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followed by lack of adequate supplies, infrastructure, and continuing educational/professional development opportunities, excessive workload, disjointed human resource management practices, and aggression in the workplace.

Going Forward: HRH2030 will disseminate the results of the research with key stakeholders and provide technical assistance to the MoH in developing evidenced-based policies and procedures for improving worker motivation and retention.

Source of Funding: USAID.

Abstract #: *1.077_HHR*

Filling the Gap for Healthcare Professionals Leadership Training in Africa: The Afya Bora Consortium Fellowship

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Program/Project Purpose: The Afya Bora Consortium is a partnership of five African and four U.S. universities with the mission of providing future global health leaders with advanced skills that are beyond the traditional patient-centered training programs for healthcare professionals. Each year, an interdisciplinary group of twenty physicians, nurses and public health professionals participate in a 12-month African-based intensive fellowship to improve skills in leadership, resource management, program monitoring and evaluation, implementation, and applied research.

Structure/Method/Design: The Afya Bora Fellowship provides leadership training in the form of eight in-person and four online modules as well as two 4.5-month mentored attachments at governmental and non-governmental organizations in Botswana, Cameroon, Kenya, Tanzania, and Uganda. The fellows come together during three, month-long highly interactive sessions held in different African countries during which interdisciplinary and multinational learning is encouraged. Afya Bora Fellows complete evaluations of the modules and program as well as self-assessments of learning throughout the year. Data presented here are from all cohorts since 2011 using qualitative analysis of personal reflection reports.

Outcome & Evaluation: Fellows described multiple training gaps the fellowship helped fill. Fellows reported that increased skills in communication would help them to better motivate and align others to address pressing problems in their healthcare systems. Improved understanding of and capacity to use data for programmatic purposes was also identified as essential to their ongoing leadership. Fellows reported that their organizational and management abilities had improved both from didactic learning and modeling of program faculty and staff. Finally, fellows reported that the rich cohort experience provided them with an added appreciation of the advantages of interdisciplinarity when solving problems.

Going Forward: Well-structured and targeted leadership training is necessary to fill the gaps in traditional medical and nursing education programs. Such training can catalyze healthcare professionals to become more effective in leadership and improve the healthcare systems in their countries while not contributing to "brain drain" (all fellows thus far have remained in their respective countries). The Afya Bora Fellowship can serve as a model for training and research institutions as well as organizations in resource-limited settings to sustainably strengthen human resource capacity to lead and improve health systems.

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Abstract #: *1.078_HHR*

Success and Challenges of Implementing a Tablet-Based Trauma Registry in Tanzania

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Background: Trauma is one of the leading causes of morbidity and mortality worldwide, even more so in low- and middle-income countries. Access to epidemiological data through trauma registries has been one of the keys to the success of improvement in trauma care. A partnership between local leadership in Tanzania and the Centre for Global Surgery, founded by McGill-based surgeons, was formed about 10 years ago, and a minimal trauma registry was implemented. It has since then been expanded to a 6 sites across Tanzania and data collection is ongoing more steadily for the last 3 years using a tablet-based registry.

Methods: iTrauma™ is a minimal trauma registry that contains a total of 26 questions about demographics, mechanism of injury, type of injury and outcome. Data is gathered on site on paper by local data collectors and is entered by an archivist on a tablet. Reports are generated with minimal user involvement. Over the last year, a quality assessment of the database was conducted using retrospective data. The database, the collection process and the use of data were evaluated to determine the robustness of the registry.

Findings: Over the course of the last 3 years, over 40 000 patients have been entered in the database through the 6 sites. Each patient file entered is on average 93.1% complete (number of questions answered), which is significantly more than what was collected in local hospital records (42.1%). The iTrauma™ catch rate compared to local hospital logbooks was estimated on average to be 317% (range 111-797%). iTrauma™ data was overall concordant with hospital records (not all data currently available, full analysis pending).

Interpretation: The implementation of a minimal trauma registry in a low-income country in collaboration with local leadership is feasible. A significantly larger amount of information about more

patients is rendered accessible through the registry. The recent quality assessment demonstrated the good quality of data found in the registry, making iTrauma™ a valuable and reliable method for characterizing trauma across the world.

Source of Funding: Centre for Global Surgery.

