

Learning Question 1: *What are the contributions of systems thinking approaches and tools to changes in health system outcomes?*

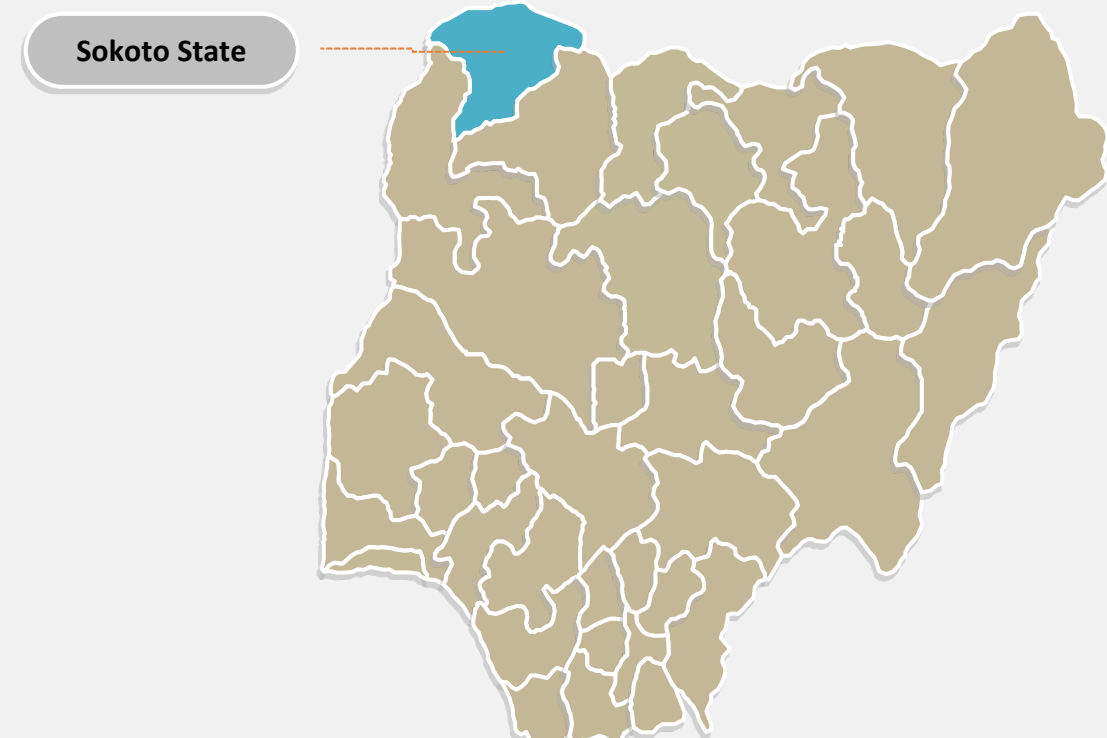
*How do systems thinking approaches affect health system outcomes?*

# Sokoto State Cadre Conversion Initiative (Nigeria)

Authors: Emmanuel Aiyenigba ([eaayenigba@ihi.org](mailto:eaayenigba@ihi.org)), Olufolake Akeju ([oakeju@banyanglobal.com](mailto:oakeju@banyanglobal.com)), Andy Omoluabi ([aomoluabi@banyanglobal.com](mailto:aomoluabi@banyanglobal.com)), and Jason Wright ([jwright@banyanglobal.com](mailto:jwright@banyanglobal.com)), USAID Nigeria Health Workforce Management (HWM) Activity



## Context



In Nigeria, the maternal mortality rates vary among the geopolitical zones, but the North-West and North-East zones have the highest rates.

Sokoto State has among the highest rates of maternal and child mortality in the country.<sup>1</sup> The maternal mortality rate is 1,576 deaths per 100,000 live births, the infant mortality rate is 78 per 1,000 live births, and the under-five mortality rate is 119 per 1,000 live births.

In 2019, the National Primary Health Care Development Agency (NPHCDA) established the National Emergency Maternal and Child Health Intervention Centre (NEMCHIC) with the goal of reducing preventable maternal and child deaths by 50 percent by 2021 through the provision of oversight on reproductive, maternal, newborn, child, and adolescent health and nutrition (RMNCAH+N) services at the primary health care (PHC) and community levels.<sup>2</sup>

Building on Thaddeus' and Maine's Three Delays model,<sup>3</sup> NEMCHIC identified four primary drivers of Nigeria's high maternal mortality rate:

1. Delay in deciding to seek maternal health care
2. Delay in locating and arriving at a medical facility
3. Delay in receiving skilled maternal care in pregnancy upon arrival at the facility
4. Delay in receiving advanced care

