However, research has shown that refugee women often are unable to access necessary health care due to an inability to overcome the geographic barrier of traveling to a medical appointment. The Refugee Reproductive Health (RRH) Committee is a coalition of refugees, government officials, and university researchers who seek to address these barriers and improve refugee health in Salt Lake County, Utah.
Structure/Method/Design: In April 2014, women from the Congolese refugee community participated in a health workshop held at a local multicultural center not far from the women's homes. Volunteers picked up participants to ensure they were able to participate in the workshop. At the conclusion of the workshop, a second set of volunteers discovered that the women were not clear about the location of their neighborhoods nor could they adequately explain how to get to their homes. The researchers completed a basic geospatial analysis of the resources available for these women and connected the resources to the location of the women's homes. Based on this analysis, refugee communities are resettled in locations that are "resource deserts" and not close to resources such as hospitals, clinics, libraries, and grocery stores.
Outcomes & Evaluation: Workshop participants varied widely in their ability to direct facilitators to their homes. Many were unable to provide a street address or directions; those who were able to provide directions to the facilitator generally relied on recognizable landmarks to navigate. Overall, returning home presented significant challenges for most of these women. In October 2014, university researchers identified six Congolese women who were willing to be filmed talking about and navigating through their neighborhoods and communities. We filmed these neighborhood walkthroughs at two different seasons to determine how women viewed their communities and how they navigated them. The overall outcome for this project will be to develop tools that women could use to better understand navigating in the Salt Lake County area.
Going Forward: Because many of the workshop participants were unable to navigate to their own home, it is likely that this population also faces significant spatial barriers in accessing health care. This study suggests that interventions seeking to improve refugee women's health should carefully evaluate the geographic barriers and seek to establish tools to expand the spatial mobility of this vulnerable population. The tool templates developed from this project will be made available for other entities working with refugee and immigrant groups.
Funding: The Congolese Community Specialist (5% FTE) devotes part of her effort to this project; involvement in this project is within the scope of employment of our governmental partners.
Abstract #: *02SEDH010*

Evaluating the developing families center: A unique model of midwifery care, primary care and early childhood education

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Program/Project Purpose: The Developing Families Center (DFC) was founded in 2000 in response to poor maternal/child health outcomes for low-income African Americans in the nation's capital, especially in wards 5, 7 and 8. The range of services provided under the DFC over the past several years include group prenatal care, midwife-attended births at the family health and birth center (on-site) or at Washington Hospital, doulas, breastfeeding support, peer counselors, easy access to WIC and other services that are brought on-site, as well as parenting classes and other targeted social supports to address community needs. A third-party evaluation is currently being conducted to document the various aspects of the model that have made it successful in terms of improving outcomes, and will be the focus of this project.
Structure/Method/Design: Documents have been gathered and reviewed, as the first step in documenting the DFC's successes and challenges, including a precarious funding climate and frequent organizational changes under the DFC umbrella, with limited infrastructure for inter-organizational collaboration. Key informant interviews will be held with three sets of stakeholders from November – December 2014: 1) providers at the DFC, 2) former clients of the DFC and 3) Community Advisory Board members. In total, 26 individuals have been invited to participate in evaluation study interviews. IRB approval for the evaluation study qualitative research has been obtained by the Johns Hopkins University School of Public Health. Interpretation of the interview results will be applied in an expanded logic model, to document key aspects of the DFC's model of care, to inform replication of the comprehensive model, but with improved financial viability.
Outcomes & Evaluation: In part due to the DFC, infant/maternal mortality and C-section rates have been reduced while breastfeeding rates, employment, educational attainment, and community empowerment have been attained. By using a midwifery model of care, and with community advisory board involvement, these goals, and associated cost-savings, have been achieved and demonstrated in the literature. However, DFC has not been financially sustainable to date, since many of its services are not billable.
Going Forward: The evaluation results will help to elucidate the synergistic impact of social supports and services, community leadership and involvement at a local health care center, and the particularly compelling combination of perinatal care and early childhood education. The evaluation aims to document the DFC model as a whole, in order to facilitate its replication both domestically and abroad.
Funding: The DFC has been funded through federal and district-level programs such as Healthy Start Program, Early Head Start Program, Child Care Block Grant, as well as a through variety of private foundations and donors. The evaluation study is being conducted by Jhpiego, an affiliate of Johns Hopkins University, funded by the DFC.
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Home and community activity and participation status of clients with neurological disorders after rehabilitation center discharge in a less-resourced country

