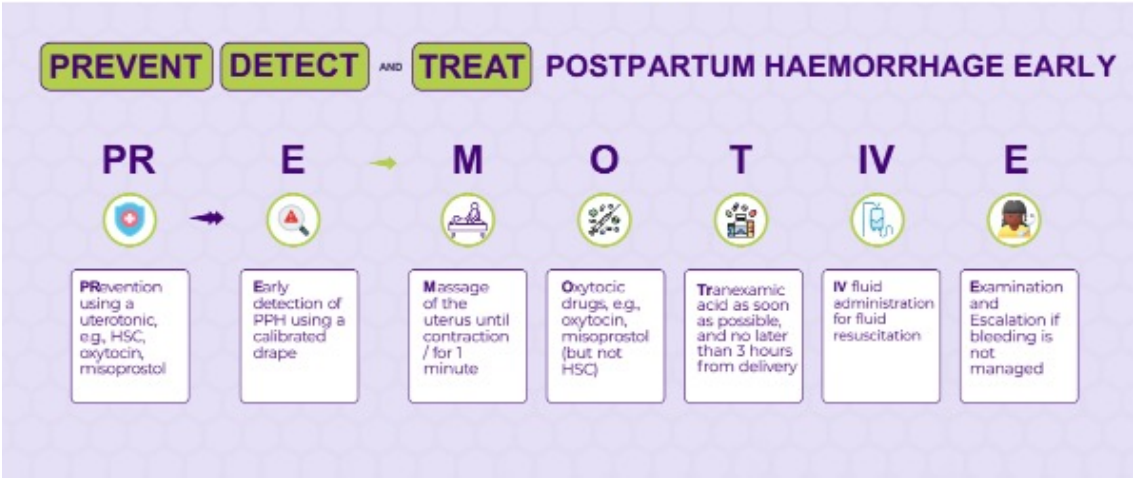
Smiles for Mothers Preparatory Phase for the Comprehensive PPH Bundle Rollout

The Federal Ministry of Health (FMoH) in Nigeria set a goal to dramatically reduce maternal mortality, with a specific focus on addressing Postpartum Hemorrhage (PPH), a leading cause of maternal deaths. In line with this national priority, the Smiles for Mothers (SfM) program has been at the forefront of innovative PPH interventions, supporting state governments in Kano, Lagos, and Niger in introducing the 2018 WHO recommendation for PPH prevention using heat-stable Carbetocin (HSC) and planning for increased use of tranexamic acid (TXA) for PPH treatment.

Building on the successes achieved in the pilot states, SfM is now poised to expand its impact. The program is in the process of implementing a comprehensive PPH bundle that goes beyond prevention to include early detection and treatment. This expansion, aligned with the FMoH's Ending Preventable Maternal Mortality (EPMM) Acceleration Plan, will introduce the bundle to Delta, Ebonyi, Katsina, and Plateau states, as well as SfM legacy states.

To ensure a smooth and effective rollout, SfM initiated a crucial preparatory phase for these new states. This preparatory phase served as a foundation, readying the healthcare systems in these states for the successful implementation of the comprehensive PPH bundle. The bundle includes oxytocin and heat-stable Carbetocin for prevention, calibrated drapes for early detection, and oxytocin and/or misoprostol plus tranexamic acid for treatment, representing a holistic approach to combating PPH and furthering Nigeria's goals in reducing maternal mortality.



Overview of the comprehensive PPH bundle

Choosing Our Battlegrounds: State Profiles

The expansion states were carefully selected based on their contribution to maternal mortality, alignment with NPHCDA's strategy, ensuring a geographic spread across the country, and the potential for rapid, impactful change.