NEMCHIC has prioritized seven interventions to address the four delays, one of which is the Reaching Every Ward with a Skilled Birth Attendants (REWSBA) strategy.<sup>1</sup> REWSBA seeks to mobilize, train, equip, deploy, support, and retain skilled birth attendants (SBAs) for PHC delivery in every ward in Nigeria and to measure their impact. REWSBA promulgated the goal that at least one PHC facility in every ward in the country should always have a minimum of two midwives and two community health extension workers (CHEWs) on staff. As of the first quarter of 2022, 81 percent of the "one PHC facility per ward" PHC facilities in Sokoto State did not meet this standard. Only 46 of the 240 "one PHC facility per ward" facilities in the State had the requisite SBAs on staff. Residents of rural communities are disproportionately disadvantaged by this reality.

At the same time, Sokoto State has an abundance of other non-SBA health workers. Compared to minimum national standards for various cadres of health workers, the Sokoto State Government employs 'excesses' of 3,743 Environmental Health Technicians, 643 Environmental Health Officers, and 462 Medical Records Officers. This imbalance in health worker qualifications can be attributed to several factors, including a dearth of up-to-date health data to inform planning for HRH training and distribution; inadequate State financial resources to employ the higher-skilled staff (SBAs); and, consequently, a lack of health workers with the requisite skills to serve as SBAs. In recognition of this challenge and opportunity, the Sokoto State Government solicited the support of the USAID Nigeria Health Workforce Management (HWM) Activity in converting these 'excess' health workers into SBAs through training as Community Nurses, Community Midwives, and CHEWs in order to better meet the needs of pregnant women and their families and to drive down maternal, infant, and child mortality.

## Activity Description

**Activity Initiation and Design:** The Cadre Conversion Initiative (CCI) is a locally-derived integrated set of solutions led by the Sokoto State Government and directed towards equity, quality, and resource optimization. In September 2020, USAID/Nigeria launched the five-year, \$19 million HWM Activity to support the production of a cost-effective, motivated, and well-trained health workforce through improved human resources for health (HRH) planning and management. The HWM Activity works in 4+1 States: Bauchi, Ebonyi, Kebbi, and Sokoto States and the Federal Capital Territory (FCT).

Effective HRH planning and management address a wide spectrum of activities including the production, retention, distribution, and utilization of available HRH within the States. These activities contribute to greater health systems responsiveness and improved health outcomes, especially among women and children.

The HWM Activity objectives are to:

1. Strengthen the pre-service training environment and in-service training programs
2. Support the building of a robust human resources information system (HRIS) to keep track of recruitment, deployment, retention, and continuing education of HRH
3. Strengthen governance and management of the health workforce
4. Support HRH research to improve HRH practices and retention mechanisms.

HWM is supporting the Sokoto State government to design, implement, and monitor an intervention that increases access to SBAs through the conversion and upskilling of existing cadres of health workers through Community Health Nursing, Community Health Midwifery, and Community Health Extension Workers (CHEW) programs at pre-service health training institutions (PSHTIs) in the State. With focus on enhancing the resources of the State, improving the quality of the skilled health workers produced, and equitably distributing health workers, HWM is providing technical support to the Sokoto State Ministry of Health to identify, and enroll interested health care workers from the pool of Environmental Health Technicians, Health Records Officers, Environmental Health Officers, etc., currently working in PHC facilities within communities with the greatest need for SBAs. HWM is also providing technical support to the Sokoto State Government to build and strengthen its HRIS to enable data-driven decision making around HRH planning and distribution.

At the Federal level, HWM has worked closely with the Nursing and Midwifery Council of Nigeria (NMCN) and the Community Health Practitioners Registration Board of Nigeria (CHPRBN) to revise their training curricula to orient more toward competency-based training. At the State level, HWM has also built the capacity of PSHTI instructors to deliver the curricula in line with competency-based methods. This is in addition to building the capacity of the instructors of the PSHTIs deliver the curricula in line with competency-based methods.

**Stakeholders and Engagement Process:** The HWM Activity has partnered with the Sokoto State Government from the beginning of this initiative to ensure smooth collaboration, shared visions and resources, and alignment with best practices. HWM has provided technical assistance to the Sokoto State Government to conduct the context analysis, identify problems, and develop the theory of change. The Sokoto State Government has established a Cadre Conversion Steering Committee; identified and engaged more key stakeholders; and mapped the PHC facilities and communities in need as well as the staffing required to meet REWSBA minimum standards for SBA; designed a screening process for the potential cadre conversion candidates; and conducted due diligence on the PSHTIs where participants will be trained.

HWM has worked closely with the NMCN and CHPRBN to improve the quality of training for nurses, midwives, and community health workers, including aligning the curricula with the national Task Shifting and Task Sharing Policy.

