Urban Health Research Program

Developing new models of sub-Saharan African urban primary health care including preventative and curative strategies to improve MNCH outcomes for vulnerable women and children

Addendum to
The USAID Global Health Broad Agency Announcement (BAA) for Research and Development (GLOBALHEALTH-BAA-2018)

I. Purpose

This is an Addendum to the 2018 Global Health BAA for Research and Development, posted on FBO.gov and Grants.gov. The purpose of this Addendum is to request Expressions of Interest (EOI) for **implementation research to test solutions to address the growing challenges of rapid urbanization and its impact on maternal, newborn, and child health (MNCH) outcomes**. This Addendum serves to commence the co-design process around innovative solutions for accelerating gains in MNCH in poor urban settings of sub-Saharan Africa using an iterative approach e.g. implementation research nested in existing programs, interventions or health systems.

II. Overview

A decade ago African urbanization was heralded as a driver for improved health status through access to social services and improved prospects for economic progress. The reality in sub-Saharan Africa (SSA) is more complicated and challenging with over 50% of urban residents living in informal settlements in some settings (3). By 2050 the SSA population is forecasted to be 2 billion with the urban population exceeding 1 billion. Although health outcomes across urban areas of sub-Saharan Africa may be better for some populations as compared to rural populations, there are significant gaps in knowledge about intra-urban health disparities, access to health services, and effective models to serve the needs of the urban and peri-urban poor.

The so-called urban advantage of residence in urban areas has not consistently yielded the expected benefits for urban poor populations and in particular women and children under 5. For example, in urban Kenya, the poorest children in 1993 were two times as likely to die as compared to their peers from higher socioeconomic backgrounds, but in 2008 this rate doubled to levels where poor children were four times as likely to die (1). These equity gaps lead to an urban disadvantage in which poor health outcomes disproportionately affect the most vulnerable.

Urban/rural and intra-urban health disparities are also documented in the most recent DHS data[1]. In Nairobi, Lagos, and Dakar, child stunting rates are higher and basic-8 immunization rates are lower in poor populations than in not-poor. In Tanzania, urban under-5 and neonatal mortality rates are higher as compared to rural settings. The number of children reaching minimum acceptable diet recommendations (measured as the IYCF3 DHS indicator) are lower for poor[2] than non-poor children in Nairobi, Lagos, and Addis Ababa. These differences in MNCH outcomes between poor and not-poor populations in SSA cities suggest that living conditions and healthcare are putting the most vulnerable at a significant disadvantage.

As an example, the rapid growth of informal settlements in urban areas presents challenges to health and more broadly undermines a country's ability to plan, finance and implement solutions to its own development challenges and progress on the pathway to self-reliance. These fundamental challenges to reaching self-sufficiency are characterized by: a) access barriers to basic services, b) overcrowding and high density increasing vulnerabilities to disease outbreaks, c) unhealthy living conditions including poor sanitation and air quality, d) substandard housing and insecure tenure, and e) poverty and social exclusion (4). The vulnerabilities that poor, urban families face may also be exacerbated by household level shocks and stressors in the form of poor physical living conditions, financial stress, natural disasters, and/or violence. Self-reliance will require a shift to include innovative and multisectoral approaches to addressing complex urban challenges.

Conceptual Framework

Addressing the health needs of vulnerable women and children in urban sub-Saharan Africa

Comprehensive approaches to improve MNCH outcomes for vulnerable urban populations will require a multi-level approach, identifying and leveraging enabling factors while also addressing/responding to contextual factors. Figure 1 illustrates the conceptual framework that highlights how individual, household, community, and institutional factors interact to influence health in the context of the urban setting. This framework was developed by the Research and Policy Division, Office of Maternal and Child Health and Nutrition, Bureau for Global Health at USAID to explore the factors influencing health in an urban environment.

[1] Detecting intra-urban health disparities may be limited by small sample size.

[2] For this analysis, poor was defined as "unsatisfied basic needs", adapted from UN Habitat definition of slum dweller.

