#### Saving Lives at Birth: A Grand Challenge for Development

#### Addendum 02

to

# The USAID Broad Agency Announcement (BAA) for Global Health Challenges (BAA-GLOBALHEALTH-2017)

#### SECTION A. PROGRAM DESCRIPTION

# Program Summary

The United States Agency for International Development (USAID), the Government of Norway (Norad), the Bill & Melinda Gates Foundation, Grand Challenges Canada (funded by the Government of Canada), UK's Department of International Development (DFID), and the Korea International Cooperation Agency (KOICA) have joined together to launch the eighth round of Saving Lives at Birth: A Grand Challenge for Development.

Together, we call for groundbreaking prevention and treatment approaches for pregnant women and newborns in poor, hard-to-reach communities around the time of childbirth. An estimated 2.6 million stillbirths, 2.7 million neonatal deaths and 303,000 maternal deaths occur globally each year, signaling a major gap in interventions specifically around childbirth and the early postnatal period – a time when mothers and babies are most vulnerable and global progress in reducing mortality has been particularly poor. This gap in interventions is particularly acute in poor, underserved communities and among women who are disadvantaged.

Innovative ideas that can leapfrog conventional approaches to address inequities and inequalities of care are critical in surmounting these gaps. If we are to accelerate substantial and sustainable progress in reducing maternal and newborn deaths and stillbirths at the community level- and contribute to the goals and targets of Ending Preventable Maternal Mortality and the Every Newborn Action Plan - we need to foster and scale innovative prevention and treatment approaches that increase access to improved:

- (1) Science & technology;
- (2) Service delivery; and
- (3) Demand-side innovation that empowers pregnant women, their families, and their communities to practice healthy behaviors and be aware of and access health care during pregnancy, childbirth and the early postnatal period, especially the first two days after birth.

Globally, an expansive pipeline of audacious maternal and newborn health innovations has emerged over the past seven years. In our eighth call for solutions, the Saving Lives at Birth Partners seek to catalyze scale and sustainability of the

most promising solutions.

# Achieving Impact at Scale

Critical to the sustained success of innovative solutions is a clear understanding of how best to implement them at scale. Successful applicants will take into account country programs, policies, and priorities. Development of new interventions, technologies or approaches and their successful scale up should complement efforts to strengthen health systems and address broader determinants of health including poverty, inequity, gender inequality, and access to water and sanitation resources, all of which are needed to address this grand challenge for development. Applicants should consider the overall health system readiness to support the scale up of a solution for sustained impact.

We also believe that strong collaborations and commitments will enable and deploy more effective and sustainable solutions. To harness scientific / technological, social, and business ingenuity, and to catalyze successful implementation at sustained scale, we encourage:

- a) Development of partnerships that bring together diverse competencies, including from private sector (with co-funding) and government partners
- b) Formation of dedicated multidisciplinary/cross-sectoral teams; and
- c) Leadership of local partners and key influencers.

Where appropriate, we strongly encourage the designation of low- and/or middle-income country partners as the lead organization.

#### **Funding Process**

Through a rigorous review process, we will identify and support transformational, scalable approaches that advance equity and quality of care to dramatically – and sustainably – reduce deaths and poor birth outcomes for vulnerable women and newborns in the hardest to reach communities of the world. Applicants do not need to have received previous Saving Lives at Birth funding to be eligible to apply.

For more information on the Saving Lives at Birth program and projects, please visit our website (<a href="https://www.savinglivesatbirth.net">www.savinglivesatbirth.net</a>).

# Problem Statement

While we have made remarkable progress in recent decades reducing maternal and child mortality globally, notable disparities still remain for mothers with even slower progress for newborns and stillbirths.

# **Critical Conditions**

The onset of labor continues to mark the start of a high-risk period for both mother and baby that does not ease until at least 48 hours after birth. During this short period of time, an estimated 145,000 maternal deaths, 1.45 million neonatal deaths, and 1.2 million stillbirths occur annually.

- For the mother, the critical conditions occurring during pregnancy, labor, and delivery include hemorrhage, hypertensive disorders such as preeclampsia and eclampsia, serious infections, and obstructed labor.
- For the newborn, the critical conditions occurring after birth are serious infections (sepsis, meningitis, pneumonia, and diarrhea), intrapartum-related deaths (primarily "birth asphyxia"), complications of preterm birth, and metabolic conditions (hypothermia, hypoglycemia, etc).
- Important causes of stillbirth include intrapartum asphyxia, maternal and antepartum hemorrhage, fetal infection, obstructed labor, Rh disease, and birth defects, especially neural tube defects.

