Maternity Foundation

Executive Summary

Every day, more than 800 women and 7,000 babies lose their lives during pregnancy and childbirth and 99 percent of them are in low- and middle-income countries, particularly in sub-Saharan Africa and South Asia. The majority of these deaths are preventable if the mother has access to skilled care during pregnancy and childbirth.

Maternity Foundation, a Danish NGO, works to improve quality of care in pregnancy and childbirth by building, scaling, and integrating digital solutions that educate and empower health care professionals, pregnant women, and new mothers in low-and-middle-income countries.

One of these digital tools is the Safe Delivery App, which provides skilled birth attendants with instant, evidence-based and up-to-date clinical guidelines on how to handle complications connected to pregnancy and childbirth – straight from their phones or tablets.

Characteristics

Website: maternity.dk

Recognitions:
- Featured in Apple's Worldwide Developers Conference in Tim Wood’s opening speech and video (2016)
- Recipient of Pierre Fabre Foundation’s eHealth Award (July 2017)
- Recipient of Yoko Ono’s Lennon Ono Grant for Peace (2017)
The story behind Maternity Foundation

In 2004, the then 33-year-old Dr. Henriette Svarre Nielsen, a Danish OBGYN, travelled to Gimbie, a small rural village in Western Ethiopia to realize her dream of helping women access a safer childbirth.

In Ethiopia, she experienced how simple it can be to save lives in childbirth-- 80-90 percent of maternal deaths are preventable with the care of a skilled birth attendant. After returning to Denmark, Henriette gathered five women each with their area of expertise – health, law, marketing and finance – around her kitchen table. Together, the six women founded Maternity Foundation under the vision that "No woman should die giving life."

The results from Maternity Foundation’s work in West Wollega (population 600,000) are remarkable. After a decade of work, the organization’s program resulted in 60% higher antenatal care attendance and 30% higher skilled birth attendance. Meanwhile, Maternity Foundation quickly grew out of Henriette’s kitchen and into a professional organization, now comprised of 12 staff on HQ-level in Copenhagen and 20 staff in Ethiopia and India.

Challenge

Approximately 15% of births around the world result in life-threatening complications during pregnancy, delivery, or the postpartum period. Health care providers skilled in basic emergency obstetric and newborn care (BEmONC) services are essential to respond to these complications in particularly in low and middle countries that have a high burden of maternal and newborn mortality and morbidity.

However, few skilled birth attendants (SBAs) have up-to-date, guideline-adherent, easy to understand, practical job aids to refer to when emergencies arise around childbirth. Additionally, ineffective, infrequent or non-existent training means many SBAs do not get the education they need to be fully confident and capacitated with the right knowledge and skills to handle emergencies.

Solution

The Safe Delivery App provides skilled birth attendants instant, evidence-based and up-to-date clinical guidelines on how to handle complications connected to pregnancy and childbirth. Developed in collaboration with Universities of Copenhagen and Southern Denmark, the App uses simple, animated instruction videos, procedures, drug lists and e-learning tools to guide skilled birth attendants in basic emergency obstetric and newborn care.

The App consists of 12 content modules addressing key interventions of childbirth emergencies and preventative procedures, all aligned to international guidelines. Five basic features guide health workers in the App: animated instruction videos, action cards, drug lists, practical procedures, and an individualized e-learning component, MyLearning.

All content in the App is designed for low-literacy, low-
income settings and works offline once downloaded, so healthcare workers in even the most remote settings can always refer to it – either on the job, in their spare time, or as part of their training.

**Operating and Business Model**

Maternity Foundation works through a partnership-based model, enabling us to exponentially more skilled birth attendants. We provide varying levels of support to partners operating at different levels – remote, project, country, and global. Our support to partners creates a pipeline where projects grow into nationally supported scaled roll-outs, and lessons learned from both inform integration into global level training efforts. At country level we seek to pursue sustainability through a strategy of government adoption—where the Safe Delivery App is integrated into state or national health systems supported by the public sector.

We are an NGO – but have gone from dependency on global grants to fuel our growth – toward being dependent on country partners to “buy in” to our solution and support. The core strategic component of our sustainable business model is our Safe Delivery Program made up of the services and tools that we provide which build off of and compliment the Safe Delivery App- the technical support, expertise and resources to support partners in adapting, implementing, and conducting monitoring & evaluation (M&E) related to the App. This was conceptualized based on the documented evidence of partners’ willingness to pay for these services, and the clear need to bridge the gap between the development of effective health innovations and the capacity to effectively implement them.

**Impact**

The Safe Delivery App has contributed to an estimated 2 million safer births in low- and middle-income countries, with 115,000+ health care workers with access to the Safe Delivery App and 130,000 downloads of the Safe Delivery App in more than 40 countries.
In the digital health space, there are a multitude of pilot innovations, but very few are able to demonstrate impact. In this vein, the Safe Delivery App is a rarity. A one-year randomized controlled trial in Ethiopia was conducted to assess the impact on health workers’ life-saving skills and knowledge. Key results revealed a significant increase in the skills and knowledge level of the health workers using the App. For example, at 12 months health workers’ ability to handle post-partum bleeding and to resuscitate a newborn more than doubled.\(^1\) Subsequent RCTs have supporting these findings.\(^2\)

Maternity Foundation makes a difference for midwives around the world. One of them is Fareeda Yelgie, a midwife from rural Ghana, who attended to a birthing woman in the middle of the night. The baby started to get sick immediately after delivery due to low glucose levels. “I opened the Safe Delivery App and I was able to manage the complication. Finally, I got the baby to breastfeed, the temperature came down to normal, and both mother and baby were happy. Thanks to Safe Delivery App, I was the hero of that night,” recalls Fareeda.

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\(^1\) Lund et al. Jama Pediatrics, 2016