GLOBAL

2014 Statistics

- Life expectancy: 68.4 years
- Population: 7.2 billion (est.)
- GDP per capita: US$16,100 (est.)
- Mobile penetration: 71.4% (est.)

Sources: CIA World Factbook (https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html); mobile penetration data provided by Ovum World Cellular Information Service and based on market intelligence.

Mobile technologies present an incredible opportunity to provide frontline health workers with immediate access to timely and relevant health information as well as tools they can use to improve and save the lives of millions of children.

— Lesley-Anne Long, Director, mPowering Frontline Health Workers

mPowering Frontline Health Workers: Using Mobile Technology to Improve Maternal and Child Health

Frontline health workers are often the first and only link to health care and preventative health services for millions of families in low- and middle-income countries. However, there is a severe shortage of trained, frontline health workers to provide quality and timely health care services, particularly to pregnant women and newborns. Mobile technology, nearly ubiquitous in these countries, offers a revolutionary opportunity to strengthen the capacity of frontline health workers and expand the coverage, quality and timeliness of critical maternal and child health interventions. To harness the power of mobile technology at scale, Qualcomm® Wireless Reach™ joined forces with USAID and other public and private sector businesses to form the mPowering Frontline Health Workers partnership. mPowering launched in 2012 with Wireless Reach as a founding, steering committee member.

Challenge

- Globally, 47 million babies were delivered without skilled care in 2011.[1] Only half of pregnant women in developing regions receive the recommended minimum of four antenatal care visits.[2] Complications during pregnancy or childbirth are one of the leading causes of death for adolescent girls.[3] However, most maternal deaths in developing countries could be prevented through adequate nutrition, proper health care, the presence of a skilled birth attendant during delivery and emergency obstetric care.
- When frontline health workers are effectively trained there is a reduction in maternal and child mortality as well as a reduction in the spread of HIV, tuberculosis and malaria. Yet, many of these workers lack the training, information and support they need to do their jobs well.[4]
- With an exponential increase in the number of mobile phones and services worldwide, mobile health (mHealth) is already improving training for frontline health workers, but very few programs have been taken to scale.[5]
- mHealth content is being created but not shared with a global audience, resulting in organizations duplicating efforts by developing content that already exists.[6]
- Training is constrained by a lack of high-quality, relevant resources being available for frontline health workers.[7] Training organizations often use materials they find online, with no guarantee of quality.

Solution

- As part of its commitment to mPowering Frontline Health Workers, Wireless Reach commissioned and published "Opportunities to Improve Maternal, Neonatal and Child Health in India through Smartphones and 3G Connectivity Solutions," a white paper that examines the mHealth landscape in India; funded the scale up of a user-friendly, smartphone-based, mHealth application to assist community health workers in India; and provided in-kind technical support to the USAID-funded Maternal and Child Survival Program which serves as the partnership's secretariat.
- Wireless Reach has also contributed to the partnership's creation of ORB, the first comprehensive online library of high-quality, mobile-optimized, training materials for frontline health workers. All content on ORB is openly licensed, and ORB encourages the re-use and adaptation of these materials so that training can cost-effectively reach significantly more health workers.

GLOBAL

Technology

- The goal of the mPowering Frontline Health Workers partnership is to contribute to the elimination of preventable child and maternal deaths by accelerating the use of mobile technology to improve the skills and performance of frontline health workers.
- mPowering Frontline Health Workers has launched the ORB platform, which will offer a customizable, user-driven experience. Eventually, the platform will include country and program pages to ORB so that Ministries of Health and trainers can collect, curate and recommend locally relevant content to health workers.
- The functions and user experiences will be enhanced to add social features that will enable users to directly suggest new developments to the platform, allowing new features to be prioritized based on user demand and to further meet individual country needs. ORB will integrate the platform into an end-to-end learning system to deliver content to health workers on their mobile phones.
- ORB is accessible via mobile, tablet and laptop browsers, and content can be stored or shared for use offline. All core code is released under an open source license, which allows for replicability and scale. An Application Program Interface (API) is available, allowing programmatic access to the platform for submitting and downloading resources. Information on how to use the API is available on the platform documentation site.[8]

Impact

- mPowering Frontline Health Workers' vision is a trained, frontline health worker for every woman and child. The partnership's goal is to contribute to the elimination of preventable child and maternal deaths by accelerating the use of mobile technology to improve the skills and performance of frontline health workers.
- Mobile broadband can help lower health-related costs, facilitate remote care and increase efficiencies. It allows communities unparalleled opportunities to track health data from anywhere, at any time, providing public health policymakers with timely information about the needs of their communities in order to improve performance of health workers, as well as tweak intervention strategies.
- Through ORB, frontline health workers will be able to improve their skills and knowledge, connect with supervisors and each other, and access critical information related to outbreaks and emergencies.

Project Stakeholders

- mPowering Frontline Health Workers is a public-private partnership of 17 organizations, supported by the United States Agency for International Development (USAID).
- mPowering's partners include: Accenture Development Partnerships, Dalberg Global Development Advisors, Frontline Health Workers Coalition, Futures Group, GlaxoSmithKline, Intel, Maternal and Child Survival Program, The MDG Health Alliance, New England International Donors Group, One Million Community Health Workers Campaign, Praekelt Foundation, Qualcomm Wireless Reach, UNICEF, The United Nations Foundation, USAID, Vodafone, and World Vision.

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[4] mPowering Frontline Health Workers and the One Million Community Health Workers Campaign. The Current State of CHW Training Programs in Sub-Saharan Africa and South Asia. http://mpoweringhealth.org/media/report _ docs/140664465801305.pdf
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