learning emphasizing topics specific to Haitian healthcare infrastructure.

Going Forward: This project's ultimate goals continue to emphasize the promotion of capacity building in Haiti through local healthcare provider empowerment. Sessions addressing ethics in global health previously detailed in the literature, Haitian culture and history taught by professors, and lectures on global health field logistics are being added to the existing elective framework. An effort to certify UniQ students as BLS instructors and add to the bidirectional nature of the program is being prioritized. The elective will also be made open to students not participating in the trip as 8 separate two-hour didactic sessions. Statistical analysis of survey item responses, observation of participant student career trajectories, and exploration of the elective's implications for medical education curriculum are also ongoing.

**Funding:** This project did not receive outside funding support and lectures are taught on a voluntary basis by ISMMS affiliated faculty and house staff.

Abstract #: 01ETC076

## Coping with ethical dilemmas during global health clinical rotations: A survey of medical student challenges and strategies

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**Background:** There has been a growing recognition of the need to prepare health professions students for common ethical issues that occur during clinical rotations abroad. The purpose of this study was to describe the ethical dilemmas reported by medical students rotating at different international sites and to identify the coping strategies used by students when facing an ethical dilemma.

Methods: All medical students participating in funded international rotations at 10 sites in Africa, Asia, and Central/South America from September 2012 through May 2014 (n=52) were invited to participate in a post-trip debriefing, which consisted of a group discussion facilitated by a team of students and faculty with previous international clinical experience, and to complete an electronic survey regarding their personal experiences. Two reviewers coded and Abstracted themes from the qualitative data; a third reviewer re-coded the data to resolve any discrepancies. Proportions were calculated and compared using the z-test for dependent groups.

Findings: 34/52 (65%) students completed the survey. 25/34 (74%) respondents reported witnessing an ethical dilemma during their rotation and 19/25 (76%) provided narrative details about these dilemmas. The most common dilemmas fell into the categories of navigating local culture (14/19; 74%), different standards of care (9/19; 47%), the obligation to subsidize care (6/19; 32%), issues of resource allocation (6/19; 32%), and students' own expectations of themselves and their abilities (6/19; 32%). 22/34 (65%) students provided information regarding with whom they discussed the dilemmas they faced. The most common individuals were visiting house officers (6/22; 27%) and visiting medical students (5/22; 23%), followed by local attending physicians (3/22; 14%) and local house officers (3/22; 14%). Several respondents reported discussing the issues with non-medical family and friends (3/22; 14%) or no one at all (3/22; 14%). Students more commonly mentioned discussing dilemmas with non-local physicians, students, or friends (18/26; 70%) than with local individuals (8/26; 30%; p < 0.05). In addition to talking through the dilemmas, students listed a number of other methods of coping with

the issues they faced, including personal reflection, written reflection, asking more questions of the local team, doing background reading, and avoidance of specific situations.

Interpretation: The majority of medical students reported facing an ethical dilemma during their rotations abroad. Students most commonly discussed the dilemmas they faced with other visitors rather than those individuals from the local institution. This may be due to convenience, lack of adequate training, or reticence to confront local individuals with what may be perceived as criticism and represents a missed opportunity for discussion and reflection between the visiting students and the individuals in their host institutions. Efforts should be made to identify reasons for this trend and to further promote discussion between individuals from the sending and receiving institutions.

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## Using HIV clinics to improve quality of community-based medical education

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Program/Project Purpose: The Ho Chi Minh City University of Medicine and Pharmacy is reforming its 6-year undergraduate medical curriculum with a goal of improving training of doctors. A major focus of the reform is to introduce early community-based clinical experiences for students. However, medical education in Vietnam is primarily hospital-based and models of community-based education are lacking. We piloted a community-based medical student elective utilizing the city's network of outpatient HIV clinics with the aims of improving the capacity of community-based clinical staff to mentor students, improving student history and physical examination skills, and exposing medical students to HIV patients in order to reduce stigma and to promote HIV medicine as a potential field for graduating doctors.

Structure/Method/Design: The longitudinal clinical experience was designed as an eight week rotation integrated into the 3rd year internal medicine clerkship. Community HIV doctors were trained in teaching and mentoring skills and were mentored by university or project staff. Participating students spent one morning per week in one of 6 participating HIV clinics in the city. During each session students took histories and performed physical examinations, and presented cases to their clinical mentors who also provided a short didactic session on HIV. We assessed student and mentor knowledge, satisfaction and confidence.

Outcomes & Evaluation: Twenty students and nine HIV providers participated in the pilot from March — July 2014. Prior to the pilot, less than half of the students reported previous experience in an outpatient setting and less than half reported previous contact with a person living with HIV. During the eight half day sessions, students examined a mean of 3.4 patients (range 1-8 patients) and took a detailed medical history from at least 5 patients (range 5 to >20). After the eight weeks, all students demonstrated improved knowledge, 85% agreed or strongly agreed that the experience increased their confidence in taking a sexual history, 75% had increased confidence in taking a substance abuse history, 75% reported increased

Annals of Global Health

confidence in the ability to present a clinical case, and 100% reported they were less afraid of caring for patients with HIV. Ninety percent reported the rotation was useful for their education. All nine mentors reported increased confidence in their mentoring skills and improved job satisfaction.