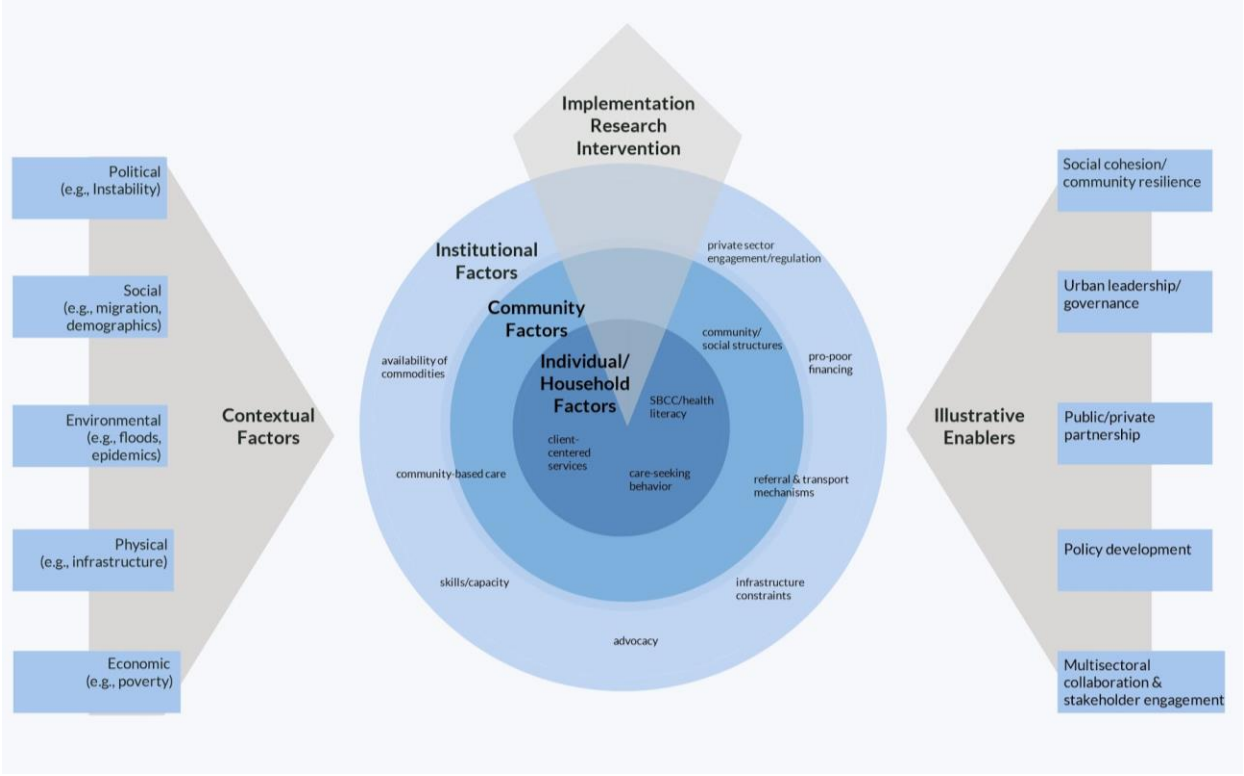

Figure 1 - Conceptual Framework for a Systematic Approach to Address the Needs of Vulnerable Urban Populations

Keeping in mind the target population of vulnerable women and children living in SSA urban informal settlements, key questions include:

1. What are the needs of these vulnerable populations and how can the existing health system be optimized to respond to their needs?
2. How do contextual factors influence their health and how can the negative impacts be mitigated?
3. What are novel implementation models of accessing primary health care that cut across the levels from individual to institutional?
4. How can the resilience and responsiveness of health services be improved to increase access to high yield interventions?

USAID, in partnership with countries and in coordination with other development partners is committed to supporting countries achieve the goal of Preventing Child and Maternal Deaths (PCMD). As a development agency, USAID aims to build capacity and reduce disease burden while strengthening health systems to enable countries to plan and achieve their journeys to self-reliance. Urban health is an emerging opportunity to advance this vision by contributing to improved health and stability.

