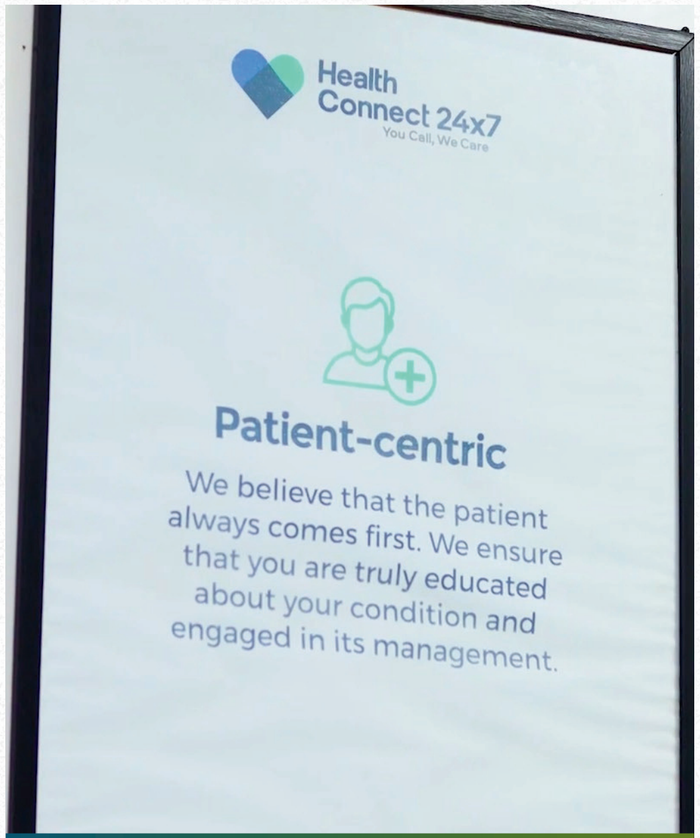
This stark contrast between low awareness and high willingness highlights a core challenge: digital access alone is not enough. Realizing the potential of telehealth to improve PHC outcomes depends heavily on the ability to generate demand, build trust, and effectively onboard users particularly those in under-resourced settings. Understanding what strategies work best for mobilizing and engaging these populations is therefore critical to designing equitable and impactful digital health interventions.

Research Contributions

These papers offer unique contributions to the overarching study on expanding equitable primary healthcare access in Lagos state through digital-first solutions. While they share common background elements, each paper focuses on a distinct phase of the research ranging from formative design to strategic framing and early implementation collectively building a comprehensive evidence base on the feasibility, design, and real-world performance of contextualized telehealth models.

The papers contribute to the field by providing a comprehensive formative design framework for telehealth implementation in underserved communities in Lagos. It introduces a replicable mixed-methods approach combining household surveys, geospatial mapping, and provider interviews that offers rare demand-side insights into digital health readiness in low-resource urban settings.

Drawing on these findings, the study identifies four context-specific telehealth delivery models: hotline, market kiosk, community pharmacy kiosk, and mobile application, each directly aligned with user preferences.



© Telehealth 2024
The patient-centric symbol highlights Health Connect 24x7's commitment to putting patients first

What strategies effectively driveuptake of digital-first telehealth in urban slum communities

What was found

1.) Bridging the Gap Between Access and Awareness: Establishing the case for Demand generation Healthcare utilization remains low among underserved populations, yet telehealth presents a promising solution to bridge access gaps. Despite its potential, awareness of telehealth is critically low, under 6%, with actual usage falling below 1%. However, mobile phone penetration in underserved urban areas is remarkably high, with 92% of respondents owning or having access to a phone. Once telehealth was explained, 93% of those surveyed expressed willingness to use it, and over 70% were prepared to pay at least ₦3,000 ($5) annually for such services.

These findings reveal a striking disconnect between the population's readiness to adopt telehealth and their current awareness levels. This highlights the urgent need to prioritize demand generation strategies through targeted education, community engagement, and tailored communication channels during both the design and implementation phases of telehealth initiatives. Unlocking this latent demand could significantly expand access to care and improve health outcomes in Nigeria's underserved communities.

