

provide quality health care due to a shortage of skilled healthcare workers, poor health education, inadequate equipment in and management of health facilities. The HRHR program, over the next 7 years, will help to restructure and develop a sustainable health system. This is the only such collaboration of its kind globally; a partnership between the Clinton Health Initiative, the governments of Rwanda and the United States, and 24 leading U.S. educational institutions in addition to the University of Rwanda.

**Structure/Method/Design:** The country's first dental school started with 15 students in 2013 in a five-year program. We want to integrate the "oral physician" concept which calls for providers to incorporate primary care into the scope of oral health care. This concept, combined with cross-training techniques, will increase capacity with the limited personnel and become a sustainable model for other countries to emulate. The oral health curriculum has been integrated with medicine and pharmacy curriculums. It has also been introduced into the nursing and midwifery curriculum. Conducting outreach programs throughout the country, with interdisciplinary teams, will be important to increase health literacy. These items have been instituted: faculty development, selected department chairs, officially appointed a dean for the school of dentistry and the school of nursing, and combined 7 colleges to form the University of Rwanda.

**Outcomes & Evaluation:** The first national oral health survey was created to establish a baseline for oral health as a risk factor for non-communicable diseases. Students conducted their first fundraiser to support student and faculty outreach.

**Going Forward:** The goal is to train 302 oral health providers; the first dental class will graduate in 2018. This program will also impact the educational of 5,000 nurses. The dental school clinic will expand to accommodate the increase in students. We are advocating for

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### On-site mentorship and quality improvement to strengthen Non-Communicable Diseases care in resource-limited settings: Lessons learned from rural Rwanda

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**Program/Project Purpose:** Lack of long-term practical mentorship following initial didactic training hinders delivery of quality health services in resource-constrained settings and may limit ability to decentralize services to primary care level. This is particularly the case for chronic Non-Communicable Diseases (NCD) for which prevalence is rising in low-income countries and management is more complex than in other clinical spheres. Here we describe implementation of a mentoring, enhanced supervision at health centers and quality improvement (MESH-QI) intervention adapted for NCD care and its preliminary impact on care quality in rural Rwanda.

**Structure/Method/Design:** A MESH NCD mentor was selected from NCD-trained nurses providing clinical care at each of three public rural district hospitals supported by non-governmental

organization, Partners In Health. Mentors received refresher trainings on NCD management and training-of-trainers, emphasizing mentorship and QI techniques. Mentorship activities started in October 2012, adding health centers that had implemented NCD clinics. Mentors made at least monthly visits to health centers to observe clinical care, provide real-time feedback to health center nurses delivering care (mentees) and support operational needs. Starting July 2013, mentor observations were documented in structured disease-specific checklists and electronically entered. Retrospective review of electronic data from July 2013 to September 2014 was conducted. Indicators related to consultation by NCD-trained mentee, documentation of blood pressure (BP), mentor-mentee diagnosis agreement and quality of patient counseling were analyzed, including comparisons between six month time periods: #1 (July 2013-December 2013), and period #2 (April 2014-September 2014).

**Outcomes & Evaluation:** Over the entire study period, 526 checklists were recorded, reflecting care delivered at seven health centers across catchment districts of the hospitals. Proportion of consultations with BP checked and documented was 98% (n=106) for diabetes and 99% (n=193) for hypertension. Proportion of consultations with diagnosis agreement was 96% (n=109) for asthma, 100% (n=66) for diabetes and 96% (n=166) for hypertension. We found significant increases in proportion of consultations by NCD-trained mentees from period #1 to period #2 for asthma (80%, n=61 v. 93%, n=94; p < 0.02) and diabetes (45%, n=25 v. 90%, n=52; p < 0.0001). We also found significant increases in proportion of consultations where adequate disease self-management counseling was provided for asthma (40%, n=28 v. 62%, n=51; p < 0.01) and hypertension (54%, n=37 v. 72%, n=115; p < 0.01).

**Going Forward:** While our data are limited in assessing changes in quality of care before v. after implementation of MESH-QI, they demonstrate improvements, measured by reported indicators, as well as maintained high quality of care over time. Adapting MESH-QI interventi

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### Building hospital management capacity in Ethiopia and Rwanda

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**Program/Project Purpose:** Since 2008, Jimma University, Addis Ababa University, and University of Rwanda, in partnership with Yale University's Global Health Leadership Institute (GHLI), and the ministries of health in Ethiopia and Rwanda, developed and implemented Master in Hospital and Healthcare Administration (MHA) programs educating over 150 students. The MHA was established to address the management and quality challenges and to build management capacity within health facilities and the broader health system. The MHA programs cultivate health facility leadership and strategic problem solving skills to improve the quality of hospitals across both countries.

**Structure/Method/Design:** Utilizing executive-style learning including didactic teaching, online resource sharing, and hospital site visits focused on the execution of students' capstone projects, faculty members provide hands-on mentoring. Through this multifaceted approach, students, who are currently hospital managers but who lack