While historically USAID global health programming has focused more on rural as opposed to urban settings (5), some key advances in urban-based programs have been made. For example,

urban health programs have been initiated in several USAID field offices in West Africa, India, Ethiopia, and Kenya, with a focus on strengthening services and building capacity for quality service delivery. Other development partners such as the Canadian International Development Research Centre (IDRC) support several reproductive, maternal and child health implementation research projects aimed at improving evidence-based policy-making and effective health sector responses to growing inequalities in urban areas. Wellcome Trust supports research to better understand the links between the design of urban environments and health outcomes. The Bill and Melinda Gates Foundation (BMGF), among other health development partners, has supported models for scaling-up reproductive health services, malaria, HIV, as well as TB services in urban areas in sub-Saharan Africa and South Asia. UNICEF and Gavi, the Vaccine Alliance, have also supported several important assessments and undertaken efforts to target the urban poor.

The way forward

Further progress in addressing health needs of the urban poor and in particular vulnerable women and children will require new and strengthened partnerships of communities, policy makers, service providers, and researchers working together to undertake systematic approaches to address persistent barriers. Creative approaches are needed to draw upon existing knowledge as well as fill key information gaps as part of a process to develop and implement sustainable solutions. Such efforts will require urban partnerships that recognize and address contextual factors and build on factors that enable cities to overcome persistent challenges to advance progress. Figure 1 is a conceptual framework that highlights the challenge of bridging the individual, household, community, and institutional factors interacting to influence health in the context of the urban setting.

Contextual Factors

The contextual factors that arise, particularly due to instability in the urban environment, include political, social, environmental, physical, and economic aspects (5, 6). These contextual factors have interdependent relationships with each other, while also being linked to changes in population density, heterogeneity, and mobility giving rise to complex dynamics. The contextual factors addressed in the solution should be relevant to the specific geography; for example, the context of the solution could be focused on resolving waste management or conflict or air quality issues, or any number of existing factors.

Political and Economic

The political and economic context include recognizing populations and planning for their health and economic impact. Vulnerable urban populations are commonly marginalized and often have limited political will and barriers to land rights and, as such, they may not be included in censuses and may not have legal access to health services (6, 7). Additionally, the large influx of population to urban areas as a result of shocks and stressors contributes to internally displaced people (IDPs)

or refugees and presents a challenge for governments to respond in a timely, equitable, and effective manner. The mechanisms, investments, planning, government readiness and political will necessary for establishing a resilient urban health system in the face of political instability are not well known.

Social

The social context of rapidly growing, diverse populations, living in close proximity where the urban poor may have lowered awareness of health services, less timely health seeking behavior, and less focus on improving living conditions, in what may turn out to be temporary living spaces (6). In extreme cases, where marginalized people are living in tenuous or unstable conditions, violence can arise and pose challenges such as barriers to health workers entering into these settlements or preventing access to health facilities.

Environmental

The natural environment can also negatively impact health, for example, when floods cause waste to mix into water supplies. Shocks and stressors, such as environmental disasters and disease outbreaks, compound the challenges that the environment poses to health in urban settings. These stressors underscore the importance of protocols to support elasticity of urban services, including commodity supply chains, workforce availability and skill mix.

Physical

The physical context, including the built environment, urban infrastructure, and pollution, plays a critical role in shaping health outcomes. Degraded urban infrastructure, which has typically exceeded its carrying capacity, limits the quality of water and sanitation and waste management services for city dwellers, and impacts their exposure to pollution and waterborne diseases. Urban development and crowding leads to increased air pollution exceeding WHO guidelines for both ambient and household, and leads to nearly 28% of total LMIC DALYs for those under 5 years, predominantly attributed to lower respiratory infections. Urban environmental pollutants and human exposures to those pollutants lead to additional DALYs (8).

