Health Research Program

Achieving effective coverage of maternal, newborn and child health (MNCH) services through timely care-seeking and effective referrals to responsive health facilities

Addendum #1 to The USAID Broad Agency Announcement (BAA) for Global Health Challenges (BAA-GLOBAL HEALTH-2017)

I. Purpose

This is an Addendum to the 2017 Global Health Challenges BAA. The purpose of this Addendum is to request Expressions of Interest (EOI) for **implementation research to test solutions to address persistent challenges preventing informed and appropriate care-seeking and effective referrals for improved maternal, newborn and child health (MNCH) outcomes**. This Addendum serves to commence the co-design process around innovative solutions for accelerating gains in MNCH using an iterative approach e.g. implementation research nested in existing programs, interventions or health systems.

II. Overview

Women, newborns, children and their families need to know when, how and where to seek appropriate treatment for life-threatening conditions. Functioning referral systems and continuity of care - from household to health facility and back - are similarly critical for improved MNCH outcomes. Ultimately, appropriate care-seeking, functional referrals and continuity of care contribute to effective coverage, defined as receipt of necessary MNCH preventive and curative services that are timely and of sufficient quality to achieve health impact.

Care-seeking

Studies and reporting from USAID field programs have demonstrated that the decision to seek care is influenced by a variety of socio-economic variables including: gender, age, social status of women, type of illness, access to services and perceived quality of the service[1,2]. Challenges persist for recognizing and responding to signs and symptoms of potentially life-threatening illness. There are also a variety of barriers including cultural conceptualization of illness, restrictions on women's movement outside the home especially after birth, fatalism about newborn survival, perceptions of poor quality care, and financial constraints. Additionally, a systematic review of illness recognition and care-seeking for children under five found that illness recognition of the leading causes of child mortality (pneumonia, diarrhea and malaria) is generally poor and care-seeking is low[3]. The review noted that there were few published studies and highlighted the need for more care-seeking research to better inform child survival.

[1] Vlassoff C., 2007. Gender Differences in Determinants and Consequences of Health and Illness. *Journal of Health, Population, and Nutrition*. 2007;25(1):47-61.

[2] Bohren, M. A., Hunter, E. C., Munthe-Kaas, H. M., Souza, J. P., Vogel, J. P., & Gülmezoglu, A. M. (2014). Facilitators and barriers to facility-based delivery in low- and middle-income countries: a qualitative evidence synthesis. *Reproductive Health, 11*(1). doi:10.1186/1742-4755-11-71

[3] Geldsetzer et al., 2014. The recognition of and care seeking behaviour for childhood illness in developing countries: A systematic review. http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0093427&type=printable

Referral Systems

Weak, disconnected, or non-existent referral systems are another challenge leading to uneven access to care, increased delays in receiving treatment, and poorer health outcomes. For clients to seek care and gain access to services, strong linkages between the community and health facility must exist. Communication, coordination and patient tracking along the referral pathway are critical. A strong referral system is characterized by: a strategy informed by population needs and health system capacity; adequately resourced facilities; collaboration across referral levels and facilities; tailored referral protocols; provider support and accountability; formalized two-way communication and transportation systems between facilities; protections against costs of emergency referrals; capacity to monitor and system effectiveness; and government support[4]. A strong referral system allows for rational use of cost-effective health services along the entire continuum of care, improving health outcomes through improved access, efficiency, and equity to care[5].

Building on Research and Program Evidence

Country governments, USAID and other development partners have supported efforts to address challenges around timely care-seeking and functional referrals. USAID's Health Research Program[6], working in partnership with the Translating Research into Action (TRAction) project[7], supported a multi-country mixed methods study in 2014 to better understand drivers of the first two delays for maternal and newborn complications. The theory of change underlying this research drew from the Pathway to Child Survival[8] framework as well as the Three Delays model[9]. The importance of understanding and addressing household, community, and health system-level factors, influencing care-seeking decisions at each point along the care-seeking pathway, is critical for reducing the delays at each stage of the continuum, ultimately improving maternal, newborn and child survival.