Infographics: State profiles

STATES	POPULATION	WOMEN OF CHILDBEARING AGE	[1]PPH CONTRIBUTION TO THE MMR
Delta Sate  Delta faces a maternal mortality ratio of 526.4 per 100,000 live births.	6,784,042	901,646	23%
Ebonyi State  The state has an MMR of 602 deaths per 100,000 live births	3,481,215	765,867	23%
Katsina State  Katsina grapples with a maternal mortality rate of 886.8 per 100,000 live births	10,368,500	2,179,525	23%
Plateau State  Delta faces a maternal mortality ratio of 526.4 per 100,000 live births.	4,999,755	622,266	23.1%

Laying the Groundwork: Our Preparatory Approach

PREPARATORY PHASE

STAKEHOLDER ENGAGEMENT

READINESS ASSESSMENT

QUANTIFICATION

TRAINING

Our Approach

Building Alliances: Stakeholder Engagements

Delta state stakeholders at the Forecasting workshop

Our journey began with mapping out the key stakeholders in each state's health ecosystem. This mapping yielded a comprehensive stakeholder landscape for each state, strategically targeting high-level decision-makers crucial to the program's success. This ensured we engaged with individuals who have the authority and influence to drive the adoption and implementation of the PPH bundle intervention at the state level

From May 16 to July 2, 2024, we conducted a series of virtual and in-person kick-off meetings, bringing together representatives from the State Ministries of Health (SMoH), State Primary Healthcare Development Agencies (SPHCDA), and Hospital Management Boards (HMB). The meetings were not just about introducing our program; they were about securing stakeholder support and collaboration to effectively reduce PPH-related deaths in each state, and outlining our proposed approach to support each state with preparatory activities in anticipation of the wider bundle rollout.

Understanding the Terrain: Readiness Assessments and Co-creation Workshops

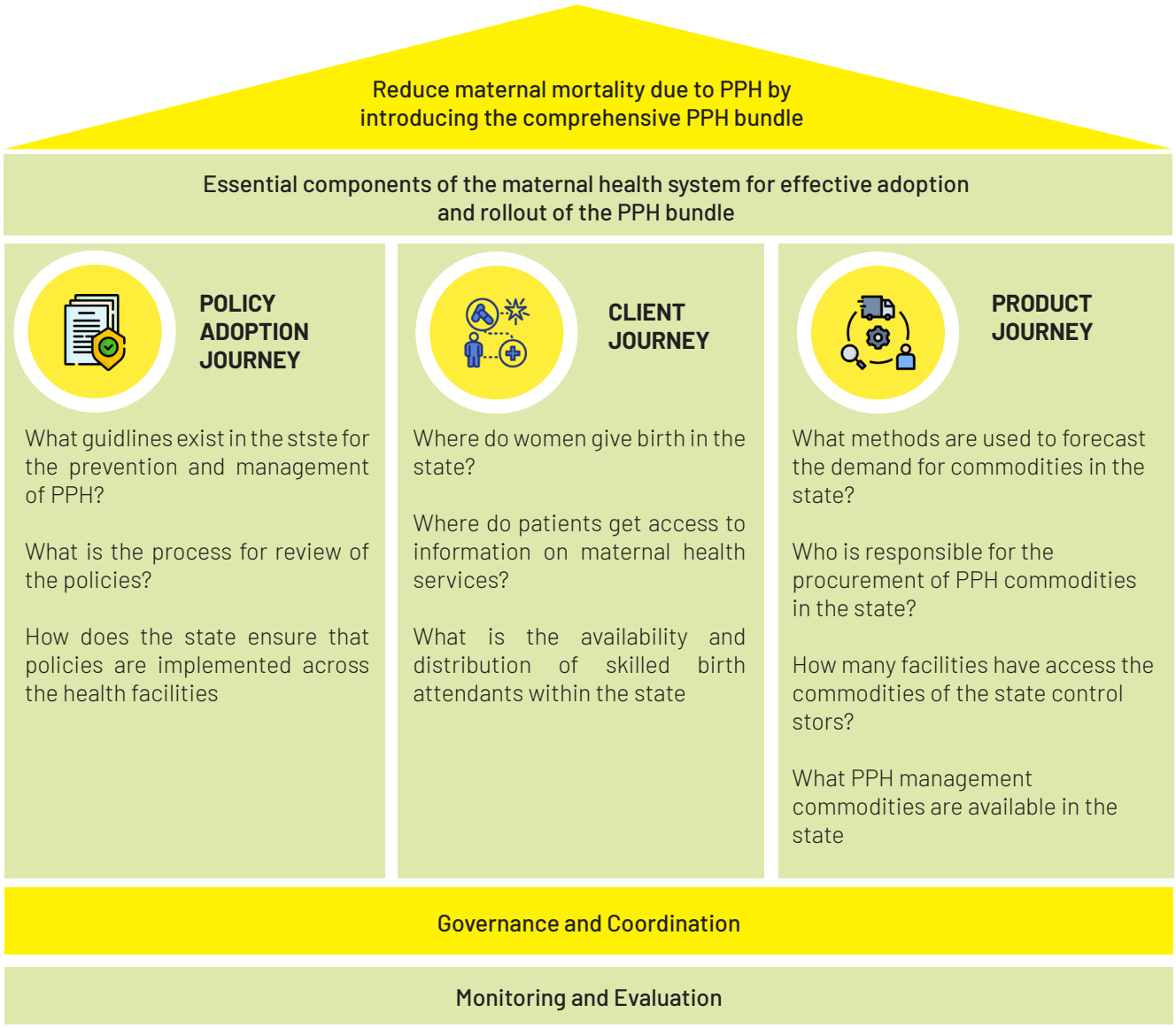
SfM representative going over the policy adoption journey findings during the co-creation workshop in PLateau State

