20 were attached to 10 intervention PHCs. Median age was 31.5yrs (IQR 26.8-35.3, range 20-38); 31 (81.6%) were married. Highest education was primary-level for 12 (31.6%), secondary for 14 (36.8%), tertiary for 7 (18.4%), and none for 5 (13.2%). Englishspeaking proficiency was "none" for 1 (2.6%), "basic" for 21 (55.3%), "moderate or better" for 16 (42.1%). Median time-period since HIV diagnosis was 2.0 years (IQR 1.84.3). Mean pre-test and post-test scores were 72.4% and 87.7% respectively. The MM program's early successes included better MM work attendance, improved documentation, increased timeliness/less missed opportunities for client tracking and increased frequency/quality of MM-client interactions. Going Forward: Even though education and English proficiency were relatively low, MMs were able to absorb and retain training knowledge. Their relatively high baseline PMTCT knowledge was encouraging. With appropriate supervisory support, these lay HIVpositive women c

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Abstract #: 02ETC073

# Academic skills building through global health: The UTMB scholarly project model

C. Satterfield, P. Patel, M. Dacso, C. Miller, University of Texas Medical Branch, Galveston, TX/US

**Program/Project Purpose:** At the University of Texas Medical Branch (UTMB), the Center for Global Health Education (CGHE) sends approximately 50 first year medical students abroad on international rotations every year. In 2011 the focus of the first year experience changed from that of clinical-shadowing to required, value adding, scholarly projects. This shift was deemed necessary due to first year medical students' limited clinical skills and to avoid medical tourism. These projects have been termed Academic Skills Building through Global Health or ASB. The project entails developing and implementing a scholarly project abroad, writing an abstract, and presenting a poster at the Annual UTMB Global Health Education Symposium. The purpose of this presentation is to describe the model used for training students in the development, implementation, and dissemination of scholarly projects abroad at UTMB.

Structure/Method/Design: After the first year (2012) of the ASB, it was apparent that our students needed more training in how to develop, implement, and disseminate a scholarly project. Face-to-face workshops were hosted for students participating in the global health first year experience in 2013. While much progress was made, the team at CGHE decided to make the workshops into four online modules in 2014 to free up faculty time for mentorship and allow students the ability to review the materials anytime, anywhere, and as many times as needed. The modules focused on: 1) Developing a Scholarly Project, 2) Implementing a Scholarly Project Abroad, 3) Developing an Abstract, and 4) Developing a Poster Presentation. In Developing a Scholarly Project, students learn how to narrow a research question and conduct a literature review. The module on Implementing a Scholarly Project Abroad focuses on the ethics of international research. The modules on Abstracts and Posters are designed to take students step-by-step through each of those processes to arrive at a final product to disseminate.

**Outcomes & Evaluation:** To date, fifty-one students have viewed the ASB modules. Students have also successfully submitted abstracts and disseminated their projects at the UTMB Global Health Education Symposium via poster presentations and oral presentations. Going Forward: A study is planned to discern any significant educational differences in abstract quality from face-to-face workshops versus online modules. Findings from this study will inform future pedagogical practices for the UTMB ASB instructional series. It is hop **Funding:** This projected is supported by funds from the UT Kenneth Shine Academy of Health Science Education Grant. Abstract #: 02ETC074

## Para nuestra comunidad: A spanish video promoting clinical trials, biospecimen studies and research participation for advancing cancer research and quality care

M. Serrano, K. Ashing; City of Hope, Duarte, CA/US

**Background:** The recruitment of ethnic minorities, particularly Latinos, into clinical trials (CT) and biospecimen studies (BB) is a formidable challenge. Latinos equal 17% of the US population and cancer is their leading cause of death. Increasing their inclusion in biomedical research contributes to advancing public health and medical research and practice. Videos have been used widely in health education with Latinos; yet videos promoting Latino participation in CT and BB are scarce. Most materials and videos have focused solely on CT participation and are translated from their English counterpart but do not address BB. Therefore, we created a culturally and linguistically tailored 3-minute Spanish video to promote Latino participation in CT and BB studies. The specific aims are to: 1) educate on the importance of CT and BB studies; and 2) promote acceptability and willingness to participate in CT and BB studies.

