

PROGRAM REPORT

MSD for Mothers in Africa

Improving maternal health across Africa



Equity and access as MSD's driving forces

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

For more than a decade, MSD for Mothers has been an essential component of our company's efforts to address unmet medical needs and advance health equity. We invest in solutions that have the potential to transform health care for women across the globe by increasing access to safe, high-quality, equitable and respectful care during pregnancy, childbirth and the months after – our company's contribution towards Sustainable Development Goal (SDG) 3.1: significantly reduce maternal mortality.

This report focuses on our work in Africa, where many countries have made significant progress in maternal health, yet challenges persist. According to the World Health Organization (WHO), the maternal mortality rate declined by 33% between 2000 and 2020. However, sub-Saharan Africa continues to account for nearly 70% of maternal deaths globally.²

At MSD, we are committed to leveraging innovation to ensure that women have access to quality maternal health care and family planning services, regardless of their socio-economic status, ethnicity, nationality or where they live. Maternity care must be tailored to meet the needs of women, especially those from underserved and marginalized communities. We believe this is the way forward to help close disparities in care and save more women's lives.

We also believe that a critical pathway for access to health for all is to strengthen health systems, ensuring strong and well-trained healthcare professionals and reliable access to high-quality care. We are proud to collaborate with non-governmental organizations, health care professionals, businesses and local and national governments to understand and meet the maternal health needs of women across Africa.

This report describes how our company works through MSD for Mothers with diverse organizations to bolster standards for quality maternity care, increase access to this care, fortify the knowledge and capabilities of health providers, develop digital solutions and more. We are grateful to the team behind MSD for Mothers and all employees contributing to this company-wide initiative as well as to our grantees and collaborators whose impactful work are reflected in these pages. We thank them for their outstanding efforts to help create a world where no woman has to die while giving life.



Renan Ozyerli President, Eastern Europe Middle East Africa Region,



Zwelethu Bashman Managing Director, Sub-Saharan Africa Cluster, Eastern Europe Middle East Africa Region, MSD

MSD for Mothers: Committed to saving lives

MSD for Mothers is MSD's \$650 million (USD) global initiative to help create a world where no woman has to die while giving life.

In support of the United Nations' SDGs and our company's goal to reach more than 50 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.

To date, <u>MSD for Mothers</u> has helped improve access to quality maternity care for over 30 million women in more than 70 countries around the world, contributing to the global effort to save women's lives, strengthen health systems and meet the SDG targets by 2030.

In Africa, programs supported by MSD for Mothers have reached nearly 8.3 million women across 28 countries, playing a crucial role in improving maternal health outcomes across the continent. Our commitment extends to fostering initiatives that address the unique health care challenges that women in Africa confront, helping to ensure that every woman receives the high-quality care she deserves during pregnancy, childbirth and the critical postpartum months after.

Our approach

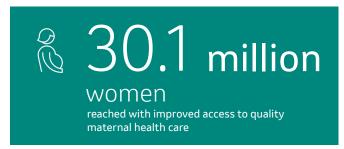
Recognizing the multifaceted challenge of maternal mortality, we take a holistic approach to addressing the many factors that have an impact on maternal health, especially in underserved communities.

Applying MSD's business and scientific resources, MSD for Mothers works with grantees and collaborators to improve the health and wellbeing of women during pregnancy, childbirth and postpartum. We are committed to working with organizations that have a deep understanding of the populations they aim to serve and are skilled at integrating women's voices and experiences into the services they provide.

The programs we support in Africa are **improving access** to quality maternity care and family planning services, with a focus on catalyzing innovation, integrating digital solutions, building capacity and increasing women's knowledge of quality maternity care. We have also supported efforts to raise awareness of maternal health challenges and encourage policy makers in Africa to prioritize equitable access to quality maternity care.

Our impact by the numbers

Our partnerships grantees and collaborators have made impressive strides to help improve maternal health worldwide











Maternal health in Africa

High-quality maternity care sets the foundation for women, children, families, communities and societies to thrive for generations to come.³ Improving availability of and access to high-quality care builds resilient health systems that can manage health emergencies while delivering primary care – saving more lives.

Thanks to increased attention to improving maternal health, sub-Saharan Africa has seen a notable **33% decline in maternal mortality rates** between 2000 and 2020.⁴

However, this region continues to account for 70% of global maternal deaths. In 2020 alone, more than 200,000 women in sub-Saharan Africa died due to complications related to pregnancy and childbirth. Most of these complications arise during pregnancy and most can be prevented or treated.