HWM has also worked with the Sokoto State Ministry of Higher Education, the Sokoto State Office of the Head of Service, the Environmental Health Officers Registration Council of Nigeria (EHORECON), the Pharmacists Council of Nigeria (PCN), the Center for Population and Reproductive Health (CPRH) and Nana Girls and Women Empowerment Initiative (which have received grants under contract (GUCS) from HWM, and other USAID Health, Population, and Nutrition (HPN) Office implementing partners.

**Adaptation and Change Management:** Initially, the Sokoto State government requested that the HWM Activity help design a specialized training to help convert the aforementioned health cadres to SBAs as quickly as possible. Early engagements with all stakeholders made it clear that a single specialized training would not comprehensively or sustainably address the problem. Therefore, HWM and other stakeholders expanded the approach to leverage existing training programs within PSHTIs and strengthen planning, management, and governance systems to bolster sustainability after HWM.

**Design for Scale, Spread and Sustainability:** The CCI is both a pilot and proof-of-concept. The HWM Activity will monitor both the implementation and outcomes of efforts with the hope of further refinement and scale-up. The multi-pronged, multi-level approach to health systems strengthening increases the ability to meet the challenges of working in a rapidly evolving and dynamic environment, and this approach increases the potential for ownership, continuity, and sustainability.

Beyond this initial pilot, scale-up will involve working with stakeholders to increase the number of students enrolled in subsequent training cycles. Based on the CCI, the NMCN and the CHPRBN have approved the relevant PSHTIs in Sokoto State to increase student admission quotas for the community nursing, community midwifery, and CHEW training programs. Through the CCI, HWM will help Sokoto State increase production of these three cadres and address the shortage of SBAs in a sustainable fashion.

HWM will continue advocacy to the Federal and State Governments to increase funding for HRH at both levels. HWM will explore cadre conversion in the other 3+1 HWM States, drawing on technical and political lessons learned from Sokoto State.

1. National Primary Health Care Development Agency (NPHCDA) National Emergency Maternal and Child Health Intervention Centre (NEMCHIC). Reach Every Ward with Skilled Birth Attendants Strategy (REWSBA) Implementation Guideline, 2021.
2. National Primary Health Care Development Agency. <https://nphcda.gov.ng/nemchic>.
3. Thaddeus S, Maine D. Too Far to Walk: Maternal Mortality in Context. Social Science and Medicine. 1994 Apr 1;38(8):1091–110. [https://doi.org/10.1016/0277-9536\(94\)90226-7](https://doi.org/10.1016/0277-9536(94)90226-7).

## Activity Impact

It is early to measure the ultimate success of the cadre conversion program.

However, preliminary findings suggest that cadre conversion is an effective, efficient, and sustainable way to address the shortage of SBAs in a State like Sokoto.

### Resource Optimization:

The CCI will assist the health system in Sokoto State to become more efficient through the enhanced utilization and improved productivity of its health workforce.

The Sokoto State Government will not have to hire more workers and further increase funding.

### Quality and Equity:

Improving HRH optimization will result in improvements in both quality and equity.

As more health workers are trained as SBAs, the provider-to-patient ratio will decrease.

In turn, the average demands on and stresses of each individual provider will decrease.

Health workers who experience fewer stresses can provide higher-quality care to their patients.

The Sokoto State Government has chosen to incentivize participation in this program by requiring SBA credentials for health workers to serve as Officers-in-Charge at PHC facilities.

Increasing numbers of SBAs will also allow the Sokoto State Government to distribute these workers across previously underserved communities, which in turn drives improvements in equity for women in rural areas.

The Four Delays identified by NEMCHIC have most affected these women.

These women will finally be able to receive the care they deserve.

Health workers with multiple skillsets (i.e., as Pharmacy Technicians and SBAs) translate to greater health system resiliency since workers can be moved around and called upon to fill different roles in emergency situations.

In addition, more SBAs mean more women can use the facilities for delivery, which will increase revenue for the facilities through health insurance schemes.

### Health Outcomes:

At this point in the implementation phase, the HWM Activity cannot yet attribute improved health outcomes in Sokoto State to the CCI.

However, HWM has already seen the Sokoto State Government demonstrate its commitment to meeting the health needs of hard-to-reach communities.

Greater engagement in rural areas should increase healthcare-seeking behavior among women and their families in these remote communities.

Greater engagement in these areas should also create new career opportunities for local residents.

These new career opportunities should increase economic prosperity.

This economic prosperity should further drive improvements in the quality of life and health outcomes.

## Evidence

As the CCI is still in the early phase of implementation, the HWM Activity cannot yet attribute to it changes in health outcomes in Sokoto State.