# **Fragmented Continuum of Care**

Evidence-based interventions—such as skilled attendance at delivery; emergency obstetric and newborn care; early initiation of breastfeeding; hygiene; and rapid diagnosis and early treatment of infections—do exist to manage complications around the time of birth. However, these interventions are not always available to the women and children who need them. Many missed opportunities exist before, during, and after the time of birth that could be tackled to optimize maternal and newborn health outcomes:

- Care before Birth: Impeded by delays in seeking prenatal care, limited ability to
  determine gestational age without reliance on ultrasound technology, and
  lack of access and/or adherence to prenatal care services and proper
  nutrition.
- Care at Birth: Impeded by a lack of infrastructural and health system resources (e.g. material resources, electricity, oxygen, IV fluids, clean water and adequate transportation to travel to hospitals) and shortages of trained healthcare providers to provide basic and comprehensive emergency obstetric care. Where trained professionals and equipped facilities exist, quality of care can be further impeded by poor management and supervision, nonfunctioning supply chains, and lack of adherence to guidelines and protocols compromising dignity and respect.
- Care after Birth: Impeded by a lack of access to postnatal care services, including support for breastfeeding, and delays in seeking care, including family planning resources such as contraception. In fact, important causes of maternal and newborn complications result from births that are spaced too closely due to a lack of access and/or adherence to family planning.

#### **Geographical Inequalities**

Almost all of maternal and newborns deaths during the high-risk period of childbirth occur in low- and middle-income countries, especially in sub-Saharan Africa and South Asia, where access to quality care is also the poorest. Inequalities also persist within countries that leave vulnerable women and newborns even more disproportionately affected, as in urban slums or fragile settings of humanitarian emergencies.

#### **Social Inequalities**

Gender norms, cultural beliefs, and traditions that limit a woman's autonomy,

inclusion, and decision making power contribute to poor enabling environments that may prevent women and their families from practicing healthy behaviors, and seeking and receiving life-saving care at and around the time of birth. For example, women, their partners and/or their families, and decision-makers may not recognize the signs of potentially life-threatening illness around the time of birth, the cause of those illnesses, or where timely appropriate care is available. Social norms may limit movement outside the household after birth for both the mother and baby; costs of care and transportation options may also limit ability to seek and receive appropriate care. Gender, social and cultural norms may also contribute to the fragmented continuum of care. Taken together, these barriers leave poor, underserved women—who have the greatest geographical, financial and structural challenges in securing quality care at the time of delivery—and their infants at the highest risk of poor pregnancy outcomes.

#### Objective

For the purposes of this Addendum, the Saving Lives at Birth partners are seeking creative solutions to address roadblocks to healthy pregnancies and births which intersect three domains:

- Science & Technology: lack of dissemination and uptake of the most recent scientific evidence applicable to delivery of care in low-resource settings; lack of affordable and effective medical solutions appropriate for the community or clinic setting;
- Service Delivery: lack of quality health services, including inadequate numbers of trained, supported, motivated, equipped and properly located and supervised health staff and caregivers; and limited by operational bottlenecks;
- Demand: lack of opportunity, agency, ability, motivation, and empowerment to access timely health care or adopt healthy behaviors before, during, and after pregnancy.

Since many opportunities to optimize maternal and birth outcomes occur before and after the time of birth, solutions do not need to focus solely on the window between labor and 48 hours post-delivery. Where life-saving interventions exist but have not been successfully deployed or implemented, we invite bold ideas for overcoming specific barriers to scaling up.

# What We Are Looking For

# Interventions that:

- Substantially increase demand for and access to primary health interventions for women and newborns;
- Substantially improve the quality of care as measured by health outcomes;
   and
- Improve and sustain healthy behaviors, attitudes, and practices.

#### Solutions should be:

- Creative: Bold, "off the beaten track," daring in premise
- **Appropriate**: Designed with and for end-users in the target population or context to meet their specific needs and circumstances
- Impactful: Address one or more important adverse maternal, fetal, or neonatal

- health conditions described in the problem statement above;
- **Competitive**: Clearly differentiated from and superior to standard practice, particularly on factors of cost and ease of use;
- **Sustainable**: Demonstrate a clear path to obtain continued political and financial support for sustained implementation and/or use of the innovation. Partnerships important for scale and matched funding are highly encouraged for solutions transitioning to scale;
- **Scalable:** Demonstrate the potential to increase and sustain coverage and impact of the intervention both within and beyond the award period, and be implemented in contexts or settings outside of those reached during the award period
- Measureable: Able to be monitored, measured and evaluated for impact.

