

## THE CLINICAL EXCHANGE COMMUNITY ON GHDONLINE.ORG: SHARING COMPLEX CASES AND DISCUSSING BEST MANAGEMENT IN RESOURCE-LIMITED SETTINGS

Rebecca Weintraub, MD, Brigham & Women's Hospital, Division of Global Health Equity; Harvard Medical School, Department of Global Health and Social Medicine; Executive Director, Global Health Delivery Project; Moderator, Clinical Exchange community, GHDonline.

Corrado Cancedda, MD, PhD, Brigham & Women's Hospital, Division of Global Health Equity; Clinician Educator, Partners In Health; Moderator, Clinical Exchange community, GHDonline.

### Category of submission: Technology Demonstration

Unlike physicians in affluent settings who can ask for consult services and opinions at any point in time, clinicians operating in resource limited settings often work in isolation and rarely have access to specialists for advice, or are unable to share their practical knowledge with colleagues. Despite these challenges, the development and quick adoption of Information and Communication Technologies in the medical field and the unprecedented increase in global health funding has created new opportunities for electronic health services. Developed by the Global Health Delivery Project, GHDonline (<http://www.ghdonline.org>) is a Virtual Professional Collaboration [1] platform where health care providers engage in real-time problem-solving, and share images, files and links with other members either online *or* via email.

This demonstration will introduce Clinical Exchange, a private community created in March 2009 where Brigham and Women's and Partners In Health Rwandan clinicians consult with each other and on complex clinical cases they encounter in the field. In the case of a 12-year old female previously diagnosed with nephrotic syndrome who presents with facial edema and ascites, a Rwandan internist requests assistance discerning a differential diagnosis and prognosis. First advised by a GHDonline moderator to supplement additional laboratory data, a nephrologist then advises this is likely a recurrence of nephrotic syndrome and details proper treatment and monitoring. The internist then provides an update after the patients' follow-up visit to an outpatient clinic and asks follow-up questions regarding her medical regimen.

In addition to offering consult services to Rwandan clinicians, this community provides invaluable training opportunities to all its members - with exposure to rare cases and specialists' insights - and the ability to search through past cases and discussions via a built-in search engine. With cases spanning a wide range of sub-specialties, including cardiology, general surgery, and dermatology, Rwandan and Boston-based moderators help guide the community. Members can contribute to this secured community seamlessly *via* email or by signing in online, where they can post files such as X-ray images, blood smears, and digital images of rashes. Functionality developments enabling video uploads and mobile integration are in the planning phase.

1. Santoro R., Bilfucio, A. 2008. "Professional Virtual Communities." PVC Reference Framework, European Society of Concurrent Engineering – Net. Accessed 8/19/2009: <http://tiny.cc/J4w8f>