To ensure the successful adoption of the PPH bundle in new states, it was crucial to identify and address any obstacles that could hinder implementation, as well as understand the current structures in the state and identify how we can leverage these structures in each state. This helps in developing effective strategies and recommendations for a smooth adoption process.

To ensure our intervention would be effective and sustainable, we conducted comprehensive readiness assessments in each state. These assessments aimed to facilitate the adoption and rollout of the PPH bundle, and to support the states in developing a roadmap for successful implementation. These assessments looked at three critical pillars:

- Policy adoption journey
- Product pathway
- Client journey

We also evaluated key enablers such as Governance, Monitoring and Evaluation, and Maternal, Perinatal, Child Death Surveillance and Response (MPCDSR).



Smiles for Mothers Framework

We utilized a combination of desk reviews (including relevant documents such as reports, guidelines, and peer-reviewed journals) and key informant interviews with relevant stakeholders.

But we did not stop at the assessments. We brought our findings back to the states in a series of co-creation workshops. These workshops served as a medium for the state stakeholders to validate our findings, propose recommendations, and help develop costed roadmaps for implementation.

Counting the Cost: Quantification of PPH Bundle Needs

Stakeholders at the Delta state forecasting workshop

The Safe Motherhood Unit of the Reproductive Health Division within the FMoH's Department of Family Health, aimed to assess the specific needs for safe motherhood products in Nigeria. To ensure the availability of essential resources for maternal and newborn health, they conducted a 5-day national quantification workshop for Safe Motherhood commodities from February 5th to 9th, 2024. The program participated in this workshop, which was coordinated by the National Product Supply Chain Management Program (NPSCMP) in collaboration with partners like the Clinton Health Access Initiative (CHAI), Chartered Institute of Procurement and Supply (CIPS), and The Global Health Supply Chain - Procurement and Supply Management (GHSC-PSM), alongside state representatives and experts in Obstetrics, Gynaecology, and newborn health. The participants focused on quantifying a wide array of commodities for critical health priorities, including PPH. The prioritized PPH commodities quantified included HSC, Oxytocin, Misoprostol, Calibrated drapes, and Tranexamic Acid, aligning with current global recommendations and the FMoH's strategy to drive an integrated approach to PPH management, particularly leveraging commodities like HSC for prevention, and the EMOTIVE bundle for treatment.

