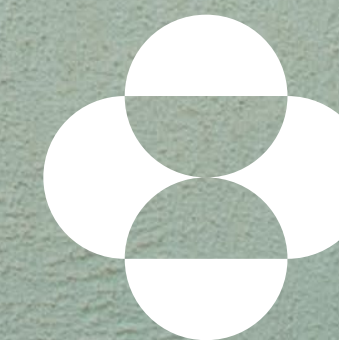




Transformational Impact:
Scaling and Sustaining
Maternal Health Solutions



MERCK
for Mothers

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A Message from Our Company

Merck for Mothers is Merck's global initiative to help create a world where no woman has to die while giving life. Applying Merck's business and scientific resources, Merck for Mothers works with grantees and collaborators to improve the health and well-being of women during pregnancy, childbirth and the months after. Merck for Mothers is known as MSD for Mothers outside the United States and Canada. For more information, visit www.MerckforMothers.com.

Access to health is a cornerstone of Merck's commitment to Environmental, Social and Governance (ESG) goals. For more than a decade, Merck for Mothers has been an essential component of our company's efforts to extend access to solutions that address unmet medical needs and advance health equity. Our aim is to spur transformations in health care for women across the globe and accelerate progress toward Sustainable Development Goal (SDG) 3.1: significantly reduce maternal mortality.

Transformational Impact: Scaling and Sustaining Maternal Health Solutions highlights six of our social investments and their paths toward scale and sustainability. Through these examples, the report describes how we have worked with our grantees and collaborators to enhance the capacity and resiliency of health systems to meet women's needs. These stories are wide ranging and include efforts to bolster standards for delivering quality maternity care, increase access to quality family planning services, and provide life-saving information about pregnancy and childbirth complications.

In support of the SDGs, and our company's goal to reach 30 million people by 2025 with our social investments,

we strive to improve maternal health by increasing equitable access to safe, high-quality and respectful care during pregnancy and childbirth. Working closely with diverse organizations helps us ensure that the catalytic investments we make are strengthening health systems for the long term so that future generations of women will have healthy pregnancies and safe childbirths.

In determining which solutions to advance, we consider three criteria: 1) is there evidence showing that the proposed solution works; 2) could it achieve impact at scale; and 3) could it be sustained after our funding ends.

At Merck, we are driven by the urgency to scale what works at a time when the COVID-19 pandemic continues to stretch health systems. We hope that sharing these solutions and the factors that contributed to their success will strengthen our collective efforts towards helping to end maternal mortality.

We are grateful to our grantees and collaborators whose creative solutions are reflected in these pages. We thank them for their outstanding efforts to help ensure that women today and tomorrow can lead healthier lives.

Carmen Villar



Carmen Villar
VP of Social Business
Innovation, Merck

Mary-Ann Etiebet



Dr. Mary-Ann Etiebet
Lead, Merck for Mothers & AVP
for Health Equity, Office of
Social Business Innovation, Merck



Introduction

The ability to sustain and scale health solutions has become increasingly important among implementers, governments, funders and community organizations and is a critical element of assessing the long-term success of any social investment. Nevertheless, reaching and benefiting more people and achieving long-term impact continue to be key challenges in public health.¹

Research shows that the planning and decisions made during the early stages of a project's life cycle heavily influence the likelihood of achieving sustainable outcomes.² This report aims to shed light on how catalytic investments in a diverse group of maternal health solutions have fueled forward-looking strategies and partnerships that have led to transformational impact for women around the world.

We believe that interventions that can expand broadly into new geographies and populations – especially underserved communities – in a sustainable and equitable way are an excellent investment in population health. By sharing the distinctive approaches that these six maternal health solutions have taken to reach scale, we hope to inspire others to replicate them and to generate greater excitement about the power of early-stage funding to deliver high impact results for women.

Merck for Mothers is committed to helping our grantees and collaborators scale what works and sustain impact in the communities they serve.

We define scale as increased reach of interventions, either within current geographies or in new geographies, to benefit more people.

We define sustainability as interventions that continue, even when initial funding support ends, because of new or revised regulations, policies or guidelines; development of sustainable business models; investment by others; and/or integration into government programs or other routine practices.



This report focuses on solutions that have demonstrated transformational impact on maternal health in vastly different contexts – from small private clinics in Maharashtra, India to a major hospital system in Bahia, Brazil.

In 2023, Merck for Mothers conducted interviews with the leaders of these efforts to better understand their pathways toward impact, scale and sustainability. Operating in Brazil, India, Indonesia, Kenya, Nigeria and the United States, each solution deployed a strategy tailored to the needs of women in their communities:

Each of these efforts highlights a distinctive solution to address the maternal health challenges of their context, yet there are common themes in how they achieved scale and sustainability. Alignment with national priorities and local unmet needs, early collaboration with government to pave the way for sustainability, partnerships with professional societies to accelerate scale, and integration into national policies, strategic plans and initiatives have been key to unlocking transformational impact.

Goal	Solution	Name	Partner	Country
Strengthen quality of care standards and practices in public and private maternity care facilities	Implementation of evidence-based training for health providers, quality improvement efforts and strengthened referral systems	All Mothers Matter	Sociedad Beneficente Israelita Brasileira Albert Einstein Hospital	Brazil
	A national quality certification that recognizes private maternity providers who meet evidence-based standards	Manyata	Federation of Obstetric and Gynaecological Societies of India (FOGSI), Jhpiego, Swasti	India
Increase access to quality family planning services across private and public health facilities	Scaling a training package for health providers to improve family planning services	Post Pregnancy Family Planning (PPFP) Choices	Jhpiego <i>Co-funded with the Bill & Melinda Gates Foundation</i>	Kenya, Indonesia
	Quality accreditation for local private drug shops and capacity building to enable adherence to quality improvement and quality assurance standards	IntegratE	Society for Family Health <i>Co-funded with the Bill & Melinda Gates Foundation</i>	Nigeria
Improve access to life-saving information and resources	Integration of postpartum discharge education program into routine obstetric care	Post Birth Warning Signs	Association of Women’s Health, Obstetric and Neonatal Nurses (AWHONN)	United States
	Education on maternal health warning signs disseminated through national communications campaign	Hear Her	Centers for Disease Control and Prevention (CDC), CDC Foundation	United States



Creating a new quality improvement model to address health disparities and reduce maternal mortality across Brazil

SOLUTION AT A GLANCE

Todas as Mães Importam (All Mothers Matter)

