

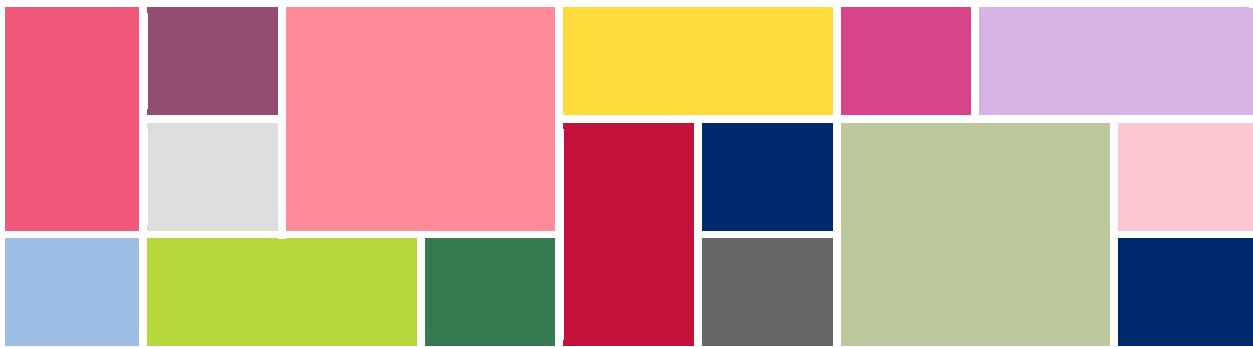


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Maternal and Child
Survival Program

Rapid Knowledge, Practices and Coverage (KPC) Survey

Maternal and Newborn Care (MNC) Module



MCSP is a global USAID initiative to introduce and support high-impact health interventions in 25 priority countries to help prevent child and maternal deaths. MCSP supports programming in maternal, newborn, and child health, immunization, family planning and reproductive health, nutrition, health systems strengthening, water/sanitation/hygiene, malaria, prevention of mother-to-child transmission of HIV, and pediatric HIV care and treatment. MCSP will tackle these issues through approaches that also focus on household and community mobilization, gender integration, and digital health, among others.

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I. Overview

The module yields information on maternal and newborn care (MNC) during pregnancy, delivery, and the postpartum period. The module includes indicator definitions, a summary of updates made to the module, notes for program managers, notes for interviewers, the tabulation plan, other data sources, and the survey questionnaire.

2. Indicators

The following indicators can be calculated using the MNC Knowledge, Practices, and Coverage (KPC) questionnaire included with this module. The indicators are divided into three sections: maternal health (Table 1 through 5), newborn health (Table 6 through 9), and gender (Table 10). Key indicators are listed with their indicator reference numbers at the beginning of each section. Some indicators are repeated in both sections; this enables standalone indicator lists to be pulled out for either maternal or newborn health. (Note, however, that there is no repetition in other sections of this module; the questionnaire, tabulation plan, instructions, etc., all integrate the maternal and newborn components.)

Key Indicators

Within the list of indicators for each section, several are designated as key indicators. Key indicators should be reported by all programs implementing an MNC component if they are relevant to the project context (i.e., only include the IPT indicator if the project is in a malarial area). The indicator tables contain indicator names and definitions, and a column that indicates whether an indicator is a key (K) indicator, LiST (L) indicator, or gender (G) indicator. Numerators and denominators are not included in the tables in this section, but they can be found in the [Tabulation Plan](#). LiST indicators are those that can be input into the [Lives Saved Tool](#) (LiST). If the indicator modeled in LiST is similarly but somehow different from the KPC indicator, the LiST indicator's definition is noted as a footnote.