With a clear understanding of each state's needs and armed with the national forecast, we moved to quantify the PPH bundle commodities required. This was critical to accurately predict and prepare for the demand for each component in the initial rollout of the bundle. This involved estimating the quantity of oxytocin, heat-stable Carbetocin, misoprostol, calibrated drapes, and tranexamic acid needed for effective management of PPH based on consumption data and forecasting assumptions for initial seeding and clinical experience for clinicians. We worked closely with each state to validate the national forecasting assumptions. This involved conducting forecast workshops in each state to refine the initial forecast, which we, in collaboration with other key players in the maternal health space, had supported the FMoH in developing. The forecast workshops aimed to collaborate with key stakeholders in each state to make necessary adjustments to the national forecast assumptions based on the state's demographics and medicine consumption data, and develop state-specific projections.

In Ebonyi, we collaborated with USAID Global Health Supply Chain - Procurement and Supply Management (GHSC-PSM) for a three-day forecasting workshop from August 7 to 9, 2024. For Delta, Plateau, and Katsina, we conducted one-day forecast workshops on July 17, 18 and September 12, 2024 respectively.

The outcome of these workshops was a set of state-endorsed forecasts that comprehensively addressed both clinical training needs and initial Drug Revolving Fund requirements of each state in preparation of the rollout of the comprehensive PPH bundle.

Empowering the Frontlines: Training and Capacity Building

OSCE demonstration in Plateau state

Our final preparatory step was to build a cadre of skilled professionals ready to cascade PPH management knowledge across our focus states.

This journey included:

- Participating in the National PPH guideline review workshop alongside the FMoH and other implementing partners to develop draft guidelines for PPH and Pre-Eclampsia/ Eclampsia (PEE) for all levels of care. The PPH guidelines included the use of calibrated drapes, HSC for PPH prevention, and the MOTIVE bundle as the first line of treatment for PPH, as well as escalation and referral procedures.

- Supporting the development of the national PPH training manual on May 16th and 17th, 2024, alongside the FMoH and other key players in the Nigerian maternal health space including representatives from the National Primary Health Care Development Agency (NPHCDA), Nursing and Midwifery Council of Nigeria (NMCN), Society of Gynaecology and Obstetrics of Nigeria (SOGON), and implementing partners like TA Connect, CHAI, Options, and JHPIEGO. The workshop's primary goal was to adapt the World Health Organization's (WHO) PPH training manual to the specific context of Nigeria. This involved tailoring the content and updating participants on the latest advancements in PPH management. Participants reviewed the training materials, encompassing all aspects of PPH management - prevention, early detection, and treatment. These materials covered three key components:

    - ***Facilitator's Guide:*** *Providing instructors with a roadmap for effective training delivery*
    - ***Participant's Guide:*** *Equipping healthcare workers with the essential knowledge and skills to manage PPH*
    - ***Objective Structured Clinical Examination (OSCE):*** *Offering a practical assessment tool to evaluate healthcare worker competency.*

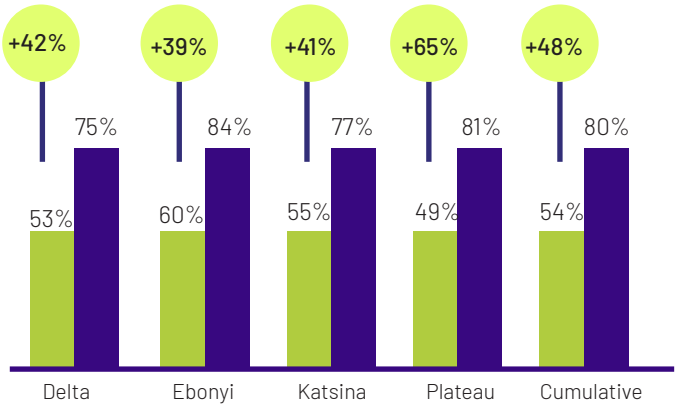
- Conducting the National Training of Trainers (NToTs). This was conducted in two phases, the first one was held in Abuja between June 4th-5th, 2024, and the second in Uyo between July 8th-9th, 2024. The NToTs aimed to create a nationwide network of experts who can cascade PPH management skills across the country. These individuals will go on to train state-level master trainers, who will then disseminate their knowledge to healthcare workers throughout their states. The training covered in-depth presentations on key PPH management topics. Interactive workshops and group activities allowed them to hone essential skills like visual blood loss estimation, active management of the third stage of labor (AMTSL), E-MOTIVE techniques, and proper application of Non-pneumatic Anti-Shock Garments (NASGs). It also featured a series of OSCE stations. Participants tackled simulated scenarios under the guidance of experienced facilitators, allowing them to demonstrate their newly acquired knowledge and practice clinical decision-making.