Brazil

2016-2023

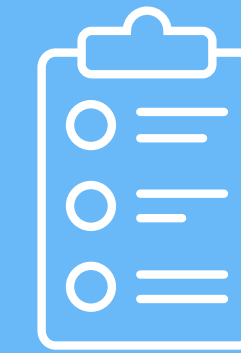


ALBERT EINSTEIN
SOCIEDADE BENEFICENTE ISRAELITA BRASILEIRA



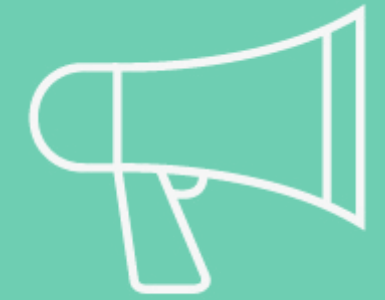
Problem Statement

Brazil, a middle-income country, has set a goal to reduce its maternal mortality ratio (MMR) to 30, *nearly 60%* below its current rate of 72 -- a more ambitious goal than the SDG global target of 70 deaths per 100,000 live births.³



Goal

Implement evidence-based training for health care workers and strengthen referral systems to reduce the maternal mortality ratio of participating public hospitals and maternity centers *by 30%*



Transformational Impact

This solution has been scaled to seven states and dozens of public hospitals – critical milestones toward state and national adoption of these life-saving efforts

High-quality maternal health care helps save women's lives

High quality maternity care is one of the most effective interventions to reduce maternal and newborn mortality and morbidity globally.⁴ Ensuring high quality care is especially important for women who face systemic inequities because of income, education, race, ethnicity, geography or culture and, thus, have disproportionately worse maternal health outcomes.

Focusing on underserved populations to reach national goals for reducing maternal mortality

In 2020, over 2,000 women died from complications related to pregnancy or childbirth in Brazil and an estimated 90% of these deaths were preventable.^{5,6} There are also significant disparities in maternal health outcomes among populations and geographies – the country's



maternal mortality ratios (MMR) are higher in the North and Northeast regions, in rural and poorer areas, and in Afro-Brazilian communities. Overall, many Brazilian women lack reliable access to timely, high-quality care throughout their pregnancy, putting them at greater risk for complications which can be life-threatening if they arrive at a hospital where health care providers are not equipped or trained to manage childbirth emergencies.

Catalytic approaches to achieve impact

Since 2016, Merck for Mothers has been working with Sociedade Beneficente Israelita Brasileira Albert Einstein (Einstein), a leading hospital network, and in collaboration with the Ministry of Health (MoH) as well as State and Municipal Secretariats of Health, to improve the quality of maternity care across Brazil, with the goal of reducing MMR by 30% in participating facilities.

To address Brazil's significant disparities in maternal health care, a pilot project was first implemented at a public referral maternity hospital in a poor section of Pernambuco State, where the MMR was three times the national average. High turnover of health providers, who were not trained consistently on maternity care protocols, was identified as a contributor to poor maternal health outcomes. The initial phase of this work tested a new training curriculum, based on protocols and methodologies provided by the MoH and input from hospital staff, with excellent results: a 54% drop in MMR in two years.

To increase reach beyond the initial hospital, Einstein extended the training to primary health care workers and provided information to traditional birth attendants in remote and rural areas of Pernambuco State, emphasizing the importance of prenatal care and timely referral of women with high-risk pregnancies. In 2022, Pernambuco State was found to be the Brazilian state with the highest reduction of MMR between 1990 and 2019, with a 74.6% decrease.⁷



Based on this success, the MoH supported replication of this solution in 19 hospitals in seven of the country's 27 states (including Pernambuco, Pará, Rondônia, Ceará, Minas Gerais, São Paulo and Rio de Janeiro), where MMR has been cut in half since implementation. In 2021, this successful model was replicated in Bahia, Brazil's largest state in the Northeast region, across 18 facilities serving more than 400 municipalities.

Focus on equity

After determining that Afro-Brazilian women living in poverty were more likely to die from pregnancy and childbirth complications – due to less access to health education and prenatal care – the quality improvement model evolved to include anti-racism and racial equity training for staff and social workers at these facilities. In addition, hospitals began collecting and stratifying maternal care indicators by race so that they can track progress in reducing racial disparities in care.

Initial Impact

Over **250** health providers trained and more than **8,000** women with access to improved quality care, resulting in a **54%** drop in maternal mortality.

Transformational Impact

Rapid advancement towards national scale with expansion to six additional states across Brazil and implementation in **over 500 cities** – resulting in 1,600 health providers trained and more than 400,000 women with increased access to improved quality care.

Transformations in policy and health system integration that are driving scale and sustainability

Policy

- States throughout Brazil are advocating with the National Council of States, Municipal Health Secretariats and the Women's Health Department of the Ministry of Health to revise the country's maternal health policies, guidelines and practices, as well as their maternity care referral systems, in order to integrate this quality improvement model.
- The Ministry of Health is promoting awareness of maternal mortality as a priority for national patient safety and is highlighting this solution with global audiences, including the World Health Organization (WHO), as an example of how Brazil is moving forward on its maternal mortality goals.

Health System Integration

- Key partnerships are helping scale implementation of best practices and trainings from this maternal health solution across the public health system. For example, virtual learning and mentoring sessions have been developed with the support of the National Council of Municipal Health Secretariats and professional societies and were provided to hundreds of health professionals across the country.
- This maternal health solution has spawned the development of a digital health education and decision support application as a resource for health professionals, patients and families. The app, in an initial testing phase with 10,000 potential users in 2023, includes a wide array of life-saving tools, such as an obstetric early warning score with recommendations for action.



- A rapid improvement network has been created to connect and equip health providers across the country with the knowledge and skills needed to improve care delivery for women, in partnership with state health agencies and the National Council of Health Departments.

Through a strategic partnership with the Institute for Healthcare Improvement, this maternal health solution is being replicated in Africa, with the goal of reducing maternal mortality in this region, which has the highest maternal mortality rates in the world.



“It is with great satisfaction that the Department of Health sees this initiative, participates in it and once it becomes a successful system, the challenge is for us to expand to other health units, to other municipalities, so that we can thus reduce maternal death in our state.”

Dr. Paulo José Bastos Barbosa
Bahia State Undersecretary of Health



“All Mothers Matter has become a very important support for the management and the team. We believe that we can provide quality service, while being concerned with equity and humanization, and performing medicine based on scientific evidence. The project has provided an excellent service to make an impact on maternal mortality rates.”

