## **USAID** Advancing Nutrition

Scope of Work: Consultant to Code, Clean, and Analyze Qualitative and Quantitative Data for Implementation Research to Assess the Feasibility of a Breastfeeding Counseling Mentorship Program in Kenya

### A. Background

Breastfeeding is globally accepted as an essential action for achieving optimal nutrition and development outcomes in children as well as health outcomes later in life. As in many low- and middle-income countries (LMICs), exclusive breastfeeding and early initiation of breastfeeding rates in Kenya are far lower than needed for the health of women and children. Significant efforts have been made in Kenya to ensure that women have access to breastfeeding information, education, and counseling. However, there is a need for evidence of effective, scalable approaches to strengthen skilled breastfeeding counseling by health care providers throughout the system. To help address this challenge USAID Advancing Nutrition is collaborating with the Kenya Ministry of Health, USAID Kenya and East Africa, USAID Bureau of Global Health, and key country stakeholders to design and test an intervention to strengthen capacity to provide breastfeeding counseling in Kenya.

From February to August 2021, USAID Advancing Nutrition organized, conducted, and documented a scoping exercise in Kenya that involved consultations with 26 stakeholders and the review of over 60 relevant background documents. This scoping exercise provided valuable inputs and recommendations related to potential capacity strengthening interventions to improve breastfeeding counseling.

Based on the results of this scoping exercise, in September 2021 USAID Advancing Nutrition began a collaborative design process to develop the Breastfeeding Counseling Mentorship Program. Mentorship is an important approach to building and maintaining the competencies required to provide quality counseling and, ultimately, improving the quality of breastfeeding counseling services. USAID Advancing Nutrition, alongside the Ministry of Health (MoH) of Kenya and the Baby-Friendly Hospital Initiative (BFHI) Task Force, will implement and test this structured, facility-based mentorship program, beginning in December 2022 and continuing through August 2023.

We will evaluate the feasibility of the program in the antenatal care clinic and postnatal care unit of Mbagathi County Referral Hospital in Nairobi, Kenya. After completing the WHO/UNICEF BFHI Training Course for Maternity Staff, we will identify mentors and mentees for the program. Five health workers will work with approximately 20 mentees – nurses, nutritionists, or clinical officers – to strengthen the breastfeeding counseling competencies covered in the WHO/UNICEF BFHI Training Course for Maternity Staff and Competency Verification Toolkit. This will include helping them learn what they need to know to be effective counselors, supporting them to develop counseling skills, and guiding them to use their knowledge and skills to counsel mothers.

Specifically, we will explore the factors that enable or hinder implementation of the mentorship program and the effect it has on the mentees' knowledge, practices, and confidence in their ability to provide quality breastfeeding counseling. The study will also examine how the mentorship program affects women's perceptions of the breastfeeding counseling they received. We will collect both qualitative and quantitative

data from mentors and mentees at three time points (T): prior to the BFHI Training Course for Maternity Staff (T1), immediately after the training (T2), and after four months of mentoring (T3). We will use health worker surveys completed by mentors and mentees at T1, T2, and T3; focus group discussions with mentors, mentees, and health facility leadership at T3; record review of the forms and observation tools completed by mentors and mentees throughout program implementation; and client exit interviews with 60 pregnant and 60 postpartum women who received breastfeeding counseling at the facility at T2 and T3.

#### **B.** Objectives

The objective of this consultancy is to code, clean, and analyze qualitative and quantitative data using Stata and Microsoft Excel, as appropriate.

#### C. Activities

The Consultant will work under the supervision of the USAID Advancing Nutrition Principal Investigator. The Consultant will be responsible for the below tasks and, in recognition of this role, will be identified as a co-investigator and co-author on the anticipated manuscript. The associated deliverables are described in the deliverables and schedule matrix in section D.

#### 1. Develop a data analysis plan, including table shells, for the following:

- Health worker surveys: longitudinal data (almost entirely quantitative but with some options to specify "other" responses) from approximately 25 health workers (5 mentors and 20 mentees) from T1, T2, and T3
- Focus group discussions: qualitative data from approximately 4 focus group discussions conducted at T3
- Program records: data (primarily quantitative, but some qualitative) from program forms and observation tools completed by mentors and mentees during implementation and collected at T3
- Client exit interviews: cross-sectional data (almost entirely quantitative but with some options to specify "other" responses) from interviews conducted with 60 pregnant and 60 postpartum women at T2 and T3

# 2. Communicate regularly with the USAID Advancing Nutrition team and other study team members, as requested.

- USAID Advancing Nutrition team will organize weekly calls. The Consultant will participate in these calls.
- At the request of the USAID Advancing Nutrition team, the Consultant will participate in selected meetings with the Expert Advisory Committee, the BFHI Task Force, and/or the MIYCN Technical Working Group.

#### 3. Clean, code, and analyze the following qualitative data using Microsoft Excel:

- Qualitative data include open-ended text to specify "other" responses from the (a) health worker surveys, (b) client exit interviews, and (c) program records of challenges and successes as well as transcripts from focus group discussions
- The study team will develop the deductive (predetermined) codes based on the research questions and study variables.
- The Consultant, in collaboration with the study team, will develop inductive (emerging from the data) codes by analyzing qualitative data to capture topics that emerge.

<sup>&</sup>lt;sup>1</sup> A Study Coordinator will be hired to check that mentors and mentees are completing the program forms and observation tools.

• The Consultant will then code and analyze data. The Consultant will revise coding as needed based on feedback from the study team.