**Methods:** The Theory of Reasoned Action/Planned Behavior was used to guide the video production. The literature, community assessments, and focus group data informed the development of the video. The video was finalized using a consensus process, and evaluated by City of Hope's community partners and City of Hope clinicians who were fluent in Spanish and serve the Latino community. Preliminary evaluation was conducted with Latino advocates, survivors and/or family members (n=69). Participants viewed the video then completed a short evaluation measuring knowledge, acceptability and willingness to participate in CT and BB.

**Findings:** The mean levels of knowledge about the importance of research participation before and after viewing the video were 3.58 and 4.38, respectively. The difference was statistically significant (z=4.95, p **Interpretation:** Preliminary evaluation shows that the video increased knowledge, acceptability and willingness to participate in CT and BB among Latinos. Therefore, this culturally and linguistically appropriate video has potential as an effective strategy for engaging Latinos in CT and BB. The limitations to our study findings include our relatively small sample size, which doesn't allow us to determine differences in other demographics characteristics (e.g. age, income, etc). Also, the participants were primarily from the Los Angeles area, and thus are not necessarily representative of the larger national Latino community so the findings cannot be generalized. **Funding:** NCI Grant No. 5P30CA033572.

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#### A curriculum and assessment tool for point of care ultrasound training in a limited resource setting

S. Shah<sup>1</sup>, C. Reynolds<sup>2</sup>, D. Mantuani<sup>3</sup>, J. Uwamungu<sup>4</sup>; <sup>1</sup>University of Washington School of Medicine, Seattle, WA/US, <sup>2</sup>Kaiser Permanente, Oakland CA, Oakland, CA/US, <sup>3</sup>Alameda County Medical Center,

Oakland CA, Oakland, CA/US,  $^{4}$ Inshuti Mu Buzima (Partners In Health ), Rwanda, Rwinkwavu, RW

**Program/Project Purpose:** Clinician-performed point of care ultrasound (POCUS) can have a significant impact on patient management, especially in settings where other imaging is not readily available. Currently, widespread lack of training in low and middle income countries (LMICs) prevents ultrasound (US) from reaching its full potential as an effective diagnostic tool. We describe a pilot study of a novel, POCUS training curriculum, implementation program, and an assessment tool for POCUS knowledge.

Structure/Method/Design: This is a retrospective review of an educational intervention and curriculum description. 2 cohorts of physicians were trained using this curriculum, 10 in 2013 and 21 in 2014. Rwandan and Burundian Medical Directors selected physicians for the training based on a reported self-interest in ultrasound. Fellowship trained emergency physicians from the USA taught course participants the POCUS curriculum (Table 2) over a 70-hour period (Table 1). Course evaluation included pre and post training confidence surveys as well as pre and post training knowledge exams (multiple choice, image recognition and interpretation).

**Outcomes & Evaluation:** The unique curriculum increased participants' scores on a POCUS knowledge test (Figure 1). Confidence in performing several common POCUS applications also increased (Figure 2). Specifically, confidence increased greatly when performing POCUS 2nd and 3rd trimester OB/GYN exams, procedural evaluation for thoracentesis, DVT exams and skin/soft tissue ultrasound (Figure 2). Gains were also seen in understanding mechanics, physics and artifacts of ultrasound. Participants' confidence in teaching the exams they learned in this curriculum also increased, with the greatest gains in applications relating to thoracentesis and DVT (figure 3). Overall, on a 1-5 Likert Scale of agreement, participants reported an increase in feeling prepared to use US from 3 (SD=0.7) to 3.9 (SD=0.3) and an increase in preparedness to teach US from 2.4 (SD= 1) to 3.6 (SD =0.6).