Dr. Amado Nizarala de Avila
Maria da Conceição Jesus Maternity Hospital



Scaling a national
quality certification
for private health
facilities that meet
evidence-based
standards in India

SOLUTION AT A GLANCE

Manyata

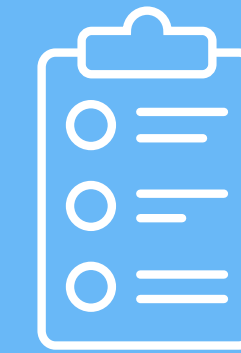
India

2013 – Present



Problem Statement

The quality of maternity care in India's private health facilities – which serve up to **40%** of women who seek facility-based care – is highly variable and often suboptimal, contributing to poor maternal health outcomes^{8,9}



Goal

Develop, test and scale a certification for private maternity care providers that acts as a stamp of quality, ensuring consistent, safe and respectful maternity care for women during the antenatal, intrapartum and postpartum periods



Transformational Impact

This certification – called Manyata – is scaling across the country, leading to sustained improvements in the quality of maternity care



Improving the quality of facility-based maternity care helps save lives

India has the second highest number of maternal deaths in the world, with over 23,000 women dying from complications of pregnancy and childbirth in 2020 alone.¹⁰ Although there have been great strides in the number of pregnant women who seek facility-based care in India, studies report that the quality of maternity care in private health facilities, which deliver up to 40% of deliveries in health facilities, is suboptimal.^{11,12}

Private health facilities are an untapped resource to expand access to quality maternal health services

An assessment in three states found that nearly half of all nursing staff in maternity care services at private health facilities were under qualified.¹³ The Government of India has launched various initiatives to improve the quality

of maternity care in public facilities – which also require urgent action to address inadequate quality and services – but there had not been comparable quality improvement initiatives for private health facilities.¹⁴

Catalytic approaches to achieve impact

In 2013, Merck for Mothers supported an effort to stimulate improved quality in maternity care in private health settings across India. The country’s obstetrician-gynecologists society – the Federation of Obstetric and Gynecological Societies of India (FOGSI) – with technical support from Jhpiego, launched Manyata, a quality improvement and certification program specifically designed for private health providers. Manyata has become a stamp of quality, assuring consistent, safe and respectful care for women during pregnancy, labor and delivery, and after childbirth.

The Manyata certification program is adapted from [WHO’s Safe Childbirth Checklist](#) and involves quality improvement

and assessment of a facility’s ability to meet 16 evidence-based clinical standards across antenatal, intrapartum and postpartum care, which includes postpartum hemorrhage, infection and complication protocols, Caesarean deliveries, and respectful maternity care. Recognizing that private providers required support to achieve certification, Merck for Mothers supported the introduction and scale-up of a quality improvement model, alongside the certification system, that helps private maternity care providers enhance their care and meet Manyata quality standards.

In 2013, Manyata was piloted in 144 facilities in 11 cities and peri-urban areas across two states with high rates of maternal mortality, Uttar Pradesh and Jharkhand. Within three years, Manyata produced impressive results: nearly 90% of facilities achieved a 70% score or better on adherence to safe care practices, compared to only 3% of facilities at baseline.¹⁵ After the program scaled to more facilities in Uttar Pradesh and Jharkhand and to a third state, Maharashtra, Merck for Mothers supported an implementation research study to help accelerate national scale. The study found a significant increase in nurses’ childbirth knowledge (score of 6.3 at baseline vs. 13.2 out of 20 at endline), complication skills (score of 8.0 at baseline vs. 34.3 out of 40 at endline), and adherence to quality standards (29% at baseline vs. 93% at endline).¹⁶

Today, Manyata has registered more than 2,000 participating private facilities in 23 states; over 1,500 of these facilities have achieved Manyata certification. By 2024, the program aims to certify an additional 1,000 private health facilities within a few priority cities to deepen its impact. Swasti, a public health non-profit organization based in Bengaluru, and PharmAccess Foundation, an international NGO, are supporting FOGSI in scaling and digitizing the quality improvement and certification processes, making it easier for facilities to track their progress, for trainers to provide tailored quality improvement support, and for assessors to efficiently evaluate facilities against the Manyata standards. Beyond India, Jhpiego is leveraging this maternal health solution to explore opportunities to replicate Manyata in new geographies across South Asia.

Initial Impact

Manyata has trained over 12,000 providers, delivering quality care to nearly **600,000 women.**

Transformational Impact

Over 2,000 private facilities have been certified or are pursuing quality certification in 23 states, in turn improving access to quality facilities for almost **70 million women** within these catchment areas. Facilities that participate in Manyata adhere to 93% of the quality standards (on average), compared to 29% when they begin the program.

Transformations in policy, financing and health system integration that are driving scale and sustainability

Policy

- The National Health Authority endorsed Manyata as a tool for strengthening health system capacity and improving the quality of maternal health care.
- The National Accreditation Board for Hospitals and Healthcare (NABH) is collaborating with FOGSI to support a joint assessment of private health facilities, combining NABH facility standards with Manyata clinical standards, accelerating uptake and supporting India's "One Nation, One Standard" mission.
- The Government of Uttar Pradesh issued guidelines that promoted compliance with and supported the introduction of Manyata in private health facilities across eight districts.

Financing

- Funding from Takeda and USAID is enabling Manyata to scale across private facilities in Madhya Pradesh, Odisha, Assam and Chhattisgarh.
- Private facilities that register for the program are paying FOGSI for Manyata assessment – a critical step towards ensuring self-sustainability of the solution beyond donor funding.
- USAID collaborated with Merck for Mothers to co-fund the [Utkrisht Development Impact Bond](#) – an innovative financing mechanism and the first development impact bond for maternal health – to scale Manyata across Rajasthan. After 400 private facilities met quality standards, the co-funders paid a combined \$9M USD to the initial investor.

- Private maternity facilities are able to use new funding available from the USAID Blended Finance Facility – which pools donor funds for quality improvement efforts in private health facilities – to prepare for and apply for Manyata certification.

