

organizations or educational institutions have been the most successful grounds for growing workforces.

**Going Forward:** These experiences aim to help global research and intervention programs create teams for large-scale global projects. Training and recruitment go hand-in-hand and must be concurrently achieved for success. The importance of retaining involvement from those individuals who are recruited and invested in by training is critical, particularly with higher-level tasks. In addition, volunteer-based models must also consider the personal interests and motivations of their individuals and determine how to best incentivize retention. Each setting offers new challenges, but by recruiting and training sustainable local workforces, projects ensure they will have local teams leading the charge in their global health efforts.

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### Long-term Patient Follow-up for Short-term Surgical Trips Is Possible

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**Background:** Achieving adequate follow-up for surgical patients is challenging in resource-poor environments, especially for short-term surgical trips. The aim of this study was to evaluate the extent of follow-up using mobile phones to reach patients post-operatively and to evaluate post-surgical quality of life.

**Methods:** At a single institution, the School of Medicine and Department of Surgery have provided surgical care yearly to patients at a public hospital in the central plateau of Haiti since 2008. During the 2016 surgical trip, 2014–2015 surgical patients were called on mobile phones to invite to clinic for follow-up evaluation. Patients who were unable to return to clinic were interviewed over the phone. Quality of life was determined using an institution-generated tool that measured patients' ability to perform activities of daily living (ADLs). For prostatectomy patients, the tool also incorporated the International-Prostate Symptom Score (I-PSS) tool.

**Findings:** With a mean length of follow-up of 17.8 months (range: 3–60), follow-up was achieved in 34 (28%) of 122 operative patients. 19 (56%) of these patients returned to clinic, 25 (74%) were able to be reached by phone, and 2 (6%) were reached via another source. Prior to using mobile phones to facilitate follow-up, four operative patients returned to clinic during the two previous trips. Follow-up patients had received the following operations: 14 inguinal hernia repair, 8 open prostatectomy, 5 lipoma removal, 2 hydrocelectomy, 1 cystoscopy and dilation, 1 celiotomy for bilateral kidney stone obstruction, 1 meatoplasty, and 1 drainage for enlarged cervical lymph nodes. Mean age was 44 (range: 6–76). Mean travel time for patients was 65 minutes (range: 5–300). At follow-up, there was a 41% improvement in patients' ability to perform ADLs and a 38% reduction in reported pain from the pre-operative period.

Among the prostatectomy patients, 7 (88%) pre-op vs. 0 post-op were catheter-dependent.

**Interpretation:** Achieving long-term follow-up for operative patients following short-term surgical trips is challenging but mobile phones facilitate follow-up. Barriers encountered that limited the extent of follow-up included language barriers, limited means of communication with patients, far travel distance for patients, and limited time in country. The follow-up data obtained demonstrates that quality of life appears to improve after short-term surgical trips.

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### Comprehension of Surgical Informed Consent in Haiti

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**Background:** Informed consent has long been considered an essential requirement of surgical care in the United States; however, US studies have demonstrated that patient comprehension of informed consent is poor. Little is known about the use of informed consent on international surgical trips.

**Methods:** Since 2008, a multi-disciplinary team from a single institution has partnered with a public hospital in the central plateau of Haiti to provide surgical care on an annual trip. Written and video informed consent tools were developed that explained the procedures, risks and benefits of both surgery and anesthesia and were translated into Creole. All 2015 surgical patients (n=52) received the dual-media informed consent prior to surgery. Procedures performed were primarily inguinal herniorrhaphy(50%) and open prostatectomy(17%). Following the informed consent, with assistance from hired translators, patients completed a multiple-choice survey translated into Creole evaluating their understanding of and satisfaction with the procedures using an iPad survey app both before(n=48) and after surgery(n=47).

**Findings:** Following informed consent, 91% of patients were able to correctly identify their surgical procedure. The majority of patients were able to identify the most common risks of surgery including pain (85%), bleeding (80%) and infection (70%). Hernia patients struggled to identify the more complex possible complications such as recurrent hernia (31%) and chronic testicular pain (23%). In contrast, patients believed impotence (17%) and death (33%) to be likely complications. The majority (89%) of patients claimed they understood the video, but 30% had additional questions. The majority (61%) noted difficulty communicating through hired translators and only 35% were able to complete the surveys independently either due to inability to read (54%), difficulty understanding the questions (28%) or difficulty using the iPad itself (33%). Almost all (98%) patients were satisfied with the informed consent process and 91% of patients would have their operation again at discharge.