Enabling Factors

Illustrative enabling factors listed in Figure 1 include urban municipal leadership and governance, social structures/community resilience, multi-sectoral collaboration, public-private partnerships, and policy. While not exhaustive, these provide examples for actualizing change and improving health in urban areas. One valuable endpoint for this solicitation is the identification and articulation of models that strengthen health service delivery for vulnerable populations, including preventative healthcare.

Social cohesion
In urban settings it is important to foster social cohesion and inclusion as a means to enhance community level resilience. One way to strengthen community resilience and social cohesion is to collaborate with community leaders, empower and leverage existing social structures such as women's and religious groups and community based savings and loans groups, as well as equip them with the appropriate knowledge and tools to take responsibility for their own well being.

Municipal Leadership
The engagement and leadership with existing local government as well as local primary MNCH care systems and other urban structures is important for ensuring both sustainability and efficiency. Strengthening leadership at the local level will require building specific leadership skills and improving transparency and accountability.

Public-Private Partnerships
Building on existing service delivery networks or creating new partnerships or service delivery alliances between the public sector, non-profit, and for-profit providers can encourage innovative solutions and leverage sector specific resources such as financing, research capacity and human resources.

Policy Development
Closely linked to urban health leadership and governance at the city/municipal level is the necessity to ensure that a policy and financial environment is conducive to realizing the goals of improving maternal and child health outcomes. In order to achieve this, the evidence base for what works at the individual/household, community and institutional levels for the urban poor population as well as appropriate structures to support informed decision-making need to be strengthened.

Multi-sectoral Collaboration & Stakeholder Engagement
MNCH urban challenges require strong multi-sectoral collaboration and stakeholder engagement to bring together the perspectives, skills, network, budgeting, and planning across sectors. This collaboration may include non-health and community based sectors that support and strengthen the health system and related services.

III. Problem Statement

USAID seeks iterative implementation research solutions that include learning and knowledge utilization approaches to address relevant aspects of the proposed Conceptual Framework (in Figure 1). The focus should be directed with special reference to the needs of vulnerable women and children under 5 in urban settings, and outcomes should include: (i) understanding characteristics of the burden of disease, determinants of health, and patterns of use of health services and how these characteristics influence the design of primary health care and preventative strategies, and (ii) evidence for strategies in primary health care and prevention that

lead to improved MNCH outcomes. Specific MNCH outcomes may include, but are not limited to: reduced newborn and child mortality and severe morbidity, reduced incidence of child pneumonia and diarrheal diseases, reduced premature and stillbirth, improved immunization coverage, reduced maternal complications of childbirth, and improved nutritional progress over the first 1000 days of life.

These approaches require several components, including:

- Contextual environment of these vulnerable populations be included in the design of interventions (e.g., physical and natural environmental pressures, existing political and economic constraints, social factors).
- Enablers such as policy, governance, and others drive and sustain this change to improved health.
- Several system levels operate concurrently: individual/household, community, and institutional.
- Multisectoral collaboration is used to inform and catalyze municipal policy makers, planners, and private sector stakeholders.
- Leverage of existing local primary MNCH care systems and other urban structures encourage both sustainability and efficiency. These platforms may provide entry points for integrated research approaches.

IV. Objective and Areas of Interest

Furthermore, these approaches must deliver the following results for the most vulnerable women and children in urban SSA:

1. Data and evidence for the existing urban conditions. The use of existing evidence, as well as formative and ongoing research, to identify gaps, barriers, drivers, enablers, and progress is critical. The current lack of disaggregated and comprehensive urban health data leads to insufficient understanding. The most recent measurement innovations have improved data collection and analysis (e.g., Nairobi Urban Health and Demographic Surveillance System, Urban Inequities Survey, and Unsatisfied Basic Needs Index), but these data sources remain inadequate urban health metrics for the poor and do not routinely include geospatial and poverty metrics. Progress in these measurement innovations and better integration of databases are critical to making progress in urban health.

2. Designed, tested, and refined interventions for real-world conditions. The focus of these interventions may include addressing barriers in improving the environment and living conditions which impact MNCH, improving urban primary health care facilities, increasing connections with the community and subsequent demand, considering aspects of preventative care such as antenatal care, immunization, and nutrition, and others.