Maternal mortality in Africa is high due to a complex interplay of factors, including limited access to quality health care, high prevalence of substandard medicines, poor health care infrastructure, socio-economic conditions and limited education and awareness.⁷

Many women in Africa lack access to prenatal care, skilled birth attendants, emergency obstetric care

and postnatal care often because of insufficient health care funding.^{8,9} Inadequate health facilities, scarce medical supplies, and a shortage of well-trained health care providers present significant challenges.¹⁰ Hospitals and clinics may lack necessary equipment, medicines, and personnel to effectively manage childbirth emergencies. The shortage of trained health professionals, especially in remote areas where there are few health services and where transportation is poor, creates additional challenges leading to delays in care and increased risks for pregnant women.¹¹

As in other parts of the world, there are persistent disparities in accessing maternity care across African countries and within countries, disproportionately affecting women experiencing poverty or living in remote rural areas. ¹² Cultural beliefs and practices also influence women's decisions whether to seek care outside of the home and from a skilled health provider, even though the WHO recommends skilled birth attendance to ensure the detection and management of complications. ¹³

Addressing these complex challenges requires comprehensive strategies that consider the diverse contexts across the continent.



MSD for Mothers' impact in Africa

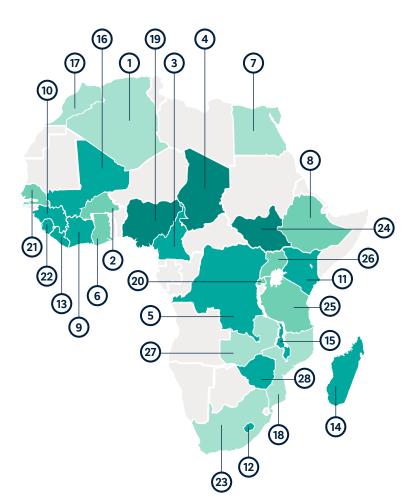
Through MSD for Mothers, our company is supporting organizations that improve women's access to high-quality maternity care and raise awareness of safe childbirth practices among women and families as well as health care providers. We support programs in a range of countries, including several that have maternal mortality rates that are among the highest in the world, such as Kenya and Nigeria. Through MSD for Mothers, we have supported nearly **50 distinct programs that have reached nearly 8.3 million women across Africa**. In the next sections of this report, we highlight some of these successful and diverse programs.

Maternal mortality varies in Africa

Maternal mortality ratio — maternal deaths per 100,000 live births (2020)¹⁴ in countries where MSD for Mothers works

Maternal mortality ratio (MMR) per country





Country	MMR
1. Algeria	78
2. Burkina Faso	264
3. Cameroon	438
4. Chad	1,063
5. Democratic Republic of Congo	547
6. Cote d'Ivoire	480
7. Egypt	17
8. Ethiopia	267
9. Ghana	263
10. Guinea	553
11. Kenya	530
12. Lesotho	566
13. Liberia	652
14. Madagascar	392
15. Malawi	381
16. Mali	440
17. Morocco	72
18. Mozambique	127
19. Nigeria	1,047
20. Rwanda	259
21. Senegal	261
22. Sierra Leone	443
23. South Africa	127
24. South Sudan	1,223
25. Tanzania	238
26. Uganda	284
27. Zambia	135
28. Zimbabwe	357

Kenya

Kenya has one of the highest numbers of maternal deaths in the world and must accelerate its pace of reducing maternal mortality to meet the SDGs by 2030.^{15,16} The Government of Kenya is developing policies and financing schemes that ensure women have access to quality and affordable maternity care services, including a commitment to achieving Universal Health Coverage (UHC) by 2030.^{17,18}

MSD for Mothers has taken a comprehensive approach to help tackle the large burden of maternal deaths in Kenya. Recognizing the widespread accessibility of mobile phones, with 98% of Kenyan adults equipped with them in 2020, the initiative has prioritized support through digital health programs that can help accelerate access to health and reduce maternal mortality.¹⁹

MomCare

Increasing access to affordable and quality health care through digital and financial solutions

Kenya's government's free pregnancy program – Linda Mama – has increased access to services, yet only 5% of facilities offering maternity services have all the equipment required to provide comprehensive maternity services. For many low-income mothers, services (e.g., staff, commodities, equipment) and funds to support their pregnancies are not available, and women therefore often turn to private facilities where they may have to pay out of pocket and receive varied service quality. This combination increases women's distrust towards health care services, while unexpected costs make them delay or forego care, contributing to poor health outcomes for mothers and their babies.