Health System Integration

- The quality improvement mentoring model, developed by Jhpiego, was successfully transitioned to nine Centers for Skill Enhancement (CSEs), local regional training centers that provide quality improvement support to Manyata-registered facilities. This transition will help ensure consistency in implementing the quality improvement model given the diversity of languages and contexts across India. New CSEs are being identified and onboarded across new geographies to accelerate program reach and scale.
- MaNTrA (Maa Navjaat Tracking App), a government owned data platform and a collaboration with FOGSI and UNICEF, is capturing critical maternal health indicators to support transparency and accountability for achieving population health outcomes in Uttar Pradesh.
- Manyata quality improvement modules are now available on Aastrika Sphere, a free digital learning platform available to nurses and midwives in India.
- The Government of Maharashtra integrated private maternity care into the state's quality improvement plans. Ten standards from the government's public sector quality improvement initiative – LaQShya – have been added to Manyata's 16 clinical standards to create a comprehensive set of quality standards, supporting joint implementation across the state.



“Now my staff does not come to me with problems but with solutions. There is a noticeable difference in the way my nurses have been diagnosing and documenting the cases. The training has helped the nurses expand their knowledge and get organized in managing the records. Right from analysis, diagnosis of patient cases, or making sure that documentation is in order, our nurses are doing it all.”

Dr. Riddhi Kathuria
Vijay Nursing Home, New Delhi

“I recognized the importance of receiving the care I needed for a healthy pregnancy, with my doctor's support. Through the doctor and nurse's consistent counselling, I felt motivated to take all necessary vaccines, improve my nutrition intake, maintain my weight and other health indicators.”

Sunita
Mom from a Manyata-certified facility



Paving the way for national expansion of high quality family planning services after pregnancy in Kenya and Indonesia

SOLUTION AT A GLANCE

Post-Pregnancy Family Planning (PPFP) Choices

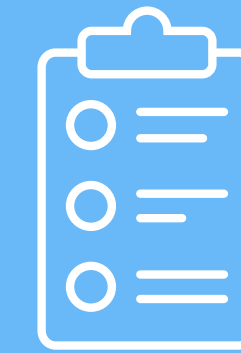
Kenya, Indonesia

2016 - 2021



Problem Statement

Women in Kenya and Indonesia have a high unmet need for PPFP, hindering progress in reducing maternal mortality and morbidity



Goal

Equip countries to significantly increase uptake of PPFP as a life-saving solution



Transformational Impact

The proportion of women adopting a PPFP method **increased by 24%** in 30 intervention sites in Kenya and Indonesia. These countries are now increasing nationwide access to high quality PPFP counseling and services across public and private health facilities.



Meeting family planning needs after pregnancy helps save women's lives

Family planning is one of the most effective interventions to reduce maternal and newborn mortality and morbidity globally. Meeting the need for modern contraception could avert close to 30% of all maternal deaths each year.¹⁷ Post-pregnancy family planning (PPFP) focuses on the prevention of unintended and closely spaced pregnancies during the first 12 months following childbirth. Given that more than one in ten women are in the postpartum period every year, and the majority do not use a modern contraceptive method, PPFP represents an important

window of opportunity to provide family planning services and help prevent maternal deaths.¹⁸

Urgent need to increase access to post-pregnancy family planning in Kenya and Indonesia

Kenya and Indonesia are two countries where a high proportion of women – 63% and 27% respectively – do not have access to family planning within one year of pregnancy, including access to the full range of modern family planning methods.¹⁹ Both countries supported

the World Health Organization's 2015 guidelines around medical eligibility for contraceptive use as part of national efforts to reduce maternal and newborn mortality. However, they needed to determine the service delivery changes that would be required to effectively implement these guidelines for expanded eligibility of family planning for women after pregnancy.

Both Kenya and Indonesia have mixed health systems where the private sector delivers a considerable proportion of health care, including maternity care. An estimated 25% of women in Kenya and 73% of women in Indonesia who seek facility-based maternity care give birth in private health clinics and hospitals, underscoring the importance of including the private sector in efforts to increase access to PPFP.^{20,21}

Catalytic approaches to achieve impact

In 2012, Merck for Mothers and the Bill & Melinda Gates Foundation made a joint \$50M USD multi-year commitment in support of global family planning goals to expand access to contraceptives to an additional 120 million women and girls in the world's poorest countries.²² Together, they funded PPFP Choices, an implementation research study conducted by Jhpiego, to facilitate greater access to evidence based PPFP services throughout Kenya and Indonesia. The goal from the outset was to achieve national scale by leveraging programmatic learnings from the study to accelerate PPFP in these two countries.

PPFP Choices' interventions included (1) Capacity-building for health providers in counseling women about PPFP during antenatal care and providing family planning services within the year following pregnancy; (2) Quality improvement efforts to overcome systemic barriers to delivering PPFP services in health facilities; (3) Interventions for private health facilities, including strengthening these providers' advocacy and business management skills; and (4) Exploration of innovations to meet the specific needs of adolescents (Kenya only).

A study of the efficacy, feasibility and acceptability of these PPFP interventions in eight sites in two Central Java districts (Indonesia) and 22 sites in Meru and Kilifi counties (Kenya) found that the proportion of women adopting a PPFP method increased by 24% in each country. These results demonstrated the impact of counseling and services on uptake of contraception after pregnancy, reinforcing the importance of strengthening national guidelines and supporting sub-national level funding to scale this solution nationwide.



Impact

Kenya

Initial impact:

270,000 women

with access to PFP services in two counties; **1,000+ health care providers** trained

Transformational impact:

24% increase

in PFP uptake in intervention sites

Indonesia

Initial impact:

34,237 women

with access to PFP services in two districts; **57 health care workers** trained

Transformational impact:

24% increase

in PFP uptake in intervention sites



“PFP Choices has come at the right time to empower private providers with skills to offer FP services to clients immediately after delivery to prevent maternal, perinatal and infant complications that come with lack of child spacing. This Jhpiego PFP training has given me a rare opportunity to refresh and update my contraceptive skills, which I have not received for the last 20 years, since I left public service. Surely, this will not only increase the scope of services that I offer but also market my facility as a center for quality FP services.”

Mary Kathei

Nurse proprietor of Kawiria Maternity and Nursing Home in Kenya

Transformations in policy, financing and health system integration that are driving scale and sustainability

In each country, PPFPP Choices formed a technical advisory group that included representatives from the Ministries of Health, district and provincial health and family planning offices, professional associations, and other international NGOs. The group regularly reviewed the study's progress, shared evidence and provided recommendations, technical assistance and resources to help scale access to PPFPP beyond the intervention and control sites.

Kenya

Policy:

- The government updated the country's national family planning guidelines to include the WHO's recommendations for spacing pregnancies, adopted the WHO's PPFPP indicators and began requiring all public and private facilities to report on their performance.

Financing:

- The national government is allocating funds for PPFPP training at the county level to scale the training package to more than 2,600 additional facilities, beyond the original sites.