3. Model for primary healthcare. The model is intended to show factors that lead to increased effective access and equitability of key urban health curative and preventive services, with a focus on the most vulnerable populations. The model should clearly involve the contextual factors as they impact health, particularly the preventive aspects, as well as consider the enabling factors, such as the increased capacity and engagement of municipal leadership, to ensure sustainability of efforts.

The potential geographic focus includes primary and/or secondary cities in Benin, Burkina Faso, Democratic Republic of Congo (DRC), Ghana, Ethiopia, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Senegal, South Sudan, Tanzania, Uganda, and Zambia.

V. Submission Instructions

A. Questions

Questions about this BAA Addendum may be submitted by email to harp@usaid.gov with the subject "Urban Health BAA Questions" by **December 19, 2018 at 5:00 pm EST.**

B. Expressions of Interest (EOIs)

All EOIs must be written in English and submitted electronically to harp@usaid.gov with the subject "Urban Health BAA EOI - *[name of organization]*" by the deadline indicated below. Late EOIs will not be accepted. EOIs must be no more than 5 pages in length, no smaller than 12 point Times New Roman 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:

- BAA Addendum Name and Number
- Implementation Research Title
- Focus Country
- Respondent Name, Title, Affiliation and Contact Information
- List of partner organizations involved in/contributing to the EOI

The EOIs must address the following areas:

1. **Context:** Provide a description and justification for the choice of urban area (specifying city and/or sub-regions within the proposed setting), including the health challenges of that urban setting (i.e., supporting your justification with quantitative data and qualitative information). Demonstrate an understanding of the city's health system structure as well as contextual and enabling factors as they relate to the need and potential opportunities within the proposed urban setting to influence maternal, newborn, and child health (MNCH) services and outcomes. Specifically, please describe the barriers and facilitators to improving MNCH outcomes, including but not limited to care-seeking and coverage for reducing mortality and severe morbidity of vulnerable women and children living in the urban setting. Describe relevant existing service delivery platforms, urban social structures, environmental health or other relevant platforms that already exist in this urban setting that can serve as relevant foundations for advancing the objectives of the BAA.

2. **Approach(es):** Propose solutions to address the contextual challenges and facilitators described in the context section that would improve MNCH outcomes for urban vulnerable women and children. This would include describing how the approach will draw upon existing knowledge and, as appropriate, address information gaps as part of an iterative, implementation research approach to develop and test models that improve effective coverage of MNCH services and prevention, and lead to improved MNCH outcomes. Describe implementation research approach(es), addressing potential feasibility and acceptability for the proposed setting. Propose a theory of change or other appropriate framework that explains how your idea(s), when implemented in practice, would lead to improved MNCH outcomes. Explain how these approaches will leverage existing service delivery platforms, urban social structures, or environmental health platforms and provide an entry point to embed this proposed implementation research approach.

3. **Partnership composition**: Partnerships should reflect diverse perspectives and capabilities, including demonstrated expertise in research, implementation, policy development, and as feasible, active engagement of relevant government officials, private sector actors, or other relevant champions needed for a change process. The EOI should clearly and succinctly describe the envisioned role and contributions from each of the proposed partner organizations in carrying out the proposed intervention(s) and accompanying embedded implementation research. Where feasible, we encourage the designation of a LMIC partner as the Lead organization. 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). EOIs that have the active engagement of key municipal stakeholders and/or influential policymakers in local governance structures, who can affect change at the city or municipal level, such as local administrative governing bodies and city councils, will be evaluated more competitively.

   Endorsements, in the form of a letter of support from a city-level policymaker and other

influential decision makers and stakeholders in the urban area would increase the competitiveness of an EOI submission, particularly if they indicate willingness to embed the proposed research activities in existing real-world programs or platforms, where they have influence. Such letters will be excluded from the page limit and can be submitted as Annexes to the EOI. The letters must at minimum consist of buy-in in the form of in-kind, technical, or financial support in order to influence policies, data systems, project effectiveness, and sustainability.

