patients can benefit from the administrative, logistical and emotional support offered by the SW team. We propose this as a successful, low-cost program, which can easily be replicated at other hospitals to improve service delivery for admitted patients.

**Source of Funding:** Funded by PIH-Sierra Leone through private donations.

## Abstract #: 2.087\_HHR

## Barriers and Facilitators of the Referral System of the Communityßbased Newborn Care Initiative in Ethiopia: An Audit of 546 Cases

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**Background:** About 82,000 newborns still die every year in Ethiopia mainly due to sepsis, asphyxia and prematurity. To curb this situation, the Government of Ethiopia (GoE) implemented community based newborn care (CBNC). The strategy trained health extension workers (HEWs) at the health posts level to manage local infections, birth asphyxia, and prematurity and identify and refer cases of neonatal sepsis (i.e., very sever disease [VSD]) to health centers (or higher level facilities) after providing a pre-referral dose of antibiotics. When referral was not possible, then the HEWs were instructed to treat the VSD cases. To inform the CBNC program, this study examines the factors (i.e., barriers and facilitators) influencing 1) HEWs to refer VSD cases to health centers; and 2) compliance of caretakers to the referrals made by the HEWs.

**Methods:** JSI supported CBNC implementation in 2,924 health posts in 122 districts covering about 18 million people. The required sample size for the study was 540 VSD cases (expecting 23% of VSD cases will be referred,  $\pm$ 5% precision, 95% confidence interval, and design effect set at 2.0). To obtain the sample, 140 health posts in the JSI supported areas that reported four or more VSD cases during July 2015—June 2016 were visited and the caretakers of 546 VSD cases interviewed (response rate was 94%). Multivariate logistics regression was used to assess whether age, education, and wealth of the caretakers; distance from health facility, antenatal care, institutional delivery, postnatal care, use of referral slip, advice on transportation, and facilitating ambulance use were independent factors influencing referrals.

**Findings:** About 23% (n=125) of the VSD cases were referred by the HEWs to the health centers of which 72% (n=90) of the care-takers complied. Receiving postnatal care was the only statistically significant (p<0.05) independent predictor. It was associated with 72% higher likelihood of cases being referred and 4.4 times more likelihood for the caretakers to comply with it.

**Interpretation:** Since a large segment of the VSD cases are managed by the HEWs, ensuring the quality of the services provided is imperative. Increasing the coverage of postnatal care will likely improve the performance of the CBNC referral system.

Source of Funding: UNICEF.

Abstract #: 2.088\_HHR

## RE-AIMing Program Design and Implementation: A Preliminary Process Evaluation of a Workforce Development Program

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**Program/Project Purpose:** Recent outbreaks and emerging public health concerns have underscored the critical need for global workforce development. The Improving Public Health Management for Action (IMPACT) Program, developed by the Centers for Disease Control and Prevention (CDC), aims to improve public health management capacity in low-to-middle income countries. Partnering with Ministries of Health (MOHs), the two-year fellowship trains entry-level professionals through didactic instruction, field-based assignments, and structured mentorship and supervision. In 2016, pilot programs began in Bangladesh and Kenya.

**Structure/Method/Design:** The principal goals of the program are to build a cadre of highly-skilled public health managers and increase the effectiveness of public health systems to improve health outcomes. The program also aims to establish country ownership and engagement through stakeholder involvement (e.g., steering committee) and program contextualization.

To assess program goals, IMPACT is conducting a mixedmethods process and outcome evaluation utilizing the Reach, Efficacy/Effectiveness, Adoption, Implementation, Maintenance (RE-AIM) Evaluation Framework. Health promotion programs traditionally utilize RE-AIM to assess the individual and institutional impact concurrently. Although workforce development programs rarely use RE-AIM, it provides a multi-layered framework that allows for examination of the structural and political factors affecting the program and its sustainability.

**Outcome & Evaluation:** To date, IMPACT has completed the preliminary process evaluation. In terms of Reach, IMPACT's applicants and selected fellows were from diverse districts and backgrounds. Evaluation results thus far demonstrate course Effectiveness; participants report knowledge gain, and observations of fellows indicate increased competency.

MOH and stakeholder engagement in IMPACT's design, contextualization and implementation showed success in Adoption; each country modified the program design and provided countryspecific examples. During Implementation, IMPACT courses were taught by a diverse group of instructors from CDC, the MOHs, local universities, and nongovernmental organizations. Instructor observational analysis revealed fidelity to IMPACT's learning objectives and teaching methods.

Further analysis will continue on all the aspects of RE-AIM as the program progresses.

**Going Forward:** The process evaluation found that adherence to project timelines was challenging. Security issues, inadequate time estimates for government processes, and difficulties in international coordination were the main causes of delays. IMPACT will adjust future timelines for new programs. Despite delayed activities, overall, the process evaluation indicates progress towards programmatic goals.