Health System Integration:

- The Ministry of Health established a national pool of trainers and mentors that has now scaled to all 47 counties, with funding from the World Bank.

Indonesia

Policy:

- As of 2020, the government started reimbursing private facilities for providing PPFPP services in response to PPFPP Choices' cost-benefit analysis which showed an estimated \$70 saved for every \$1 invested. The Indonesian government has already committed to reach 80% of postpartum women with family planning services.²³

Financing:

- The national government is allocating funds for PPFPP training, helping ensure that states have sufficient resources and budget to adapt and scale the training package.

Health System Integration:

- The Ministry of Health is offering an official certificate to health care providers who complete the training package, incentivizing participation and enabling PPFPP counseling to scale and sustain beyond the initial phase. Indonesia's midwifery professional association endorsed the PPFPP Choices curriculum at the end of 2022, and it is now integrated into midwifery nursing schools across the country.



Beyond Kenya and Indonesia, lessons from PPFPP Choices are being replicated in other geographies. The Challenge Initiative, funded by the Bill & Melinda Gates Foundation, is supporting regional sharing of PPFPP Choices' lessons and tools across additional sites in Kenya, as well as in Uganda and Tanzania, with the goal of increasing women's access to PPFPP services in these countries which also have high unmet need.



Increasing access to quality family planning services in communities across Nigeria

SOLUTION AT A GLANCE

IntegratE

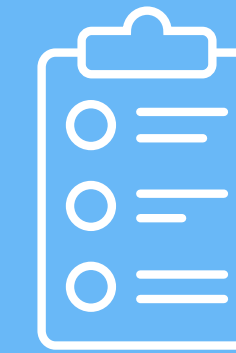
Nigeria

2017- 2023



Problem Statement

Nigeria, the country with the most maternal deaths in the world, has an extremely low rate of modern contraceptive use – 12%. An estimated **40%** of women who receive family planning services get them from private health settings, especially local drug shops, whose staff are not formally trained and offer limited options of modern contraceptives.²⁴



Goal

Accredit local private drug shops to improve the quality of family planning services available at the community level, thereby increasing access to this life-saving intervention



Transformational Impact

Quality accreditation of local private drug shops has expanded to **almost one-third** of Nigeria's 36 states.²⁵ The federal government has changed its Task-Sharing, Task-Shifting policy to allow accredited local private drug shops to offer a broad range of modern contraceptives, expanding communities' access to quality family planning services.

Access to modern contraception helps save women's lives

Family planning is one of the most effective interventions to reduce maternal and newborn mortality and morbidity globally. In 2022 alone, women's use of modern contraception averted 141 million unintended pregnancies and 150,000 maternal deaths.²⁶ Meeting the need for modern contraception could avert close to 30% of all maternal deaths each year.^{27,28} However, in low- and middle-income countries, many women have an unmet need for modern contraception.²⁹

Unique opportunity to leverage the reach of local private drug shops for family planning in Nigeria

Nigeria has the highest annual number of maternal deaths in the world - 82,000 -and has the third highest maternal mortality ratio.³⁰ The country has one of the lowest



modern contraceptive prevalence rates at just 12%, due in part to limited access to a broad range of quality family planning methods. Across Nigeria, local private drug shops are the entry point of care within communities for many: 40% of those who seek family planning do so from private health care providers, especially community pharmacies. However, these outlets are often unregulated, not formally recognized by the health system, and have staff with limited training on how to deliver quality family planning services as part of their primary care offerings.

Catalytic approaches to achieve impact

Merck for Mothers and the Bill & Melinda Gates Foundation's joint \$50M USD multi-year commitment in support of global family planning goals funded the IntegratE Project to increase access to a broad spectrum of contraceptive methods. The solution focused on improving the quality of services delivered by local private drug shops in Lagos and Kaduna states. A consortium, led by the Society of Family Health, in close collaboration with the Pharmacists Council of Nigeria (PCN), implemented an accreditation system to incentivize local private drug shops to improve the quality of the family planning services they offer as well as other primary health care services of great concern, including pneumonia, malaria, diarrhea and nutrition.

IntegratE involved building drug shops' capacity to meet and adhere to quality improvement and quality assurance standards, implementing an accreditation system to sustain the delivery of high-quality services, and advocating for policy changes to accelerate scale and sustainability of the accreditation system.

Ensuring that the PCN and state ministries were deeply engaged throughout this effort was essential to laying the foundation for national scale and sustainability. IntegratE convened a national stakeholder steering committee to create a unified vision for expanding access to family planning services and support the PCN to



design, implement and supervise the initial test of the accreditation and reporting system. Members included the Federal Ministry of Health, state ministries of health, the leadership of community pharmacists, and the national association of patent and proprietary medicine vendors. Partnership was a critical contributor to the project's ability to scale and sustain its impact.

IntegratE achieved impressive results during its first four years. More than 200,000 women in Lagos and Kaduna States gained access to quality family planning services from over 1,400 drug shops that were trained and accredited. The project's findings demonstrated that, when properly supervised and supported, local private drug shops can safely provide an expanded set of modern contraceptives, including injectables and implants. Likewise, research showed that training and accreditation instilled local communities' confidence in the quality of family planning services these drug shops provide, leading to increased demand for their services.

Initial Impact

Over 200,000 women received family planning services from local private drug shops; 1,400 local private drug shops received high-quality family planning training and supervision; an estimated **17,000 unintended pregnancies were averted**

Transformational Impact

Expansion to **11 of 36 states** across Nigeria, working with over **4,000 local private drug shops**, and on a path to scale nationally

Transformations in policy, financing and health system integration that are driving scale and sustainability

IntegratE's accreditation system is significantly increasing access to quality family planning services in local communities across Nigeria and national policy changes are sustaining the initiative's impact in saving women's lives.

Policy

- Nigeria's Ministry of Health revised its federal Task-Shifting, Task-Sharing policy in 2022 to formally allow accredited local private drug shops to provide family planning services, including implants and injectables. This policy will be implemented in target states in 2023, leading to wider availability and access to a broader range of quality family planning products, especially for underserved populations in semi-rural and rural areas.
- Nigeria has integrated private drug shops as recognized service providers in its National Strategic Framework for Community Health, expanding the availability of quality family planning services in local communities.