# Strong Areas of Interest

We are particularly interested in novel innovations in any of the following areas, but not limited to:

- Promoting healthy behaviors and generation of demand for services, including voluntary timing and spacing of pregnancy
- Preventing and addressing the consequences of **preterm birth**
- Increasing access to and sustained use of evidence-based, appropriate, quality care with particular emphasis on:
  - Early uptake and retention in antenatal care and simple, low-tech methods of dating pregnancy
  - o **Equity**, including identifying and reaching the most vulnerable populations
  - Accountability to stakeholders and families
  - o **Eliminating mistreatment** of women during birth
  - o **Improving working conditions** of and respect for birth attendants
  - Better monitoring and management of labor to promote maternal and fetal survival and better monitoring and management of special newborn care
  - Making the "old and boring" (but essential and good for maternal and newborn care) seem exciting (e.g. how to take, record, and act upon a blood pressure reading)
- Addressing key health system bottlenecks that have an outsized impact on maternal and newborn health services with particular emphasis on improving referral and transportation of mothers with complications and sick newborns, including links to facilities
- Addressing underlying gender, social and cultural barriers and/or opportunities
- Assessing and addressing the challenges of approaches or technologies proven to work in high-income settings but unproven in low-income settings such as antenatal steroids, progesterone, etc.

We encourage integrated solutions that bring together cutting-edge science and/or low-cost technologies, service delivery, and demand innovation in transformative new ways.

PLEASE NOTE: Solutions addressing HIV in vertical manner, e.g., HIV diagnostics, will not be considered for funding.

#### **Transition**

The Partners seek to catalyze scale and sustainability of the most promising innovations. We will fund solutions across the continuum of scale-up as described

# to Scale Eligibility

below. In addition to funding, and to accelerate impact of the innovation, each grantee will receive \$25,000-\$50,000 worth of technical assistance in tailored scaling support annually.

# Eligible applications will focus on any of the following areas alone or in combination:

- Developing, testing and refining scaling plan/business model, including generating evidence of health outcomes or conducting further market research needed to engage partners. Estimated funding and timeframe: about \$400,000 USD (Up to 500,000 CAD) for up to 24 months.
- Transitioning to scale innovations with promising health impact and developed, sustainable scaling plans. These innovations must have demonstrated strong evidence in a controlled or limited setting of improved health outcome(s) and/or the reduction of significant barrier(s) to health and demand for the solution (i.e. proof of concept). Submissions will have the potential to credibly scale in a sustainable manner beyond the term of Saving Lives at Birth funding to improve the lives of millions of pregnant women and newborns in multiple settings. Estimated funding and timeframe: approximately \$800,000 USD (up to 1,000,000 CAD) for up to 24 months.

#### Eligibility criteria:

- 1. The lead applicant must be a non-profit organization, for-profit company, or another recognized institution that is capable of receiving and administering funding. Individuals are not eligible to apply.
- 2. Applicants may be from high-income countries. However, we strongly encourage the designation of low- and/or middle-income country partners as the lead (i.e. prime) organization. Applicants from high-income countries may be asked to switch the designated lead (i.e. prime) to a low-and/or middle-income partner and otherwise may not be able to progress further in the competition. A list of low- and middle-income countries can be found here.
- 3. Reviewers will look for partnerships that contribute expertise relevant to the scale and sustainability of the idea. Co-funding and/or matched funding from partners is required, as this demonstrates a key stake in project success by project partners, as well as demand for the solution. Matching funds should be 'new cash'. Where cash is not possible, and where strong smart partners are present such as government or corporate partners matching through in-kind contributions will be considered on a case-by-case basis. Though it is preferred, secured commitment of matched funds may not be required at the proposal stage. Funding committed up to one year prior to submission of the applicant may be considered for match funding.
- 4. Applicants may not propose projects for longer than 2 years and for more than 1,000,000 CAD (approx. 800,000 USD).
- 5. Applicants do not need to have received previous Saving Lives at Birth funding to be eligible to apply.

#### SECTION B: SUBMISSION GUIDELINES AND INSTRUCTIONS

# Submission Overview

Expressions of Interest (EOI) must indicate the idea that will impact upon the Objective, above, by increasing knowledge and understanding of potential solutions and their implementation at scale; utilizing scientific discoveries or advancements in technology, processes, methods, devices, or techniques; advancing the state of the art; or using scientific and technical knowledge in the scaling and evaluation of a potential new product or service (or of an improvement in an existing product or service).

