is particularly pronounced in medicine as several studies have highlighted its importance in multiple specialties, including Family Medicine, Emergency Medicine, and General Surgery. [References] GH rotations may place trainees in high-risk situations and environments with regard to ethics, cultural sensitivity, and personal safety. Academic institutions need to provide proper guidance and education to prepare trainees for safe and effective GH rotations.

**Structure/Method/Design:** In order to better address institutional concerns, provide reasoned and consistent oversight, and prepare students for their GH rotations, we created, piloted, and refined a standardized preparation and approval process for resident physicians who sought to participate in GH electives as part of their training programs. A Global Health Advisory Committee (GHAC), consisting of key GME, legal, resident, and GH expert stakeholders was created. Three checklists, managed and administered via New Innovations (a commonly used and commercially available residency management software package), are used to provide trainees with consistent and critically important education about GH electives while also providing a mechanism for oversight, completion of relevant documents, and a debriefing tool which creates a summary of the elective that can be viewed by other residents.

**Outcome & Evaluation:** Several of our residents have successfully completed the checklists for GH rotations. Our GHAC will soon be meeting to gain feedback from the group on our new standardized preparation and approval method. This uniform system will also enable us to perform monitoring and evaluation of specific sites.

**Going Forward:** We are happy to share our checklists with other institutions. We will continue to assess our new system and make changes as needed.

**Abstract #:** 1.070_HRW

### The outcomes of no-job surgical training by visiting gynaecological oncologists to Mulago National Referral Hospital Uganda

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**Background:** WHO predicts 16 million new cancer cases per year in 2020. 70% of these will be in the developing world. In the developing world, 1/3 cancers potentially can be prevented another 1/3 are treatable if detected early. Evidence shows that cancer outcomes (survival) are better when care is provided by Specialists (Gynecologic Oncologists). This is lacking in East Africa and Uganda as well. Through partnership with University of California San Francisco (UCSF) (initiators) and other collaborator gynecologic oncologists, there has been job surgical training and mentorship which has led to tremendous outcomes. The aim was to improve the care and management of women with gynaecologic cancers and to train a critical mass of specialists in this field starting with what is currently available in their setting.

**Structure/Method/Design:** This started with a needs assessment by a gynecologic oncologist from UCSF. She then started coming twice a year to date doing ward rounds, radical surgeries and working with the administration to create an interdisciplinary team for cancer patient care that was not existent.

**Outcomes:** Since 2011 a gynecologic oncologist from UCSF has worked with gynecologists on the oncology ward at Mulago and has done at least 50 radical surgeries for gynaecologic cancers with them and has been joined by faculty from Duke University and University of Vermont. The surgeries were more appropriate in comparison to what used to be done especially for management of early CaCx with radical Hysterectomy and pelvic lymph node dissection. They have worked with at least 10 gynecologist at the referral hospital and have mentored them in Cancer care. A multidisciplinary approach to cancer care has been started with radiation oncologists, palliative care and gynecologists working together in the management of patients on the gynaecologic oncology unit.

**Going Forward:** One gynaecologist is being sponsored by UCSF to do a fellowship in gynaecologic oncology at Moi University a 2 year programme now in her second year. This will ensure sustainability. A curriculum development for a fellowship in gynaecologic oncology is underway with stakeholders meetings was held and the local faculty identified the need.

**Abstract #:** 1.071_HRW

### A surgical training track that meets the needs of global surgeons

**Abstract Opted Out of Publication**

**Abstract #:** 1.072_HRW

### Effect of participatory community quality improvement on maternal and newborn health care practices: a quasi-experimental study

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**Background:** To address the shortfall of skilled health workers required reach the health related MDGs, Ethiopia’s health extension program (HEP) shifted some of the primary health care responsibilities of skilled health workers to about 34,000 female health extension workers (HEWs). Covering a population of about 17 million people in 115 districts in four of the most populous regions of Ethiopia, the Last Ten Kilometers Project (L10K) project, funded by Bill & Melinda Gates Foundation, supports the HEP to foster communities to be part of the health system to improve health outcomes. In 14 of the 115 districts, participatory community quality improvement (PCQI) is tested through fostering partnership between communities and service providers to create shared responsibility in the ownership of maternal MNH services provided by the HEP. With the aim to improve the quality of maternal and newborn health (MNH) services from the provider, client and the community’s perspective, PCQI implements a cyclical process that first identifies barriers to quality services, then develops action plan to address barriers, implements the action plan, and finally monitors the quality of improvement solutions.