2.) Early Insights from Implementation of Demand Generation

Demand generation activities reached over 2.9 million people, with community outreach accounting for more than 73% of total reach Among those who used telehealth services, 50% were reached through community outreach, 23% through walk-ins at kiosks, and 19% via referrals from family and friends.

What we learned

1. Researchers highlighted that access is not the barrier to telehealth; visibility and awareness are. The low awareness of telehealth underscores the urgent need for demand generation to drive adoption, enabling wider use of these models to improve healthcare access and close existing gaps. Proactive, community-based engagement is the strongest driver of awareness and uptake, while kiosks and social networks serve as important complementary entry points.

2. However, the inability to deploy radio sensitization campaigns limited uptake among the hardest-to-reach groups, representing a missed opportunity to raise awareness through widely accessible channels such as radio, which is listened to by over 75% of users.

3. Furthermore, the combination of awareness-building and offering subsidized care helped convert latent demand (high willingness to use telehealth) into actual service utilization, overcoming known financial barriers.

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Why it Matters

This research demonstrates that the primary barrier to telehealth adoption is not infrastructure but low visibility and weak demand generation. While mobile phone ownership exceeds 90% in underserved communities, fewer than 6% had ever heard of telehealth. Identifying strategies that actually convert awareness into use, such as community enrollment officers, kiosk placement in high-traffic areas, and the use of local influencers, provides evidence-based guidance for policymakers, implementers, and donors.

Importantly, the findings show that different strategies play different roles: social media is useful for broad awareness but rarely converts to utilization; kiosks in visible locations sustain demand even without active outreach; and community outreaches and use of enrollment officers are effective but cost intensive and highly sensitive to deployment patterns.

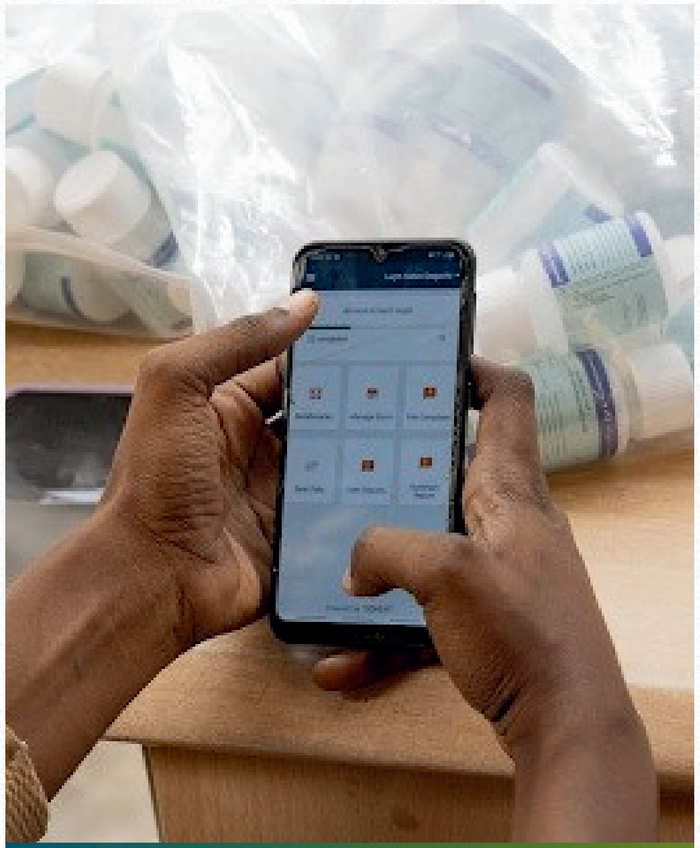
This research on effective demand generation strategies matters because it directly informs how scarce resources are deployed to yield real improvements in service uptake and health outcomes for maximum health impact. It helps telehealth providers to better plan outreaches and service delivery by focusing on touch points, such as community enrollment officers or kiosks in high-traffic areas, where people are most likely to convert awareness into actual use. It highlights the need for continuous, localized engagement strategies beyond the use of social media. For governments and policy makers, the insights inform how to design cost-effective national demand generation programs. For funders, it strengthens the investment case for approaches that move beyond awareness-raising to measurable utilization and impact. Ultimately, communities benefit from better access, greater trust, and increased use of healthcare services.