Findings from the TRAction research indicated that maternal symptom recognition and decision-making to seek care were better and faster than for newborns, but the patterns of care seeking varied across different contexts. Families sought care from multiple points of care in their quest to find appropriate treatment. Perceptions of quality and the experience of actual poor quality of care were experienced by families seeking care, suggesting one reason for further delay. Poor quality and nonresponsive care at facilities underscores the need for families facing life threatening health conditions to identify reliable sources of care for mothers and newborns experiencing complications. Responsive and appropriately equipped facilities and efficient and functional referrals serve are equally critical for ensuring access to appropriate and timely of care.

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[4] Gitonga, C . (2013) The State of the Health Referral System in Kenya: Results from a Baseline Study on the Functionality of the Health Referral System in Eight Counties Accessed from: MEASURE Evaluation

[5] Cervantes K, Salgado R, Choi M and Kalter H., 2003. *Rapid Assessment of Referral Care Systems: A Guide for Program Managers*, published by the Basic Support for Institutionalizing Child Survival Project (BASICS II) for the United States Agency for International Development, Arlington, Virginia.

[6] Health Research Program website https://www.harpnet.org/

[7] https://www.harpnet.org/project/traction/; http://www.tractionproject.org/

[8] Waldman R, et al. BASICS, 1996

[9] Thaddeus S, Maine D. Too far to walk: maternal mortality in context. Soc Sci Med 1994; 38: 1091-1110

III. Problem Statement

There are myriad interventions aimed at addressing health systems strengthening, curative and preventive care, as well as aspects of care-seeking and referral system deficiencies. Demand generating efforts have included: community-based interventions, financial incentives, establishment of maternity homes and financing patient transportation. For the referral system, training health workers, ensuring emergency transport, equipping health facilities, strengthening health information systems, improving quality of care, and ensuring sustainable financing[10] have been explored. Yet efforts to link care-seeking behavior with system responsiveness and accountability are often weak, underfunded, or an afterthought in public health initiatives and programs. While individual health system strengthening and maternal and child health (MCH) program efforts can affect incremental change, increased emphasis on a systems approach that intentionally pairs care-seeking with responsive health care, and that views referral systems as a critical link, has the potential to move the needle towards achieving greater effective coverage and more efficient use of limited resources.

Successful program implementation to improve the continuum of care for mothers, newborns and children relies on a better understanding of where the gaps are in seeking care along the pathway and what factors contribute to these gaps[11]. There is growing evidence that the introduction and scale of essential packages of care deployed across the "household to hospital continuum of care" can improve MCH outcomes. Such packages might include: supportive care, nutritional support, antenatal care (ANC), high risk, childbirth, essential newborn care, and child health[12,13]. Engagement of community systems, including community health workers, also show promise, but require strong linkages with and concurrent improvement of quality through health system strengthening efforts including supportive supervision, especially in settings with high and increasing demand for facility-based services[14].

Some USAID funded programs have tried to better link demand and supply sides to improve maternal health. For example, Saving Mothers, Giving Life (SMGL)[15] has sought to reduce maternal deaths in Uganda and Zambia. The initiative has targeted the critical period of labor, delivery and first 48 hours postpartum, including generating patient demand for services through community-based efforts, training and mentoring providers on quality care, improving supply and drug chain systems, promoting greater facility access by establishing maternity waiting homes and supporting transportation networks, as well as enhancing data systems to manage patient information. Building on existing service platforms, SMGL has contributed significant

[10] Elmusharaf, K., Byrne, E., and O'Donovan, D. (2015). Strategies to increase demand for maternal health services in resource-limited settings: challenges to be addressed. *BMC Public Health, 15:870* https://doi.org/10.1186/s12889-015-2222-3
[11] Wang, W., & Hong, R. (2015). Levels and determinants of continuum of care for maternal and newborn health in Cambodia-evidence from a population-based survey. *BMC Pregnancy and Childbirth, 15*(1). doi:10.1186/s12884-015-0497-0
[12] Lassi, Z. S., Kumar, R., Mansoor, T., Salam, R. A., Das, J. K., & Bhutta, Z. A. (2014). Essential interventions: implementation strategies and proposed packages of care. *Reproductive Health, 11*(Suppl 1). doi:10.1186/1742-4755-11-s1-s5
[13] Kikuchi, K., Ansah, E. K., Okawa, S., Enuameh, Y., Yasuoka, J., Nanishi, K., . . . Jimba, M. (2015). Effective Linkages of Continuum of Care for Improving Neonatal, Perinatal, and Maternal Mortality: A Systematic Review and Meta-Analysis. *Plos One, 10*(9). doi:10.1371/journal.pone.0139288
[14] Waiswa, P., Pariyo, G., Kallander, K., Akuze, J., Namazzi, G., Ekirapa-Kiracho, E., . . . Peterson, S. (2015). Effect of the Uganda Newborn Study on care-seeking and care practices: a cluster-randomised controlled trial. *Global Health Action, 8*(1), 24584. doi:10.3402/gha.v8.24584
[15] http://www.savingmothersgivinglife.org/

