Implementation Research:

Multiple Micronutrient Supplementation (MMS) Project for Pregnant Women in Haiti

December 19, 2019

Background

Recent research has shown the positive effects of MMS (containing iron and folic acid, as well as 13 other micronutrients) in improving birth outcomes, above the improvements from IFA alone.

While WHO has not yet issued a "positive" recommendation of guidance for use of MMS instead of IFA, **WHO has stated that where appropriate, governments could begin to explore use of MMS in its national programs.**

RECOMMENDATION A.6: Multiple micronutrient supplementation is not recommended for pregnant women to improve maternal and perinatal outcomes. *(Not recommended)*

Remarks

- There is some evidence of additional benefit of MMN supplements containing 13–15 different micronutrients (including iron and folic acid) over iron and folic acid supplements alone, but there is also some evidence of risk, and some important gaps in the evidence. Although the GDG agreed that overall there was insufficient evidence to warrant a recommendation, the group agreed that policy-makers in populations with a high prevalence of nutritional deficiencies might consider the benefits of MMN supplements on maternal health to outweigh the disadvantages, and may choose to give MMN supplements that include iron and folic acid.
- More research is needed to determine which micronutrients improve maternal and perinatal outcomes, and how these can be optimally combined into a single supplement.

WHO, 2016: *WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience.*

Implementation Research

VA is partnering with the Haitian Ministry of Health to scale-up the distribution of MMS among pregnant women in Haiti.

To inform the program implementation and scale-up, VA and the MOH, in partnership with Johns Hopkins University, are engaging in a "demonstration project," to:

- Field test provision of MMS, including the distribution platform, supply chain, and cost.
- Develop and field test social and behavior change communication (SBCC) strategies and tools intended to support the uptake and adherence of MMS among pregnant women.
- Identify and implement a methodology to evaluate acceptance, coverage, and adherence of MMS among pregnant women.

Johns Hopkins Bloomberg School of Public Health

Haitian Health Foundation

RÉPUBLIQUE D'HAÏTI
Ministère de la Santé Publique et de la Population

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Site Selection

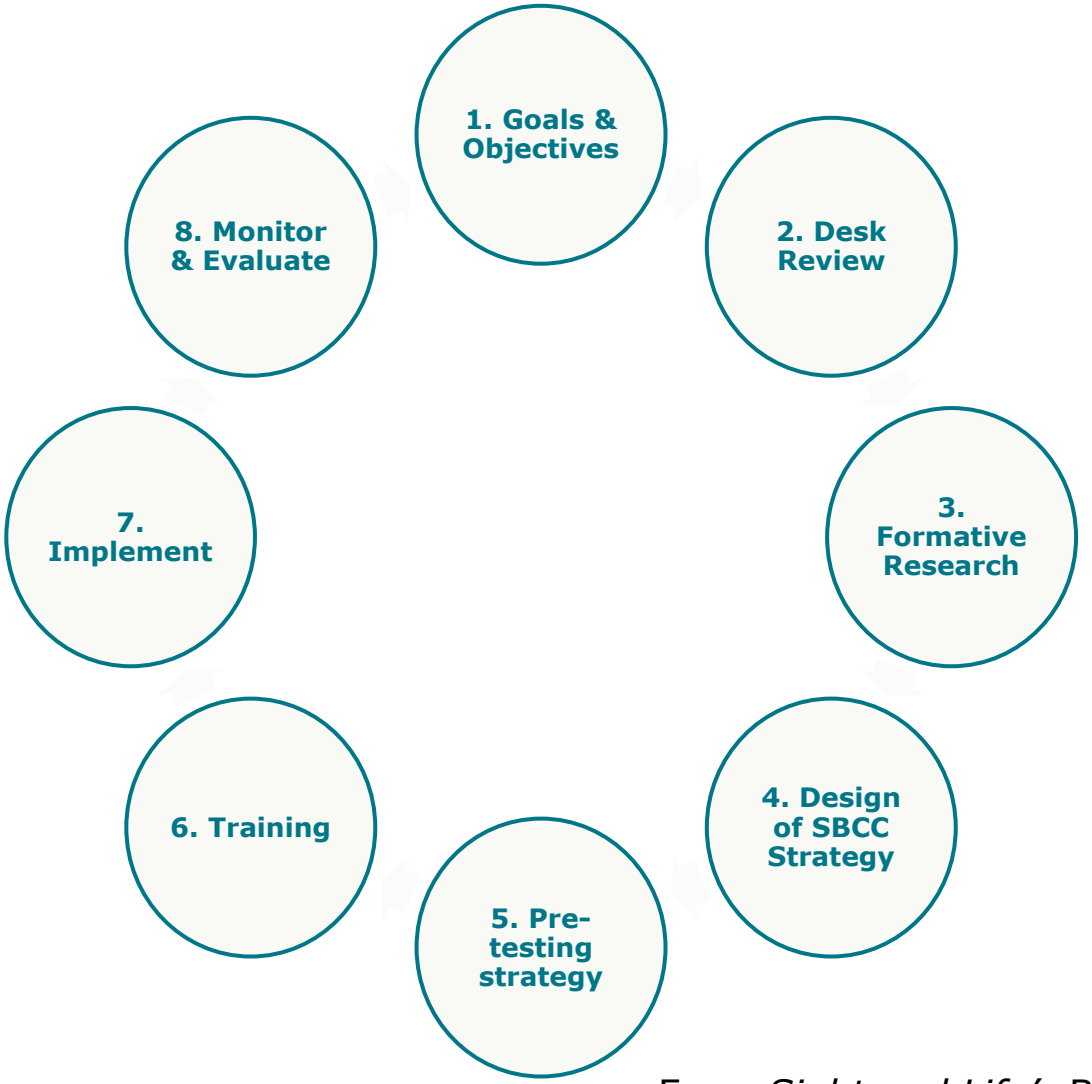
- The **five communes** within the **Grand-Anse department** were selected as the research project sites by MSPP, in collaboration with VA.

