

the development of equitable, long-term partnerships with local health systems. During our two-year program, HEAL fellows provide clinical service while rotating between an underserved domestic site and an underserved international site in either Haiti, Liberia, India, or Mexico. At each location, fellows work closely with local counterparts selected by our partner organizations, engaging in a curriculum that teaches core components of global health delivery, including project management, leadership, diseases of poverty, social determinants of health, quality improvement, monitoring and evaluation, and faculty development. In addition, both fellows and their counterparts will obtain an online Master of Public Health (MPH) as part of their training.

Outcomes & Evaluation: Since the HEAL Initiative will launch in July of 2015, we do not yet have outcomes for the fellowship. However, we plan to implement a rigorous evaluation structure to assess the skill sets of our fellows and the impact the program's retention of quality health care professionals within resource-limited settings.

Going Forward: As with all innovative educational programs, there are unanswered questions about the ideal structure and content of our curriculum. We anticipate a learning curve with our first cohort of fellows. Given our goal of training an interprofessional cohort, we plan on expanding recruitment in the future to include nurses and pharmacists in addition to physicians.

**Funding:** Funding will come from partner site contributions and philanthropy. Our model is designed to be financially sustainable in three years.

Abstract #: 02ETC003

# Evolution of a training program in use of electronic medical records: Towards efficiency and quality scale-up

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Program/Project Purpose: International Training and Education Center for Health (I-TECH) is a global network housed in the University of Washington (UW) that supports the development of a skilled health work force to provide effective prevention, care, and treatment of infectious disease in the developing world I-TECH provides technical assistance to the Kenyan Ministry of Health (MOH) for implementation of an open-source electronic medical record (EMR) system, called KenyaEMR (hosted on Open MRS platform) within 315 public health facilities in four regions of Kenya. Before implementation, I-TECH carried out a training needs assessment among personnel in 23 facilities. Distinct training needs for health managers and front-line health care workers identified

Structure/Method/Design: I-TECH implemented three different strategies in delivering KenyaEMR trainings to users. Trainings were delivered by three different groups (training institutions, centrally located facilitators, county facilitators). Training location transitioned from off site (hotel-based) trainings to on-site (facility-based) trainings in a bid to train more health care workers (HCW). Lenght and content of trainings was adjusted in response to curriculum evaluation and strategy changes to incorporate mentorship sessions. Strategy #1: Five-day off site user training, Delivered by facilitators from training institutions. Strategy #2: Three-day off site user training, Delivered by master facilitators. Strategy #3: Four-day on-site end-user + mentor training, Delivered by MOH county-level facilitators, 1-2 Champion Mentors per site cascade training to other health care workers.

Outcomes & Evaluation: January-March 2013: Strategy 1 Cost per participant \$2,345 121 managers attended Health Manager Orientations 67 Health care workers attended KenyaEMR User Training

April — September 2013: Strategy 2 Cost per participant \$577 165 managers attended Health Manager Orientations 131 Health care workers attended KenyaEMR User Training

Cost per participant \$325 216 managers attended Health Manager Orientations 1123 Health care workers attended KenyaEMR User Training 120 Champion mentors involved in mentorship

Going Forward: The evolution of I-TECH's training strategy has resulted in a lower-cost training model, with greater availability of onsite support for system users and realization of a robust training with ability to track and account for all mentees. However transfer

Funding: Centre of Disease Control (CDC) Pepfar

October 2013 — September 2014: Strategy 3

Abstract #: 02ETC004

### Results of a five year program review for the first USbased masters of science in global health at UC San Francisco

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Program/Project Purpose: Context: As the first masters of science degree in global health in the country, the GHS MS is a one-year, 4-quarter degree comprising 36 course units and a capstone product. It was conceived as an academic program with a comprehensive core curriculum and a multidisciplinary approach to public health in a globalized world, with particular emphasis on low-income, marginalized and underserved populations. Program Period: In 2008, the MS in Global Health Sciences admitted its inaugural class of seven. We are currently in the seventh year of our program. Why: The surging academic interest in global health has created demand for improved program collaboration and oversight, including a consensus framework for global health education at the master's level. Aim: To train students or practitioners in a health science profession or related field who wish to acquire expertise and leadership in the field of global health.

Structure/Method/Design: Program Goals: 1) To train students in the key concepts in global health 2) To train students in scholarship and scientific writing 3) To provide an enganging, interactive learning environment that faciliates leadership development 4) To prepare students for careers in global health Participants: Applications are received online and eligible candidates are interviewed. We examine academic transcripts, letters of recommendation, a resume, and personal statement for evidence of academic accomplishment, global health experience, motivation, leadership potential, and program "fit." Sustainability: The program is self-supporting and entirely based on student tuition. It does not receive any funding from the University or the State of California. Outcomes & Evaluation: Successes: The program is a completely self-supporting program. Increase in applications to about 180 per year. Our class size has grown from 7 to 44 in the current class. M&E Results: By all measures, including student evaluations, faculty evaluations, institutional discussions, increased applications, and the formal five-year program review, the MS in Global Health has had overwhelming success. We have successfully recruited highly diverse and well qualified students and the majority have gone on to careers or further educational related to global health. 79% of 89 graduates reported paid employment following graduation. The majority of graduates (66%) who have held paid employment since graduation Annals of Global Health 139

fall within the academic sector. The remaining 34% work for government, NGOs, private groups, and in other capacities.