Financing

- The Pharmacists Council of Nigeria is allocating personnel in 11 states to oversee the accreditation system and is considering adding a specific budget line for accreditation of private drug shops. PCN established a budget line item to maintain a new online platform for patent proprietary medicine vendor and community pharmacist registration, licensing, monitoring, supervision and accreditation enforcement processes.
- Additional funds from the Bill & Melinda Gates Foundation and Merck for Mothers are facilitating the expansion of this maternal health solution to provide quality family planning services across Nigeria.

Health system integration

- The Pharmacists Council of Nigeria shifted responsibility from grant-funded NGOs to local schools of health technology to assure sustainability in training private drug shops to deliver quality family planning and primary health care services. A Memorandum of Understanding is in place with 22 of these schools in 11 states.
- Data on family planning services provided by local drug shops are now integrated into national District Health Information Systems in Lagos and Kaduna, giving drug shops and policymakers a clearer understanding of the supply and demand for family planning products in the private sector.
- USAID's Integrated Health Program Project and other efforts involving local private drug shops in Nigeria have adopted IntegratE's training manual on delivering quality family planning services.

"I really enjoyed working with IntegratE and have seen the impacts of the project at the community level. Our people at the community are able to access family planning services at all times from trained local private drug shops. The project has also assisted the state to strengthen the task sharing and task shifting policy."

Nafisat Musa Isah
Deputy Director Community & Family Health and Reproductive Health Coordinator, Kaduna State

"Partnership was a critical success factor [for scale and sustainability]. Second critical success factor was continuous advocacy throughout the project and, of course, a supervisory system so that quality is sustained. Oftentimes, what makes a lot of people worried about working with health providers with less formal training at the community level is the issue of quality. This was not something the project took lightly at the design stage when we set in place a quality assurance system that gets services monitored over time sustainably."

Emeka Okafor
IntegratE Project Director, Society for Family Health





Incorporating education about serious postpartum health concerns into routine obstetric care in hospitals throughout the United States

SOLUTION AT A GLANCE

Post-Birth Warning Signs: Empowering Patients to Obtain Needed Care*

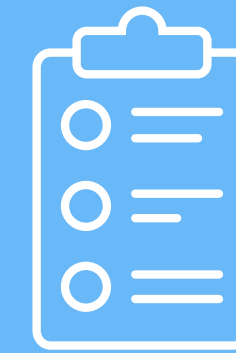
United States

2018-2021



Problem Statement

More than half of maternal deaths in the United States occur during the year following pregnancy, yet those who have just given birth and their health providers have limited awareness of life-threatening complications that could arise during the postpartum period.³¹



Goals

Raise awareness of postpartum health risks and equip people with the information they need to take action to safeguard their health



Transformative Impact

11 states are implementing policies to ensure that hospitals are integrating a standardized and comprehensive postpartum discharge education program into routine care, enabling postpartum patients and their families to make lifesaving decisions about their health.

* Per alignment with the grantee's program, this case study takes a gender-neutral approach to language

Raising awareness about postpartum complications can save lives

The U.S. has the highest maternal mortality rate among developed countries with an estimated 84% of maternal deaths considered preventable.³² More than half (53%) of maternal deaths occur in the critical postpartum period – up to 12 months following pregnancy.³³ Educating new parents about the risks of post-birth complications and the importance of seeking medical care can help improve health and save lives.

The importance of educating postpartum patients and nurses about postpartum health risks and taking action

Following the release of startling statistics from the CDC that a high proportion of maternal deaths in the U.S. occur postpartum, Merck for Mothers supported an initiative with the country's leading obstetric nurses association to better understand the problem and develop a solution that could be scaled nationally. As a first step, the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) interviewed more than 50 postpartum nurses and identified that participants did not provide consistent information about postpartum risks to patients who recently gave birth before discharging them from the hospital, highlighting a need to improve how nurses educate postpartum patients.³⁴

Catalytic approaches to achieve impact

In response, AWHONN developed the Post-Birth Warning Signs education program and toolkit to raise awareness among nurses and other health providers, as well as postpartum patients and their families, about



complications that could develop after leaving the hospital after childbirth. The initial program aimed to improve and standardize postpartum education in hospitals across the U.S.

A key element of the education program and toolkit was the development of an easy-to-understand *Save Your Life* handout with instructions for postpartum patients and caregivers to be on the lookout for warning signs of post-birth complications and seek immediate medical help if symptoms arise.

The program and toolkit were initially tested in New Jersey and Georgia with promising results: postpartum nurses reported that the educational materials and resources were easy to use and assisted them when educating new postpartum patients who understood the information they were receiving.³⁵

Based on these findings, Merck for Mothers supported AWHONN to accelerate national scale of this effort by partnering with a national health care improvement organization. This partnership facilitated adoption of the

training and discharge education materials in 70 birthing facilities across the country, training over 2,000 nurses who educated more than 55,000 patients.

According to the program evaluation, 99% of participating nurses reported that they would integrate postpartum education into discharge discussions with all new mothers; 80% stated that they would change their current clinical practice based on the program; and 66% said they would share the information with colleagues.

Focus on equity

The evaluation of this solution also showed that nurses increased their knowledge about health inequities, and how racism and bias are contributors to the disproportionately high rates of maternal mortality among Black and Indigenous patients and those living in low health access settings. Merck for Mothers is currently supporting AWHONN with its evaluation of the readability and accessibility of the *Save Your Life* handout for culturally diverse patient populations.

Initial Impact

By the end of 2021,

2,000 nurses were trained and **55,000 patients** were provided with resources to identify postpartum health risks and take action.

Transformational Impact

As of 2022,

9,000 nurses from **over 250 hospitals** have been trained. Eleven states across the U.S. have adopted the program in all of their birthing hospitals.

Transformations in policy, financing and health system integration that are driving scale and sustainability

AWHONN's evidence-based training, education and resources for postpartum discharge education are significantly increasing awareness among nurses, health educators and patients of postpartum risks. The adoption of a new standard of care for postpartum hospital and ambulatory care-based education across the country is sustaining the initiative's impact.

Policy

- 11 states, including New York, New Jersey and Georgia, have begun state-wide implementation of the postpartum education program in their hospitals, updating their policies regarding postpartum discharge.
- The federal government's Alliance for Innovation on Maternal Health and the American College of Obstetricians and Gynecologists have integrated AWHONN's Post Birth Warning Signs materials into their quality improvement efforts.

Financing

- Additional external funding facilitated the translation of the *Save Your Life* handout into 23 languages to reach more non-English speaking patients and help close equity gaps.

Health System Integration

- AWHONN's Knowledge to Action: Care Equity for Black Moms video is available as an open-access resource to address racial disparities and inequities in care and is being integrated into AWHONN's updated education materials for obstetric nurses across the country.



