Seeking to reduce high maternal and fetal mortality rates in Indonesia

Despite the increase in childbirths assisted by skilled birthing attendants, the Indonesian Demography and Health Survey 2012 showed a dramatic rise to 359 maternal deaths per 100,000 live births from 227, just five years earlier. This is largely attributed to a continuing lack of access to quality healthcare for expectant mothers. Addressing this issue is one of the top priorities of the Ministry of Health with the Millennium Development Goal to reduce Indonesia’s Maternal Mortality Rate (MMR) to 102 per 100,000 births by 2015.

Philips together with the Indonesian Reproductive Science Institution (IRSI) under PT Bundamedik and Padang city government developed a pilot project to address high maternal mortality rates through the use of innovative mobile health technology.

Customer's need
The Indonesian Ministry of Health – along with the Millennial Development Goal – aims to reduce Indonesia’s maternal and fetal mortality rates to 102 per 100,000 births by 2015.

Our response
Philips developed a scalable telehealth platform that can be adapted to suit specific rural and urban needs, using a mobile phone application.

Initial results
Within the first three months of introducing mobile obstetrical monitoring, the pilot project identified 60 out of 500 expectant mothers as being high-risk pregnancies. Doctors identified the mothers through the data collected from the app.
Approximately 96% of the world population has access to mobile phones. Philips developed a scalable telehealth platform that can be adapted to suit specific rural and urban needs, using a mobile phone application. With the app, midwives can build a relevant health profile of pregnant women by collecting data from physical examination and tests and local nursing clinics or even at the soon-to-be mother’s home. Data are uploaded from the app onto the central Mobile Obstetrical Monitoring server, allowing obstetricians and gynecologists to remotely monitor patients from hospitals or home. And through the integration of local risk score guidelines, they can determine if a pregnancy might be high risk, in which case an immediate care can be provided.

By introducing Mobile Obstetrical Monitoring in Indonesia, PT Philips Indonesia and Padang city government have started to address mortality rates amongst pregnant women during pregnancy.

Vincent Chan, General Manager of Philips Healthcare Indonesia comments: “The high maternal mortality rate remains one of the biggest challenges for the healthcare system in Indonesia. We understand that mobile phones have become a key part of Indonesians’ daily lives. Therefore, together with our partners, we have used our expertise and technology to empower midwives and mothers in remote places to receive better quality healthcare and, in doing so, hopefully reduce maternal mortality rates.”

Mobile Obstetrical Monitoring is part of the ongoing “Philips Innovation for Healthier Indonesia” program focusing on Mother and Child Care. This program also includes expanding coverage and clinical education, in which Philips aims to train, educate and coach 3,500 medical professionals each year to help continually increase standards of medical care in the country. Dr Ivan Simi, SpOG, Chairman of PT Bundamedik and the Indonesian Reproductive Science Institute (IRSI) said: “The high maternal and fetal mortality rate remains one of the biggest challenges for the healthcare system in Indonesia, with the lack of access to health services and professionals such as skilled doctors or midwives a contributing factor. The Philips Mobile Obstetrical Monitoring project is a great example of strategic collaboration between the private and public sectors, in bringing better healthcare to remote areas.”

Philips also helps to increase access to maternal care in other regions across the world where remote monitoring is involved, such as in India and Africa. In Uganda, Philips in collaboration with “Imaging the World” has trained midwives in village health centers to scan and acquire ultrasound images that are compressed and sent to a specialist center. A recent joint study demonstrated that providing pregnant women in rural Uganda access to ultrasound examinations resulted in near doubling of newborns delivered by skilled healthcare workers.

**Sources**

1. International Telecommunication Union (ITU)