Abstract #: *1.079_HHR*

Ready or Not? Service Readiness of Health Facilities in High-Mortality Countries

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Background: Health systems in lower income countries face substantial challenges in meeting population health needs, including a growing burden of non-communicable disease. Existing research suggests that health facilities may be poorly equipped to provide high-quality care, yet systematic assessment of health facility readiness has been limited to date. We define and compare service readiness in nine high-mortality countries.

Methods: We used all Service Provision Assessments conducted in the past decade to provide nationally representative assessments of health systems in nine countries: Bangladesh, Haiti, Kenya, Malawi, Namibia, Rwanda, Senegal, Tanzania, and Uganda. We calculated the service readiness index (SRI) for each health facility following the 2014 World Health Organization guidelines, which define 50 readiness indicators in five domains: basic infrastructure, basic equipment, infection prevention, diagnostics, medication. We compared SRI within hospitals and non-hospitals (health centers) in each country and assessed whether readiness differed by facility ownership or location. We used linear regression to test the explanatory power of national characteristics such as total health expenditure per capita.

Findings: 7,480 facilities were surveyed, including 548 (7%) hospitals. Average service readiness was low, with hospitals scoring 76% and non-hospitals only 52%. Basic equipment was the most likely domain to be completely present and essential medications the least (25% of facilities with all equipment vs. 0.7% with all medications). Among non-hospitals, private facilities and those in urban areas scored higher on service readiness across most countries; these differences were weaker and less consistent among hospitals. Health expenditure per capita was associated with greater facility service readiness, but over 60% of variation in SRI was not explained in any model.

Interpretation: Health facilities in high-mortality settings are insufficiently equipped to address population health needs, particularly public clinics in rural areas. Hospitals are better and more uniformly equipped in most countries, though critical deficiencies persist. While higher spending on health per capita was associated with greater readiness, much of the variability in health facility readiness remains unexplained. Further research on efficient conversion of health spending into readiness and, ultimately, population health, is required to strengthen health systems for the many challenges of the Sustainable Development Goal era.

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Abstract #: *1.080_HHR*

Redefining the role of Army Medicine in Global Health: Transformation in the Indo-Asia Pacific

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Program/Project Purpose: The recent US Army medical transformation aligns medical capabilities with Regional Combatant Commands to further enhance delivery of medical services to the warfighter and beneficiary population. Regional Health Command - Pacific (RHC-P) is one of four regional Army Medicine Commands and is aligned to directly support US Army Pacific and US Pacific Commands. This area of operation includes 36 countries, 17 percent of the earth's landmass, and 60 percent of the earth's population. Based out of Honolulu, HI with nine direct reporting units (e.g. Tripler Army Medical Center, Public Health Command - Pacific, Medical Centers Japan and Korea), approximately 11,000 employees, and an operating budge over $1.2 billion USD in support of over 229,000 beneficiaries, RHC-P developed an innovative health engagement strategy to assist partner nations in developing capability, increasing capacity, and enhancing interoperability while generating US Army military medical readiness.

Structure/Method/Design: The strategy is the first of its kind and in direct support of the US Army Medical Command 2017 Campaign Support Plan; synchronized with US Army Pacific Command, US Pacific Command, and other US Government strategies; and is informed by host nation priorities and requirements. Implementation occurs across three lines of effort and ten primary functional areas based on doctrine and includes Army Health System Support, Health Service Support, and Force Health Protection. The functional areas include casualty care (e.g. medical treatment, dental, behavioral heatlh), combat stress control, laboratory services, medical evacuation, medical logistics, preventive medicine, and veterinary services among others.

Outcome & Evaluation: RHC-P leverages the Army medical enterprise in the Pacific across these health lines of effort through myriad military-to-military and military-to-civilian health engagements to enhance the host nation capability and capacity, achieve DoD security objectives, and increase the readiness of the military medical community to operate in all phases of operations.

Going Forward: Early successes have been achieved and are being measured by the Uniformed Services University Center for Global Health Engagement; however, changes to existing DoD medical structures and funding authorities could further empower DoD in supporting the National Security Strategy through global health engagements.

Source of Funding: None.

Abstract #: *1.081_HHR*

Training Health Workers to Provide Cervical Cancer Screening: Comparison of Educational Strategies in Liberia, South Africa and Grenada

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