Findings: Preliminary results illuminate that that Brazil has robust public policies to ensure civil society inclusiveness in the development of health policies, as well as mechanisms for the actualisation of accountability and transparency in its pharmaceutical system. However, we also are finding that cases of corruption and inefficiencies are evident in the procurement and selection of medicines. We also have found uneven levels of civil society participation and a lack of government support for including civil society in the formulation and monitoring of health policies.

Funding: The Canadian Institute for Health Research.

Abstract #: *1.015_PCF*

Strengthening monitoring and evaluation to improve quality of care in integrated community case management services in Bugoye, Uganda

Abstract Opted Out of Publication

Abstract #: *1.016_PCF*

Collaborations between academic institutions and a Colombian health insurance provider to implement a mobile health platform for chronic disease management: Opportunities and obstacles

R. Philson[1], C. Bourdillon[1], J. Tasset[1], M. Gomez[1], S. Ferguson[1], J.H. Velasquez Molina[2], N.L. Salazar Marulanda[2], N. Marinec[4], J.F. Saldarriaga Franco[2], H. Escobar López[3], J.D. Piette[4]; [1]The University of Michigan Medical School Global REACH, Ann Arbor, MI/US, [2]La Universidad de Antioquia Living Lab Telesalud, Medellín, Colombia, [3]Savia Salud EPS, [4]University of Michigan School of Public Health Center for Managing Chronic Disease, Ann Arbor, MI/US

Program/Project Purpose: Llamada Saludable is a pilot mobile health (m-health) program using interactive voice response (IVR) calls to monitor diabetes patients and provide self-care education between outpatient visits. While m-health tools are increasingly important in chronic illness management in low-middle income countries, health systems struggle to identify financially sustainable models. From 2013-2015, the University of Michigan (UM) partnered with a large public payer for low-income patients in Colombia (Savia Salud EPS) and a university in Medellín to pilot the Llamada Saludable system. This collaboration unites technology designers, local providers, and payers in a novel and viable partnership to implement a large scale, long term, m-health program.

Structure/Method/Design: The partnership is directed through the Living Lab, whose physicians and paramedics are responsible for maintaining the m-health service, recruiting health centers, and training clinicians to use the program and respond to patient alerts. Savia Salud participates in site identification and plans for long-term program scaling. UM provides software, technical assistance, and evaluation plans for determining program impacts.

Outcomes & Evaluation: A 12-week pilot program including 150 diabetes patients was successfully implemented in the summer of 2015. Living Lab staff developed a triage system to follow up on adverse health events reported during IVR assessments. UM staff addressed software changes and assisted in troubleshooting technical problems. Patients completed over 70% of their weekly automated calls and the model of implementation successfully demonstrated proof of concept to patients, health care providers, and Savia Salud. Challenges to program implementation included low buy-in on the part of some administrators, delays in acquiring patient records, and shared telephone lines that hindered calls from going directly to patients.

Going Forward: Llamada Saludable is being extended to other municipalities around Medellín and expanded to address conditions including tuberculosis, HIV, and depression. As the program expands, it will be adapted to accommodate diverse patient and infrastructure demands (e.g. cellular network reliability in rural areas may require the incorporation of community health workers). Tailoring the IVR program to support workflow will be critical to the program's long-term success. Savia Salud plans to conduct a three-year trial to evaluate cost-effectiveness.

Funding: None.

Abstract #: *1.017_PCF*

Strengthening decentralized primary health care in low and middle income countries: A narrative review of frameworks

Katherine Reifler[1], Andrew Dykens[2]; [1]University of Illinois at College of Medicine, USA, [2]University of Illinois at Chicago Department of Family Medicine, Chicago, IL, USA

Background: Primary health care (PHC) is essential for improving population health in low- and middle-income countries (LMICs). Considerable health systems strengthening (HSS) and implementation research challenges exist in decentralized, low-resource LMICs. Lessons learned through decentralizing LMIC health systems suggest the need for an effective context-specific conceptual framework to guide PHC strengthening. While not specific to decentralized, low resource settings, preexisting HSS frameworks may have relevance for future efforts to strengthen decentralized PHC systems in LMICs.

Methods: We searched PubMed and Google Scholar with terms such as "primary health care," "decentralization," "developing countries," "policy development," "regional health planning," and "community integration," and "global health," to identify scientific, policy, and white papers that discussed HSS evidence in various global contexts. We reviewed 64 scientific articles referenced through PubMed and 23 policy and white papers, choosing six frameworks.

Findings: Six existing frameworks significantly contribute to HSS in various contexts and may be adaptable for application to decentralized areas of LMIC's. These frameworks are: 1) WHO Health System Building Blocks, 2) Starfield' s Primary Care Framework, 3) Global Fund to Fight HIV,Tuberculosis, and Malaria's Community Systems Strengthening, 4) Results-Based Logic Model, 5) USAID Five Smart Strategies, 6) Health Systems 20/20. Notable concepts from these frameworks include essential health system components, the role of communities and local context, assessing and iteratively reforming PHC, strengthening decentralized health systems, and negotiating intersectoral roles.