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Background: Literature on clients with neurological disorders post rehabilitation discharge in less-resourced countries identified many problems participating in their prior home and community environments. Access barriers were a major factor. This study fills a gap in the literature through an investigation into the community reintegration status of discharged clients from the Kachere Rehabilitation Centre, Malawi. The aims were to 1) determine client-perceived disability, 2) explore whether disability varied by diagnosis or gender, and 3) describe environmental barriers. The hypotheses were 1) patients would perceived moderate to severe levels of disability and 2)

there was no relationship between disability perception and diagnosis or gender.
Methods: With a mixed method design, team members interviewed clients using the WHO Disability Assessment Schedule (DAS) 2.0 to quantify self-perception of disability and a researcher-designed Home Observation Data (HOD) Form to describe client environments. Using consecutive sampling, thirty-five potential participants were screened by phone and 31 were interviewed, based on inclusion/exclusion criteria. Twenty-eight clients fully met the criteria at the time of the initial in-person client encounter. Researchers analyzed the data using quantitative methods for the DAS summary scores, with two non-parametric tests to consider scores and client-related factor relationships. Qualitative methods consisted of HOD theme analysis.
Findings: Complete DAS key question data were available for 12 female and 16 male clients. Fifteen had non-hemorrhagic cerebrovascular accidents and 13 had other neurologic conditions, mainly spinal cord injury. Analysis of data supported the hypothesis that clients perceived moderate to severe levels of disability. There was one client with no perceived disability, one at the extreme level, and 16 at the moderate to severe levels. There was no relationship with diagnosis or gender. Environmental barriers within homes and surroundings appeared to play a major role in home and community reintegration for those clients with continuing physical challenges to their mobility and function.
Interpretation: This small-sample study verified the hypothesis that clients perceived moderate to severe levels of difficulty post rehabilitation discharge. The research results documented the situation at one point in time, verified the literature for similar clients in less-resourced countries, provided programming considerations for Kachere staff with future clients, and supported potential use of the WHO DAS 2.0 for similar research applications. Study limitations included the small sample size and selection convenience, use of a client self-assessment tool with subjectivity from personal and experiential factors. They restrict population generalizability based on the results beyond the focus of this study. The strengths of this study were the integration of the literature with rehabilitation center need, replicable design, use of an interprofessional team approach for the environmental assessment, and the research findings' implementation potential.
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Gender sensitivity in health service provision in Afghanistan from 2012-2013

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Background: Afghanistan ranks 147 out of 148 on the Gender Inequality Index and has historical exclusion of women from health care under the Taliban rule (Malik, 2013). Afghanistan had a Maternal Mortality Ratio of 1,600 maternal deaths per 100,000 live births and pregnancy and childbirth accounted for half of all deaths in women of childbearing age (UNICEF, 2002). Objective was to study the association between gender and quality of service provision in under-5 patients by assessing the affect of sex of health worker, sex of patient, and sex of caretaker on quality of client counseling and client satisfaction. When looking at provider-patient interaction, we expect male caretakers provide better quality care to male patients, female patients receive poorer quality care, and the presence of a male caretaker improves quality of care received.
Methods: A cross-sectional analysis was done for under-5 patients using secondary data collected with the National Health Services Performance Assessment (NHSPA). Data was drawn from a stratified sample of 25 facilities per province, with random sampling of patient and providers. 3516 under-five patients were interviewed and observed. Data is from all 34 provinces in Afghanistan. Main Outcomes of Interest The three primary outcomes of interest were patient satisfaction and perceived quality of care, client counseling and total time spent in consultation. Institutional Review Board obtained by Johns Hopkins Bloomberg School of Public Health. Analysis A multiple logistic regression investigated the association between sex of patient, sex of health worker, and sex of caretaker with each quality outcome.
Findings: Patients accompanied by a male caretaker were more likely to have high quality client satisfaction (OR: 1.35, CI: 1.07-1.69, P=0.010). Client satisfaction was not affected by sex of patient or health worker. Male patients were 27% more likely to receive high quality client counseling (OR: 1.27, CI: 1.06-1.52, P=0.008). Client counseling was more likely to be high quality with male health workers (OR: 3.55, CI: 3.53 2.04-6.10, P < 0.001). Health workers were 22% more likely to spend quality time with male patients compared to female patients (OR: 1.22, CI: 1.02-1.48, P=0.033).
Interpretation: Results from study illustrated a gap in literature related to the quality of care provided in post-conflict settings as well as room for improvement as the MoPH begins its efforts to address a deep seated problem of gender inequality. Results illustrate that gender continues to affect quality of service provided. The scope of this study was limited to the interaction at time of service provision. Education and socioeconomic factors may be included in future studies to understand issues of access to facility by gender.
Funding: Funded by contract between Afghanistan MoPH and Johns Hopkins Bloomberg School of Health. Study conducted in collaboration with Indian Institute of Health Management.
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Delivering healthcare to the refugee population in Pittsburgh

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Background: The University of Pittsburgh General Internal Medicine – Montefiore Clinic (GIMO) is an academic hospital-based resident and faculty clinic which serves a growing population of Bhutanese, Iraqi, and Sudanese refugees settled in Pittsburgh. Refugee patients are screened for communicable and non-communicable diseases according to CDC recommendations, however management of refugee health conditions has not been well characterized. Refugee patients experience numerous barriers to care including transportation, financial, language, and cultural. Identifying the health needs and barriers to care experienced by refugees in the U.S. is key to improving the quality of care provided to this vulnerable population. Aims This study aims to identify baseline characteristics and to prioritize health needs of refugees at the GIMO clinic - specifically: 1. What are the demographic and health characteristics of this group? 2. How does visit frequency and follow-up change through this group's immigration cycle? 3. How well is preventative care addressed in this group?
Methods: The GIMO clinic maintains a database of refugees in EPIC, the electronic medical record utilized for usual patient care. This study is a cross-sectional analysis based on chart review of existing records of refugee patients seen between January 2008 and