PharmAccess Foundation launched MomCare to address these challenges and ensure that women have access high quality care throughout their entire pregnancy, including regular antenatal care, facility-based delivery and postnatal care. MomCare is a digitally-enabled 'care bundle' that expectant mothers can sign up for. Once enrolled, women receive a unique prepaid 'mobile health wallet' which they use to pay for services at accredited facilities within the MomCare network. Women know upfront which services they are entitled to and can track their maternal health journey, improving their ability to complete the full continuum of care to help support a healthy pregnancy and safe childbirth. Women provide feedback on the care they receive through the platform, with no smart phone required. Providers also use digital tools to track their patients' care, improve the quality of care they provide and increase the speed of receiving payments for services delivered. Since health

care providers are precontracted, they can invest in the supplies and equipment needed, and as services improve, patients increase trust and adherence to care guidelines. The initiative integrates value-based health care, improving health outcomes at the best cost, with payers accessing real-time insights on the costs, utilization and outcomes of maternal health via the digital platform. MomCare has become accessible to expectant mothers across Kenya with nearly 37,000 women receiving care from 2021 to the end of 2023. Beyond Kenya, MomCare has also scaled efforts to reach 46,000 women in Tanzania and 3,700 women in Nigeria.





"As a new mother joining MomCare, I learned that my blood and my baby's are incompatible, a condition not covered by Linda Mama insurance. Fortunately, MomCare provided education and covered the costly medication, ensuring my baby's health and the safety of future pregnancies."

- MomCare beneficiary

Wazzii

Providing information that young women want, trust and need

When young women are unable to make informed decisions about their sexual health, there is lower uptake of contraceptives and increased rates of unintended pregnancies, unsafe abortions and sexually transmitted infections. While Kenya has made significant progress in increasing its modern contraceptive prevalence rate – to 58% in 2021 from 39% in 2014 – it will be critical for the country to sustain these gains in order to reach its target of 64% by 2030. 23,24

Girl Effect – a global NGO headquartered in Kenya – is creating content that helps young women make informed choices about their sexual and reproductive health. In 2023, Girl Effect launched Wazzii, a digital platform where young women can get trusted information about their family planning options, linkages to client-friendly services and access to contraception. Wazzii is developed by young people for young people – the chatbot has youth friendly content and a youthful tone, incorporating slang and emojis to communicate with users. Wazzii users are 25% more likely to access a health service for their sexual health than non-users.





"Wazzii is so informative and considerate at the same time. While interacting with Wazzii, it made me feel confident to visit a health clinic to talk about my sexual health. It even gave me a glimpse of the often-asked questions to just prepare me psychologically."

- Wazzii beneficiary, a resident of Nairobi county



Nigeria

Nigeria has the largest number of maternal deaths globally, accounting for over a quarter (28.5%) of all maternal deaths annually. In 2020 alone, 82,000 Nigerian women died from complications related to pregnancy and childbirth, each a devastating loss for families and communities.²⁷

MSD for Mothers has taken a comprehensive approach to help tackle the large burden of maternal deaths in Nigeria by supporting programs to provide women access to two of the most powerful ways to prevent these tragedies: quality maternity care services and modern contraception.

RICOM - Reducing Indirect Causes of Maternal Mortality and Morbidity

Addressing risk factors to prevent pre-eclampsia, eclampsia, diabetes, obesity and anemia

In Nigeria, the proportion of maternal deaths due to indirect causes – such as diabetes, anemia, hypertension and risk factors for pre-eclampsia/eclampsia (PE/E) – are increasing. Lagos state has considerable barriers to providing high-quality maternity care, including inadequate referral systems to coordinate care, low rates of people who have health insurance and extensive health worker shortages.²⁸

In Lagos and Federal Capital Territory, the Reducing Indirect Causes for Maternal Morbidity and Mortality (RICOM) consortium improved the identification, prevention, and management of risks during pregnancy, reducing the likelihood of poor maternal health outcomes. RICOM enhanced the clinical capabilities of over 5,000 providers and offered self-care support to 86,000 women of reproductive age, ensuring comprehensive care both within and outside health care facilities. This integrated woman-centered quality of care model delivered high-quality care and reduced risk factors for PE/E in 40 public and private facilities, reaching over 170,000 women.

Leveraging the insights and accomplishments of the RICOM project, mDoc, a digital health social enterprise and a member of the RICOM3 consortium, is implementing a whole-system quality approach to improve maternal health outcomes in Lagos and Ekiti states. Through a virtual learning network, mDoc is supporting health care workers and health system leaders with knowledge and skills while providing holistic maternal care to enhance women's physical, emotional,

and financial well-being using their Al-enabled coaching platform. This includes helping women to track and manage their health needs during pre-conception, intrapartum, and post-delivery. By supporting women through their care journey mDoc aims to bolster their access to resources and support they need to lead healthier, happier, and more fulfilling lives. mDoc is aiming to reach 200,000 women receiving care at 70 public and private facilities by 2025.





"Since 2019, RICOM's initiatives and capacity building have consistently upgraded our infrastructure, enhancing service delivery and the quality of care. Before this period, maternal mortality rates were high, with causes ranging from avoidable to unavoidable. Through RICOM training, we have addressed the avoidable causes, focusing on improving both human resources and equipment. This has led to more detailed training, better monitoring, and thorough evaluation."