"We had a postpartum patient report to the emergency department post-discharge and specifically mention the discharge teaching she received and brought her Save Your Life handout to the emergency department to show that her symptoms were concerning since she had a baby within the last 5 days."

Anonymous Nurse

Responding to the impact of the Post-Birth Warning Signs education course

"A mother called to say she was experiencing signs of increased blood pressure - [a risk she learned] from her discharge education - and ended up coming in to be evaluated and then eventually re-admitted."

Anonymous Nurse

Responding to the impact of the Post-Birth Warning Signs education course

- The CDC's Hear Her campaign - a national effort to raise awareness of urgent maternal warning signs during and after pregnancy - includes the *Save Your Life* handout among its resources, expanding national reach and visibility.





Increasing awareness of warning signs for pregnancy-related complications and equipping communities with essential tools to engage in life-saving conversations in the United States

SOLUTION AT A GLANCE

Hear Her Campaign*

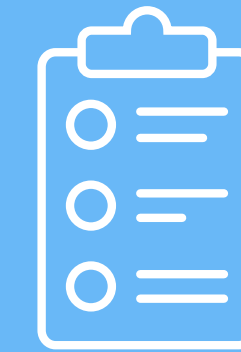
United States

2020 – 2022



Problem Statement

More than 80 percent of maternal deaths in the United States are preventable, and women from racial and ethnic minority groups have disproportionately higher rates of maternal mortality.³⁶ Many women – as well as their social support networks and health care providers – do not have the information they need to identify, communicate and respond to serious health risks during and after pregnancy.



Goal

Prevent maternal deaths by disseminating potentially life-saving messages about warning signs of urgent health problems that could arise during and after pregnancy



Transformational Impact

The national Hear Her campaign has secured federal funding, been embraced by several states and adapted to respond to the cultural contexts of women from diverse communities, especially those with high rates of maternal mortality

*Hear Her™ is supported through a partnership with the CDC Foundation and funding from Merck through its Merck for Mothers Program. Hear Her™ is a trademark of the U.S. Department of Health and Human Services.

Increasing awareness of urgent maternal warnings signs to prevent pregnancy-related deaths

The U.S. has the highest rate of maternal mortality among high-income countries.³⁷ Data reported by maternal mortality review committees in 36 states showed that 84% of maternal deaths are preventable – significantly above earlier estimates.³⁸ The U.S. also has wide disparities in maternal deaths across racial and ethnic minority groups: Black, Alaskan Native and American Indian women are two to three times more likely to die of pregnancy-related causes than White women, and this disparity increases with age.³⁹ These national trends have worsened over the past couple of years due, in large part, to the COVID-19 pandemic.⁴⁰

The importance of recognizing warning signs and strengthening communication between health care providers and their pregnant and postpartum patients

The Centers for Disease Control and Prevention (CDC), with support from Merck for Mothers via the CDC Foundation, has been providing technical assistance to strengthen maternal mortality review committees (MMRCs) across the U.S. These state-based multi-disciplinary committees conduct comprehensive reviews of the factors that contributed to a maternal death up to a year after pregnancy and develop recommendations to prevent future loss. An area that MMRCs and subject matter experts identified as a nationwide priority is the need to ensure that pregnant and postpartum women know the warning signs of complications and are listened to when they communicate their health concerns.^{41,42}

Catalytic approaches to achieve impact

In response to the startling findings on the high proportion of preventable deaths, the CDC Division of Reproductive Health designed a national social marketing campaign, titled “Hear Her,” with support from Merck for Mothers via the CDC Foundation. The campaign complements the Post-Birth Warning Signs education program and toolkit (see previous case study), which focused primarily on training health providers to share consistent and accurate information with new mothers during discharge from the hospital after childbirth to raise their awareness of postpartum health risks, and supports CDC’s efforts to prevent pregnancy-related deaths.

Hear Her, which launched in 2020, has four goals: (1) raise awareness nationally of serious pregnancy-related complications and their warning signs, (2) empower people who are pregnant or postpartum* to speak up when they have concerns about their body, (3) encourage their support networks to listen and take action, and (4) give health care providers tools to better engage in potentially life-saving conversations about these concerns. In its initial design, the campaign was intentional about reaching Black pregnant and postpartum people, who are disproportionately affected by poor maternal health care and outcomes, ensuring that their needs and voices are represented.

Using a comprehensive marketing and communications approach, Hear Her leveraged news outlets, social media, influencers and national events to disseminate critical information on pregnancy and childbirth-related complications nationwide.

According to a nationwide survey measuring the impact of the campaign over its first seven months, awareness of the campaign’s key messages increased by 55%, with

*Per alignment with the grantee’s program, this case study takes a gender-neutral approach to language.

95% of women responding to ads on pregnancy-related complications by seeking more information online, talking about pregnancy health with their providers and social networks, and overall feeling more comfortable discussing health complications.

Focus on equity

The team behind Hear Her conducted focus groups with over 70 participants, including Black women with lived experiences of pregnancy-related complications, to refine campaign messaging and determine the best strategy for implementing a culturally competent and nationally representative campaign. In its preliminary stages, the team tested the campaign concepts and messaging by creating an evaluation feedback loop to ensure the campaign resonated across markets as it scaled nationwide. The evaluation generated insights into audience needs and local market nuances, which led the Hear Her team to design additional materials – in English and Spanish – to expand the campaign’s reach.



Initial Impact

Over 1.5M people

across the United States engaged with Hear Her through the campaign’s website and social media channels, with **over 80,000 people** using the campaign’s supportive tools and communications resources.

Transformational Impact

The campaign has expanded its reach to produce culturally-appropriate and responsive resources for American Indian and Alaska Native communities and has scaled to the broader clinical community, including those working in obstetrics, pediatrics and other fields such as emergency medicine and primary care. Several states are running their own Hear Her campaigns, leveraging national resources and contextualizing them to the needs of their communities.

Transformations in policy, financing and health system integration that are driving scale and sustainability

The expansion of the Hear Her campaign is not only significantly increasing awareness of warning signs among pregnant and postpartum people, but also urging their support networks and providers to listen to women and act. In response to the diversity of the U.S. population, the campaign's materials were translated into more than 20 languages to limit access barriers to critical health information.

Policy

- Several states – including Arizona, Connecticut, New Jersey, New York, Tennessee, Texas and Utah – have adopted the campaign and its messaging to localize the materials and amplify the stories of women from their respective communities.

