

The Knowledge for Health Project: Focus on mHealth



Building on the ubiquity of mobile phone accessibility around the world, mHealth provides new opportunities for improving health care services, even in remote and hard-to-reach areas. mHealth, or mobile health, is the use of mobile technology to support health services and improve health outcomes.

Recognizing the potential of mHealth to transform service delivery in developing countries, the Knowledge for Health (K4Health) Project is applying its leadership in knowledge management and information and communication technology to synthesize and share knowledge about mHealth and employ mHealth applications in the field.

Our mHealth activities center around four main areas: (1) spearheading an interdisciplinary mHealth Working Group to share best and emerging practices; (2) continually updating the web-based mHealth Toolkit that provides access to key mHealth resources; (3) implementing mHealth components within country programs where appropriate; and (4) developing mobile applications.

mHealth Working Group

Founded in August 2009, the mHealth Working Group is a collaborative forum for sharing and synthesizing knowledge about mHealth, supported and co-facilitated by K4Health. Composed of more than 500 individuals representing over 200 organizations worldwide, the mHealth Working Group seeks to frame mobile technology within a larger global health strategy. By applying public health standards and practices to mHealth, we promote approaches that are appropriate, evidence-based, interoperable, and scalable in resource-poor settings. The Working Group holds regular

What is mHealth?

mHealth is the use of mobile technology, most commonly mobile phones, to support medical and public health practices.

Key mHealth applications in developing countries include:

- delivering health education to patients,
- collecting health data,
- monitoring patient data,
- providing ongoing medical education and training of health care workers,
- tracking diseases and epidemic outbreaks, and
- providing diagnostic and treatment support to remote health care workers.

Programs in mHealth can leverage the tens of billions of dollars invested in mobile phone markets in developing countries to complement, or even transform, current health service delivery methods and outcomes.

meetings in Washington, DC, to discuss promising approaches, challenges, and lessons learned. Participants from around the world can dial into the meetings. To join the mHealth Working Group listserv, go to www.k4health.org/toolkits/mhealth/mhealth-listserv.

mHealth Toolkit

Developed in partnership with the mHealth Working Group, the mHealth Toolkit provides an objective source of information on the opportunities and challenges introduced by mHealth. It provides quick and easy access to an electronic library of important mHealth resources, including the current evidence base for mHealth and instructive program examples. Resources cover a wide range of health sectors, including HIV/AIDS, malaria, and reproductive health/family

planning. The toolkit pays careful attention to mHealth applications for data collection, behavior change communication, and provider training. Explore the mHealth Toolkit at www.k4health.org/toolkits/mHealth.

mHealth in Country Programs

Malawi Demonstration Project: Community health workers (CHWs) in Malawi provide a critical link in the health delivery system, as the majority of the population lives in rural areas. However, after their initial training, CHWs rarely receive follow-up training. Results from a K4Health health information needs assessment in Malawi revealed a knowledge gap among CHWs.

Launched in May 2010 by K4Health partner Management Sciences for Health, the K4Health Malawi Demonstration Project created an SMS-based mobile phone network between CHWs and district health centers to increase access to and promote use of essential health information among CHWs. Working in collaboration with FrontlineSMS and the Ministry of Health, K4Health distributed 663 mobile phones and solar chargers to all CHWs in two pilot districts of Salima and Nkhotakota, serving a catchment area of 652,326 Malawians.

The mobile phone network enabled direct communication in real time between the CHWs and the district health centers, as well as among CHWs themselves.

- District health centers sent more than 2,000 SMS messages to alert CHWs about new resources, training opportunities, changes in protocols, and special events, such as community vaccination dates.
- CHWs received on-demand treatment support for their clients from district health centers, including information about medication dosages

and contraceptive side effects as well as prompt responses to emergencies, such as high-risk pregnancies and measles outbreaks. CHWs have sent over 1,000 SMS messages to the district health centers.

- The teams also used the mobile phone network for data collection, for example, to report contraceptive stock-outs and avoid interrupting clients' monthly contraceptive supply.

Bangladesh Knowledge Management Initiative: In Bangladesh, K4Health is launching a cross-cutting program to provide technical assistance and build capacity for the development, deployment, and management of communication and priority health interventions that address the country's Essential Service Package. The project will develop online toolkits of health information resources, eLearning courses, and other capacity-building resources. The project is also planning a mobile component in partnership with other mHealth activities to help reinforce key messaging among CHWs.

Developing Mobile Applications

K4Health develops mobile applications when appropriate to give people immediate access to information through their mobile devices. In November 2011, K4Health will launch the free Application for Contraceptive Eligibility (ACE) mobile app on the Android Market that will give family planning providers an easy and effective way to check whether clients are medically eligible to start using certain contraceptive methods. ACE is based on the popular *Family Planning: A Global Handbook for Providers* that offers technical yet practical information to help health care workers around the world deliver contraceptive methods appropriately and effectively. K4Health also has developed Kindle and iBook versions of the *Global Handbook*. Learn more at www.k4health.org/about/mhealth.



Funded by the U.S. Agency for International Development, the Knowledge for Health Project is implemented by the Johns Hopkins Bloomberg School of Public Health · Center for Communication Programs, in partnership with FHI 360 and Management Sciences for Health. To learn more, visit: www.k4health.org.