reductions in maternal mortality, including a 55% decline in Zambia and 44% in Uganda, with observable impacts throughout the intervention districts as well. The SMGL successes highlight the major inputs that can contribute to improving access to life-saving care.

IV. Objective and Areas of Interest

USAID, together with Resource Partners the Bill and Melinda Gates Foundation (BMGF) and the Doris Duke Charitable Foundation (DDCF), is interested in testing demand side solutions, e.g. factors that lead clients to seek care, while simultaneously addressing critical supply side gaps, such as effective referral systems, ensuring clients can reach the most appropriate level of care. To ensure improved effective coverage of maternal, newborn and child health services, implementation research supported by this effort would ideally be nested within existing quality improvement or health system strengthening efforts. This would presumably ensure a measure of health care quality of services (e.g. equipped health facilities and a trained and motivated health workforce) is available at participating facilities.

Illustrative Areas of Interest

We are interested in exploring potential investment opportunities for innovative approaches and solutions that increase demand for essential health care with improved referral pathways, leading to greater effective coverage of MNCH services. We highly encourage these approaches to be nested in an existing quality improvement or health systems strengthening (HSS) initiative to ensure adequate quality of care. The following list is by no means exhaustive, but provides illustrative areas of interest:

- Documenting, understanding, and addressing the barriers along the continuum of care that women, newborns, and children face in accessing health care, and linking innovative solutions to improved referral systems and responsive care.
- Developing and testing means to reduce response times and delays at various levels - from the household, community and within and between facilities, including scalable emergency transport.
- Exploring behavioral factors that affect demand for MNCH services and evaluating the implementation of strategies for improving use and provision of health care, potentially drawing from interdisciplinary/cross-sectoral approaches. Promoting healthy behaviors and generation of demand for services while addressing referral challenges, including information systems.
- Addressing key health system bottlenecks that have an outsized impact on maternal and newborn health services with emphasis on improving referral and transportation of mothers with complications and sick newborns, including linkages to facilities.
- Assessing the role of community health workers and other community leaders as agents of change in timely and appropriate utilization of health services.
- Evaluating the impact of maternity waiting shelters on increasing access to and utilization of maternal health care, as well as any unintended consequences.
- Addressing underlying gender, social and cultural barriers to timely demand for and use of MNCH services.

V. Submission Instructions

A. Questions

Questions about this BAA Addendum may be submitted by email only to harp@usaid.gov with the subject “Care-seeking and Referrals BAA Questions”. The **deadline for question submission is November 6, 2017 at 5:00 pm EST.** USAID will post answers to questions received by the deadline to grants.gov and fbo.gov.

B. Expressions of Interest (EOIs)

All EOIs must be written in English and submitted electronically to harp@usaid.gov by the deadline indicated below. EOIs must be no more than 5 pages in length, no smaller than 12 point font with 1” margins, and in .pdf or .docx format. Any graphics, charts or tables included with the EOI will be considered within the page limits. The title page is not part of the page limit. References and citations to academic publications or other resources are not required but are encouraged. If included, references and citations should be formatted as endnotes, and will not be included in the page limit. Lengthy biographical descriptions are not desired and should not be included in the response.

All EOIs must contain a title page with the following minimum information:

- Implementation Research Title
- Focus Country
- BAA Addendum Name and Number
- Respondent Name, Title, Affiliation and Contact Information

The EOIs must address the following areas:

1. **Context:** Demonstrate understanding of national as well as relevant sub-national care-seeking, referral, and health system issues pertinent to MNCH - including barriers, successes and persistent challenges. Reference national strategic health plans, national or multilateral reports, published papers or similar documents that describe existing programs, initiatives or research relevant to this Addendum. Include hyperlinks to key documents as is feasible. Identify existing service delivery platforms and/or existing HSS or quality improvement initiatives in which your proposed implementation research approach would be embedded. Demonstrate understanding of perspectives of clients/families and frontline health workers.