- The Grand-Anse department has the **second highest rate of anemia among women 15-49 years in the country (54.9%)**, above the national average of 49%.

- The selected communes have similarly high rates of anemia, an **existing antenatal delivery platform**, and **experience distributing IFA supplements**.

- The sites are located in the westernmost region of the country and have a combined population of 218,576, with approximately **6,118 pregnant women**.

Process



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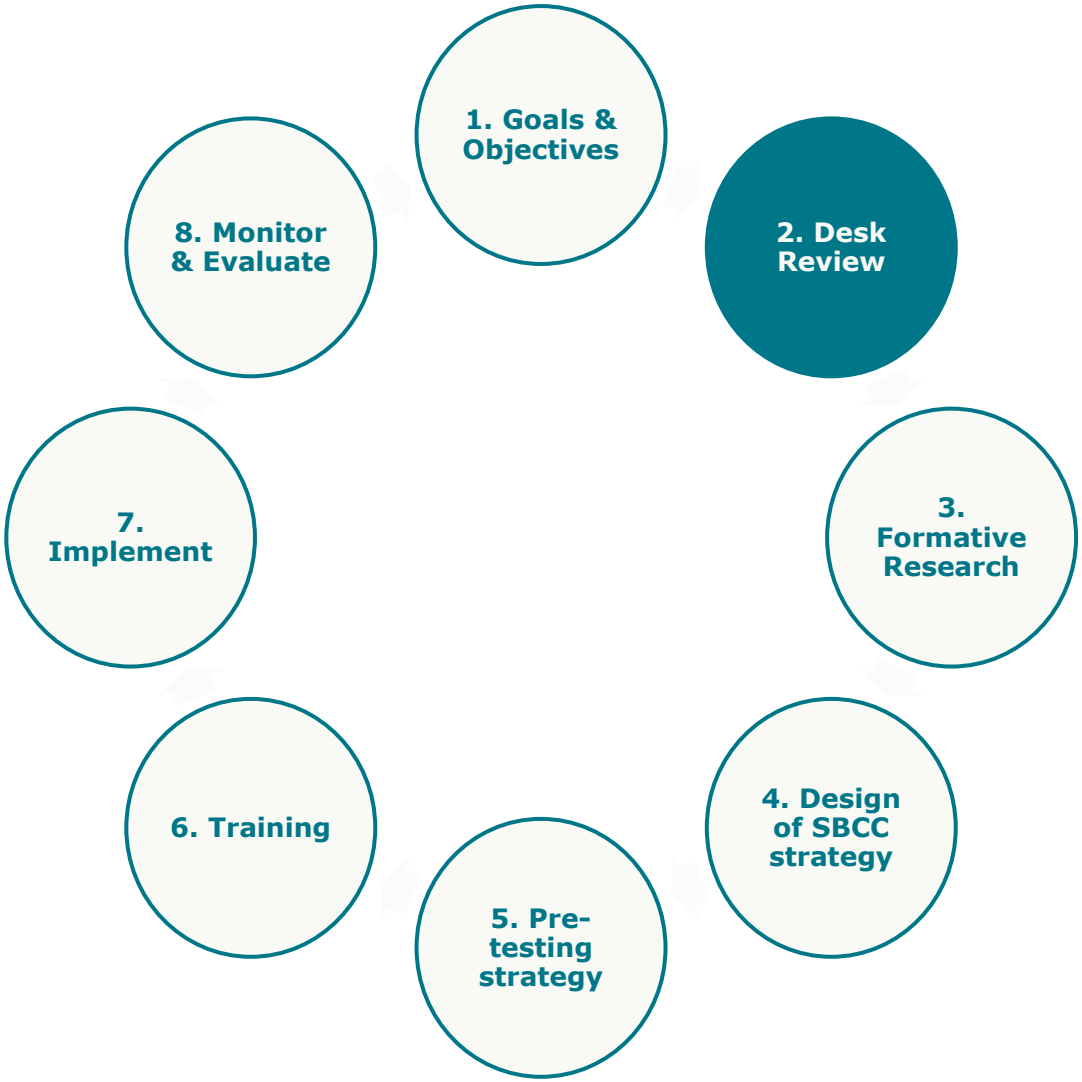
Process