Going Forward: A pilot of early longitudinal clinical training in community-based HIV clinics improved student confidence in history and physical examination skills, reduced fear of HIV patients, improved the mentoring skills of community based clinicians and served as a model for introducing students to the outpatient management of chronic disease. The lessons learned from this pilot will inform the university's planned expansion of community-based clinical training opportunities.

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## Management in global health education: A new health innovation fellowship in central America

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Program/Project Purpose: Interprofessional education is increasingly recognized as fundamental for health education worldwide. Although effective management is essential for health care improvement, business schools have been underrepresented in global health education. Here we report the Health Innovation Fellowship (HIF), a new training program created for practicing health professionals offered by the Central American Healthcare Initiative (CAHI) and INCAE Business School, Costa Rica. The initial period for this annual program is July 2014 to February 2015. HIF aims to catalyze improvements in the quality, efficiency, and delivery of healthcare for Central Americans in greatest need.

Structure/Method/Design: HIF's goal is to provide training in management and leadership for fellows, in order to carry out an innovative health care improvement project in their local region. Participants are selected based on a submitted outline for their proposed project, and why it is innovative and relevant within their current local health care system. The initial cohort of 16 fellows represent eight health-related professions in six Central American countries. HIF is supported by CAHI stakeholders. Desired outcomes for HIF include successful completion of each fellow's project, and providing a positive impact on achieving their goals. All fellows attend four one-week on-site modular training sessions, receive ongoing mentorship, and stay connected through formal and informal networks and webinars to exchange knowledge and support each other. Viability is encouraged by creating a network of increasingly sustainable projects and health professional leaders across Central America, with each successive annual training program.

Outcomes & Evaluation: Preliminary data are positive. During each on-site training module, fellows present updated project profiles, which are compared to their earlier project profiles to track progress. A "check-out" process has fellows set concrete goals and timelines to accomplish by the next module, and a "check-in" process reports whether they achieved their previous goals. After the first and second modules, 100% of the fellows considered HIF and its training sessions as "very good" or "excellent" toward meeting their project's goals. More than 50% of the projects have found either financial or political support for their implementation. Upon

completion of HIF, fellows complete a quantitative-qualitative exit interview to measure 1) project outcomes and 2) the fellowship's impact on their project design, implementation, quality and effectiveness.

Going Forward: Strengths include that both leadership and trainees come from the Global South, and that HIF offers a Global South platform to collaborate with partners in the Global North. Across sites, common themes are defined and unique lessons are learned. The seven-month period is a challenge, which is short for health system improvement efforts. By focusing on innovation and management within a Central American school of business, HIF is a novel capacity-building effort within global health education efforts. Funding: HIF is funded by CAHI.

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## Culturally adapted obstetrics training course for traditional mayan birth attendants: Evaluation of knowledge

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Program/Project Purpose: Guatemala has the third highest maternal mortality rate in Latin America, with 140 maternal deaths/100,000 live births. Majority of Guatemala's maternal deaths occur among indigenous Mayan women. Traditional Mayan birth attendants with minimal formal obstetric training provide majority of prenatal and delivery care in rural settings. Because they are first line providers for many rural Guatemalan women, proper training is necessary to give women the care they need. We assess knowledge before and after a culturally adapted 16-week curriculum on basic obstetric practice and emergency management.

Structure/Method/Design: The purpose of this project is to determine the ability to provide formal obstetric training and to assess whether Traditional Birth attendants, with minimal education training can effectively be taught to manage pregnancy and address acute complications during delivery. Twenty-three women were recruited in Santiago Atitlan through a local hospital partnership with the ministry of health. Majority had a maximum of 1 year of formal healthcare training as community health workers. The women came form various education levels ranging from no education to completion of high school. Local providers and Saving Mothers volunteers taught 3 didactic modules with 29 4-hour sessions in Spanish. On the first day of each module, participants received a pre-test that was repeated the last day of that module.

Outcomes & Evaluation: Average cumulative scores improved by 17% points between pre and post tests (p=0.00002). Module 1, 2, and 3 scores improved by 16% (p=0.005), 18% (p=0.004) and 17% (p=0.004) respectively. Prior to the course, only 35% of participants scored correctly in multiple basic knowledge areas such as anatomy, physiology, and pregnancy diagnosis/management. Post-test assessment improved by 20 to 35 % but knowledge in anatomy/physiology still remained lowest. Participants' strongest baseline areas were Newborn Assessment/Care, Labor & Delivery, and Family Planning. Knowledge in obstetrical management, such as labor and delivery, emergency complications, postpartum care and sterile techniques, improved by 20-30% after the course.

Going Forward: Baseline knowledge of obstetrics and anatomy was low in this Mayan birth attendant population. A formal education led to a measurable increase in knowledge despite low levels in education and prior experience. Care should be given to create