## Feature Project Summary: Mobiles in Malawi

In the summer of 2008, an SMS-based communications network was implemented for a rural hospital and its volunteer community health workers (CHWs) in Namitete, Malawi. Located 60 km from Lilongwe, St. Gabriel's Hospital serves 250,000 Malawians spread over a catchment area 100 miles in radius. Distance presents an often-insurmountable obstacle for patients seeking care at St. Gabriel's. Many patients walk up to 100 miles to the hospital; those with more resources ride bicycles or oxcarts. In order to report patient adherence, ask for medical advice, or request medical care for remote clients, CHWs had to travel similar distances to the hospital's doors.

Josh Nesbit, a Senior in the Human Biology Program at Stanford University, traveled to St. Gabriel's with 100 recycled cell phones, a donated laptop and a copy of FrontlineSMS – a free computer program developed to act as a central text message hub. Over 8 weeks, a total of 75 CHWs were called to the hospital, given cell phones, and trained in text messaging. The volunteers' locations were mapped, and the phones were disseminated throughout the catchment area. Stationed at the hospital, a laptop running FrontlineSMS coordinates the health network's activities. The day-to-day program operations were handed over to hospital staff within two weeks. Josh returned to St. Gabriel's in December 2008, to distribute solar panels donated by G24 Innovations, taking the SMS network off the grid.

As a result of the SMS network, the hospital now responds to requests for remote patient care, tracks distant patients, informs CHWs of proper drug dosages and uses, receives patient updates, facilitates CHW-to-CHW communication and group mobilization, connects HIV-positive patients to support groups, and relays outreach HIV testing schedules. In six months, the SMS program has saved the hospital staff 1200 hours of follow-up time and over \$3,000 in motorbike fuel. Nearly 1,400 patient updates have been processed via SMS. Over 100 patients have started TB treatment after their symptoms were noticed by CHWs and reported by textmessage. The SMS network has brought the Home-Based Care unit to the homes of 130 patients who would not have otherwise received care. Texting has saved 21 antiretroviral therapy (ART) monitors 900 hours of travel time, eliminating the need to hand-deliver paper reports.

## Jopsa.org Summary

After witnessing the effects of simple ideas and equally uncomplicated technology on medical care, one thing is clear - each day that a clinic goes without tools they want and need is a day with undue hardship.

To date, I am talking with healthcare organizations working in eleven countries (Burundi, Malawi, Uganda, Zambia, Mozambique, India, Kenya, Ghana, South Africa, Peru, and Haiti) about partnerships to expand the tools and strategies used at St. Gabriel's to their respective sites. Details regarding these organizations and my role in supporting them will be expounded upon at jopsa.org in the coming weeks. In addition to healthcare providers, I'm honored to be

collaborating with kiwanja.net, The kiwanja Foundation, the FrontlineSMS team, and MobilizeMRS. After speaking with global health organizations and the clinics they're linked to, it is clear that 2009 must be a year of action.

Selected media:

CNN - "Text service provides more than band-aid for rural health service"

BBC - "Mobile development rings true"

PC World - "Witnessing the Human Face of Mobile in Malawi"

CGI Member Commitment by Ken Banks