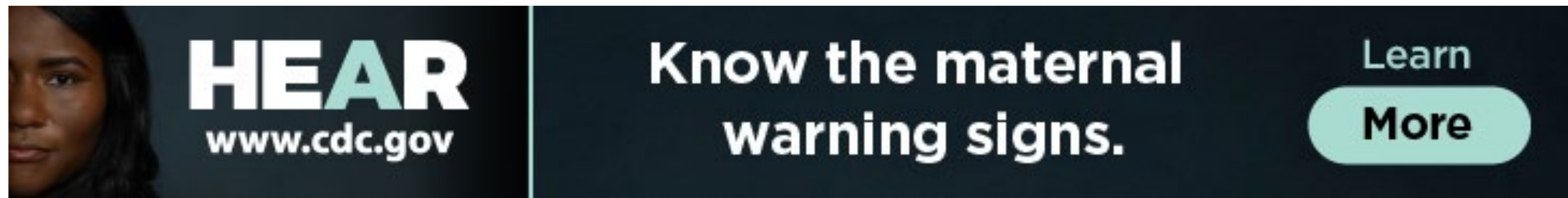
Financing

- Additional investment from the Health and Human Services Office of Minority Health has enabled the campaign to expand its reach to communities most severely affected by maternal mortality.

Health System Integration

- Hear Her microsites allow state and city health departments to embed campaign messaging and resources into their local websites through content syndication, facilitating broader access and reach within their geographies.
- The campaign's messaging and resources were translated into more than 20 languages to expand reach throughout the U.S.' diverse population.

Moving forward, the Hear Her team is exploring the need and feasibility of scaling the campaign further both within and outside the U.S.



Urgent Maternal Warning Signs

If you experience any of these warning signs, get medical care immediately.

- Severe headache that won't go away or gets worse over time
- Dizziness or fainting
- Thoughts about harming yourself or your baby
- Changes in your vision
- Fever of 100.4° F or higher
- Extreme swelling of your hands or face
- Trouble breathing
- Chest pain or fast-beating heart
- Severe nausea and throwing up (not like morning sickness)
- Severe belly pain that doesn't go away
- Baby's movement stopping or slowing down during pregnancy
- Vaginal bleeding or fluid leaking during pregnancy
- Heavy vaginal bleeding or leaking fluid that smells bad after pregnancy
- Swelling, redness or pain of your leg
- Overwhelming tiredness

This list is not meant to cover every symptom you might have. If you feel like something just isn't right, talk to your healthcare provider

Use This Guide to Help Start the Conversation:

- Thank you for seeing me.
I am/was recently pregnant. The date of my last period/delivery was _____ and I'm having serious concerns about my health that I'd like to talk to you about.
- I have been having _____ (symptoms) that feel like _____ (describe in detail) and have been lasting _____ (number of hours/days)
- I know my body and this doesn't feel normal.

Sample questions to ask:

- What could these symptoms mean?
- Is there a test I can have to rule out a serious problem?
- At what point should I consider going to the emergency room or calling 911?

Notes:



Learn more about CDC's Hear Her Campaign at www.cdc.gov/HearHer



"A person knows their body best. Listening and acting upon their concerns during or after pregnancy could save a life."

Dr. Wanda Barfield
Director of CDC's Division of Reproductive Health

Conclusion

With the urgency of the 2030 deadline for the SDGs rapidly approaching amid the setbacks in global health due to the COVID-19 pandemic, scaling and sustaining solutions that work is the most effective way to accelerate progress in meeting the global targets for reducing maternal mortality.⁴³

Our aim is to provide learnings from our experience making catalytic social investments to improve maternal health that will be useful to funders, implementers, governments, health providers and advocates who are also working to advance high quality, respectful maternity care for all. We hope that these case examples of transformational impact will inspire continued innovation to address unmet needs in global maternal health, speed up the implementation of proven solutions and contribute to strengthening health systems in order to save many more women's lives.

We look forward to continuing our support of ambitious efforts to develop policies and practices that lead to meaningful, measurable and lasting impact on maternal health – and growing this compendium of solutions.

Together, we can help end preventable maternal deaths.

Tell us what you think about this report by contacting us at: CSTMFORMOTHERS@merck.com.

Merck for Mothers is committed to driving long-term impact by:

- Calling for all the maternal health solutions we support to plan for scale and sustainability to maximize reach and impact.
- Capturing and monitoring qualitative and quantitative data from our collaborators about how they are using our catalytic investments to scale up their activities and sustain their impact, including through policy, financing and health system integration, and sharing successes and challenges along the way.
- Collaborating with industry, government, the development community and others to scale maternal health solutions that work and hold ourselves accountable to the women we aim to reach, especially in underserved communities.



Acknowledgements

Merck for Mothers is grateful for the opportunity to create transformational impact alongside so many organizations and coalitions doing transformational work. We are especially thankful to those leading the six solutions spotlighted in this report for their contributions. We are pleased to highlight their expanding efforts to address maternal health challenges and advance equity in maternal health. A special thank you to all of those who were interviewed for sharing your stories and perspectives: Samita Bhardwaj, FOGSI-NPMU; Elaine Charurat, Jhpiego; Claudia Garcia de Barros, Hospital Israelita Albert Einstein; Jessica Irrobal, AWHONN; Shiv Kumar, Swasti; Emeka Emmanuel Okafor, Society of Family Health Nigeria; Suranjeen Pallipamula, Jhpiego; and Livia Sanches Pedrillo, Hospital Israelita Albert Einstein.

The development of this report would not have been possible without the vision and editorial direction of Jacquelyn Caglia and the support of all members of the Merck for Mothers team: Mark Allen, Temitayo Erogbogbo, Mary-Ann Etiebet, Jeffrey Jacobs, Lee Matias, LaShawn Oliver, Iyadunni Olubode, Wilna Paulemon, John Reading, Pompy Sridhar, Catharine Taylor and Carmen Villar. A special thanks as well to Kleber Santos for his review of the maternal health solution from Brazil. We also thank Rabin Martin for its support in the development and coordination of this report as well as Matter Unlimited for the creative design.

Merck for Mothers is Merck's global initiative to help create a world where no woman has to die while giving life. Applying Merck's business and scientific resources, Merck for Mothers works with grantees and collaborators to improve the health and well-being of women during pregnancy, childbirth and the months after. Merck for Mothers is an initiative of Merck & Co., Inc., Rahway, NJ, USA. For more information, visit www.MerckforMothers.com



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