Key Maternal Health Indicators

Indicator 1.2: Antenatal care (4+ visits)

Indicator 1.13: Intermittent preventive treatment (IPT) (3+)

Indicator 1.14: Long-lasting insecticidal net (LLIN) use

Indicator 2.1: Skilled attendant at birth

Indicator 2.2: Facility birth

Indicator 2.3: Cesarean section

Indicator 4.1: Postnatal care for mothers

Table 1. Maternal Health Indicators: Pregnancy

Indicator	Definition	Key/LiST
Antenatal Care		
1.1 Antenatal care (1+ visit)	Percentage of mothers of children age 0–23 months who received one or more antenatal care visits from a skilled health provider	
1.2 Antenatal care (4+ visits)	Percentage of mothers of children age 0–23 months who had four or more antenatal visits while pregnant with their youngest child	K/L
1.3 Iron tablets (<i>possession</i>)	Percentage of mothers of children age 0–23 months who received or purchased any iron tablets during the most recent pregnancy while pregnant with their youngest child	
1.4 Iron tablets (<i>consumption</i>)	Percentage of mothers of children age 0–23 months who took iron tablets for 90 or more days while pregnant with their youngest child	L*
1.5 Maternal tetanus toxoid vaccination (Neonatal tetanus protection)	Percentage of children age 0–23 months protected at birth from neonatal tetanus through maternal tetanus toxoid immunization	L
1.6 HIV testing	Percentage of mothers of children 0–23 months who were tested for HIV and received their results while pregnant with their youngest child	
1.7 Syphilis screening	Percentage of mothers of children 0–23 months who were screened for syphilis while pregnant with their youngest child	L**
1.8 TB testing (in areas with high HIV prevalence)	Percentage of mothers of children 0–23 months were tested for TB who while pregnant with their youngest child	
1.9 Deworming treatment	Percentage of mothers of children 0–23 months who took deworming treatment while pregnant with their youngest child	
1.10 Counseling	Percentage of mothers of children 0–23 months who were counseled on the following while pregnant with their youngest child: <ol style="list-style-type: none"> 1. Danger signs during pregnancy, delivery, or postnatal (mother and newborn) 2. Nutrition during pregnancy 3. Rest during pregnancy 4. Self-care during pregnancy 5. Birth planning 6. Postpartum family planning 7. Breastfeeding 	
1.11 Urine test (for facility antenatal care)	Percentage of mothers of children 0–23 months who received a urine test during an antenatal care visit while pregnant with their youngest child	
1.12 Blood pressure taken	Percentage of mothers of children 0–23 months who had their blood pressure taken during an antenatal care visit while pregnant with their youngest child	

Indicator	Definition	Key/LiST
Malaria in Pregnancy: Prevention and Care Seeking		
I.13 Intermittent preventative treatment (IPT) for malaria during last pregnancy	Percentage of mothers of children age 0–23 months who received IPT for malaria, broken into the following categories: ¹ <ul style="list-style-type: none"> • 1 dose • 2 doses • 3 doses • 4+ doses 	K(3+)/L(2+) ^{***}
I.14 Long-lasting insecticidal net (LLIN) use by women during pregnancy ²	Percentage of mothers of children age 0–23 months who reported they slept under an insecticide-treated net (ITN) all of the time or most of the time during their most recent pregnancy	K/L ^{***}
I.15 Appropriate care seeking for fever during last Pregnancy	Percentage of mothers of children age 0–23 months who had fever during pregnancy with the youngest child and sought care from an appropriate provider	L ^{****}
Birth Preparedness		
I.16 Birth preparedness (any)	Percentage of mothers of children 0–23 months who made birth preparations before the birth of their youngest child	
I.17 Birth preparedness: Money saved	Percentage of mothers of children 0–23 months who saved money for the birth of their youngest child	
I.18 Birth preparedness: Transportation plan (including emergency plan) in place	Percentage of mothers of children 0–23 months who had a transportation and emergency plan in place for the birth of their youngest child	
I.19 Birth preparedness: Birth companion decided	Percentage of mothers of children 0–23 months who decided on a birth companion before the birth of their youngest child	
I.20 Birth preparedness: Place to deliver decided	Percentage of mothers of children 0–23 months who decided on a place to deliver before the birth of their youngest child	
Misoprostol Possession		
I.21 Misoprostol possession	Percentage of mothers of children 0–23 months who were given misoprostol to take immediately after they delivered their youngest child to prevent postpartum hemorrhage	

* LiST indicator: Percentage of pregnant women receiving iron folate supplementation

** LiST indicator: Percentage of pregnant women screened for syphilis with the rapid plasma reagent test and treated with 2.4 MIU benzathine penicillin, if needed

*** LiST is set up to include only one of the two of these indicators in any given projection.

**** LiST indicator: Percentage of pregnant women with malaria who are treated for malaria between contraception and 6 weeks after delivery

¹ Current World Health Organization recommendations are for women to receive three doses of IPT, but for programs to track progress, this indicator should be broken down into categories by dose.