These insights are critical for designing interventions that go beyond infrastructure deployment to address behavioral, informational, and economic barriers, ensuring that digital health innovations achieve meaningful and sustained adoption

Building on these insights, SCIDaR is developing scalable demand generation models that can be integrated into national and state digital health strategies to expand digital health across Nigeria. Additional areas to explore include:

- The effect of expanding kiosk-enabled service points in high-footfall locations to act as trusted community access and onboarding hubs.
- Institutionalizing community enrollment officers within state health agencies to ensure consistent outreach.
- Piloting radio based campaigns to reach remote communities, given its wide listenership among underserved populations.
- Pairing demand generation with targeted subsidies to address the financial barriers that still prevent service completion.

These next steps directly support the NPHCDA PHC digitization agenda, ensuring that digital health innovations not only exist but are actively used by those most in need. By scaling the most effective telehealth demand strategies, Nigeria has an opportunity to accelerate progress toward universal health coverage, while donors and implementers can channel investments into proven approaches that deliver sustained, equitable impact.



A Community Drug Distributor takes stock of available medications through the DIGIT HCM Application

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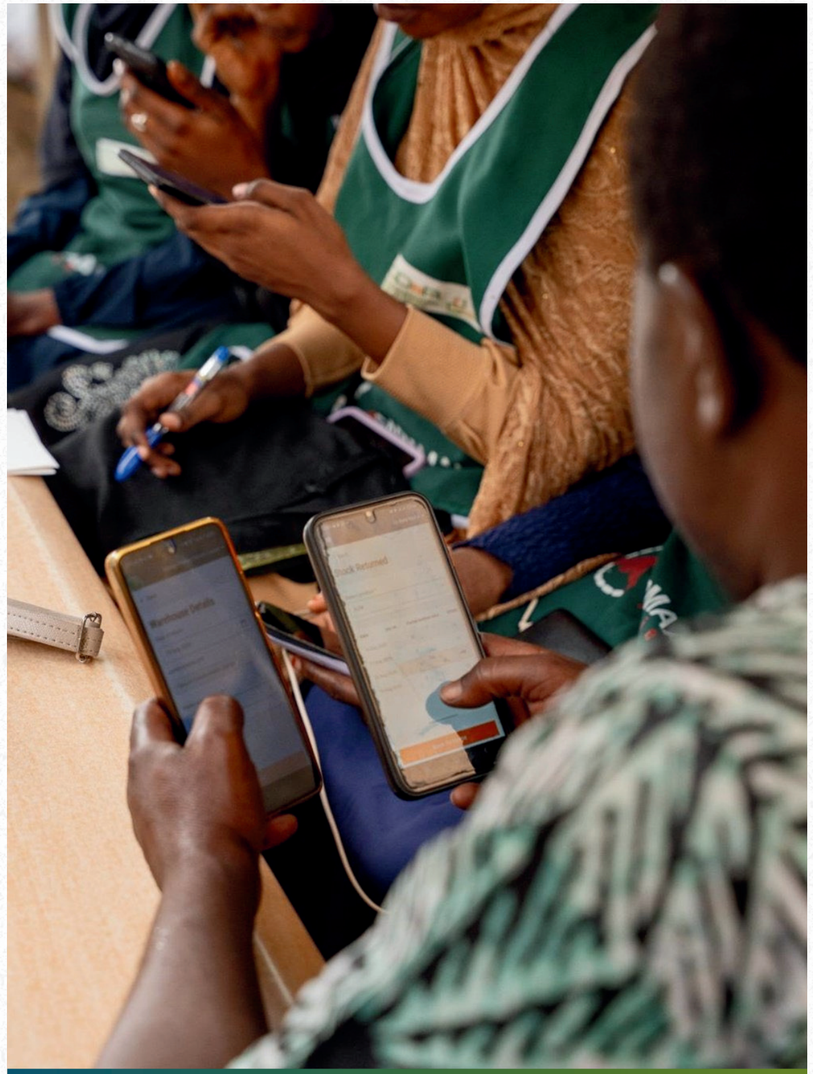

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A ward supervisor in Kano reconciling the stock of his Community Drug D is t rib uto rs

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E

EXPANDING HEALTH ACCESS THROUGH THE PRIVATE SECTOR

How can accreditation programs unlock trust, quality and access in the informal private health sector?

