SUSTAINING ACCESS TO QUALITY UTEROTONICS IN NIGERIA

A Human-centered Design Approach



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Background

Quality uterotonics are crucial for reducing maternal mortality from postpartum hemorrhage (PPH), which accounts for **29%** of maternal deaths in Nigeria — one of the highest burdens globally, with **58,000** annual maternal deaths (19% of global total)¹ with uterine atony as the most common cause.² Despite the importance of Oxytocin, challenges like inadequate cold chain infrastructure (2°C - 8°C), poor supply forecasting, and inconsistent distribution limit access. A recent study showed that 74% of Oxytocin failed the quality test.³ The Smiles for Mothers program addressed this by employing a human-centered design approach to develop a sustainable supply chain for quality uterotonics in **Kano**, **Lagos**, and **Niger** states, engaging stakeholders to create lasting solutions that enhance availability, reduce maternal deaths, and support Universal Health Coverage.

Commonest causes of PPH in Nigeria² Uterine atony Lacerations Retained POC Others Survey of quality of Oxytocin in Nigeria³ Passed quality assay Failed quality assay 27% 74%

Results



Developed costed implementation plans for the rollout of HSC



Pilot rollout through Drug Revolving Funds



Reviewed and updated National & State EMLs and the LSS Manuals



Trained over 2,000 health workers across 3 states



Obtained NAFDAC approval for HSC importation



Administered over 13,000 ampoules during the IR study

Post-Implementation Outcomes



Supported the integration of Oxytocin and other heat-sensitive uterotonics into the vaccine supply chain



Roll out of HSC to 87 health facilities in the first year and increased adoption to 293 health facilities for PPH prevention



Procurement of HSC through the DRF and State Health Insurance schemes



ampoules of HSC

Kano, Lagos and Niger states have collectively procured 27,000



2,207 healthcare workers trained on PPH management

770 healthcare workers trained in the first year and currently over



Mentored healthcare workers in 86 health facilities on Emergency Obstetric and Newborn Care and supply chain management



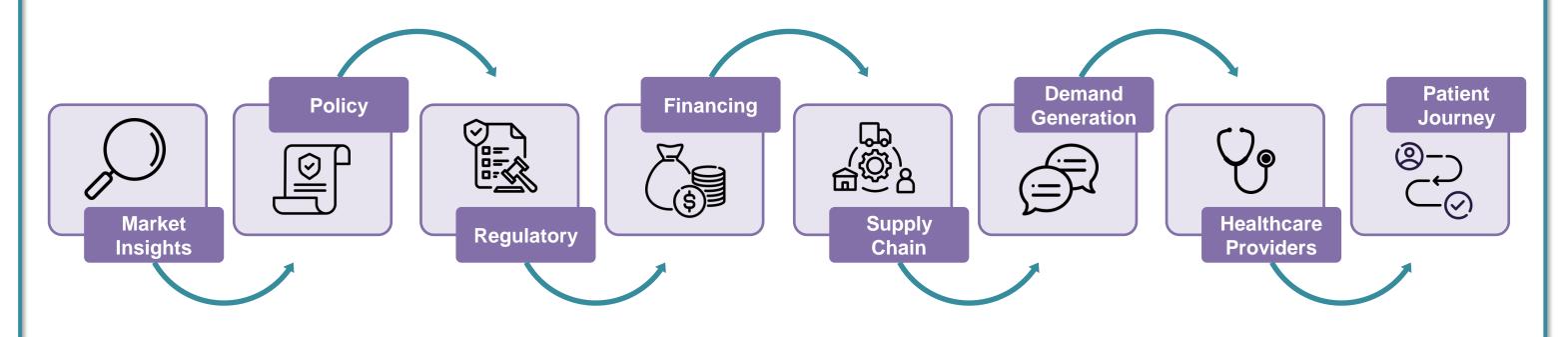
Developed and distributed patient literacy materials to over 13,985 women, increasing awareness and healthcare service uptake

Objective

To roll-out an intervention to strengthen the supply chain of existing Uterotonics and introduce heat-stable Carbetocin (HSC) as a fit-for-purpose uterotonic in health facilities across Kano, Lagos, and Niger states, with the aim of improving access to quality uterotonics and reducing maternal mortality rates due to PPH through a human-centered approach.

Methodology

Human-centered design approach was used to uncover supply chain challenges for uterotonics in Kano, Lagos, and Niger states and to identify priority interventions across a market shaping value chain to facilitate the rollout of heat stable Carbetocin. We applied this methodology to map the product journey for the introduction of HSC and to develop interventions to address the supply chain barriers affecting the availability of quality PPH medicines.



The value chain - Building blocks for market shaping & health system strengthening

Conclusion

The Smiles for Mothers program, through its human-centered design (HCD) approach, has strengthened the supply chain of uterotonics and successfully introduced and integrated heat-stable Carbetocin (HSC) into healthcare systems in Nigeria. This integration has led to progressive improvements and scale-up over time, significantly enhancing access to quality uterotonics and contributing to better maternal care. The program's success underscores the importance of collaboration and innovative supply chains in strengthening healthcare for all, serving as a blueprint for achieving Sustainable Development Goal 3.1 on reducing maternal mortality.

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