² The indicator “LLIN Use during Pregnancy” is not comparable to the indicator “Use of ITNs by Pregnant Women” found in the Demographic and Health Survey and other large-sample surveys. The KPC does not have a large enough sample of currently pregnant women for this indicator to be calculated. Instead, the self-reported KPC indicator covering the previous pregnancy is meant to give project managers an idea about the practice of this behavior in the project area.

Table 2. Maternal Health Indicators: Labor and Delivery

Indicator	Definition	Key/LiST
2.1 Skilled birth attendant	Percentage of last-born children age 0–23 months whose births were attended by skilled health personnel	K/L
2.2 Facility birth	Percentage of last-born children age 0–23 months who were born in a health facility	K/L*
2.3 Cesarean section	Percentage of last-born children age 0–23 months who were delivered by cesarean section	K
2.4 Augmented delivery	Percentage mothers of children age 0–23 months who were delivered using augmented delivery (induced or accelerated labor) when giving birth to their youngest child	
2.5 Assisted delivery	Percentage of mothers of children age 0–23 months who when giving birth to their youngest child were delivered with forceps or vacuum/suction	
2.6 Oxytocin injection	Percentage of mothers of children age 0–23 months who received an injection immediately after they delivered their youngest child to prevent postpartum hemorrhage	
2.7 Misoprostol use	Percentage of mothers of children age 0–23 months who took misoprostol immediately after they delivered their youngest child to prevent postpartum hemorrhage	

* In LiST, if the information is available, facility deliveries can be disaggregated by essential care, basic emergency obstetric care, and comprehensive emergency obstetric care facilities; home deliveries can be disaggregated by assisted and unassisted deliveries.

Table 3. Maternal Health Indicators: Respectful Maternal Care

Indicator	Definition	Key/LiST
3.1 Birth companion wanted	Percentage of mothers of children age 0–23 months who wanted a birth companion during labor and/or delivery of their youngest child	G
3.2 Birth companion present	Percentage of mothers of children age 0–23 months who had a birth companion with them during labor and/or delivery of their youngest child <i>Optional disaggregation by birth companion:</i> <ul style="list-style-type: none"> • Mother • Mother-in-law • Sister • Child's father • Other family member • Sister-in-law • Friend/neighbor • Traditional birth attendant 	G
3.3 Laboring positions	Percentage of mothers of children age 0–23 months who were able to labor with their youngest child in the positions they wanted	G
3.4 Birth position	Percentage of mothers of children age 0–23 months who delivered their youngest child in the position they wanted to be in	G
3.5 Disrespectful care (self)	Percentage of mothers of children age 0–23 months who experienced physical or verbal abuse during labor or childbirth or immediate postpartum in a health facility	G

Indicator	Definition	Key/LiST
3.6 Disrespectful care (others)	Percentage of mothers of children age 0–23 months who reported awareness that other women experienced physical or verbal abuse during labor or childbirth or immediate postpartum in a health facility	G
3.7 Facility recommendation	Percentage of mothers of children age 0–23 months who would recommend the health facility to a friend or family member to give birth	G

Table 4. Maternal Health Indicators: Postdelivery Care

Indicator	Definition	Key/LiST
4.1 Postnatal care for mothers	Percentage of mothers of children age 0–23 months who received postnatal care from an appropriately trained health worker within 2 days of birth of their youngest child	K

