

Mobile Midwife Platform

Health need

In many regions of the world, there is a shortage of health care providers who have the skill and ability to collect and act on information required for care. Areas such as sub-Saharan Africa and South Asia suffer from a virtual absence of highly-skilled health care providers. For instance, the doctor-to-population ratio in rural India is 0.33 doctors per 1,000 people. As a result, there is an inverse relationship between access to skilled care at birth and maternal and newborn mortality; the lower the attendance by a skilled birth attendant, the higher the risk of death or complications. Leveraging the abilities of all available caregivers helps to maximize human resources and lessen capacity constraints. By providing a tool that offers point-of-care guidance in accordance to local adaptations of global best practices, lesser-skilled providers can be empowered to act on critical health information and improve the services they deliver, reduce delays, and improve access to appropriate care.

Technology solution

The Mobile Midwife Platform (MMP) runs on a mobile device (phone or tablet) and is designed to improve postnatal maternal and newborn care by minimally trained health care providers in rural clinic- and home-based settings. The MMP increases accessibility to standards of care, backed by global best practices, to populations with limited options. The tool provides midwives with localized guidance on clinical decisions, patient record management, and instructional support. These components enable timely and improved health care service delivery, improved patient education, and real-time data transmission and aggregation for field-based consultation, organizational research, and process improvement.

PATH has partnered with Action, Research, and Training in Health (ARTH) and the University of Washington (UW) Department of Computer Science and Engineering. ARTH is a nongovernmental agency operating in Udaipur, India. They developed training materials and care protocols for ARTH midwives who provide clinic- and home-based care to approximately 50,000 people in the region. Leveraging the Open Data Kit software tools developed by UW, graduate students are adapting the software to meet the specific health needs and use scenarios of midwives and mothers.

Current status and results

The project commenced in November 2010. After intensive collaborative design and requirements gathering, the team initiated a pilot introduction in India with ARTH nurse midwives. The two-month study will test the appropriateness and usability of the device as well as evaluate provider compliance with postnatal care protocols and treatment. The study will also evaluate the impact of the device on the length and distribution of time spent with the patient, and the capability of the device to be used as an educational tool for patients. The pilot study will involve two of ARTH's clinics in rural Rajasthan, seven ARTH-trained midwives and physicians, and more than 200 home-based visits. Upon the successful completion of the study, the project team expects to broaden the application of the MMP to include antenatal care and to extend the program to government-employed midwives in the region.



University of Washington/Carl Hartung

Nurse midwives training on the Mobile Midwife Platform.

“Around the world, countless lives are lost due to insufficient access to quality health information. The availability of accurate, timely, and analyzed data is directly relevant to the quality of an individual’s health and the health care system in general, the delivery of individual care, and the understanding and management of overall health systems.”

Ranck J. *Health Information and Health Care: The Role of Technology in Unlocking Data and Wellness—A Discussion Paper*. Washington, DC: United Nations Foundation and Vodafone Foundation Technology Partnership; 2011.

Availability

For more information regarding this project, contact Noah Perin at nperin@path.org.

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