

et al., BMC Health Services Res 2014), with a dearth of literature on adherence to best practices for outpatient encounters. Both private and public outpatient clinics utilize clinical officers (COs), non-physician healthcare providers that complete three years of clinical training and a one-year internship, to deliver health services. Interventions to increase midlevel care providers' adherence to clinical quality guidelines could lead to substantial improvements in the standard of primary care. The aim of this study was to better understand factors that influence the uptake and adherence to clinical quality guidelines by midlevel care providers.

**Methods:** The study was carried out in three Penda Health outpatient clinics around Nairobi, Kenya. Penda Health is a chain of private outpatient clinics that delivers comprehensive primary care services to low and middle income Kenyans using midlevel care providers, servicing approximately 2,000 unique patient visits per month. In 2014, we developed 17 clinical quality guidelines based on internationally recognized best practices across four health areas: urinary tract infections, vaginal discharge, tonsillitis and childhood diarrhea. COs received interventions to increase adherence to these guidelines, including: 1) An online educational module assigned to each provider; 2) A mandatory 2 hour educational and training session; 3) System changes; and 4) Monthly feedback with each provider. This quasi-experimental, longitudinal study took advantage of this new protocol set-up at Penda to track adherence and performance to Penda clinical quality measures (CQMs). Relevant data were Abstracted from patient medical charts to develop CQMs. Demographic and professional information was also collected on each provider. Penda employs temporary COs that are not permanent Penda staff, and were not subject to the study treatments. The locums, therefore, acted as a natural control group. Multivariable logistic regression and interrupted time series analysis are being used to determine whether the intervention had a significant effect on adherence, and, if so, at what point in time this effect occurred.

**Findings:** Preliminary analyses indicate a significant increase in adherence to CQMs over the study period, with full-time Penda COs exhibiting a higher odds of adhering to guidelines than locums. Final results, and a discussion on the factors that prove to be the strongest predictors of adherence, as well as a formative evaluation of the interventions themselves, will be presented.

**Interpretation:** Simple interventions related to clinical education, CQMs, and organizational process changes can improve adherence to clinical quality guidelines in a resource-limited setting.

**Funding:** USAID grant #AID-OAA-A-13-00004.

**Abstract #:** 01ETC024

### New medical schools in Africa – challenges and opportunities CONSAMS and the value of working in consortia

Q. Eichbaum<sup>1</sup>, M. Hedimbi<sup>2</sup>, G. Ferrao<sup>3</sup>, K. Bowa<sup>4</sup>, O. Vainio<sup>5</sup>, J. Kumwenda<sup>6</sup>; <sup>1</sup>Vanderbilt University SOM, Nashville, TN/US, <sup>2</sup>UNAM, Windhoek, NA, <sup>3</sup>Lurio University, Sfshjadfhs, Mozambique, <sup>4</sup>Copperbelt University Zambia, Ndola, ZM, <sup>5</sup>Oulu University, Oulu, Finland, <sup>6</sup>University of Namibia medical School, Windhoek, NA

**Program/Project Purpose:** Context Africa bears 24% of the world burden of disease but has only 3% of the global health work force. Health worker capacitation to cope with this burden of disease is therefore a priority. This goal is best achieved by establishing new medical schools to graduate more healthcare workers. By some estimates over hundred new medical schools will open in Africa over the next decade. Whether these new schools will be capable of sustaining

themselves remains uncertain Program/Project Period CONSAMS –the Consortium of New Southern African Medical Schools – represents such a consortium. Currently comprised of 5 new southern African medical schools of less than 5 years since opening (in Namibia, Zambia, Mozambique, Lesotho and Botswana and two Northern partner schools at Vanderbilt University in the USA and Oulu University in Finland). Why the program/project is in place, in one or two sentences A seminal Lancet report of 2010 (Frenk et al.) suggested that resource-constrained medical schools can best achieve sustainable capacitation by collaborating within “networks, alliances and consortia” to share ideas, faculty, resources and innovative programs. Aim We describe here some of the challenges and opportunities facing new schools in Africa and present a case for the value of working together in consortia like CONSAMS

**Structure/Method/Design:** Program/Project Goals, Desired Outcomes Through joint meetings and numerous regional exchanges between partner schools CONSAMS has implemented several successful context-appropriate educational strategies and programs aimed at health care strengthening and health worker capacitation. Participants and Stakeholders: How were they selected, recruited? Partners were brought into CONSAMS as medical schools known to be less than 5 years old since opening and through shared interests and determination to meet challenges and opportunities. Capacity Building / Sustainability: What is the plan, structure in place to encourage viability? The Consortium is sustained through regular meetings, through south-south and north-south sharing of faculty, programs and innovations. Other new African medical schools are being invited to join.

**Outcomes & Evaluation:** To date, what are the successes and outcomes achieved? Opportunities identified and achieved include: (1) Development of innovative context-based medical curricula; (2) Sharing of limited resources and pedagogical innovations with partner schools; (3) Faculty and student exchanges between schools; (4) Development of regional accreditation standards; (5) Submission of Consortia-wide funding applications

**Going Forward:** What are the ongoing challenges? Challenges identified for new medical schools in Africa include: (1) Curricula unsuited for the African context – either outdated or obliviously imported from Western medical organizations; (2) Faculty shortages, lack of faculty development and continuing medical education (CME) programs; (3) Lack of postgraduate training programs; (3) Uncertainties about sustainable government funding and strategic planning for medical school development; (5) Inequitable student admissions policies favoring affluent urban applicants over disadvantaged rural applicants that fail to promote physician retention. Are there any unmet goals? To effectively achieve health worker capacitation in Africa scores of new medical schools are being established throughout the continent. The success of these new schools is not guaranteed as they face many challenges.

**Funding:** None.

**Abstract #:** 01ETC025

### Mitigating the digital divide: Access, attitudes, and training in information and communication technologies among medical students at University of Zimbabwe College of Health Sciences, Harare, Zimbabwe

A. Ershadi<sup>1</sup>, A. Karimov<sup>1</sup>, M. Mapfumo. Chidzonga<sup>2</sup>, C. Ndhlovu<sup>2</sup>, A. Dougherty<sup>3</sup>, M. Sadigh<sup>4</sup>; <sup>1</sup>Western Connecticut Health Network, Danbury, CT/US, <sup>2</sup>College of Health Sciences, University of Zimbabwe, Harare, Zimbabwe, <sup>3</sup>University of Vermont College of Medicine, Burlington, VT/US, <sup>4</sup>Western Connecticut Health Network, Woodbridge, CT/US