Table 5. Maternal Health Indicators: Knowledge

Indicator	Definition	Key/LiST
5.1 Knowledge of pregnancy danger signs	Percentage of mothers of children age 0–23 months who know at least two danger signs during pregnancy	
5.2 Knowledge of delivery danger signs	Percentage of mothers of children age 0–23 months who know at least two danger signs during delivery	
5.3 Knowledge of maternal postpartum danger signs	Percentage of mothers of children age 0–23 months who know at least two postpartum danger signs for the mother	

Key Newborn Health Indicators

Indicator 6.1: Antenatal care (1+ visit)

Indicator 6.2: Antenatal care (4+ visits)

Indicator 6.3: Neonatal tetanus protection (maternal tetanus toxoid vaccination)

Indicator 7.1: Skilled attendant at birth

Indicator 7.2: Facility birth

Indicator 7.3: Cesarean section

Indicator 7.4: Birthweight

Indicator 8.1: Postnatal care for mothers

Indicator 8.2: Postnatal care for newborns

Indicator 8.3: Early initiation of breastfeeding

Table 6. Newborn Health Indicators: Pregnancy

Indicator	Definition	Key/LiST
6.1 Antenatal care (1+ visit)	Percentage of mothers of children age 0–23 months who received one or more antenatal care visits from a skilled health provider	K
6.2 Antenatal care (4+ visits)	Percentage of mothers of children age 0–23 months who had four or more antenatal visits while pregnant with their youngest child	K/L
6.3 Neonatal tetanus protection (maternal tetanus toxoid vaccination)	Percentage of last-born children age 0–23 months protected at birth from neonatal tetanus through maternal tetanus toxoid immunization	K/L

Table 7. Newborn Health Indicators: Labor and Delivery

Indicator	Definition	Key/LiST
7.1 Skilled attendant at birth	Percentage of last-born children age 0–23 months whose birth was attended by skilled health personnel	K/L
7.2 Facility birth	Percentage of last-born children age 0–23 months who were born in a health facility	K/L*
7.3 Cesarean section	Percentage of last-born children age 0–23 months who were delivered by cesarean section	K
7.4 Birthweight	Percentage of last-born children age 0–23 months with a reported birthweight	K

* In LiST, if the information is available, facility deliveries can be disaggregated by essential care, basic emergency obstetric care, and comprehensive emergency obstetric care facilities; home deliveries can be disaggregated by assisted and unassisted deliveries.

Table 8. Newborn Health Indicators: Postdelivery

Indicator	Definition	Key/LiST
8.1 Postnatal care for mothers	Percentage of mothers of children age 0–23 months who received postnatal care from an appropriately trained health worker within 2 days of birth of their youngest child	K
8.2 Postnatal care for newborns	Percentage of last-born children age 0–23 months who received postnatal care from an appropriately trained health worker within 2 days of birth	K/L
8.3 Early initiation of breastfeeding	Percentage of last-born children age 0–23 months who were put to the breast within the first hour after birth	K
8.4 Clean cord cut	Percentage of last-born children age 0–23 months who had their umbilical cord cut with a clean instrument (nonfacility births only)	
8.5 Thermal care: Immediate drying	Percentage of last-born children age 0–23 months who were dried immediately after birth	
8.6 Thermal care: Skin-to-skin	Percentage of last-born children age 0–23 months who were placed on the mother's bare chest immediately after birth	L*
8.7 Thermal care: Delayed bathing	Percentage of last-born children age 0–23 months whose first bath was delayed until at least 6 hours after birth	L*

Indicator	Definition	Key/LiST
8.8 Cord care ³	Percentage of last-born children age 0–23 months who had nothing harmful applied to the umbilical cord stump	
8.9 Feeding colostrum	Percentage of last-born children age 0–23 months who were fed colostrum	
8.10 Pre-lacteal feeds	Percentage of last-born children age 0–23 months who did not receive prelacteal feeds	
8.11 Prophylactic eye care	Percentage of last-born children age 0–23 months who received appropriate preventive eye care within the first hour after birth	
8.12 Postnatal care signal functions ³	Percentage of last-born children age 0–23 months who had at least two signal functions checked within 2 days of birth	