Submitters should use the instructions and format found at www.savinglivesatbirth.net/apply and note the following basic requirements:

- All EOI must be written in English. EOI should be written clearly and with minimal jargon as reviewers will possess a variety of backgrounds and technical expertise.
- The EOI must be no longer than 3 pages. Any charts or tables included with the EOI will be considered within the page limits. References and citations to academic publications or other resources are not required but are encouraged. If included as a separate page as end notes, references and citations are not included in the page limits.
- All EOI must use a standard font no smaller than 11-point font with one-inch margins.
- All EOI must be submitted through the online application platform, which can be accessed via the link found at <a href="https://www.savinglivesatbirth.net/apply">www.savinglivesatbirth.net/apply</a>.

Submission and Review Process and Timeline The following outlines the process and timeline for submission and review of EOI.

- 1. Expressions of Interest (EOI) shall be submitted by February 28, 2018 2:00 p.m. EST.
- Beginning mid-January, EOI shall be submitted electronically via www.savinglivesatbirth.net/apply. As noted above, more guidance and instructions on submission can be found on our website. For all submissions, it is the applicant's responsibility to ensure that files are complete and transmitted by the deadline. The applicant bears full responsibility for data errors or omissions.
- 3. If initial review indicates the EOI merits further consideration, selected organizations or consortia may be invited, individually or in combination, to discuss their proposals with the Saving Lives at Birth partners for co-creation and further due diligence. This process may result in applicants being invited to submit concept notes and attend the Development<sup>x</sup>Change in Washington, DC July 24-26, 2018 (estimated dates).

Development<sup>x</sup>Change: To take advantage of the presence of a variety of development actors together in one place, the Partners will host the Development<sup>x</sup>Change in Washington, DC (estimated to be July 24-26, 2018). Finalists will display their innovations/innovative ideas in an open marketplace.

As part of this event, finalists will have the opportunity to network with each other, with other development experts and innovators, and other potential funders. Finalists will also participate in a series of workshops tailored to the participants' needs such as business planning, fundraising and monitoring and evaluation. The Partners will cover the cost for two representatives from each finalist team to attend the Development<sup>x</sup>Change.

#### 4. Validation and final selection:

An Executive Committee or Governing Board for each of the respective funding organization will independently review and validate the panel recommendations to ensure consistency with applicable policies, procedures and practices of the respective funding organization, inclusive of past performance evaluation. As per the BAA, the Partners may engage in codesigning the project and assisting the partner to provide additional information with respect to the proposer's technical approach, capacity, management and organization, partnerships and resources, past performance, and budget, as well as representations and certifications, as needed. The final decision regarding awards, including the amount of funding to award, is the responsibility of the respective funding organization. Award amounts and funding conditions may vary by funding organization.

**Unsuccessful Projects:** Applicants with unsuccessful projects will receive notice that their project was not selected.

# Information Protection

Saving Lives at Birth's goal is to identify and scale up transformative prevention and treatment approaches for pregnant women and newborns around the time of birth. Understanding the sensitive nature of submitters' information, USAID will work with organizations to protect intellectual property.

Expressions of Interest should be free of any intellectual property that the submitter wishes to protect, as the EOI will be shared with Saving Lives at Birth 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 the BAA Addendum hereby grant 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 expressions of interest submitted under the BAA Addendum. As noted above, if Saving Lives at Birth engages further with the organization regarding its submission, the parties can negotiate intellectual property protection for the organization's intellectual property.

Organizations must ensure that any submissions under the Addendum are free of any third party proprietary data rights that would impact the license granted to USAID herein.

# Evaluation Criteria

Proposals will be evaluated based on the following criteria. **More detailed criteria** can be found on our website (<a href="www.savinglivesatbirth.net/apply">www.savinglivesatbirth.net/apply</a>

The final award selection will be based on a combination of technical strength, cost, and pioneering innovation.

#### 1. Innovation

Demonstration that the proposed solution offers a creative approach to the problem outlined in the challenge and is clearly differentiated from existing approaches approaches in the proposed setting (i.e. provides significant improvements in cost, quality, and/or access to essential health services relative to standard practice/current offerings in the proposed market).

### 2. Sustained Impact

Demonstration that an investment in the proposed solution could result in transformational gains in maternal and newborn survival and in the prevention of stillbirth globally.

# 3. Execution Plan

Extent to which the proposed project objectives and interim milestones are appropriate, feasible and technically sound within the budget and time allocated for catalyzing scale and sustainability.

## 4. Evaluation Plan

Extent to which the project has proposed a clear, measurable and realistic monitoring and evaluation plan, including key indicators to measure project success.

#### 5. Team Capacity and Partnerships

Demonstration that the applicant and its partners have the necessary depth and breadth of talent, experience and leadership in order to execute their project.

#### 6. Pioneering

Proposals with highest potential to achieve sustainable, groundbreaking impact and/or to become true game changers in the field.