These efforts culminated in conducting State Training of Trainers (SToTs) in each of our focus states. The SToTs aimed to establish a pool of state master trainers who will lead cascade training for clinicians in their respective states and support the scale-up of the PPH bundle in these states. The training took place between August 20th to 22nd, 2024 in Delta and Plateau States. Additionally, the training took place from August 21st to 23rd, 2024 in Ebonyi State and from September 10th to 12th, 2024 in Katsina State. A total of 20 master trainers were trained in each state bringing the cumulative state master trainers to 80.

The training focused intensively on PPH prevention and management, covering topics such as respectful care, Active Management of the Third Stage of Labor (AMTSL), early detection of PPH, and the E-MOTIVE bundle approach, utilizing the National PPH facilitator and provider guides. Participants engaged in practical sessions, simulations, and group discussions. They also completed OSCE stations to demonstrate their skills in providing AMTSL, managing women with 500mls blood loss with no symptoms, and managing uterine atony.

The training also explored Emergency Obstetric and Newborn Care (EmONC) topics, such as danger signs in pregnancy, labor and delivery, cesarean sections, instrumental delivery, pre-eclampsia/eclampsia, sepsis, and Maternal, Perinatal, and Child Death Surveillance and Response (MPCDSR) using the SfM training modules. Additionally, the training covered quality of care, clinical data management, pharmacovigilance, and supply chain management. Various teaching methods were employed, including content reviews, video sessions, case studies, role-plays, and practical exercises. Each session included time for participant reflection, ensuring a thorough understanding and the ability to cascade the training effectively.

The results were impressive: a 20% improvement in PPH management knowledge after the NToTs, and a cumulative 47% knowledge gain across the focus states after the SToTs. The OSCE assessments during the SToTs also showed a significant increase in participants' knowledge as they demonstrated strong clinical skills.



Knowledge Improvement in Training Sessions

Other Program Activities

In Ebonyi state, the team supported the review of the Ebonyi State Essential Medicines List (EML) on July 15th and 16th, 2024. This review aimed to update the state's EML, which had not been updated since 2015, and to develop a monitoring and implementation plan to promote its usage.

The state adopted the 2020 National Essential Medicines List (NEML) for adults and children into its EML and included key PPH bundle commodities, such as the Calibrated drapes. The program will also support printing and dissemination of this EML following validation and approval by the Honourable Commissioner of Health (HCoH).

Celebrating Milestones: Our Achievements

As we conclude this preparatory phase, we celebrate several key achievements:

1. Successful stakeholder buy-in across all four states
2. Development of state-specific, costed implementation roadmaps
3. Supported the creation of a national pool of 61 master trainers
4. Establishment of 80 state-level master trainers
5. State-endorsed forecasts for PPH bundle commodities
6. Updated Ebonyi State Essential Medicines List to include PPH bundle commodities

Knowledge Generated

Throughout the preparatory phase, SfM developed and disseminated valuable resources to stakeholders:

1. **Two newsletters:** Provided regular updates on project progress and insights.
2. **Factsheet on the comprehensive PPH bundle:** Offers concise, accessible information on the comprehensive PPH bundle intervention.

These materials played a crucial role in maintaining stakeholder engagement and ensuring that our stakeholders had a consistent understanding of the comprehensive PPH bundle

Scan the QR code to view these

LESSONS FROM THE JOURNEY

The preparatory phase yielded several valuable insights that will inform future implementation:

1. It is important to coordinate closely with the FMoH to facilitate stakeholder engagements, rather than approaching stakeholders independently. This approach recognizes that our intervention is fundamentally an FMoH-driven initiative. By leveraging the FMoH's authority and influence, we can significantly enhance the credibility of our program. This federal-level backing can lead to increased buy-in from state-level stakeholders, potentially accelerating adoption and implementation processes.

