Within each of these case studies, donors will find evidence-based models and interventions informed by local input and involving local actors. Each study further illustrates how the featured organizations effectively delivered their proven solutions and provides estimated impacts and costs. Finally, the toolkit provides decision-making tools and frameworks for how to think about and expand on these philanthropic models with action steps.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): As above

Summary/Conclusion: For donors who care about maximizing the social impact of their gifts, the child survival toolkit fills a critical information gap providing evidence-informed analyses and actionable decision-making tools. The tool kit has been shared with the Center's primary audience—individual donors and their advisors—as well as the larger philanthropic community through online publications, blogs, social media outlets, and reports.

Bridging the accountability divide: Male circumcision planning in Rwanda as a case study in how to merge divergent operational planning approaches in global health

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Background: When voluntary medical male circumcision (MC) was confirmed as an effective tool for HIV prevention in sub-Saharan Africa in 2007, many public health policymakers and practitioners were eager to implement the intervention. How to roll out the tool as part of comprehensive strategy, however, was less clear. At the time, very little was known about the capacity of health systems to scale delivery of the new intervention. Today, nearly all countries prioritized for the intervention are far behind their targets. To contribute to the discourse on why this is, we develop a historical analysis of medical MC planning in sub-Saharan Africa using our own experience of this process in Rwanda.

Structure/Method/Design: We compare our previously unpublished feasibility analysis from 2008 with international research published in 2009, which suggested how Rwanda could reduce HIV incidence through a rapid MC intervention, and Rwanda's eventual 2010 official operational plan.

We trace how, in the face of uncertainty, operational plans avoided discussing the details of feasibility and focused instead on defining optimal circumcision capacity needed to achieve country-level target reductions in HIV incidence. We show a distinct gap between the targets set in the official operational plan and what we determined was feasible in 2008. With actual data from the ground finally available, we show our old feasibility models more closely approximate circumcision delivery rates to date.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Not applicable

Summary/Conclusion: Our applied research demonstrates how feasibility and optimization modeling approaches can produce very different policy recommendations, an issue of relevance when seemingly apolitical empirical tools form the foundations of political maneuvering for a particular global health intervention, such as male circumcision. Using the language of quantitative models, we show how rigid models, specifically in a low-capacity, high-uncertainty setting, can create unrealistic mandates and leave implementers to balance between obvious international enthusiasm and derivative ramifications for resource mobilization while still juggling feasibility. With an eye toward the future of long-term policy planning, we conclude that discussing feasibility ahead of policy setting necessarily incorporates local perspectives and should help to create better, country-specific, operational plans and ultimately improved conversations around accountability in global health.

Do no harm: The know-do gap and quality of care for childhood diarrhea and pneumonia in Bihar, India

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Background: The provision of high-quality health care relies not only on providers' knowledge, but also on the translation of that knowledge into action. A mismatch between these domains is known as the know-do gap. We present new evidence on the capacity of rural health care providers in India to properly identify and treat childhood diarrhea and pneumonia, two leading causes of disability and mortality among children worldwide.

Structure/Method/Design: We administered vignettes for childhood diarrhea and pneumonia to 340 providers in rural Bihar and unannounced standardized patients (SP) presented the same cases. We calculated the know-do gap by comparing the fraction of providers who asked key diagnostic questions on each method. We used multivariable regression analyses to examine the relation between providers' characteristics and percentage of diagnostic questions asked, as well as likelihood of prescription of potentially harmful treatments.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Providers, on average, asked 2.9 diagnostic questions and suggested 0.3 examinations on diarrhea vignettes (1.4 and 0.8, respectively, for pneumonia). Only 3.5% offered the correct ORS treatment for diarrhea, while 20.9% prescribed potentially harmful drugs without ORS. With SPs, 0% offered the correct treatment for diarrhea and 13% for pneumonia. We find a large know-do gap for diarrhea with providers asking diagnostic questions far more frequently on vignettes than with SPs, but not for pneumonia. While only 20.9% prescribed treatments that were potentially harmful on diarrhea vignettes, 71.9% offered such drugs to SPs ($P < 0.001$). Although medical qualifications were associated with fewer diagnostic questions for pneumonia, odds of unqualified providers prescribing potentially harmful treatments for diarrhea were 5.1 times that of qualified (95% CI, 1.24-21.13) and 2.4 times for pneumonia(95% CI, 0.98-5.82). Higher knowledge scores were associated with better performance for diarrhea, but not for pneumonia.

Summary/Conclusion: Our findings highlight the urgent need for policies to regulate and incentivize providers to correctly diagnose and manage the two leading causes of childhood mortality.