- Dr Alaba Oshikoya, Quality Improvement Lead

Saving Mothers Giving Life 2.0

Transforming access and quality of care

More than 50% of the population of Nigeria receives care from the private sector, yet private health providers are often not included in quality improvement efforts.²⁹

Saving Mothers Giving Life (SMGL), was a successful global public-private partnership, involving different agencies across the United States Government, MSD for Mothers and others. It has achieved impressive results in reducing maternal and newborn deaths in sub-Saharan Africa by taking a comprehensive approach to strengthen the entire health system – in both public and private facilities.

In Nigeria, SMGL efforts extended beyond the core five-year partnership and have focused on regions with low rates of women giving birth in health facilities and high rates of maternal and newborn mortality. In Cross River state, SMGL expanded access to high-quality, comprehensive maternity care and strengthened linkages between more than 100 local public and private facilities. These efforts resulted in a 66% reduction in maternal mortality in three years. In Kaduna state, global NGO Pathfinder (implemented a quality improvement model for private health providers and digitally-enabled education and engagement programs to encourage communities to support the goal of increasing the proportion of women who give birth in health facilities. These interventions resulted in a 60% reduction in maternal mortality in three years.





"The SMGL 2.0 project gave us a more in-depth understanding of how to handle women during early labor. It helped in reducing morbidity and mortality in pregnant women and children. We were helping the women to know the danger signs during pregnancy, child spacing and child immunization, and the risk involved in home delivery."

 Patrick Kassang, Traditional Birth Attendant, Zonkwa

IntegratE

Expanding access to quality family planning services in Nigeria

In Nigeria, community pharmacists and patent and proprietary medicine vendors (PPMVs) serve as the first point of health care for many communities, particularly in rural and hard-to-reach areas. PPMVs are an especially popular source for family planning (FP) due to their widespread availability, ease of access, consistent drug stocks, extended hours, personable interactions, and lack of consultation fees. ³³ Although PPMVs are relied upon, they often receive limited training, which can affect their health knowledge and treatment practices. ³⁴

IntegratE is increasing the capabilities of these providers to offer a broader range of quality family planning products by helping to implement the Pharmacy Council of Nigeria's tiered accreditation system for local private drug shops. Since the program began in Lagos and Kaduna states in 2017, over 200,000 women have received family planning services from accredited PPMVs, 1,400 local PPMVs received high-quality family planning training and coaching and an estimated 17,000 unintended pregnancies were averted. ³⁵ IntegratE has since expanded to 11 of 36 states across Nigeria, working with over 4,000 local PPMVs, and the program is on a path to scale nationally. ³⁶



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"The IntegratE project has been quite transformative in redefining community health systems and bringing quality basic health care services including family planning closer to the clients. A woman does not need to wait for the public health facilities to open in other to access family planning services because the PPMV in the neighborhood has been trained to provide family planning services."

 Emeka Okafor, Chief of Party, Society for Family Health

Smiles for Mothers

In spite of significant improvements in maternal health, postpartum hemorrhage (PPH), or excessive bleeding after childbirth, is still the leading direct cause of maternal mortality worldwide.³⁷

Although the WHO revised its recommendations on PPH prevention in 2018, a critical step to ensure impact on women's lives is translating the guidelines into policy and implementation at national level.³⁸ There are many health system challenges associated with preventing PPH, including availability, accessibility, acceptability, and quality of uterotonics (medicines to prevent excessive bleeding). With regard to quality, some uterotonics require refrigeration during transport and storage. As the climate gets warmer, inconsistent refrigeration due to supply chain challenges or lack of electricity at facilities can worsen the quality of uterotonics, leading to women receiving substandard medicine during labor and delivery.³⁹

As a response to the challenges countries face in ensuring access to quality uterotonics, MSD for Mothers invested in Smiles for Mothers (SFM) - a multi-stakeholder initiative to support Kenya and Nigeria's national governments to strengthen their health systems to address PPH, including:



Advocating for updates to national PPH normative policies in line with WHO recommendations and associated training of health care providers to improve the standard of care, including the safe, acceptable introduction of a novel heat-stable uterotonic



Creating access to high-quality uterotonics, including more accessible, quality medicines that do not require refrigeration, - especially important

in health facilities without consistent access to electricity or refrigeration



Educating key stakeholders on the importance of PPH prevention and treatment as a key maternal health issue, including developing cost-effectiveness analysis to inform decision making around the use of new medicines



Equipping women with resources such as educational materials to raise their awareness and knowledge of early signs of PPH in an effort to prompt them to seek out care and reduce maternal deaths

Kenya

The Smiles for Mothers Kenya consortium in Kenya, which includes Jhpiego Kenya, HealthStrat and McKinsey & Company, joined forces to address the country's high rates of PPH.