**Interpretation:** The results of our survey demonstrate that a multi-media informed consent tool can prepare patients for surgery but that communication barriers such as language and literacy inherent to the setting of international surgical trips should be considered in

the development of informed consent tools and addressed in order to maximize their efficacy.

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### Perceived Reciprocal Value of Health Professionals' Participation in Global Health-related Work

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**Background:** Leading children's hospitals in high-income settings have become heavily engaged in international child health research and educational activities. Research to date on global health collaborations has typically focused on documenting improvements in the health outcomes of the developing countries. More recent discourse has characterized these collaborations with the notion of "reciprocal value", namely, that the benefits go beyond strengthening the local health systems, and, instead, that both partners have something to learn and gain from the relationship. Few studies have measured the actual reciprocal value of this work for the home institutions and for individual staff who participate in these overseas activities. Our objective was to estimate the perceived reciprocal value of health professionals' participation in global child health-related work.

**Methods:** A survey questionnaire was developed following a comprehensive review of literature and key competency models. It was distributed to all health professionals at the Hospital for Sick Children in Toronto with prior international work experience (n=478). Benefits were measured in the form of skills, knowledge, and attitude strengthening as estimated by an adapted Global Health Competency Model. Descriptive statistics, one-way ANOVA, post-hoc Turkey's test, and chi-square tests were conducted using SPSS 23.0. Answers to open-ended questions were analyzed independently by two research assistants using qualitative content analysis.

**Findings:** One hundred and fifty-six health professionals completed the survey (34%). A score of 0 represented negligible value gained and a score of 100 indicated significant capacity improvement. The mean respondent score was 57 (95% CI 53-62) suggesting improved overall competency resulting from international experiences. Mean scores were >50% in 8 of 10 domains. Overall scores suggest that international work brought value to the hospital and over half responded that their international experience would influence their decision to stay on at their home institution.

**Interpretation:** Global child health work conducted outside of one's home institution impacts staff and health systems locally.

**Source of Funding:** None.

**Abstract #:** 1.021\_HHR

### Teaching Advocacy to Health Professional Students: Advancing Global and Population Health by Training the Next Generation of Health Professionals

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**Program/Project Purpose:** Training local health professional students on advocacy, partnership building, international development, and the social determinants of health, will advance progress on population health locally and abroad. Physicians, in particular, can play a major role in promoting health and health equity; therefore, fostering medical students' interest in population and global health is necessary for success. The Office of Global Health at Queen's University has launched a Certificate in Global Health program to provide medical students with training on health advocacy and how to work ethically in global and public health contexts.

**Structure/Method/Design:** The certificate launched in 2015, and was founded on the Association of Faculties of Medicine of Canada- Global Health working group's guidelines for global health concentrations. The certificate is structured to provide students with opportunities to engage in service learning in local and international communities.

**Outcome & Evaluation:** 28 medical students are enrolled in the certificate. The certificate is comprised of:

- Self-directed online modules on international development, hunger, infant and child health, sexuality and gender, maternal health, infectious diseases, and non-communicable diseases
- A service-learning activity
- Mentorship
- Educational Sessions such as: Journal clubs/documentary screenings/facilitated discussions
- A placement in a low-resource setting (local or international)
- Pre-departure training for placements and
- Post-arrival debriefing.

**Going Forward:** The certificate program gives health professional students an opportunity to explore their interest in global health through hands-on opportunities to work in low-resource contexts and practice health advocacy. After completing the certificate program, medical students will have the essential skills they need to promote health and health equity locally and abroad, which they can take with them in their future practice. Pre/post data on students' personal and professional development in the certificate is currently being collected. We are also looking to expand the certificate to include other health professional students to enable students in public health, nursing, and rehabilitation therapy to work in inter-professional collaborations in global health contexts.

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### Global Health Practice Competencies: Building Health Professionals' Capacity to Work in Global Health Contexts

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**Background:** Building health professionals' capacity to work in global health contexts is important to ensure future progress on global health challenges. Health professional students, particularly