

Communication and Training for Healthcare Workers

Project 31: Enhancing Nurses Access for Care Quality and Knowledge through Technology (ENACQKT)

Country: The Caribbean

Sponsoring Organization and Partners: The International Development Research Centre (IDRC) and the University of Saskatchewan

Application Area: Communication and Training for Health Care Workers

In order for health workers to provide effective patient care, access to timely information is essential. In the Caribbean, nurses often lack basic resources, work remotely, and are isolated, which makes data sharing challenging. Enhancing Nurses Access for Care Quality and Knowledge through Technology (ENACQKT) empowers nurses by providing training and other services via PDAs. A key component of ENACQKT is building nurses' capacity through technology instruction, giving them the means to access healthcare applications through the PDAs provided by the program. This enhances professional development and improves quality of care for patients. Project principals report several achievements, including time savings for nurses and greater access to information, particularly in the areas of medication and treatment support. The project also reports success in imparting a sense of empowerment to the nurses in terms of speaking to physicians about conditions, treatments, and diagnosis.

Reference source:

Interview with Pammla Petrucka, Associate Professor with the College of Nursing, University of Saskatchewan

Project 32: HealthLine

Country: Pakistan

Sponsoring Organization and Partners: Microsoft Research, Carnegie Mellon University (CMU), Aga Khan University (Karachi) and Health and Nutrition Development Society (HANDS)—a Pakistani NGO

Application Area: Communication and Training for Health Care Workers

One of the chief obstacles to mHealth solutions is literacy, or the lack thereof. To ensure that semi-literate community health workers have access to critical information, Microsoft and others are developing HealthLine, a speech recognition-based information system. The solution is based on Microsoft Speech Server 2007 beta software. The menu-driven program can be accessed via landlines or mobile phones. Callers specify a topic (or disease) and are walked through a set of menus until they reach the information they are seeking. The information is then read to them—from a prerecorded message—in their local language. HealthLine was tested among a group of low-literate maternal and child health community health workers in Pakistan in mid-2007. It will continue to be tested in the field with the results informing new features, functionality, and enhancements. Ideally, the solution will be scaled across Pakistan for maximum impact.

Reference sources:

<http://www.cs.cmu.edu/~healthline/flash/detail/>
http://research.microsoft.com/enus/um/redmond/about/collaboration/awards/digitalinclusion_awards.aspx#Speech_Interfaces_for_Health_Information-Access
http://research.microsoft.com/enus/collaboration/papers/carnegie_mellon.pdf



Credit: Vital Wave Consulting



Project 33: Mobile HIV/AIDS Support

Country: Uganda

Sponsoring Organization and Partners: Trinity College Dublin

Application Area: Communication and Training for Health Care Workers

'Training the trainers'—providing healthcare workers in the field with accessible and reliable medical information—is essential for improved health delivery in the developing world. Trinity College Dublin (TCD) is collaborating with the medical school at Makerere Hospital in Kampala, Uganda to explore the potential advantages of using PDAs in HIV/AIDS care and treatment. The project aims to provide high-quality medical information and advice to healthcare workers in Uganda and throughout sub-Saharan Africa. After an initial needs assessment, the project leaders—a group of academic clinicians from TCD, the Dublin Institute of Technology, and North American universities—developed a prototype of a training program on the clinical care, research, and prevention of HIV/AIDS. The program was to be evaluated by a select group of healthcare workers in the field. Results of the testing and evaluation have not yet been published.

Reference source:

<http://www.universitiesireland.ie/pubs/report0306.pdf>

Project 34: Primary Healthcare Nursing Promotion Program

Country: Guatemala

Sponsoring Organization and Partners: The National School for Nurses of Coban (Guatemala), Canadian Agency for International Development and the Centre for Nursing Studies (Newfoundland, Canada)

Application Area: Communication and Training for Health Care Workers

Nursing shortages, especially in rural areas, are common in developing countries (and increasingly in developed ones as well). The National School for Nurses of Coban in Guatemala created the Primary Healthcare Nursing Promotion Program to increase the number of nursing personnel available to work in rural areas. One component of this program is a virtual nursing course, which is taught via a combination of telephone and two-way data communications. Of the first virtual nursing course graduates in 2004, a subset became 'community tele-facilitators.' These tele-facilitators were each given a mobile (or satellite) phone, which they used to link their rural communities with health specialists in urban areas. The pilot test was launched in 2005 in five municipalities in northern Guatemala and covered 150 communities with a total population of 45,000. At this time, there appears to be continued progress on the virtual nursing training component, but it is not certain whether the tele-facilitator program continued after the initial pilot test.

Reference sources:

<http://www.mspas.gob.gt/>

<http://www.enecav.edu.gt/>

Project 35: The Uganda Health Information Network (UHIN)

Country: Uganda

Sponsoring Organization and Partners: Uganda Chartered HealthNet (UCH), AED-SATELLIFE, Makerere University Medical School, Connectivity Africa and the International Development Research Center (IDRC) of Canada

Application Area: Communication and Training for Health Care Workers

Uganda has become a laboratory for efforts to improve two-way data flows between health workers and government officials, and the Uganda Health Information Network (UHIN) is a prime example of these efforts. UHIN uses PDAs to collect data and to provide continuing medical education services to physicians. The PDAs send and receive messages via infrared beams that send the signals to battery-operated access points. The program was launched in 2003 and currently 350 PDAs are being used. They are connected to 20 access points in different districts of Uganda. Positive impacts were recorded early on: "The network delivered a 25% savings in the first 6 months...health workers using the handheld technology now have better job satisfaction and [it] is contributing to staff retention..." The UHIN is planning an analysis to determine if the project has had an impact on health outcomes such as healthcare planning, resource allocation, and delivery.

Reference sources:

<http://unpan1.un.org/intradoc/groups/public/documents/UN/UNPAN030003.pdf>

<http://pda.healthnet.org/>

http://mobileactive.org/files/MobilizingSocialChange_full.pdf



Credit: DataDyne