Going Forward: Ongoing challenges: 1) Differentiated learning for very diverse student body 2) Adding additional elective opportunities 3) Adapting curriculum to a rapidly changing field Unmet goals: None Future changes: Creation of tracks or optional lengthening of the program for students wanting or needing additional training.

**Funding:** Initial funding for the program came partially from the University of California, San Francisco. We have received some scholarship funding from private foundations since that time.

Abstract #: 02ETC005

## SUNY Global Health Institute: A cross-campus global health initiative

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Program/Project Purpose: The State University of New York (SUNY) is the largest public University system in the U.S. with 64 campuses, including 4 medical schools, 3 public health schools, 2 dental schools, 4 nursing schools and schools of pharmacy and optometry. Each of these institutions has developed global health programs, both through student experiences, as well as faculty research and service projects. Additional system assets include global health projects supported by the Fogarty International Center and the Department of Defense. There is clear evidence that cross-campus collaborations can increase both breadth and quality of global health experiences and research. Catalyzed by the 2013 CUGH meeting, Global Health leaders from various SUNY campuses came together 3 times over the past year to discuss opportunities for collaboration and a Global Health Institute (GHI) was created. The Institute will promote exchange of ideas, recognition of common barriers, identification of best practices and increased opportunities for funding. In addition, the Institute will leverage existing SUNY research centers, established training experience and clinical service models to benefit global partners.

Structure/Method/Design: Three primary focus areas for the Institute were elaborated: Education, Service, and Research. Project themes will center around current global health priorities, including communicable, non-communicable diseases, environmental health and water quality. A steering committee was established and asset mapping of SUNY global health programs has begun. Innovative areas such as nanotechnology, biosensors, and bioinformatics have already been identified as academic partner programs. Initial collaborative projects are being elaborated and funding is being sought to support implementation. Joint conferences have brought together global health leaders from the various campuses, along with follow-up meetings to maintain continuity of efforts. All of the SUNY campuses are eligible to be partners in the Institute.

Outcomes & Evaluation: The SUNY GHI has had success in garnering support from various campuses, as well as from SUNY leadership, for the mission of cross-campus collaboration in global health. Approximately 30 campus leaders have been involved in the establishment of the Institute, and continued recruitment from all campuses is in progress. A grant from the Networks of Excellence program of the SUNY Research Foundation was awarded to support further development of the GHI.

Going Forward: Current challenges for the Institute include securing funding for initial collaborative projects and operational support for the Institute, as well as identifying all campus leaders involved in global health. Regular communication between campuses that are geographically dispersed will be a challenge for collaborative projects, but utilization of teleconferencing and web-based communication will mediate these difficulties. The steering committee continues to look at other

university models of cross-campus global health initiatives as potential paradigms for the SUNY GHI.

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#### A baseline quality assessment of delivery care at a rural Kenyan hospital prior to PRONTO training

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Background: Despite global efforts to improve maternal and child health, childbirth remains a risky process for women and infants in Kenya. Maternal and neonatal deaths can be prevented when deliveries occur with skilled birth attendants in adequately equipped facilities, yet many women in Kenya give birth at home. Disrespectful and poor-quality care has been cited as a deterrent to seeking care in a facility[1]. To establish baseline practices prior to a PRONTO training (a low-tech simulation-based training in emergency obstetric and neonatal care, aimed at improving provider competency and delivery of respectful, quality care in a context of cultural competency and humility), we conducted an observational study at Kisii Level 5 Hospital, a referral hospital in Western Kenya. [1] "Failure to Deliver: Violations of Women's Human Rights in Kenyan Health Facilities." Center for Reproductive Rights. 2007

Methods: Normal vaginal deliveries were observed in the maternity ward of Kisii Hospital in Kisii, Kenya between June 30th and July 16th, 2014, using a birth observation form adapted from a validated tool. Data points included evidence and non-evidence based practices, as well as metrics on communication and patient-centered care. Informed consent from mothers and providers was obtained prior to birth observation. The University of Washington IRB and the University of Nairobi Ethics and Research Committee approved this study.

Findings: We collected data on 75 births over the course of two weeks. Two different levels of nursing students attended the majority of births (91.3%). A family member accompanied women giving birth in only 9.4% of cases. Overall patient-centered care, an aggregate of practices including assuring patient privacy, using the patient's name, freedom of movement, acknowledgement of patient requests, and positive verbal communication, occurred in 6.7% of all births. Complete Active Management of the Third Stage of Labor (AMSTL) occurred in 5.4% of births. Furthermore, non-evidence based practices, such as negative nonverbal communication, occurred in 79.5% of cases.

**Interpretation:** This study highlights low rates of AMSTL and patient-centered care in this hospital in Kenya. Low levels of patient-centered care may serve as a deterrent for women seeking care. This and other measures suggest that a global approach to improvement of quality of care should be adopted to achieve continuing successes in Maternal Newborn survival.

Funding: Medical Student Research Training Program, University of Washington School of Medicine

Abstract #: 02ETC007

### Pathology capacity building in Ghana

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