Interpretation: A PHC strengthening framework that incorporates all concepts relevant to decentralized areas of LMICs is needed. Consensus should be derived from the applicable concepts within these and other preexisting frameworks, the lessons learned through efforts at decentralizing health systems and current

Annals of Global Health, VOL. 82, NO. 3, 2016
May–June 2016: 319–327

implementation research at the community health systems level. Future research should aim to build more complete understanding of community responsiveness and sustainability within the local context. Gaps in common language, implementation and delivery research, and funding are ongoing challenges in low-resource LMICs. Global health actors must disseminate lessons learned by relevant efforts and address these gaps to develop a framework to strengthen community-responsive PHC.

Funding: This research was funded by the University of Illinois Department of Family Medicine Summer Research Fellowship.

Abstract #: *1.018_PCF*

Improving newborn care quality with a training and QI intervention in a rural hospital in Gujarat, India

Darien Shapiro, Reetu Malhotra, Sarah Schoenhals, Jordan Kocinski, Bernhard Fassl; University of Utah, Salt Lake City, UT, USA

Background: 7.6 million children under the age of 5 die each year in the first month of life, many of them in health facilities or shortly after discharge. Adverse outcomes can be averted if newborns are carefully monitored and treated, especially with regards to birth asphyxia, infections, and low birth weight (LBW). The objective of this study is to determine the health provider compliance with 10 evidence based newborn care quality measures following a training and quality improvement (QI) intervention in a rural hospital in Gujarat, India.

Methods: This study took place at Mota Fofalia Pediatric Center in Gujarat India. All hospital staff (10 nurses, 5 doctors, 19 ward boys and ancillary staff) completed training in immediate newborn care and pediatric care designed to meet WHO performance standards using the Helping Babies Breathe (HBB) and the Essential Newborn Care (ENC) training curricula. Training interventions were supported by a concurrent QI intervention introducing a standard checklist for the delivery room and standard admission order sets to the newborn ward. Medical students observed care given to a convenience sample of newborn infants from delivery or hospital admission until discharge at 4 distinct time intervals between February 2014 and August 2015. We report compliance with ten previously validated quality measures for care of newborns in resource poor settings at pre-intervention baseline (Feb 2014) and over three observational periods following staff training and QI interventions.

Findings: A total of 601 care encounters in 251 newborns and 115 deliveries were recorded. Pre-intervention compliance with evidence based care was 0% across all but one measure. Following training and QI interventions, provider performance gradually improved and was sustained with regards to immediate newborn care (Measure 1-4) and routine newborn care (Measures 5-7) but only modestly improved with regards to LBW care (Measures 8-10). See Figure 1 for compliance details.

Interpretation: A combined training and QI intervention produced improvement for multiple newborn quality measures. There is need for further interventions especially with regards to LBW care.

Funding: None.

Abstract #: *1.019_PCF*

Ethical obligations of schools and hosts during an international medical elective

David Sikule; Albany Medical College

Program/Project Purpose: International Medical Electives (IMEs) are a way for medical students of the global North to experience challenges facing health care of the global South in a training environment. While valuable, these training experiences have ethical issues that need to be addressed to ensure the safety of patients, students and the culture of the hospital. By reviewing current literature, the obligations of sending schools and host institutions will be determined and assessed through a bioethical lens.

Structure/Method/Design: Through a review of current literature focusing on undergraduate medical education, I explore the obligations of the schools sending the students and the hosting institutions to the patients and students of the IME and determine if those obligations are met.

Outcome & Evaluation: There is an abundance of literature discussing ethical considerations of IMEs but less looking at the obligations of the sending schools and host institutions. Many articles mention the subject but do not delve into the details of the role of each institution as it pertains to the patients and students involved. Sending schools and host institutions have an obligation of non-maleficence towards the patients to conduct an ethical IME by mitigating the risks posed by students. There is also an obligation towards the students to maintain their safety while participating in the IME. Finally, there is an obligation of beneficence towards the patients and students in their health and training respectively. From the literature, it can be seen that obligations are not being met due to poor communication of expectations of students prior to the IME, poor preparation of the host institution and resource drain on the host institution.

Going Forward: Currently research suggests the obligations of schools and hosts are not being met. In the future, sending schools must ensure host faculty understand the abilities of the students and train them prior to starting their IME. This includes cultural competency and knowing not train outside the students' ability while participating in an IME. Finally, further considerations must be made to compensate the host institution for the training so resource drain does not occur.

Funding: No funding.

Abstract #: *1.020_PCF*

RAHI (pathfinder)—SATHI (partnership): The evolution of a student-led international initiative into a multidisciplinary collaborative program of medical research and education

A. Soni[1], N. Fahey[2], M. Fischer[1], H. Pandya[3], H. Santry[1], J. Allison[1], S. Nimbalkar[3]; [1]University of Massachusetts Medical School, Worcester, [2]Des Moines University, Des Moines, [3]Pramukhswami Medical College, Karamsad, India

Program Purpose: In recent years there has been a tremendous surge in the number of global health programs operated by academic institutions. However, most of the existing programs in