**Methods:** 82 and 34 communities respectively representing PCQI and non-PCQI areas were visited during baseline (Dec 2010-Jan 2011) and at follow-up (Dec 2014-Jan 2015). Maternal and newborn
health information was collected through interviewing 12 women with children 0–11 months representing each of the communities. Treatment effects were the average differences in MNH care practices between PCQI and non-PCQI group subjects across propensity score matched pairs during follow-up. Pairs were matched on communities with similar estimates for the MNH indicator at baseline, administrative region, and the respondents’ background characteristics.

Findings: The analysis indicated that the coverage of 4+ antenatal care, having neonatal tetanus protected childbirth, skilled birth attendance, and immediately initiating breastfeeding were 8, 8, 11, and 5 percentage-points higher (p < 0.05) in the PCQI areas compared to the non-PCQI areas.

Interpretation: Engaging communities as part of the HEP service delivery strategy using PCQI is effective. Community participation should be integral part of health systems in settings with human resource constraints for health services.

Funding: Bill & Melinda Gates Foundation.

Abstract #: 1.073_HRW

Task shifting and capacity building for non-communicable diseases in Uganda

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Background: Sub-Saharan Africa has one of the most rapidly growing incidences of non-communicable diseases (NCD) in the World yet this region suffers from a chronic shortage of doctors and capacity for managing these diseases is inadequate. In Uganda, non-physician providers also called clinical officers are rendering chronic HIV care with very good outcomes and they have become an integral part of the district health services and rural health centers. They play a critical role in patient assessment, disease management, triage and referrals and very often under take minor surgical procedures. We hypothesized that task shifting and training these clinical officers in chronic disease management may be one potential intervention to build a sustainable capacity in dealing with this worsening burden of NCD.

Methods: First we undertook a needs assessment study to identify knowledge gaps and attitudes of Ugandan clinical officers about NCD management. We then developed an education intervention to train Ugandan clinical officers in NCD. A curriculum appropriate to Ugandan settings, was developed, delivered by Ugandan physicians, and includes lectures and hands-on workshops.

Results/Findings: So far 50 clinical officers have graduated from our training program. Participant feedback suggests that the curriculum is appropriate and relevant to their practice needs. There was a perceived improvement in knowledge and readiness to tackle NCDs such as Diabetes and Hypertension.

Interpretation: The major lesson learned is that clinical officers when well-trained can play a vital role in managing the growing epidemic of non-communicable diseases in Uganda. This project is the first of its kind to focus on NCD capacity building among clinical officers in Uganda. We plan to scale up our training programs to other neighboring countries.

Funding: The initial phase of our program was funded by the R.K. Pedersen Global Outreach Fund of the American Academy of Physician Assistants.

Abstract #: 1.074_HRW

Improving adherence to clinical practice guidelines in a low-resource primary care setting in Kenya

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Project Purpose: Penda Health is a community-based private healthcare organization located in Kenya. In Kenya, and at Penda Health, non-physician healthcare providers called Clinical Officers (COs) often deliver outpatient clinical services. Due to the substantial responsibility placed on mid-level care providers in Kenya, interventions to increase and evaluate their adherence to clinical quality guidelines may lead to substantial improvements in the quality of primary care. Our project focused on provider-level educational interventions to increase adherence to clinical practice guidelines and build skills related to patient-centered care.

Our objectives were threefold. First, to standardize Penda Health’s clinical training modules for childhood diarrhea, respiratory tract infections, tonsillitis, urinary tract infections, vaginal discharge, and family planning. Second, to incorporate education related to patient-centered care within the training modules. Third, to develop an online training platform in order to facilitate staff training at Penda Health.

Structure and Method: The relevant training modules were reviewed for consistency and formatted to emphasize evidence-based clinical quality guidelines to be used at all Penda Clinics. Each module and topic was reviewed to ensure accordance with Penda Health’s own Clinical Quality Guidelines (CQMs) and with internationally recognized standards. Penda Health’s “Patient-Provider Interaction” training module and expectations were incorporated into each clinical training module to better emphasize the importance of both evidence-based and patient-centered primary care. Finally, after considering multiple online training programs, we chose the SkyPrep system and uploaded a prototype training module and quiz for COs to complete.

Outcome: This project had concrete results through which Penda Health is able to improve upon existing provider training methods. The integration of evidence-based clinical practices with guidelines for patient-centered care is a novel approach for Penda Health, through which both clinical outcomes and patient satisfaction may be improved.

Going Forward: Next steps include incorporating all Penda Health trainings into the online system, improving the assessment of COs who have gone through the trainings, garnering feedback from COs about the efficacy and functionality of the online trainings, collecting data from charts to compare with prior CQM adherence, and collecting data from patients to evaluate any improvements in patient satisfaction.

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