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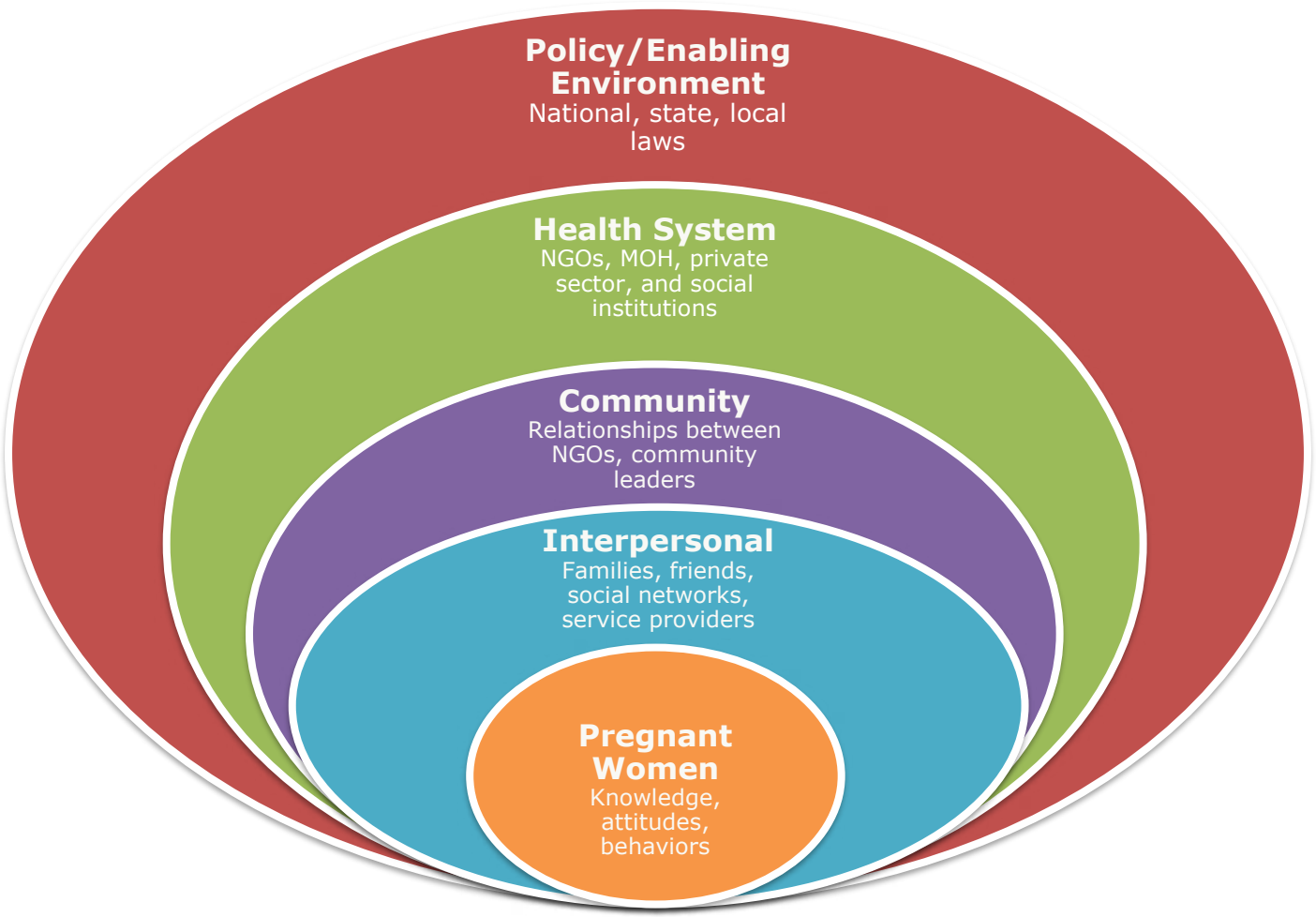
Desk Review