Together with national, county and regional stakeholders, SFM introduced several successful strategies across the health system supporting the policy, service delivery, supply chain and awareness building pillars mentioned above. Over the past three years, SFM has ensured that more than 300 health care providers from 10 counties were trained and follow newly revised guidelines and protocols on PPH prevention, including safe, appropriate uterotonic use, to improve their standard of care. The team has also developed materials in multiple languages to educate women across the country about the warning signs of severe bleeding after childbirth.

SFM's advocacy efforts also led to the inclusion of heat-stable carbetocin – an alternative therapy for the prevention of PPH that does not require cold storage and transport – in the Kenya essential medicines list. The Kenyan government has procured this heat-stable medicine based on the successful introduction and implementation efforts in 10 counties and endorsed a plan for national introduction and scale.





"We don't want the Kenyan mothers to die from preventable causes like PPH. The Smiles for Mothers project with investment from MSD for Mothers, came in at the right time to support the Ministry's efforts towards combating PPH. As a ministry we have pledged to procure HSC as 60% of the total uterotonic used for PPH prevention to mitigate some of the challenges we experience with maintenance of cold chain."

 Dr Edward Serem, Head of the Division of Reproductive and Maternal Health

Nigeria

To achieve SFM's overall goals, the Nigeria consortium, which includes the Solina Centre for International Development and Research, Clinton Health Access Initiative and Co-Creation Hub, partnered to address the country's persistently high rates of PPH by supporting the rollout of WHO recommendations to manage PPH.

SFM worked with national and state stakeholders to successfully design and implement health systems interventions in three states across Nigeria - Kano, Lagos and Niger. At the core of the consortium's approach was using human-centered design, which involved stakeholders in the health systems identifying gaps and designing interventions themselves focused on supporting the policy, service delivery, supply chain, and awareness-building pillars mentioned above. Over the last three years, SFM has supported federal and state-level policy updates, designed roadmaps for the adoption of uterotonics for PPH prevention, trained over 2,000 health care providers on the appropriate use of uterotonics including heat-stable carbetocin for PPH prevention and supported 86 health care facilities across the three states in procuring high-quality uterotonics, increasing access to quality maternity care for 122,000 women.

The team is currently working towards scaling its efforts across the country and developed a playbook to provide technical assistance to other states that are implementing interventions to prevent PPH.





"The patient literacy material is beneficial. It teaches me not to see postpartum hemorrhage as a fearful thing. I have also learned the importance of not hiding my health problems but instead reach out to the health facility for help."

 Recipient of Smiles for Mothers Patient Literacy Materials, Lagos State



Strengthening Systems for Safer Childbirth

In 2022, MSD for Mothers launched Strengthening Systems for Safer Childbirth, an initiative that promotes community-led, multi-sector solutions to accelerate progress in saving women's lives.

Six coalitions involving 20 organizations within four countries – India, Kenya, Nigeria and Sierra Leone – are implementing interventions to improve maternal health that respond to the needs and preferences of women and the priorities of governments. Coalition members are diverse including organizations that represent private health care providers (who deliver a significant proportion of maternity care in underserved communities), community-based health organizations and local health entrepreneurs.

A community of practice is enabling the coalitions to share what works, learning from each other to build their capacity and accelerate sustainable positive change in maternal health.

FOR M(om) (Nigeria)

Mobilizing capacity building financing for public and private health facilities

In Nigeria, access to quality maternity care is a longstanding challenge in both public and private health facilities. Limited funding can hinder the procurement of equipment and supplies essential for delivering comprehensive maternity care and leads to delays in women receiving adequate care, with far-reaching consequences for maternal health outcomes.⁴⁰

The FOR M(oM) consortium is improving the quality of maternity care in public and private facilities in Lagos, Kano and Delta states. FOR M(om)'s focus is on strengthening the operational capacity of health facility administrators to support the delivery of high-quality maternity care; digitizing patient health records to improve efficiency and quality, training maternity care providers to improve the quality of their services; and engaging communities to ensure that women's needs and preferences inform how health facilities function. As of December 2023, FOR M(om) disbursed over \$400,000 in loans to private and public facilities in Kano and Lagos states for medical supplies, equipment and other commodities, overcoming significant operational challenges, such as lack of blood, medicines and electricity, that contribute to up to 25% of maternal deaths.41





"The FOR M(om) program is all encompassing and the benefit is both for the receiver and provider of health care as it assists medical practitioners to have access to health care financing that will improve health service delivery and will in turn improve the health indices of Lagos state and Nigeria at large."

 Dr. Makinde Akinlenmibola, Chairman of the Association of Nigerian Private Medical Practitioners-Lagos Chapter

Wellbody Hub-and-Spoke Model in Sierra Leone

Strengthening health system through a comprehensive approach

For many years, Sierra Leone ranked as one of the countries with the highest maternal mortality rates in the world. 42 Historically, this was largely driven by low-quality maternity care, gaps in referral systems and low rates of pregnant women seeking facility-based care. However, with accompaniment from partners, the Ministry of Health is successfully deploying strategies to improve maternal health outcomes.