4. **Participation in Co-creation Workshop:** Nominate up to 4 individuals referenced in the EOI to represent the team at the co-creation workshop as described in this Addendum. Co-creation workshop participants should include, at a minimum, a researcher, government decision maker (from the city/municipal level), service delivery implementer, and where appropriate, an influential private sector representative. Describe why the individuals you are nominating are the best people to develop promising models to identify and test approaches/strategies that are nested in real world urban environments to improve health outcomes for vulnerable women and children living in urban settings in sub-Saharan Africa through implementation research, together with USAID and Resource Partners. Include the individual's name, title, employing organization, and if they will require a visa for travel to South Africa. 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 fully participate in the workshop. 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"[3].

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

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

(GFF) 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 sub-Saharan countries: Benin, Burkina Faso, Democratic Republic of the Congo, Ghana, Ethiopia, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Nigeria, 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 partnership opportunities including multi-country proposals.

Budget Parameters

USAID currently anticipates that awards stemming from this Addendum might range between $1 to $5 million for the entire period of performance (up to three years). USAID 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 sustainable 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, non-exclusive, 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 is focused on how implementation research supports the development of new models of urban primary health care including preventative and curative strategies to improve MNCH outcomes for SSA urban vulnerable women and children.

VI. Review of Submissions

A. Review Criteria

EOIs will be reviewed in January 2019 and selected for Stage 2 of the BAA process (see below, B. Selection Process) according to the following Evaluation Criteria:

1. **Context**
   Relevance of the information about the city's health system structure, as well as the contextual and enabling factors that are unique to the proposed urban setting, and how they interact and influence maternal, newborn, and child health (MNCH) services and outcomes. This includes providing sufficient description of existing service delivery platforms, urban social structures, or environmental health platforms that can be used as entry points and allow for integration of the proposed urban health solutions.

2. **Approach(es)**:
   Justification for how the presented solutions -including relevant contextual factors and specific enablers-will address urban health challenges and improve MNCH outcomes, including sufficient rationale to address the feasibility and acceptability of the proposed approach. The justification should include how the approach will be embedded in existing service platforms, urban social structures, or environmental health platforms.

3. **Partnerships**:
   Demonstrated capabilities of the proposed partnership -for example, do the proposed organizations bring research, implementation, policy/government and private sector expertise, and justification for how the proposed partner organizations will work together to carry out implementation research efforts in targeted urban settings. The EOI should include documentation of local/municipal government support, as demonstrated by letters of support.

4. **Participation in Co-creation Workshop:**
   Ability of the proposed participants to represent research, implementation, government and private sector interests, as appropriate; as well as capacity to be active contributors in the co-design process, including a description of why the selected individuals are best

positioned to contribute to development of promising models to identify and test approaches that improve health outcomes for vulnerable women and children living in the proposed urban setting.

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 five day co-creation workshop scheduled to be held in Johannesburg, South Africa in late April/early May 2019. USAID, Resource Partners, EOI teams as well as other select invitees, will gather to collaboratively develop concepts for implementation research approaches to developing new models of urban primary health care including preventative and curative strategies to improve MNCH outcomes for SSA urban vulnerable women and children. 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.

Selected EOI teams will be required to complete a pre-workshop exercise that will include interviewing end users/beneficiaries to prepare for and inform co-creation workshop activities. The exercise details will be sent to selected EOI teams about a month before the workshop. The completed exercise should be submitted in advance of the workshop.

Stage 3: Review by the Scientific Review Board. Approximately one month after the co-creation workshop, concept papers, developed during Stage 2, will be submitted to USAID to be reviewed for selection by USAID and other Resource Partners.

Stage 4: Contracting/Agreement Officer Determination. After review, concept papers may proceed to Stage 4, as described in the Broad Agency Announcement for Global Health.

C. Response Date

Expressions of Interest should be submitted no later than **January 22, 2019 at 9:00 AM EST** to harp@usaid.gov.