2. **Approach(es):** Propose one or more innovative ideas to address persistent challenges preventing informed and appropriate care-seeking and effective referrals for improved MNCH, using an iterative, implementation research approach. Ideally solutions would link demand and supply side interventions, leveraging existing health system service delivery programs and personnel. While coupled demand and supply side approaches are desired, innovative ideas that address EITHER demand or supply approaches for addressing challenges to prompt care-seeking or functional referral pathways will be

considered. Describe the approach(es), addressing potential feasibility, acceptability, scalability and costs. Propose a theory of change[16] or other appropriate framework that explains how your idea(s) when implemented in practice would lead to the desired results.

3. **Partnerships:** Partnerships should reflect diverse perspectives and capabilities, ideally including research, implementation and policy expertise. The EOI should clearly and succinctly describe the envisioned role and contributions of proposed partners in carrying out the proposed implementation research. A more competitive EOI would identify key national, sub-national, and/or district level stakeholders whose involvement will be critical to the success of this effort. Endorsements, in the form of a letter of support from a Ministry of Health (MOH) official and/or a bilateral or multilateral program, would increase the competitiveness of an EOI submission, particularly if they indicate willingness to embed the proposed research activities into existing real-world programs or platforms. Such letters will be excluded from the page limit and can be submitted as Annexes to the EOI. USAID's past experience with BAAs has demonstrated the value of MOH involvement in the co-creation workshop; as such this would be highly encouraged. Where feasible, we encourage the designation of a LMIC partner as the Project Manager/Principal Investigator. EOI teams should be open to engaging with other key stakeholders who may not be part of the initial application (as identified in later stages of the co-design process).

4. **Participation in Co-creation Workshop:** Nominate 2-3 individuals referenced in the EOI to represent the team in the co-creation workshop, as described in this Addendum. Co-creation workshop participants should include at a minimum a research and government representative (from national or sub-national level). Ideally a third participant, representing an implementation platform or perspective, would complete the EOI team. Describe why the individuals you are nominating are the best people to co-create promising approaches to address the persistent challenges of timely care-seeking and effective referrals for improved MNCH outcomes, together with USAID and its Resource Partners. Include the individual's name, title, and employing organization. Individuals whose focus is on business development will not be considered for participation in the workshop. USAID reserves the right to disapprove nominated individuals and request additional/different nominations at its discretion. It is essential that the participants nominated will be able to participate in the workshop full time. USAID has limited funding to support travel costs for LMIC participants.

C. Additional Guidance on EOI Submissions

EOI submissions should embody an implementation research approach, i.e. "using scientific methods to address the challenges of implementation and scale-up, drawing upon a variety of methods, tools, and approaches for enhancing equity and efficiency, promoting a culture of evidence-informed learning, engaging stakeholders, and improving decisions on policies and programs to achieve better health outcomes"[17].

[16] https://usaidlearninglab.org/lab-notes/what-thing-called-theory-change
[17] STATEMENT ON ADVANCING IMPLEMENTATION RESEARCH AND DELIVERY SCIENCE, September 30, 2014.

USAID and its partners view implementation research as a collaborative endeavor focused on learning and action to improve health in "real-world" conditions, underscoring the importance of building local capacity in the process, and sharing knowledge in real-time to increase uptake and application of findings. Examples of "real-world settings" could include USAID or other bilateral programs working in partnership with the government to improve health systems strengthening or quality of care at the district level, results based financing (RBF) or Global Financing Facility effort, or district level government intervention with evidence or promise of improving MNCH services.

Eligibility
Public, private, for-profit, and nonprofit organizations, as well as institutions of higher education, non-governmental organizations, and U.S. and non-U.S. government organizations are eligible under this BAA. Neither individuals nor public international organizations (also known as multilaterals), are eligible to apply. All organizations must be determined to be responsive to this BAA and sufficiently responsible to perform or participate in the final award type.