**Going Forward:** This paper describes a novel curriculum and its efficacy in POCUS education for health care providers in a remote international setting. Our data suggest it is possible to improve provider confidence and POCUS knowledge though a focused educational interv

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## Application of a systems thinking lens to the design of effective and sustainable scale-up of national community health programs

K.D. Shelley; Johns Hopkins Bloomberg School of Public Health, Baltimore, MD/US

Background: Community Health Worker (CHW) programs vary in terms of work environment, training scope and duration, remuneration level, supervision, tasks, and integration within the health system, but a defining characteristic of CHWs is their provision of services outside of health facilities, within homes, villages, and/or at community gatherings to serve as a bridge between the community and health facility. A fragmented system of NGO-funded, vertical, single-disease focused CHW programs exists in many countries, but there is renewed interest by some Ministries of Health and donors to formalize an integrated, national cadre of CHWs that functions across a wide spectrum of preventative and curative activities. There are no shortage of conceptual frameworks which describe various relationships between components of a CHW system; however, these frameworks fail to capture the dynamism and complexity of these systems. Therefore, the aim of this research was to apply a systems thinking perspective to a hypothetical CHW program to understand the core dynamics driving the existing fragmented phenomena, and to identify sub-system areas of import for designing and implementing a national-level, integrated CHW program.

**Methods:** A causal loop diagram (CLD) is a tool used to qualitatively map out a mental model of a system, with a focus on interactions between actors and variables, including cause and effect mechanisms, feedback loops, and emerging relationships. Two CLDs for the fragmented and integrated CHW system were developed utilizing several static conceptual frameworks to identify relevant variables and relationships between the community, CHW performance and national integration of CHW programs within the health system. Directionality of relationships was confirmed by literature review, for example on the key drivers of CHW motivation, quality of care, and trust in the community.

**Findings:** A range of relationships at the community, programmatic implementation, and policy level were explored within the two CLDs (fragmented and integrated CHW systems). Several potential feedback loops were identified, including a reinforcing relationship between CHW motivation and community trust in CHWs, and a balancing relationship between donor financing, workload, and retention. CLDs applied in a real-world context may help decipher why some CHW programs stagnate despite ample donor funding and robust Ministry of Health commitment.

**Interpretation:** This research represents the first step in application of a systems thinking lens to facilitate understanding about the complex, dynamic nature of CHW programs. Further research using a participatory model building approach with key stakeholders is necessary to validate the CLD, followed by a quantitative adaptation using stock and flow diagramming.

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# REW - re-entry workshops: Supporting students to integrate their global health experiences upon their return

J. Sherman<sup>1</sup>, I. St-Cyr<sup>2</sup>, J. Tuck<sup>3</sup>; <sup>1</sup>Welcome Hall Mission, Montreal, PQ/CA, <sup>2</sup>Montreal Children's Hospital, Montreal, PQ/CA, <sup>3</sup>Ingram School of Nursing, McGill University, Mcgill, PQ/CA

**Program/Project Purpose:** While global health placements are recognized to be a rich learning experience for students while they are on placement, there is also a rich learning experience to be had upon their return. Additionally, global health placements often generate ethical, social and emotional challenges for students upon their return. The importance of pre-departure training has been recognized, however the importance of supporting students upon their return from global health experiences has received little attention, despite the challenges faced by students. Re-integration learning and challenges may be enhanced through academic supervision and support. Aim: To share experiences with the introduction of re-entry workshops (REW) for students in healthcare disciplines.

Structure/Method/Design: Students within a Global Health Studies (GHS) concentration of a MSc. in nursing program work with vulnerable populations, both at home and abroad, These students were offered REW in addition to the usual pre-departure workshop and ongoing support while on placement. Participating students spent 3.5 months in a global health partnership site (Africa, SE-Asia, Caribbean, South America, and Canadian aboriginal