2. There is a critical need to involve all maternal health agencies within each state from the outset of engagements. This comprehensive approach ensures no key players are overlooked in the planning and implementation phases. By casting a wide net in stakeholder engagement, we create a more robust and sustainable foundation for our intervention. This inclusive strategy helps prevent potential roadblocks that might arise from overlooked agencies, fosters a sense of shared ownership among all relevant parties, and facilitates better coordination in implementing the comprehensive PPH bundle.

3. State-level facility data proved more accurate than national population estimates for forecasting, highlighting the need for the Federal Ministry of Health to integrate state-level data in future national forecasts

4. Stakeholders expressed concerns about cold chain facilities, substandard products, and the need for multiple uterotonic doses. While open to heat-stable Carbetocin (HSC), they recommended a cautious approach due to availability and cost concerns

5. In Delta State, many health workers still rely on ergometrine for PPH prevention, emphasizing the need for targeted change management strategies through training and mentoring

6. Training enhancements:

    - Incorporating pre-Objective Structured Clinical Examinations (OSCEs) in training sessions could improve learning outcomes, as demonstrated in Ebonyi State

    - Demonstration kits at training sites proved valuable, especially for new and less common commodities

    - Trainers with hands-on experience using the PPH bundle were generally more effective.

7. Clear standards for calibrated drapes are crucial to ensure quality. Advocacy to the Federal Ministry of Health is necessary to enforce these standards as specifications are being developed

8. Managing stakeholder expectations emerged as a critical factor for project success

Challenges	Mitigation strategies
Limited availability of essential commodities like oxytocin, tranexamic acid, and IV fluids during the SToTs sessions	The team secured additional commodities from facilitators' facilities for demonstration
Some calibrated drapes leaked during the SToTs, highlighting potential quality control concerns	The team received alternative drape brand from nearby EMOTIVE site
Katsina state requested a Memorandum of Understanding (MoU) be signed by the HCoH before beginning any preparatory phase activities. Additionally, a change in government further stalled the signage of the MoU, in turn stalling the commencement of any activity in the state	The team had continuous advocacy with the Permanent Secretary in the state and other key stakeholders and eventually received the go-ahead to begin activities in the state

THE ROAD AHEAD: NEXT STEPS

OSCE demonstration in Delta state

With the foundations laid, we're poised to move into the implementation phase of our PPH bundle expansion. Our next steps include:

- Initiating cascade training in healthcare facilities
- Implementing robust monitoring and evaluation systems
- Continuing stakeholder engagement and support
- Begin procurement and distribution of PPH bundle commodities

Conclusion

The preparatory phase of the SfM program's expansion has laid a robust foundation for implementing the comprehensive PPH bundle in Delta, Ebonyi, Katsina, and Plateau states. Through meticulous stakeholder engagement, thorough assessments, tailored forecasting, and intensive capacity building, we have generated crucial knowledge and insights that will guide our future efforts.

As we close this chapter and look forward to full implementation, we are filled with hope and determination. The journey to reduce maternal mortality due to PPH in Nigeria is far from over, but with each step, each trained healthcare provider, and each life saved, we move closer to our goal. The Smiles for Mothers program, through this expansion, is not just about effectively managing PPH – it is about ensuring that more mothers survive childbirth, more families stay whole, and more communities thrive.

Photo Reels

Cross-section of Plateau state stakeholders at the state training of trainers

Delta state stakeholders at the Forecasting workshop

Participants at the Ebonyi state ToT

Plateau state stakeholders with SfM representatives at the co-creation workshop

Demonstration of the use of non-pneumatic antishock garments in Katsina State

SfM representative going over the Policy adoption journey at the Delta state co-creation workshop

SfM representative going over the state-specific recommendations during the co-creation workshop in Katsina State

OSCE demonstration in Plateau state