provided by Directory of Open Access J

involved in motor vehicle and motorcycle trauma. Delayed presentation and a low rate of ambulance delivery indicate a lack of options for trauma care and poor infrastructure for coordinated care from field to hospital. The point of care perioperative data collection tool utilized by anesthesia personnel can provide detailed information that guides interventions for the development of a trauma system within a country in East Africa. Future directions will include utilizing this tool in more rural hospitals to define where interventions in the trauma care pre-referral hospital transfer are needed.

**Funding:** GE Foundation. **Abstract #:** 01*ITI*S022

## Implementation of an electronic medical record for HIV programs in resource-limited settings: A Nigerian case study

I.E. Nta<sup>1</sup>, G. Eke<sup>2</sup>, N. Sam-Agudu<sup>3</sup>, G. Gomez<sup>1</sup>, J. Aghatise<sup>1</sup>, N. Okere<sup>1</sup>, K. Smart<sup>4</sup>, A. Onah<sup>1</sup>; <sup>1</sup>Institute of Human Virology Nigeria, Abuja, NG, <sup>2</sup>Institute of Human Virology, Abuja, NG, <sup>3</sup>Institute of Human Virology Nigeria and IHV at U of MD Baltimore, Abuja, NG, <sup>4</sup>Intitute of Human Virology Nigeria, Abuja, NG

Program/Project Purpose: Nigeria's HIV treatment scale-up has stressed pre-existing inadequacies in the paper-based health information system (HIS). A 2013 nationwide Quality of Care exercise reported a 21% completion rate for HIV clients' medical charts. Poor documentation limits the integrity and impact of clinical decision-making, and compromises the quality of services delivered. The Institute of Human Virology Nigeria is a large local NGO that supports healthcare facilities (HCFs) to provide HIV services. We piloted an EMR system at public HCFs in North-Central Nigeria to improve documentation, data reporting and ultimately, patient care.

Structure/Method/Design: Between May 2011 and December 2012, a 5-member core team of engineers and programming staff piloted the Open MRS EMR in 23 of 629 public HCFs in Nasarawa State. We selected 13 Primary Healthcare Centers (PHCs), 8 secondary and 2 tertiary HCFs according to results of baseline assessments for telecommunications/electricity coverage and Human Resource capacity. HCFs with ≥500 HIV-positive clients enrolled were prioritized. Agreements were signed with facility ART Coordinators, and Medical Records heads were designated EMR Focal Persons. Computers, Local Area Networks and internet modems were provided, and site-level pre-implementation training was conducted for each HCF.

Outcomes & Evaluation: A total of 254 HCF staff were trained on basic computer use, EMR and minimal maintenance. The majority (94%) of HCF staff had never used an EMR. Only 1 HCF lacked telecommunications coverage; 10 (43.5%) HCFs met criteria for ≥180 minutes of daily power supply- only 2 (20%) were PHCs. At the end of the pilot, 17 (73.9%) HCFs switched to EMR, but for data reporting only. These HCFs reported elimination of missing/incomplete client records, and also met HIS reporting standards for timeliness and completeness. EMR implementation in this resource-limited setting was successful in terms of data storage/reporting. Challenges included inconsistent internet coverage, HCF staff resistance (citing increased workload and turf intrusion), distrust of technology and concerns about impersonal provider-client interactions.

Going Forward: Inconsistent internet/power supply were major implementation barriers, in addition to HCF staff resistance, stemming largely from low IT capacity and EMR inexperience. Scale-up phase adjustments include facility-organized stepdown trainings and provision.

**Funding:** US Government PEPFAR grant to Institute of Human Virology-Nigeria.

Abstract #: 01ITIS023

## The diaspora health network: A new mechanism of mobilizing foreign US-based health professionals for international health

J. Nwadiuko<sup>1</sup>, N. Nagarajan<sup>2</sup>, A. Ranjit<sup>2</sup>, M. Nyakabau<sup>3</sup>, C. Wonodi<sup>4</sup>; 
<sup>1</sup>University of Pittsburgh, Pittsburgh, PA/US, <sup>2</sup>Johns Hopkins University 
School of Medicine, Baltimore, MD/US, <sup>3</sup>Georgetown University, 
Washington, DC/US, <sup>4</sup>Johns Hopkins Bloomberg School of Public 
Health, Baltimore, MD/US

Program/Project Purpose: It is estimated that 265,000 physicians of foreign origin are practicing in the US, 129,000 of whom come from low and low-middle income countries. Much of the focus on physician migration has been on the impact of their absence on the health systems of their home countries. However, emerging research suggests that an important subset of immigrant health professionals contribute or desire to contribute to building and strengthening home country health systems. While information on priorities and relevant volunteer opportunities could facilitate targeting of efforts, there is no single space where immigrant health professionals can be mobilized and provided with said content.

Structure/Method/Design: The Diaspora Health Network was founded by students and faculty at the Johns Hopkins Bloomberg School of Public Health (JHSPH) to provide an online resource for health professionals seeking to effect positive change in the health systems of their home countries. An interactive online portal was built with country-specific "engagement gateways" which included health data, upto-date commentary, and volunteer opportunities from a pilot set of 5 countries. The portal also features a series of case examples of diasporaled sustainable health interventions, a blog, and a forum to support community building amongst diaspora. Opportunities where diaspora can make significant contributions are being actively sourced from global health organizations and partners and vetted for capacity and potential for long-term impact. Online and in-person marketing approaches are being employed to reach unengaged health professionals.

Outcomes & Evaluation: Initial outreach collaborations have been planned or carried out successfully with US medical associations, diaspora associations (such as the Association of Nigerian Physicians in the Americas), USMLE test prep companies, and JHSPH. Country pages for Nigeria, Mexico, Zimbabwe, India, and Nepal have been created and are being circulated. Programs have been implemented to locate and vet opportunities in partnership with international health organizations and grassroots movements alike.

Going Forward: Continued intensive outreach will be carried out for both health professionals and trainees, while opportunities will continue to be added to the site. High-impact practical content is being written and collated to create a "manual of engagement" for diaspora to ensure that their contributions encourage sustainability and are of high quality. Finally, in-person gatherings are planned to provide more opportunities for networking and international health practice preparation.

Funding: None.

Abstract #: 01ITIS024

## Using low cost android tablets and instructional videos to teach clinical skills to medical students in Kenya

J. O'Donovan<sup>1</sup>, A. Bersin<sup>2</sup>, R. Hines<sup>3</sup>, R. Ahn<sup>4</sup>, J. Edwards<sup>5</sup>, S. Davies<sup>6</sup>, T.D.F. Burke<sup>4</sup>; <sup>1</sup>Harvard University, Leeds, UK, <sup>2</sup>Harvard College,