their experiences. These journal entries were analyzed utilizing a grounded-theory approach to identify major themes and determine the short-term effects of the trip. Content was additionally analyzed for the positive or negative tone with which students described their experiences. To evaluate long-term effects, participants will complete a survey derived from the salient themes of the journal entries.

Findings: All participants completed a total of 35 unique journal entries with 667 out of 958 sentences coded (70% coverage). Analysis revealed ten major themes, which we grouped into 3 broad categories: (1) knowledge, (2) attitudes, (3) perceptions. In a majority of the entries (89%), participants reported learning about a breadth of topics including border politics, Native American health, and rural healthcare. 43% of entries described experiences that would impact the participants' future medical career decisions, and 37% noted experiences that improved their clinical knowledge and skills such as patient education and communication. The participants' reflections also revealed more abstract benefits such as becoming aware of privilege within society (40%) and the importance of studying an individual's motivations when evaluating his/her actions (51%).

Interpretation: This study suggests that, participation in short-term service learning trips (<1 week) has a significant impact on medical students' educational development and on how they envision themselves as medical professionals and their role in society. Analysis of survey results will clarify the enduring impact of this experience on the student participant's medical education.

Source of Funding: None.

Abstract #: 1.025_HHR

The Right Diagnosis: The Role of Pathology in Health System Strengthening

K. Fleming¹, W. Cherniak², J. Flanigan², S. Horton³, S. Sayed⁴, R. Sullivan⁵, M. Wilson⁶; ¹Oxford University, Oxford, United Kingdom, ²National Cancer Institute, Washington DC, USA, ³University of Waterloo, Waterloo, Canada, ⁴Aga Khan University Hospital, Nairobi, Kenya, ⁵King's College, London, London, United Kingdom, ⁶University of Colorado School of Medicine, Denver, USA

Background: The drive to Universal Health Care coverage, and the need for strengthening health systems, has led to the examination of the role of core elements of the system such as surgery and radiology. Until recently, pathology (which, along with radiology, is key to correct diagnosis and treatment), has been relatively neglected within the global health framework.

Resource-constrained governments and patients paying out-of-pocket have tended to underestimate the importance of laboratory testing. International donors have looked to point-of-care tests as a way to overcome the difficult task of strengthening national laboratory networks.

Without strong pathology systems, however, there is the danger of development of multi-drug resistance, inaccurate tissue diagnosis and delays in identifying new emerging epidemics. Diagnosis and treatment of cancer and other non-communicable diseases is compromised.

Methods: We utilize survey data from regional associations of pathology to describe the current situation in different regions.

We conduct an expert survey of existing literature, and combine this with previously unpublished economic data from selected institutions. We synthesize these data to provide a comprehensive picture of the current situation of pathology in low and middleincome countries.

Findings: Key factors needed to strengthen pathology systems in low and middle income countries including the accreditation, education and training systems, payment for service and the balance between the public and private sectors. The organization of pathology systems is important, with advantages and disadvantages of different modalities ranging from point-of-care testing, to "labin-a-box" approaches, and a tiered networked system. We make estimates of the costs required to strengthen systems as well as describe the benefits.

Interpretation: Strengthening pathology systems is an essential underpinning of a quality Universal Health Care system. There are lessons in how to do this in an effective and cost-effective way.

Source of Funding: Funding for writing meetings came from the National Cancer Institute.

Abstract #: 1.026_HHR

Did an Innovative Approach to Technical Assistance by Nurse Mentors improve PMTCT Standard of Practice among Community Health Extension Workers at Primary Health Care Centres in Ebonyi Nigeria?

A.F. Chizoba¹, C. Nwadike², E. Ezeobi³, N. Kehinde⁴, E.E. Ezeanolue⁵, A.E. Nwandu⁶; ¹Center for clinical care and clinical research Nigeria, Owerri, Imo, Nigeria, ²Maryland Global initiative Nigeria (MGIC-Nigeria), Enugu, Nigeria, ³Center for clinical care and clinical research Nigeria, Ebonyi, Nigeria, ⁴Center for clinical care and clinical research Nigeria, Abuja, Nigeria, ⁵University of Nevada School of Medicine, Las Vegas, NV, USA, ⁶University of Maryland, Baltimore, MD, USA

Program/Project Purpose: Globally, Nigeria accounts for 30% of childhood HIV infections. Mother-to-child transmission remains the major route of acquisition of new infections among children. Decentralization and task shifting to primary health centres (PHCs) and community health extension workers (CHEWs) has been used to scale effort aimed at prevention of mother-to-child transmission of HIV (PMTCT). To be effective, the capacity of CHEWs to provide standard of practice in PMTCT needs to be enhanced. We engaged and trained Nurses as Nurse Mentors to provide PMTCT technical assistance to CHEWs at PHCs and evaluated the effectiveness of this intervention on PMTCT standard of practice.

Structure/Method/Design: From January through March, 2014, we used a 50 question checklist adopted from the National PMTCT guideline to conduct a baseline evaluation of CHEWs implementation of the PMTCT standard of practice during antenatal, labour/delivery and up to 18 months postnatal period across 59 PHCs in Ebonyi state. A score of >70% score was considered standard while a score <70% was considered substandard. Following baseline evaluation, we implemented a 14-month (April 2014 to June 2015) intervention comprising of quarterly TA visit by Nurse Mentors