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A proud PPMV in her store shortly after receiving her PCN Signage

Aunty Taiye's medicine store
has been here as long as I can remember.
She's saved my life more times than I can count
from fever, from cold, from the belly that would not rest.
We could always knock on her door,
any time of the day.

She says she only wanted to help her people.
Help is often too far away,
a clinic on the other side
of a 1000-naira note.

Then came the rumour:
her shop would be closed.
We panicked. We wondered.
Where would we go?

But she did not close.
She returned with a green dot.
They say it means she has learned
how to be better.

For us, it means hope.
Aunty Taiye is all we have.
And with this green dot,
we pray she will be
all we need.

> "We find that people in these hard-to-reach communities trust PPMVs deeply. Not only do they dispense medicines, but they also promote appropriate health-seeking behaviors, encouraging people to seek medical help when necessary.

-Iyadunni Olubode (Nigeria & Kenya Director, MSD for Mothers)

Supporting local medicine shop owners in Nigeria to help drive access to care

Research Question:

How does access to finance support accreditation programs to improve service quality and patient trust in PPMVs?

Background

Patent and Proprietary Medicines Vendors (PPMVs) are often the first entry point into the health system for many Nigerians. In many cases, they are the only source of care for underserved populations and are thus critical players in Nigeria's health system [1].

While they are central to reproductive health and family planning, they generally operate in a harsh economic climate with suboptimal regulatory oversight, limited quality control, poor training and poor access to quality commodities. These gaps undermine safety, erode trust, and reduce uptake of PHC services.

The Pharmacy Council of Nigeria (PCN) 3-tier accreditation programme for PPMVs is one veritable programme for strengthening the quality of care available in these facilities. Yet, participation in the programme by PPMVs has been uneven due to structural and financial barriers. Evidence from Lagos and Kaduna shows vendors value accreditation for its benefits: greater clientele and improved service delivery, but many cannot afford the upfront and recurrent costs [1,2]. Programs like IntegratE [1] and MSD for Mothers' funded PACS [3-5] are addressing these gaps by pairing training with financial support to influence broader reforms.

PPMVs often operate on thin margins with poor credit access, high loan costs, and limited financial literacy, making accreditation and sustained quality improvements difficult. Access to finance must be repositioned as a strategic enabler of sustainability. By embedding financial access into accreditation systems, vendors can upgrade infrastructure, stock quality-assured medicines, comply with regulations, and ultimately expand family planning access [1-5].

This section examines how addressing the financial barriers that PPMVs face can improve their participation in the accreditation programme and ultimately strengthen service quality among PPMVs.

Research Contributions

A series of studies have been conducted over 2 phases. In the first phase, the studies combined provider and client perspectives to reveal how clinical training, streamlined accreditation pathways, and business incentives collectively foster consumer trust and drive uptake of family planning services. It highlighted how both vendors and clients are focused on quality service and value for money. Additionally, it revealed that access to finance was a preferred incentive for the PPMVs.

Building on these insights, a second series of studies explored how targeted financial support mechanisms, such as low-interest loans, tailored credit products, and financial literacy training, can enhance provider engagement and long-term sustainability. These interventions proved especially effective in helping PPMVs overcome structural barriers to business financing and to accreditation by extension.

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A Kaduna based PPMV attending to a client

How does access to finance supportaccreditation programs to improve service quality and patient trust in PPMVs?