- **Literature review**
- **PESTHLE Tool** – Factors that may affect intervention
  - Political, Economic, Social, Technological, Health, Legal, and Environmental
- **Stakeholder Analysis**
  - Who holds power and influence
  - Who supports or opposes the MMS program
  - What are the issues affecting the MMS program
- **Program Context Analysis**
  - Coverage rates and service provision
  - Supply chain

Desk Review: Levels of Influence



Social Ecological Model

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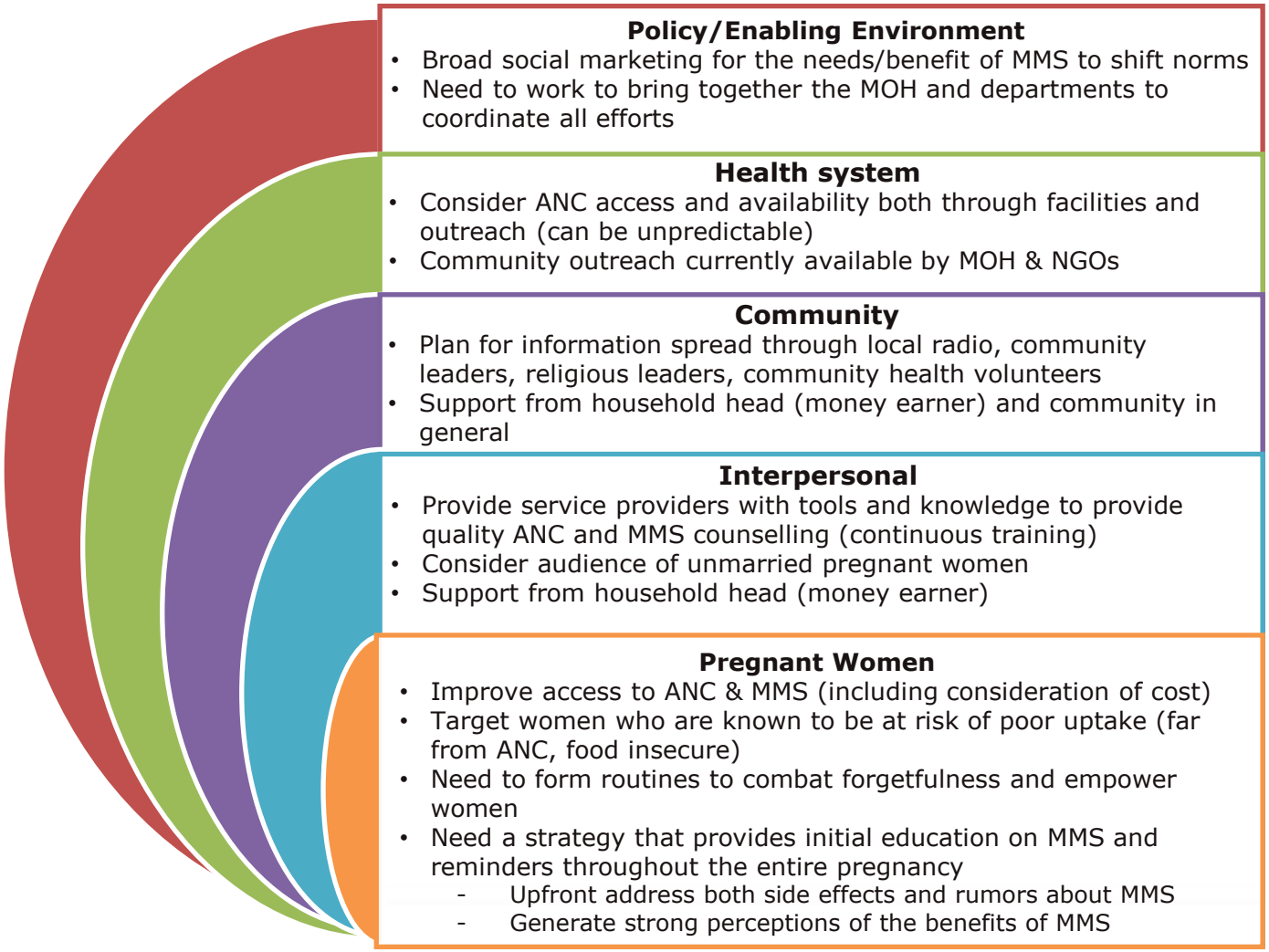
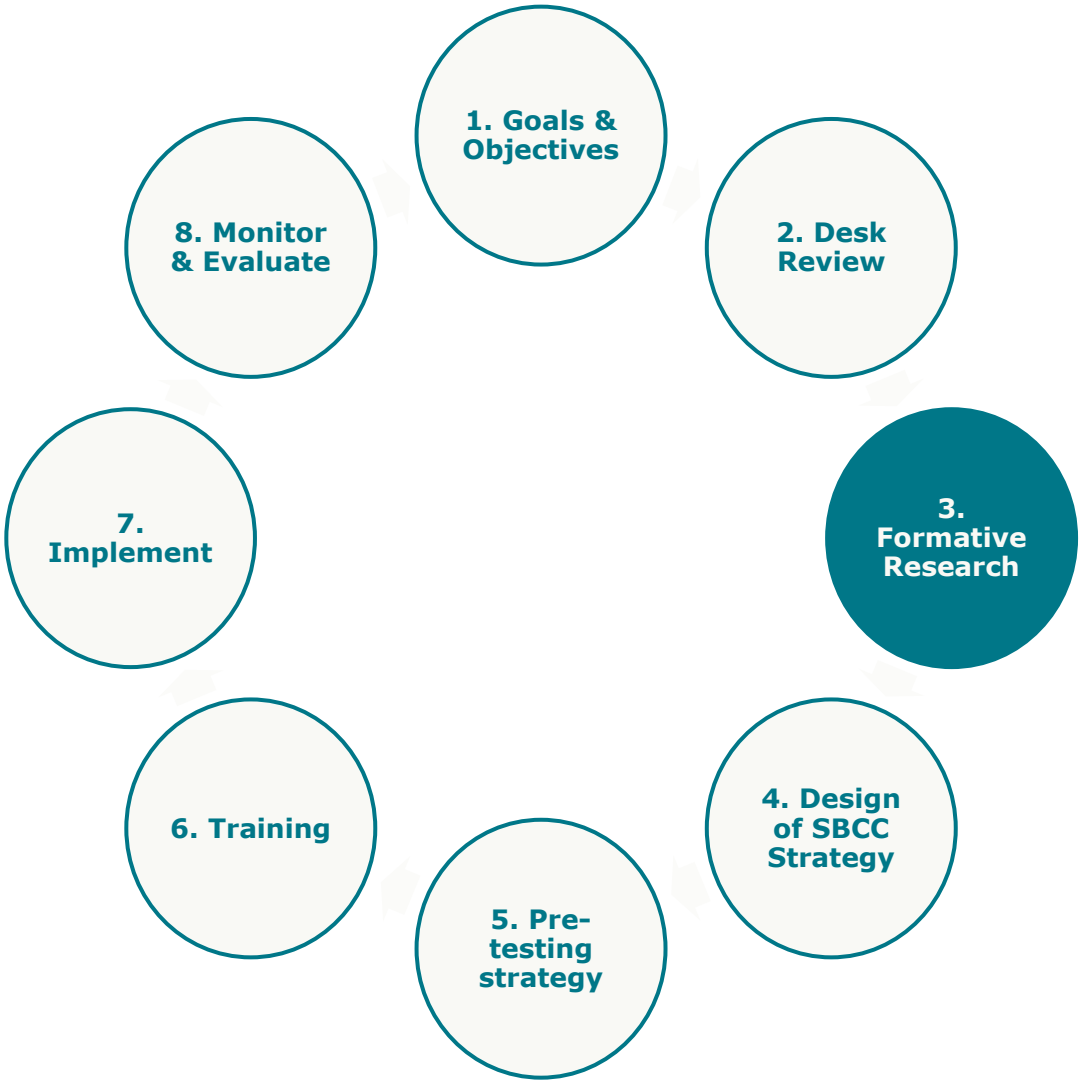
Desk Review: Summary