Current issues in global health evaluation: The role of academia in addressing methodological challenges

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Background: Since seminal evaluation experiences starting with the Multi-Country Evaluation of the IMCI and the Five-Year Evaluation of the Global Fund, and through recent GAVI, PEPFAR, PMI, and AmFAR evaluations, the challenges in using classic evaluation approaches like impact evaluation and even "mixed methods" when evaluating global health initiatives with any degree of complexity have shown themselves to be difficult to address.

In response, several methodological approaches have been proposed as "answers" and complements to more classic approaches to global health program evaluation: implementation science, contribution analysis, causal chain analysis, case study. Regardless of their disciplinary roots, most of these are concerned with addressing context and program implementation variation. All are striving to demonstrate and improve the rigor of the range of methods that are used to evaluate under messy conditions. These are the studies that will build the evidence base on what works, why, and under what conditions, supporting the progress in global health that needs to be made post-2015. There is a critical role for interdisciplinary, academic contributions to this important work.

Structure/Method/Design: This presentation will systematically assess critical points for university contribution to global health program evaluation activities, referencing current methodological challenges and proposed methodological approaches to evaluating under complex, real-world conditions. The critical role of partnerships between implementers and universities will be highlighted, using examples featured in a recent Institute of Medicine workshop on evaluation methods, and from the presenter's own experiences.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Essential areas for university contribution are highlighted, including: for design, analysis, and publication; for methodological leadership within a study; and for leading a broader change in the paradigm of what is considered "good" evaluation.

Summary/Conclusion: These will be presented as means to strengthen the quality of future global health evaluations, and as a key area of academic scholarship in global health that is very often overlooked.

Lessons learned from a community-engaged emergency referral systems-strengthening initiative in a remote, impoverished setting of northern Ghana

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Background: Approximately 800 women die from pregnancy- or childbirth-related complications around the world every day. Most direct causes of maternal and perinatal deaths could be prevented if women received timely care during medical emergencies. However, poor road conditions, scarcity of vehicles, and limited means of communication continue to be major barriers to reaching urgently needed care in resource-poor settings. While Ghana has a well-organized, decentralized health system, the country does not have clear policies or guidelines for developing or providing emergency referral services. In March 2012, an emergency referral scheme was piloted by the Ghana Health Service (GHS) in collaboration with community stakeholders and health workers in one subdistrict of the Upper East Region—the poorest, most remote region of the country. Based on lessons learned from the pilot, the project was scaled up to 12 subdistricts. The scale-up project, known as the Sustainable Emergency Referral Care (SERC) initiative aims to test the hypothesis that context-specific, community- and subdistrict-level interventions designed to strengthen emergency referral systems will improve access to care in rural, impoverished communities in Ghana.

Structure/Method/Design: A fleet of 24 Motorkings was procured by the GHS to serve as ambulances at the subdistrict and community levels in three districts. Modifications were made to the vehicles to ensure patient safety and comfort. Vehicles were strategically placed at subdistrict health centers and community health facilities to ensure that all communities in intervention areas have access to a vehicle dedicated specifically to emergency transport. Communication between communities and health workers is facilitated through the implementation of a communications system for emergency referral and distribution of mobile phones to health workers and volunteers. A key set of health and process indicators are being analyzed on a quarterly basis.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): SERC is funded by grants from the British charity "Comic Relief" to the GHS. SERC is a component of a collaborative initiative of the GHS and the Columbia University Mailman School of Public Health known as the Ghana Essential Health Intervention Programme.

Summary/Conclusion: An initial process evaluation of SERC indicated challenges related to inconsistent documentation practices; varying levels of driver and staff motivation; and issues with protocol adherence. Refresher trainings along with enhanced community engagement and supervision have been initiated to address these challenges. Overall, the SERC initiative has been well received by communities and has been successful in reducing delays in reaching care and increasing access to emergency referral services.

Using an electronic medical record system to identify factors associated with attrition from the HIV antiretroviral therapy program at two hospitals in Haiti

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Background: Patient retention is important for the success of Haiti's national antiretroviral therapy (ART) program.

Structure/Method/Design: This retrospective cohort study examined ART attrition among adult patients enrolled on ART from 2005 to 2011 in two large public-sector departmental hospitals, using the iSanté electronic data system. The study characterized ART attrition levels and explored the patient demographic, clinical, temporal, and service utilization factors associated with ART attrition. The study used time-to-event analysis methods.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Among the 2,023 patients in the study, ART attrition on average was 17.0 per 100 person years (95% CI, 15.8-18.3). In adjusted analyses, risk for ART attrition was up to 89% higher for patients living in distant communes compared to patients