What was found

Transforming Nigeria's informal health sector requires more than piecemeal interventions; it depends on accreditation as a foundation for quality, financing as fuel for growth, partnerships as scaffolding for sustainability, and smart investments as the catalyst for scale.

1. Accreditation as a Catalyst: Bridging Quality, Business, and Community Health

Our assessment of accredited PPMVs revealed multiple gains in both service delivery and business performance for 97% of providers. Providers reported a clear rise in client flow, stronger skills in business management, and access to higher-quality health commodities [2]. Women in the served communities expressed high satisfaction with improved access to modern contraceptives and the overall quality of care [2]. However, persistent myths, misconceptions, and out-of-pocket costs continued to limit full uptake of family planning services [3], underscoring the need to pair provider capacity building with broader community education [1,2].

2. Financing the Future: Unlocking SME Potential in Nigeria's Health Sector

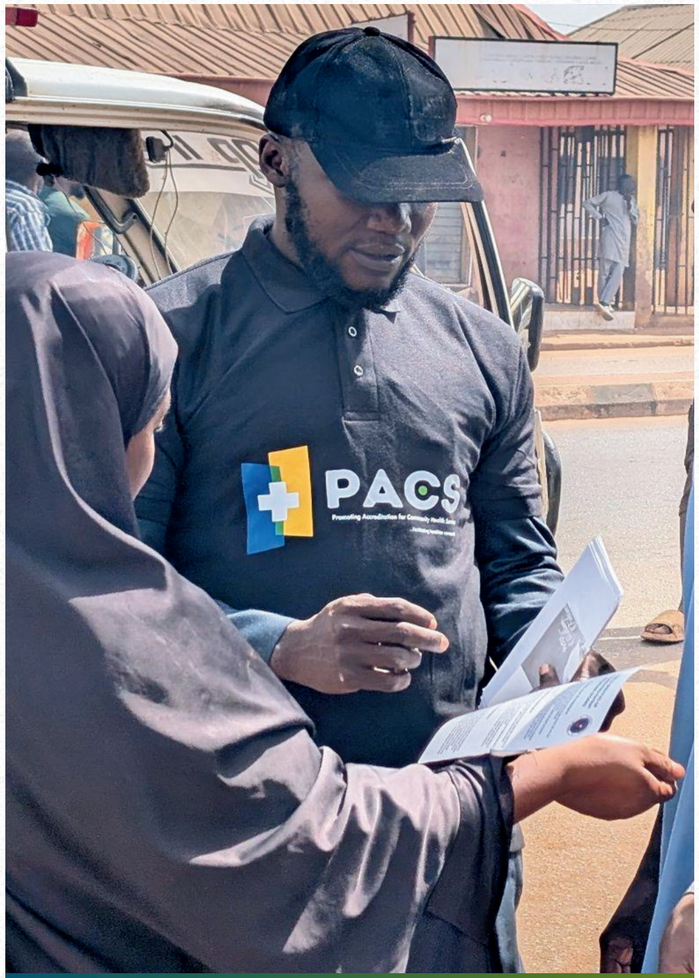
We also documented significant financial hurdles that informal providers face when seeking accreditation. Smaller PPMVs often lack affordable credit and are subject to high entry barrier. Many are excluded from traditional lending because they do not hold formal medical qualifications [3]. Even when financing options such as microloans or equipment leases exist, high fees and rigid criteria limit uptake, and low financial literacy can lead to repayment difficulties or stalled business growth [4,5].

3. Beyond the Clinic: Building Sustainable Health SMEs Through Strategic Partnerships

Strategic partnerships with banks and development actors are unlocking new pathways for health SME growth. By linking accreditation to financing, training, and reliable commodity access, initiatives like PACS [3-5] empower informal providers to scale sustainably, boosting service quality, expanding contracrptive access and driving economic rescilience across Nigeria's underserved communities [4]. Market systems that help to sustainably achieve such collaboration are net positive for all stakeholders

4. Scaling Impact: How Smart Investments Drive Access to Reproductive Health

Smart investments in Nigeria's informal health sector, like tailored financing, business training, and accreditation-linked incentives, are unlocking scalable access to reproductive health [3,5]. Evidence from programs like PACS shows that when providers are empowered as entrepreneurs [5], service quality rises, community trust deepens, and service uptake improves. Strategic funding is not just a support system; it is a catalyst for sustainable health impact.



