



“Community health workers are critical where the number of doctors and nurses is insufficient to deliver primary care to everyone, where the infrastructure is so poor that patients are too far away or have trouble traveling to the hospital...”

– Geoff Priedis, President, Health Empowering Humanity

Community Health Outreach-Worker Pack

Global Health Challenge

Sub-Saharan Africa, accounting for 11% of the world’s population and 24% of the global burden of disease, has only 3% of world’s trained healthcare providers. In some areas of Malawi, for instance, there is only 1 doctor for every 100,000 people. The lack of physicians, nurses, infrastructure and supplies has led to an inability to provide adequate access to healthcare, especially in rural communities. To more effectively utilize what limited resources are available, some countries have started using a community-based framework for providing basic healthcare. In this system, community healthcare workers, who are commonly volunteers, are trained in providing basic healthcare. They travel to surrounding communities on a regular basis to screen for common diseases, provide minor care, educate about relevant health issues, and triage patients that need further care. Unfortunately, the community healthcare workers often lack the necessary tools to effectively provide this care.

Appropriate Solution

To address this issue, the design team in BIOE 260: Introduction to Global Health Issues, developed a comprehensive toolkit for community healthcare workers. The portable day-pack contains the necessary tools and materials to screen for basic illnesses, pregnancy, and malnutrition and provide basic first aid treatment. The backpack was designed to accommodate any additional supplies that are appropriate for the environment and type of care the community healthcare worker is able to provide. Mentorship and support were provided by Yvette Mirabal, Dr. Rebecca Richards-Kortum, Monica Dyer, Geoff Priedis and Medical Bridges.

BEYOND TRADITIONAL BORDERS



Rice University
6100 S. Main St. - MS142
Houston, TX 77005

Ph: 713-348-4549
Fax: 713-348-5877

E-mail: beyondtraditionalborders@rice.edu



Team “Deliverance”

Alex Bonnel
Meredith Buchberg
Sam Ruder
Andrea Ulrich



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Pregnancy

- Condoms
- Prenatal Vitamins

Malnutrition

- Oral Rehydration Therapy
- Hanging Scale
- MUAC Wristband

Basic Screening

- Stethoscope
- Sphygmomanometer
- Thermometer
- Hourglass
- Urine test strips



First-Aid

- Latex gloves
- Face masks
- Medical tape
- Hand sanitizer
- Iodine
- Gauze
- Kerlix
- Alcohol prep pads
- Biohazard bag
- Matches

Miscellaneous

- Waterproof Cover
- Scissors
- Notepad

Current Status

The Community Health Outreach-Worker Pack was field-tested in Malawi and Haiti in June of 2009 with great success. A global health technologies student is assembling 14 more packs for St. Gabriels Hospital in Namitete, Malawi.

An initiative for the advancement of appropriate, high-value innovations in global health biotechnology