The Wellbody Coalition, composed of Partners In Health Sierra Leone, the National Emergency Medical Services, LifeBank (a private blood bank), Janitri (private company) and the Sickle Cell Carers Awareness Network, is strengthening relationships between women in the community and local health care facilities through a hub-and-spoke model. This model delivers a comprehensive continuum of care—from communitylevel care, to primary care clinics (spokes), and to district level secondary hospitals (hubs)—heavily relying on a strong referral system to prevent delays in access to care for complex cases, ultimately strengthening services at multiple levels of the health system and making sure that women receive the support they need if they are referred to specialized care at the district hospital. The Wellbody Coalition is working to incorporate traditional birth attendants as accompaniments into the care team, given the important role they play in building community trust and encouraging women to seek care from skilled birth attendants at health facilities. The Wellbody Coalition has also introduced private sector innovations - low-cost fetal monitoring devices, a lifesaving tool for mothers and babies - through a partnership with Janitri.⁴³





"Use of Janitri at the PHU's has enabled our midwives and nurses to monitor labour more effectively. Alerting them to possible maternal and fetal complications, resulting in prompt action being taken, including referral to Secondary Care hospital (KGH). This is facilitated by NEMS Ambulance service, who are able to swiftly transfer the client to Koidu Government Hospital, for ongoing care, resulting in better outcomes for mothers and babies."

 Isata Dumbuya, Director of Reproductive, Maternal, Newborn, and Child Health Partners



MOMs Initiative

The MOMs (Maternal Outcomes Matter) Initiative was launched in 2019 with a USD \$50 million commitment to increase access to large-scale financing for health businesses in sub-Saharan Africa and India seeking to address unmet health needs and expand access to health services. ⁴⁴ The initiative is a collaboration among the U.S. International Development Finance Corporation, MSD for Mothers, USAID (both the Center for Innovation and Impact and Office of Maternal Child Health and Nutrition) and others. The collaborators have used blended finance – a mix of equity, debt financing and grant capital – as the investment model to facilitate health entrepreneurs' transition from grant-funded start-ups to scalable and sustainable businesses.

This innovative financing structure enables small-to-medium sized enterprises to innovate, test and scale their business strategies and innovations to: (1) successfully identify and address unmet health care needs, (2) foster equitable health impact and population reach and (3) catalyze financial and business growth to secure their placement in the local health market for continued scale across local communities, including those of greatest need.

The MOMs Initiative invests in enterprises that are making a positive impact on maternal health outcomes and strengthening health systems with a successful track record in one or more of the following areas: health infrastructure, health service delivery, training for health care providers, digital solutions for more efficient and effective care, financial inclusion and supply chain.

LifeBank (Nigeria, Ethiopia, Kenya)

Delivering life-saving products and utilizing innovative technology to address postpartum hemorrhage

LifeBank is a Nigerian health-tech company that powers hospitals and care centers to deliver quality health care to patients in emerging markets and is helping increase access to blood and other vital medical supplies to address the problem of postpartum hemorrhage (PPH). LifeBank uses different innovative technologies that enable health workers to order lifesaving blood and blood products from medical centers across Nigeria and connects potential blood donors to local blood banks. LifeBank has leveraged blockchain technology, machine learning and data science to further enhance its operations.

With the support of the MOMs Initiative, LifeBank has expanded its operations across all states in Nigeria, including remote areas. It has also extended its reach to regions in Ethiopia and Kenya, enabling it to serve over 1,200 facilities and provide life-saving emergency blood supplies to almost 9,000 women. Through its robust business model, LifeBank has seen significant growth, tripling its revenue in just two years with the assistance of MOMs grant funding. As a result of this success, the company is now eligible to receive debt financing from the U.S. International Development Finance Corporation. This funding will facilitate further scale-up of services and expansion into new geographic areas.





"The MOMs Initiative has been instrumental in LifeBank's transformative journey, expanding its footprint across Nigeria's states and even into remote regions. This pan-Nigerian presence, coupled with its expansion into Ethiopia and Kenya, highlights the program's impact in extending life-saving health care to thousands of women in Africa. Additionally, the development of innovative technologies like SmartBag and AirX has enhanced transparency, safety, and efficiency in the health care supply chain, further showcasing the program's success and uniqueness."

Temie Giwa-Tubosun, Chief Executive Officer, LifeBank

Kasha Global (Rwanda and Kenya)

Bringing health care products closer to home

Kasha is a platform for access to health, ensuring that individuals in Africa can easily get the health and household products they want. It leverages its digitally enabled platform to sell and deliver health products and household goods to the large lower-income population in both urban and rural areas of Africa, given the high unmet demand for sustainable access to essential health products and services in these areas.

