

# Community Health Worker Programs

Technical Tools, Training, Home Visit Kits, & Income Generation

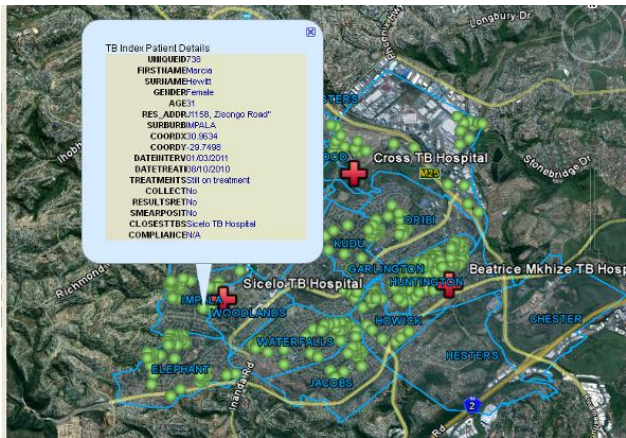
## Technical Tools

Smart Phones, Mobile Application, and Digital Map.

Each CHW has an Android phone loaded with a mobile application for gathering health data in her village. Each CHW cares for, on average, 100 households and 500 individuals. This new, mobile electronic format makes her job of collecting, retrieving, and reporting data much easier. The CHWs assure us that carrying around the heavy, large format book and having to hand tally pages and pages of data into a report will not be missed.



Data from all of the CHWs resides in an online database that feeds into a digital map of Segá. Goal4.org's map is in development, and is planned to resemble the sample map below.



Sample map: TB management project, South Africa

The map is a visual tool for managing health. For example, to conduct a child immunization campaign, filters identify just those households that have children under five who are not up-to-date on their immunizations. Hovering over each dot (household) brings up an information bubble with household health information, including the name of the child who is missing immunizations, and which he's missing. Similarly, the map can filter all of the pregnant women who are in their third trimester so a targeted campaign might be run to entice them to deliver in a health facility.

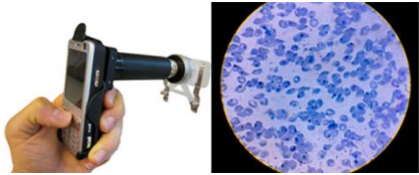
Health data is kept up-to-date by the CHWs during their day-to-day home visits.

## Other Uses of the Smart Phone


The development of low cost, mobile health tools is growing rapidly. In regions of the world where medical expertise simply isn't available, these technologies offer never before possible access to experts. And where training materials are virtually non-existent, smart phones can be used to download and display them.

Training materials that CHWs can use with mothers are being formatted for mobile devices. "Where There is No Doctor" a book published by Hesperian and used by the US Peace Corps for decades is now available as a mobile application.







CellScope is a \$10 microscope that fits onto the camera of a smart phone. The blood or other sample is photographed by the phone's camera and sent via text message to a doctor who can make a diagnosis remotely.



Fetal Weight is a mobile application that calculates the estimated weight of a fetus.



Netra, a mobile eye exam, is a \$2 eyepiece that clips onto a smart phone



ARemind is a mobile application that sends scheduled text message reminders to patients

## Challenges of the Smart Phone

Smart phone batteries need to be recharged much more often than simple cell phones. This posed a financial and time burden on the CHWs. Since they live in villages where there is no electricity, it required them to walk to town every day and wait while their phone charged and to pay roughly 3 times as much in phone charging service than they paid before.

We solved this by loaning each of them a solar lamp that could charge their cell phone at the same time it lit their home at night.

## Home visit kits

### Malnutrition

- Oral Rehydration Therapy
- MUAC tape
- Children's multivitamins
- Deworming Pills

### Pregnancy

- Condoms
- Prenatal vitamins

### Training Material

- Well baby calendar
- Infant nutrition poster
- Healthy pregnancy pamphlet



### First Aid

- Latex gloves
- Face masks
- Waterproof medical tape
- Hand sanitizer
- Iodine disinfectant
- Gauze
- Alcohol prep pads
- Band-aids

### Miscellaneous

- Swiss army knife
- Waterproof cover
- Umbrella

The home visit kit is a backpack filled with health supplies. Community health workers will use the kits to provide basic first aid and to identify and address important health issues, particularly of young children and pregnant women.

## Training

Sega's CHWs value training and have consistently asked for more. They need more health training for themselves so they can be better monitors of health problems and better advisors of health solutions. They want more training on how to educate mothers and families, and request supporting materials to help deliver the message. And they have an interest in personal development training on topics like entrepreneurship, technology skills, and data quality and reporting. The training is delivered in three ways.

### Online, On-Demand Training

There is a wealth of high quality training online much of which was developed specifically for CHWs by reputable organizations like the World Health Organization, Partners in Health, IntraHealth, and others. Goal4.org's aim is to put the CHWs in control of their own learning by giving them direct access to available training and supporting materials. To start, the CHWs attend an in-person, computer literacy course delivered by our technical partner, Sega Silicon Valley, a local NGO and Cisco Networking Academy.

Goal4.org has researched and begun reviewing and aggregating training links that will be posted on a CHW training website. The content is organized in a clear, logical manner so it's easy to navigate and locate desired topics. The initial inventory of courses and support materials are those that were available from our primary list of training organizations. As we continue to research, we will add to the inventory.

CHWs will access the training from a dedicated CHW computer station in the goal4.org office. There, in addition to attending training, they can search for information, print supporting materials, meet and with their peers to discuss problems, exchange ideas and learn one from another.

### Live Online Training

We are testing low bandwidth video meeting software that we can use for live scheduled sessions with remote experts, such as a nutritionist from Kisumu, or pediatrician from Eldoret. Our goal is to record the sessions and make them available in the on-demand library of trainings.

### In-Person Training

Matibabu Foundation, a local goal4.org health partner, organizes a wealth of in-person CHW training. If however goal4.org has visiting experts – in health, technology, data collection, or entrepreneurship – we'll invite them to present a session to our CHWs

## Income Generating Activity

Sega's community health workers are unpaid. They have been volunteering for between 9 and 27 years. They willingly share their time and energy supporting friends and neighbors. They take in orphans. They contribute to funeral costs of their neighbors. They're awakened at night to sit with sick. They are the ultimate philanthropists. They have little, yet give so much.

To help compensate them for all that they do, we sought an income generating activity that wouldn't demand too much more of their time, and would be a product or service that would be in demand and easily marketable. The 14 health workers who live in villages without electricity chose to run a solar cell phone charging service. The three who live in the town and have electricity chose to become solar lamp technicians and share running the solar lamp rental business (the social enterprise whose profits will fund CHW kit supplies).

We expect the cell phone charging business to generate an income of around US \$30 per month for each health worker, save her family between \$5 - \$7 per month in paraffin cost (fuel to light household lamps) and \$2 - \$3 per month in family cell phone charging cost.