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A PACS representative informing community members on PACs PPMVs

What we learned

1. We have learned that successful accreditation programs must deliver tangible benefits that resonate with informal health providers, especially PPMVs and CPs, who often operate on thin margins. Evidence from Lagos and Kaduna shows that when accreditation like that of PCN is linked to access to quality health commodities, stronger business performance, and client confidence, providers view it not as a regulatory hurdle but as a pathway to growth, recognition, and legitimacy.

2. It was also evident that financial constraints remain a major barrier, as many PPMVs and CPs are not creditworthy, and face high interest rates, rigid loan terms, and exclusion from formal lending due to limited qualifications. Simultaneously, low-income women struggle with out-of-pocket costs and misinformation, limiting their access to accredited services. To address this, training must be tailored to the diverse educational backgrounds of providers and embed financial capacity building, covering literacy, bookkeeping, and business planning, to ensure sustainability.

3. Strategic partnerships between financial institutions and health regulators are key to unlocking scalable solutions. Initiatives like PACS and SCIDaR's collaboration with WEMA and Access Bank demonstrate how simplified loan products, flexible repayment structures, and business development support can transform accreditation into a viable investment. When financing is integrated into the accreditation ecosystem, it empowers providers to scale sustainably, enhances service quality, and expands access to reproductive health across underserved communities.

Why it Matters

Nigeria's health policy environment, anchored by the 2014 Task Shifting and Task Sharing (TSTS) Policy, the National Health Act, and the Family Planning Costed Implementation Plan, provides a strong foundation for expanding reproductive health services through informal providers.

Well-designed and implemented accreditation programmes will ensure the health services accessed from these providers contribute to the broader health systems objectives. Yet, such programmes must be designed to reflect the realities of informal providers, for it to elevate service quality, build consumer trust, and strengthen provider reputation.

Accredited PPMVs report increased client flow, improved business performance, and access to higher-quality commodities, clear evidence that accreditation, when paired with the right incentives, is not just a regulatory tool but a catalyst for addressing health inequality, particularly among marginalized populations.

Access to Finance has proven to be a critical driver for the PPMVs' business resilience and growth. The right financial products and services must be tailored to the realities of the providers who operate largely in rural settings. In addition, there is a need for robust systems of aggregation, potentially leveraging associations and cooperatives, to make these micro-businesses more lendable. Complementary investments that can further de-risk such investments include close collaborations with credit bureaus to assess prior loan exposures; underwriting loan facilities for these providers by government actors and development finance institutions; and introduction of digital tools (e.g MaishaMeds, Remedial Health) that turn digital inventory records into financial footprints for financial institutions to better understand provider businesses.

Ultimately, a self-sustaining market-based interaction that invites the right stakeholders, including the regulatory associations, financial institutions, and suppliers of essential commodities, to transparently and holistically address the needs of these PPMVs, such as financial access, training, and commodity access can help to sustainably scale the impact.

This kind of system not only addresses the health access challenge in the rural and peri-urban settings, but also contributes to tackling the broader socioeconomic development issues through financial inclusion and empowerment, which has ripple effects on the economy.

Building on this momentum, SCIDaR continues to champion innovative approaches that bridge policy, finance, and implementation. By generating robust evidence and fostering strategic collaborations, SCIDaR is not only reshaping perceptions around accreditation but also laying the groundwork for scalable, sustainable improvements in reproductive healthcare from the grassroots level across Nigeria and beyond.

A significant next step will be engaging these accredited PPMVs to provide community demand generation and patient tracking, and facility referrals as part of Nigeria's Maternal and Neonatal Mortality Reduction Innovation Initiative (MAMII) objectives to crash maternal mortality. This approach will take advantage of the PPMVs' strategic embedding in their communities and trust built over time as primary care providers.

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A PPMV signing the signage receipt form

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