However, the CCI theory of change clearly lays out the expected impact which HWM will measure and report on throughout this initiative. The theory of change posits that if HWM empowers the Sokoto State government to:

1. Optimize its health workforce through training of the excess lower cadre PHC facility workers to a cadre with life saving skills (SBAs)
2. Build capacity for effective HRH governance;
3. Have a functional HRIS
4. Improve the quality of health worker training

... then the output will be a health system resilient and positioned to produce better maternal and child health outcomes.

HWM is confident that the enhanced government capacity and the commitment resource optimization, quality, and equity will increase the government's responsiveness to community health needs and improve trust in public health services.

One of the accomplishments achieved from the ongoing stakeholder engagement process is the decision of the Sokoto State Government to transition the management of the community midwifery and community nursing training programs from the State Ministry of Local Government to the State Ministry of Health for better supervision and coordination.

This transition also enhances health worker motivation and retention as it guarantees the promotion of the converted health workers to a higher level within the State's civil service and their deployment to underserved communities after completing the training.

## Facilitators

The success of the CCI has been possible due to the strong commitment and collaboration of HWM partners, in particular the Sokoto State Ministry of Health and Ministry of Education and the NMCN and the CHPRBN.

The partners has brought their considerable experience, expertise, and resources to bear, and they have approached this effort with an openness to new ideas and feedback that has been instrumental to the success so far.

The Sokoto State HRH Technical Working Group (TWG) has facilitated coordination with partners the HMM has worked to strengthen the HRH governance and management system. The TWG has helped to illuminate the resources available to support this cross-sectoral initiative.

HWM has collaborated closely with the NMCN and the CHPRBN to support the PSHTIs. Based on the productive interactions with the two regulatory bodies, HWM has been able to adapt the approach to maintain the integrity of the conversion process.

HWM and partners have built upon the previous work of others, including the:

- \* USAID Integrated Health Program (IHP) (primed by Palladium), which helped to identify the HRH gaps among PHC facilities in Sokoto State
- \* World Health Organization (WHO), which supported the development of a functional State Health Workforce Registry (SHWR)

## Challenges

**Collaborating, Learning, and Adapting:** The first major challenge was for the HWM Activity to determine the critical stakeholders to engage.

While aiming to be inclusive, HWM was cognizant that including too many stakeholders may lead to scope creep, which would put the success of the initiative at risk.

Fully understanding and comprehensively responding to stakeholder expectations slowed down the pace of implementation.

HWM leadership has continued to provide an enabling environment for learning, sharing, and innovating.

Despite the clarity of vision on what HWM wanted to achieve, reaching consensus on how to execute that session proved to be a complex task. The development of a theory of change helped to avoid the possibility of mission creep and tangential changes to the CCI.

**Culture, Process, and Resources:** Stakeholders had different working cultures, organizational processes, and resource availabilities.

Competing priorities made convening stakeholder meetings more complicated than usual, and the subsequent delays in meeting led to lags in implementation.

However, the relentless focus of HWM on co-creation with stakeholders has proven essential to the success of joint efforts so far.

HWM expect the commitments of stakeholder to help achieve desired results.

## Lessons Learned

The HWM Activity team has learned several lessons through the design and implementation of this activity.

HWM worked with partners to embrace the core elements of the collaborating, learning, and adapting approach.

After the kick-off meeting, HWM and partners spent 243 days designing, negotiating, iterating, and redesigning their approach to the CCI before reaching agreements with the NMCN and the CHPRBN. As previously mentioned, stakeholders had competing priorities. There were also disruptions due to political and civil unrest in Sokoto State. All together, it was difficult for partners to maintain focus.

Designing the interventions, interacting with the stakeholders, and coordinating the activities required the team to remain agile and adaptive in its approaches. There were several iterations and consultative conversations, and many times, the team had to pause and reflect on its mission and the best approach to achieving its goals while building collaborations and relationships. The team revisited its theory of change several times as it received feedback from the multiple stakeholders.

The HWM leadership continued to intentionally create an environment of transparency, learning, and improvement. The leadership modeled proactive and open engagement with the partners, which allowed the team to correct false or incomplete assumptions about stakeholder interests and organizational processes. The team was also able to leverage institutional memory to improve its decision-making processes.

In scaling up cadre conversion to other States, HWM will apply the lessons learned from Sokoto State and immediately engage the relevant stakeholders.

To other implementing partners in Nigeria and other countries which might want to adapt this approach, HWM strongly encourages them to:

- \* Build elements of collaborating, learning, and adapting into the program design from the beginning
- \* Ensure that the leadership intentionally creates a similar enabling environment

