

PHILIPS MOBILE OBSTETRIC MONITORING PILOT*

Bringing city healthcare to rural areas

Connecting expectant mothers and care professionals in remote, rural areas to healthcare resources through mobile technology, aiming to reduce maternal mortality

*In development. Not currently available for sale



Mobile-cellular subscriptions will reach almost 7 billion by end 2014, corresponding to a penetration rate of 96%¹. But in many countries, a lack of healthcare resources and staff leads to worryingly high infant and maternal mortality rates. Our Mobile Obstetric Monitoring (MoM) pilot project in Indonesia uses mobile technology to connect expectant mothers and care professionals in remote, rural areas with monitoring and healthcare expertise from big-city hospitals. The program aims to improve care in high-risk pregnancies, protecting mothers and their unborn children.

¹ source: <u>International Telecommunication Union - ITU</u>

What is it?

The MoM concept uses a smartphone app to enable care workers in rural areas to benefit from city healthcare expertise. Using an app, a midwife registers personal information and vital parameters from the expectant mother during antenatal checkups. This information is then securely sent to the primary healthcare center, which will allow the doctor to view the information remotely and flag up any irregularities, advising local care professionals about follow-up care and possible referrals, if necessary.

What is innovative about it?

- **Designed to improve the quality of care** by compliance to local Obstetrical Risk Management guidelines and Policies.
- Designed to offer information and expertise to community and primary care workers: it will be able
 to allow care professionals to perform monitoring and checkups remotely. Off-site specialists can offer
 guidance and referrals when necessary, aiding collaboration with frontline care professionals.
 "The MoM solution helps streamline referrals with guideline-based smart tools that could help
 caregivers to refer high-risk patients to the next appropriate level of care."
 Dr. Jos van Haaren, Senior Director Philips Research India, Department Head Healthcare Applications
- Could help reduce the strain on secondary/tertiary care healthcare professionals: as it is designed as a remote application, fewer patients would need to travel to secondary/tertiary care healthcare facilities, which potentially can free up hospital staff and resources for other patients.

What is the benefit of this innovation to 'you'?

Indonesia struggles with high rates of maternal and fetal death. The MoM concept, based on a smart phone app, leverages the existing mobile technology and infrastructure to identify and monitor high-risk pregnancies, which could increase the likelihood of better outcomes. MoM is designed to allow care professionals in rural areas, gain access to the healthcare resources of secondary/tertiary care hospitals.

The improved workflow design enables primary care professionals to manage patients more effectively, and potentially offer reassurance to mothers who wouldn't normally have access to prenatal checkups.



Finally, by using existing mobile technology and devices, it could be used anywhere, providing a speedy and cost-effective solution.

How did we do it?

Philips started the MoM research project in Bangalore, India, , building a smartphone app and server to aid community health workers or midwives. Further research followed, in collaboration with the primary healthcare center in Suttur near Mysore, to improve the solution and assess the usability. Currently, a pilot project in partnership with Bundamedik hospital group is underway.

"The Philips MoM project is a great example of a strategic collaboration between the private and public sectors working towards improving the overall access to healthcare for women in Indonesia." Dr. Ivan Sini, SpOG, Chairman of PT Bundamedik and Indonesian Reproductive Science Institute (IRSI).

Did you know?

- Globally, an estimated 289,000 women died during pregnancy and childbirth in 2013, a decline of 45% from levels in 1990. Almost all of these deaths occurred in low-resource settings, and most could have been prevented. (world Health Organization)
- Approximately 96% of the world population has access to mobile phones (ITU)

Points to note about the project

- The one-year MoM pilot project in Indonesia has registered 665 pregnant women.
- This concept has the potential to be applied to urban environments as well.

Find out more

<u>MoM project</u> – describes the project's goal and what it is trying to achieve in Indonesia. <u>MoM VIDEO</u> – illustrates MoM's use case in rural Indonesia: Yetti, the pregnant lady in the video, gave birth to a healthy boy on June 17, 2014.

Contacts

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