



Cellular phone Technology details offered by us partnered with CLICKMEDIX

Note: This document has been taken from :

Compendium of new and emerging health technologies that address Global Health Concerns 2011.... From World Health Organization at : http://www.who.int/medical_devices/en/index.html

Mobile technology to connect patients to remote doctors

Health problem addressed

The bottom of the pyramid population in the developing world continues to face fundamental challenges in healthcare, due to lack of access, low affordability, low quality and exploitative care, and a reactive, emergency-driven system. Existing solutions lack financial and human resources and show suboptimal use of limited resources.

Product description

We developed an Integrated Mobile Health Technology Platform that enables frontline health providers (community health workers, rural nurses and doctors) to connect patients to remote doctors in order to obtain timely medical diagnosis and administer effective treatment for underserved patients. Selected awards: Winner at the 2008 MIT 100K Entrepreneurship Competition and Best Telemedicine Innovation at the 2009 World Health Care Congress.

Product functionality

Frontline health providers use the mobile application to perform health risk screening and medical triage to identify health concerns. The diagnostics application on the phone instructs health providers with immediate actions to care for the patient, or transmits the case to remote doctors for further diagnosis and treatment advice.

Developer's claims of product benefits

This solution is cost-effective as it requires no additional equipment or infrastructure by using available mobile phones, mobile connectivity and local health providers. Training for local health providers takes less than an hour because all users are already familiar with the use of mobile phones. Maintenance is minimal as local phone stores are capable of maintaining the mobile devices. The service reduces travel costs, minimizes time to obtain treatment (from weeks to minutes), and is accessible locally to underserved patients via health workers or close-by rural clinics.

Operating steps

Frontline health providers use mobile phones to access the diagnostics application. They enter patient symptoms information by going through a series of decision-tree based medical algorithm. For cases requiring remote doctor consultation, the phone transmits the patient symptoms information via mobile broadband or SMS/MMS to the remote doctor.

Development stage

The product was technically evaluated and tested for clinical effectiveness via concordance rates between in-person and mobile-transmitted remote diagnosis in Egypt, Ghana, Botswana, the US. We pursue various partnerships. Partners include mHealth Alliance, BRAC, Sajida Foundation, Mobinil Egypt, Orange Botswana, University of Pennsylvania Medical School, Harvard, MIT, American Academy of Dermatology. THE PRODUCT AND SYSTEM IS ALREADY IN COMMERCIAL USE IN 5 COUNTRIES SINCE LAST 2 YEARS SUCCESSFULLY.



Future work and challenges

Our applications and business model were tested through pilots in over 10 countries. The basic technology proposition was proven and patient acceptability demonstrated. We are now ready to test commercial scalability by 1) improving our technology platform to support large scale usage from current ~500,000 beneficiaries to >1 million, 2) expanding distribution channels, 3) refining service models to suit our markets.

Use and maintenance

User: Patient, family member, nurse, midwife, physician

Training: 30-60 min walk-through of the mobile application.

Maintenance: Technician, engineer, manufacturer

Environment of use

Requirements: Mobile connectivity, access to a power source to charge mobile phones.

Product specifications

Dimensions (mm): 110 x 47 x 14 (approx.)

Weight (kg): 0.008

Life time: Varies by phone model

Retail Price (USD): Varies

Year of commercialization: 2009

Currently sold in: US, Botswana, Bangladesh