Kasha was built and started in Rwanda in 2016 and since then has expanded its operations into Kenya and South Africa, with a particular focus on addressing the unique reproductive and maternal health requirements of women. The company envisions extending its operations, into broader East Africa, West and Central Africa by the close of 2024, laying the groundwork for eventual global expansion into emerging markets. Through a \$1 million equity investment from the U.S. International Development Finance Corporation and grant funding from MSD for Mothers, Kasha significantly strengthened its business model and expanded its reach in Kenya and Rwanda by 90%. In less than one year, the company tripled its portfolio of maternal health products and services (online and offline) and nearly quadrupled its revenue from the sale of these products - meeting the needs of pregnant women, a key goal of the MOMs initiative.





"Through our partnership with MSD for Mothers, Kasha has empowered mothers with vital resources. Moving forward, our commitment to disrupting health care access in emerging markets remains unwavering. We're expanding our reach to address pressing health challenges like NCDs and HIV/AIDS, fueled by data-driven strategies for seamless product delivery and customer-centric innovation."

- Joanna Bichsel, CEO and founder, Kasha



Global Grants

In 2012, we launched MSD for Mothers Global Grants — a corporate grant program that enables MSD offices to support organizations that are improving maternal health around the world, beyond MSD for Mother's four focus countries: India, Kenya, Nigeria and the United States. The program is designed to be responsive to local women's needs, focusing on how resources can contribute distinctively to increase equitable access to care and support around pregnancy and childbirth.

In Africa, we support an array of programs that improve access to antenatal care and family planning and provide support for pregnant women living with chronic health conditions. We have also supported work with European NGOs to advance maternal health in the Democratic Republic of Congo, Ethiopia, Malawi, Mozambique and Tanzania. These programs also strengthen health providers' skills and practices, while building strong referral networks to improve access to health care around pregnancy and childbirth that is safe, high-quality, equitable and respectful.

UGANDA

Doctors with
Africa University College
for Aspiring Missionary
Doctors (CUAMM) increased
the accessibility and utilization of
emergency obstetric for mothers and
their newborns by improving referrals
at district hospitals and health centers and
providing transportation for emergency services.

TANZANIA

The Swiss Tropical & Public Health Institute (Switzerland) worked with several national partners to enhance health care access for HIV-infected pregnant women, partners and children in the Kilombero district.

SOUTH AFRICA

University of Pretoria improved the quality of obstetric care in midwife-led obstetric units and referral district hospitals by providing high-quality respectful clinical care.

SOUTH AFRICA

Solina Centre for International Development and Research, in collaboration with the Clinton Health Access Initiative, is aiming to enhance the quality and efficiency of sexual, reproductive, maternal, newborn and child health care across all levels of the health system by building clinical capacity, improving the availability of resources and strengthening data systems.

RWANDA

Health-e Foundation improved reproductive and maternal health by increasing antenatal care attendance and strengthening the skills of community health workers and midwives through electronic learning courses that are localized for the targeted communities.

MOZAMBIQUE

Comunità di Sant Egidio (Italy) integrated HIV and AIDS care with antenatal services in health facilities while also training health care workers to provide antenatal care, deliveries and services to prevent maternal-child transmission of HIV.

ALGERIA

Association
AIDS Algeria is
improving access to
prevention services for mother-tochild transmission of HIV for pregnant
women and women of reproductive age.

DEMOCRATIC REPUBLIC OF CONGO

Medics Without Vacation (Belgium) supported medical missions to train local health workers on maternal health.

DEMOCRATIC REPUBLIC OF CONGO

Organización Navarra Ayuda entre los Pueblos (Spain) improved access to antenatal care and strengthened health workers' ability to manage complications during pregnancy and childbirth.

ETHIOPIA

Doctors with Africa University College for Aspiring Missionary Doctors (Italy) conducted community outreach in rural Ethiopia to increase demand for facility-based maternity care and strengthened the referral network for obstetric emergencies.

ETHIOPI/

Maternity Foundation (Denmark) implemented its Safe Delivery App, an innovative mobile health tool to enhance antenatal care and emergency obstetric care.

LIBERIA

Last Mile Health is establishing mother-tomother peer support groups to strengthen communication, information sharing and referrals among pregnant women and women of reproductive age.

MALAWI

Concern Worldwide (Ireland) supported a program that aimed to reduce maternal mortality and morbidity through a package of community and facility-based interventions. Mothers2mothers addressed the delay in pregnant women seeking antenatal care and the lack of follow-up of pregnant women and mother-infant pairs in the continuum of HIV/AIDS care.

MOROCCO

The Lalla Salma Foundation is providing education about maternal health for women living with cancer, while increasing health provider awareness of the importance of effective monitoring and support for pregnant oncology patients.