### 4. Clean and analyze the following quantitative data using Stata software:

- Quantitative data include that collected through health worker surveys (self-administered using tablet computers) and client exit interviews (administered also using tablet computers).
- Calculate scores of health workers' knowledge and attitudes.
- Calculate means, medians, minimum and maximum values of numeric (e.g., years of experience, age of respondent, weeks of gestation, times mentor met with mentee),
- Calculate frequencies of categorical variables nominal (e.g., binary, and categorical knowledge and practice questions), and ordinal (e.g., extent of satisfaction or degree of confidence).
- Conduct bivariate analysis, as agreed upon when developing table shells.
- Analyze change in selected variables using longitudinal/panel data from health worker surveys (TI, T2 and T3).
- Analyze differences between T2 and T3 from cross-sectional data collected through client exit interviews, disaggregated by client type.

# 5. Prepare tables of analyzed quantitative data and matrices of coded qualitative data (text).

- In accordance with the data analysis plan (activity #I), prepare and submit to USAID Advancing Nutrition tables of analyzed data and matrices of coded text, using Microsoft Excel or Google Sheets.
- Revise and update the tables and matrices based on feedback from USAID Advancing Nutrition.

#### 6. Prepare the methods and results sections of study manuscript.

• Building on the protocol and analysis plan (activity #1) draft the methods and results sections of the manuscripts.

## 7. Review study publications.

• As is expected of any co-investigator and co-author, the Consultant will review study publications with a focus on data presentation and interpretation.

#### D. Deliverables and Schedule

## The Contractor is responsible for the timely submission of the following deliverables, as part of the SOW:

| Del.<br>No. | Deliverable Name                           | Deliverable Description   | Deliverable<br>Due Date* | Number of Days |
|-------------|--|---|--------------------------|----------------|
| I           | Data analysis plan, including table shells | The Consultant will prepare a document describing the type of analysis that will be conducted with the quantitative and qualitative data, collected through the various methods described above. It should include table shells for the quantitative data, spanning all three time points of data collection. | December 2,<br>2022      | 3              |
| 2           | Revised data<br>analysis plan              | The study team will provide feedback in two weeks. The Consultant will revise the plan accordingly.   | January 13,<br>2023      | 2              |
| 3           | Tables with cleaned and analyzed           | In accordance with the data analysis plan, the Consultant will clean the data from health   | January 27,<br>2023      | 4              |

| Del.<br>No. | Deliverable Name   | Deliverable Description  | Deliverable<br>Due Date* | Number of Days |
|-------------|--|--|--------------------------|----------------|
|             | quantitative data<br>from TI and T2  | worker surveys (T1 and T2) and client exit interviews (T2) and populate the table shells. This should include results scores or aggregate variables proposed in the analysis plan.   |                          | _              |
| 4           | Revised tables with cleaned and analyzed quantitative data from T1 and T2          | The study team will provide feedback in two weeks. The Consultant will revise the tables accordingly.  | February 24,<br>2023     | 1.5            |
| 5           | Tables with cleaned<br>and analyzed<br>quantitative data<br>from T1, T2, and<br>T3 | In accordance with the data analysis plan, the Consultant will clean the data from health worker surveys (T1, T2, and T3) and client exit interviews (T2 and T3) and populate the table shells. This will include results from the statistical analysis described in the analysis plan, such as comparisons between time points. | May 19, 2023             | 3              |
| 6           | Deductive and inductive codebook (with codes and definitions)                      | The Consultant will develop deductive (predetermined) codes based on the research questions and study variables. Following transcription of the FGDs, the Consultant will develop an inductive codebook, which should include codes and definitions.   | May 26, 2023             | 2              |
| 7           | Revised tables with cleaned and analyzed quantitative data from T1, T2, and T3     | The study team will provide feedback in two weeks. The Consultant will revise the tables accordingly.  | June 9, 2023             | 1.5            |
| 8           | Revised codebook<br>(with codes and<br>definitions)                                | The study team will provide feedback in one week. The Consultant will revise the codebook accordingly.   | June 9, 2023             | I              |
| 9           | Matrices of coded text   | In accordance with the final codebook, the Consultant will prepare matrices of coded text.   | June 23, 2023            | 5              |
| 10          | Revised matrices of coded text   | The study team will provide feedback in one week. The Consultant will revise the matrices accordingly.   | July 7, 2023             | I              |
| П           | Draft of methods<br>and results sections<br>of the manuscript                      | The Consultant will draft the methods and results sections in accordance with the study protocol, data analysis plan, and with input from USAID Advancing Nutrition. This will be approximately 10 pages.  | July 14, 2023            | 3              |
| 12          | Revised methods<br>and results sections<br>of the manuscript                       | The study team will provide feedback in two weeks. The Consultant will revise the methods and results sections accordingly.  | August 4,<br>2023        | 2              |
| 13          | Comments on other sections of the manuscript                                       | The study team will prepare other sections of the manuscript. The Consultant will review and provide feedback on the entire manuscript.  | September I,<br>2023     | 3              |

<sup>\*</sup>Dates subject to change based on USAID Advancing Nutrition Activity Manager approval

The total LOE is equivalent to approximately 33 days.

## **E.** Consultant Qualifications

- I. Master's degree or in a master's program for public health or a related field;
- 2. 5-10 years of work experience in public health and nutrition, particularly in relation to maternal, infant, and young child nutrition.
- 3. Certification of completion within the previous five years of an ethics in research training course such as those offered by <u>CITI</u>, <u>TRREE</u>, <u>NIH</u>, <u>FHI 360</u> or <u>GHTC</u>.
- 4. Expertise in qualitative research for maternal and child health, preferably in Kenya;
- 5. Previous experience with qualitative data analysis software;
- 6. Access to Stata software.