Geographic Focus
This Addendum is limited to the following countries: Afghanistan, Bangladesh, Burma (Myanmar), Democratic Republic of Congo, Ethiopia, Ghana, Haiti, India, Indonesia, Kenya, Liberia, Madagascar, Mali, Malawi, Mozambique, Nepal, Nigeria, Pakistan, Rwanda, Senegal, South Sudan, Tanzania, Uganda, and Zambia. Only single country applications are invited to apply at his time, but during the co-creation workshop, participants are free to explore various collaborative arrangements.

Budget Parameters

USAID currently anticipates that awards stemming from this Addendum would range between $1 to $5 million for the entire period of performance (up to three years). USAID's preference is to issue a higher number of awards at more modest funding levels to expand the reach of this effort. USAID also expects that this work would be nested in and leverage existing interventions, to maximize cost savings/efficiencies and sustainable impact.

D. Information Protection

USAID's goal is to facilitate the research that will lead to innovative, and potentially commercially viable, solutions. Understanding the sensitive nature of submitters' information, USAID will work with organizations to protect intellectual property.

EOIs should be free of any intellectual property that the submitter wishes to protect, as the EOIs will be shared with USAID partners as part of the selection process. However, once submitters have been invited to engage in further discussions, submitters will work with USAID to identify proprietary information that requires protection.

Therefore, organizations making submissions under this BAA Addendum grant to USAID a royalty-free, nonexclusive, and irrevocable right to use, disclose, reproduce, and prepare

derivative works, and to have or permit others to do so to any information contained in the EOIs submitted under the BAA Addendum. If USAID engages with the organization regarding its submission, the parties can negotiate further intellectual property protection for the organization's intellectual property.

Organizations must ensure that any submissions under this BAA are free of any third party proprietary data rights that would impact the license granted to USAID herein. This Addendum falls under the USAID Global Health Challenge BAA. Specifically, this Addendum is focused on how implementation research in conjunction with other efforts can improve MNCH outcomes through informed and appropriate care-seeking and functional referral systems.

VI. Review of Submissions

A. Review Criteria

EOIs will be reviewed and selected for Stage 2 of the BAA process (see below, B. Selection Process) according to the following Evaluation Criteria:

1. **Context**:

- Clarity of description and understanding of the country or sub-national context demonstrates the need, country readiness, identifies any existing or planned national/sub-national interventions, and shows potential for advancing the objectives of this Addendum.

2. **Approach(es)**:

- Presentation of innovative idea(s) in response to identified challenges, including sufficient rationale that addresses the feasibility, acceptability, scalability, and cost-effectiveness of the proposed approach.
- Inclusion of a theory of change or other appropriate framework that explains how the idea(s) when implemented in practice would lead to the desired results.
- Degree to which the proposed approach will be nested in a real-world setting with reasonable programmatic coverage.

3. **Partnerships**:

- Partnerships reflect diverse perspectives and capabilities, ideally including researchers, implementers and policymakers.
- Contributions and proposed roles of key partners clearly articulated.
- Documentation of government support for the EOI and subsequent implementation as demonstrated by letters of support.

4. **Participation in Co-creation Workshop:**

- Proposed participants represent at a minimum research and government interests with the capability to contribute to the co-design process and subsequently guide the successful implementation of the proposed implementation research activity.

B. Selection Process

Stage 1: USAID and partners will review and select EOIs submitted in accordance with the guidelines and criteria set forth in this Addendum. USAID and partners reserve the right to disregard any EOIs that do not meet the guidelines. USAID is not obligated to issue a financial instrument or award as a result of this BAA Addendum.

Stage 2: Based on the review of EOIs, selected EOI teams will be invited to join a co-creation workshop likely to be held in South Africa the week of February 5-9, 2018. USAID, Resource Partners and EOI teams, as well as other select invitees, will gather to collaboratively develop concepts for implementation research addressing care-seeking and referral challenges in one or more countries. Selected applicants should be prepared to travel to and participate in the workshop. Limited travel funding may be available, with priority going to support participants from LMICs.

Approximately one month after the co-creation workshop, final concept papers will be submitted to USAID to be reviewed for selection by USAID and its Resource Partners (Stage 3 - Review by Scientific Review Board). After review, concept papers may proceed to Stage 4 (Contracting/Agreement Officer Determination, etc.) as described in the Broad Agency Announcement for Global Health.

C. Response Date

Expressions of Interest should be submitted no later than **November 27, 2017 at 3:00 PM EST** to harp@usaid.gov.