South Africa

Addressing South Africa's shortage of skilled health professionals

Many health facilities in South Africa, especially those in rural and underserved areas, lack skilled staff with the necessary expertise to provide quality maternal health services. As a result, pregnant women often face barriers in receiving timely and appropriate care, leading to preventable maternal morbidity and mortality.

Implementation of CLEVER Maternity Care, developed by the University of Pretoria's Research Centre for Maternal, Fetal, Newborn and Child Health Care Strategies, optimized labor ward organization and improved respectful care during childbirth in district hospitals and midwife obstetric units in community health centers. The program reached close to 1,200 obstetric health care workers during supportive rounds and emergency obstetric drills. The program resulted in a significant decrease in meconium aspiration and birth asphyxia rates in the facilities as well as lower stillbirth rate. Birth satisfaction rate also improved from 68% to 90% in midwife obstetric units.

Additionally, the Foundation for Professional Development (FPD) and University of Pretoria developed and implemented a training program for emergency medical service staff, nurses and local clinicians to improve their skills, knowledge and the quality of services they provide

to pregnant women, emphasizing respectful care. In three years, they have trained nearly 900 professionals in Eastern Cape and increased their knowledge of how to manage obstetric patients and identify and respond to complications by 20%. The project was endorsed by the government which has since contracted FPD to continue the program using the same model to train an additional 2,000 health professionals.





"Patient-nursing relations have improved." "The women are appreciating us – we are matching what they want!"

- Midwives, Tshwane District Health facilities

Egypt

Enhancing access to family planning services

Access to quality family planning services is a significant challenge in South Egypt's Souhag Governorate, where young married women and first-time parents, in particular, often face barriers in getting the information and resources they need to make informed decisions about their reproductive health.

Pathfinder, a global NGO, increased demand for family planning and availability of family planning including postpartum family planning, especially among young married women and first-time parents. The Ma'an project trained 5 NGOs and close to 40 private physicians, nurses and pharmacists in reproductive and maternal health to be able to provide quality services. Each of the local NGOs identified approximately 100 families in the project area to be trained as a core group of family planning advocates in their communities and offer information about diverse aspects of family planning and reproductive health. The project included Family Interaction Days, interactive theatre trainings, the engagement of religious leaders, and the use of an animated series. In three years, the project reached 3,000 women and their families.



"The project taught us to take decisions together as a family, such as giving ourselves sufficient time between having one child and the next. It also taught us to have discussion before we take any decisions pertaining our life together. We are truly glad that we had the opportunity to spend great time with the people (peer families), and we managed to express our feelings in an amical way."

 Hisham Rabea and Ola Shehata, Family, Tahta District, Souhag Governorate

Kenneth C. Frazier Award for Maternal Health Equity

In many countries, unacceptable and inequitable maternal health outcomes persist. A long history of structural discrimination and unequal access to health care, as well as the underlying social determinants of health, are some of the key factors that contribute to these inequities.

Around the world, visionary leaders and community-based organizations are creating a path to a better world where maternal health outcomes are more equitable, and pregnancy and childbirth are safer. They are helping to create a world where prenatal visits, labor and delivery and postpartum encounters for the first year after childbirth contribute to healthier maternal health outcomes.

In 2021, MSD for Mothers launched the Kenneth C. Frazier Award for Maternal Health Equity. This annual award was established in recognition of the legacy and commitment to maternal health by Kenneth C. Frazier, retired chairman and CEO. Every year, the grant award is bestowed upon one organization to celebrate its commitment to and progress toward more equitable, high-quality maternal health care.

Mali Health

Preventing maternal mortality by helping to build participatory, community-led, and equitable health systems

The 2022 recipient of the Kenneth C. Frazier award for Maternal Health Equity was Mali Health, an organization based in Bamako, Mali. When Mali Health was created in 2006, they worked to identify the barriers that prevent women and children from accessing quality health care in their region, including a lack of health care facilities and trained health staff.

The community health system in Mali depends on the participation of community members and Mali Health helps them ensure that their local institutions are democratic, transparent, and responsive to the needs of their communities. Mali Health helps communities mobilize local resources so mothers can reach the care they need quickly, and health centers have the revenue to provide high-quality, patient-centered care in the long-term.

Mali Health's comprehensive program helps women prepare for birth by connecting them to health information, to the midwives at their health centers, and to each other. With the award, Mali Health extended the program's impact in a way that is equitable and sustainable, and put the program in the hands of the women it serves by piloting community-led approaches.





"The Mali Health team is deeply grateful to receive the Kenneth C. Frazier Award and for the light it shines on participatory, community-led approaches that keep the voices and experiences of women at the heart of efforts to improve maternal health equity in underserved communities. We are honored and proud to stand with all those working to improve access to quality maternal health care in their communities and to contribute to a world where no woman has to die while giving life."

- The Mali Health Team



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