Formative Research



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Formative Research

VA and the MOH worked with a Haitian data collection agency to conduct:

- Semi-structured in-depth interviews (IDIs)
- Focus group discussions (FGDs)
- Acceptability trial

Formative Research: IDIs & FGDs

IDIs with key informants:

- **women** (pregnant women or women who have a child <6 months of age)
- **influential family members of women**
- **community leaders**

FGDs with key informants:

- **health care professionals**

Objective was to understand perceptions and view on prenatal supplementation, pregnancy experiences, and prenatal care.

Formative Research: Acceptability trial

The acceptability trial examined the extent to which MMS was deemed suitable, satisfying, or attractive to **pregnant women**.

This was achieved with a **2-week home trial** followed up with **IDIs** to assess how pregnant women reacted to using the MMS.

Outcomes of interest included maternal satisfaction, perceived positive or negative side effect, desire to continue use, adherence, facilitators and barriers to the daily MMS regimen.

Formative Research: Stakeholder Workshop

Organized successful workshop in October with project investigators to review & discuss preliminary findings and outline next steps

Potential Impact of MMS Program

2018

- 43% coverage of IFA at 18% adherence
- **Effective coverage = 8%**

2020

- Increase to 70% coverage at 55% adherence (result of implementation research)
- **Effective coverage= 39%**

Impact

- 10% reduction in maternal anemia
- 2% reduction in LBW
- 501 total lives saved
  - Maternal: 25 lives saved
  - Neonatal (<1 months): 159 lives saved
  - Children (1-59 months): 68 lives saved
  - Stillbirths: 249 lives saved

Estimated through The Lives Saved Tool https://www.livessavedtool.org/

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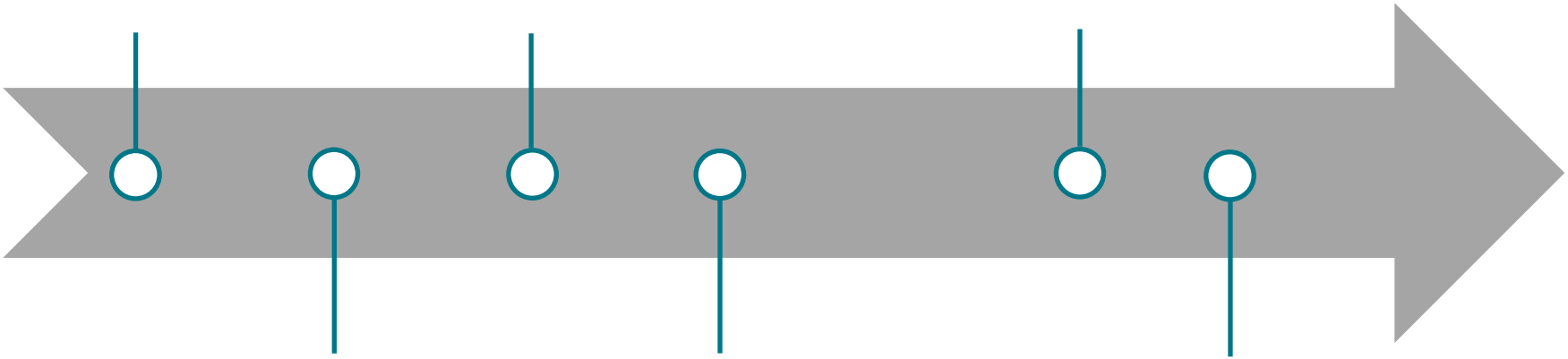
Timeline

Oct 2018
- ✓ Identified expert advisers
- ✓ Site selection

July - Nov 2019
- • Formative research and analysis

March 2019–Aug 2020
- • Implementation (distribution + M&E)



Nov 2018–June 2019
- • Submission & approval of ethics (IRB) proposal

Dec–Feb 2019
- • Develop & test SBCC strategy/messages
- • Expansion of VA's learning toolbox
- • Training of service providers
- • Initiate community awareness & advocacy campaign

Aug 2020
- • Disseminationof findings

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Thank you!