* Percentage of newborns whose mother delays the infant's bath and practices skin-to-skin contact to maintain thermal control of the infant

Table 9. Newborn Health Indicators: Maternal Knowledge

Indicator	Definition	Key/LiST
9.1 Knowledge of newborn danger signs	Percentage of mothers of children age 0–23 months who know at least two newborn danger signs	

Table 10. Gender Indicators

Indicator	Definition	Key/LiST t
10.1 Antenatal care accompaniment	Percentage of mothers of children age 0–23 months whose husband/partner accompanied them to at least one antenatal counseling visit	G
10.2 Birth preparedness support (any)	Percentage of mothers of children 0–23 months whose husband/partner helped make birth preparations before the birth of their youngest child	G
10.3 Birth preparedness support: Money saved	Percentage of mothers of children 0–23 months whose husband/partner helped save money for the birth of their youngest child	G
10.4 Birth preparedness support: Transportation plan in place	Percentage of mothers of children 0–23 months whose husband/partner helped put a transportation plan in place for the birth of their youngest child	G
10.5 Birth preparedness support: Place to deliver decided	Percentage of mothers of children 0–23 months whose husband/partner helped decided on a place to deliver before the birth of their youngest child	G
10.6 Decision about delivery location	Percentage of mothers of children 0–23 months who decided on the place to deliver their youngest child by themselves (independently) or jointly with someone else	G

³Suggested indicator, but needs additional testing

3. Updates to the Module

This module was revised in 2017 to make the survey compatible with state-of-the-art MNC indicators. A concerted effort was made to harmonize the indicators presented here with those already in use by key initiatives, including MEASURE Evaluation, the Demographic and Health Surveys (DHSs), and the *Millennium Development Goals Multiple Indicator Cluster Survey (MICS)*, ensuring compatibility between this module and MNC information collected using other questionnaires. Several updates have been made to the MNC KPC module:

- The “Notes for Program Managers” section has been updated to include additional context considerations and important programmatic considerations for newborn care.
- Three questions were added to better assess the gender dimensions of MNC:
 - **Question MN106** was added to assess whether a woman’s husband/partner accompanied her to any antenatal care visits.
 - **Question MN126** was added to assess whether a woman’s husband/partner helped her prepare financially or logistically for the birth.
 - **Question MN202** was added to assess decision-making about delivery, specifically to determine who made the decision about where the woman delivered her child and whether this decision was made independently by the woman, by someone else, or jointly by the woman and someone else.
- **MN114** was clarified to focus on women’s knowledge of danger signs, and to specify adaptation to include community-based providers and health facilities as sources of immediate care if there is a community-based MNC platform in the program area.
- **MN122** was clarified to specify whether the pills were given along with instruction to take just after birth. This question is only relevant in program areas that are doing advanced distribution of misoprostol.
- **Question MN123** was added to determine whether the woman self-administered misoprostol after birth. This question is only relevant in programs areas that are doing advanced distribution of misoprostol.
- **Question MN204** and **MN205** were added and **MN206** was rephrased to more clearly determine whether the woman wanted a companion present during labor and delivery, if she had a companion present during labor and delivery, and who that companion was.
- **Question MN207** was added and **MN208** was clarified to more clearly determine whether a woman was able to labor in the position(s) that she wanted to be in and whether she delivered her child in the position(s) she wanted to be in.
- **Question MN210** was updated to include answer options for pills (misoprostol) and something placed inside the vagina.
- **Question MN215** was added to determine whether women received an oxytocin injection to prevent postpartum hemorrhage. Though research is ongoing on the validity of women’s recall of receiving oxytocin injections, this question was added to avoid a missed opportunity to capture these data in settings where this intervention is used.
- **Question MN218** was clarified to focus on women’s knowledge of symptoms requiring immediate care at a health facility.
- **Questions MN239** and **MN240** were clarified to focus on physical or verbal abuse that women may have experienced during labor, birth, or immediately postpartum, and whether they had heard about other women experiencing physical or verbal abuse.
- **Question MN305** was clarified to focus on women’s knowledge of symptoms requiring immediate care at a health facility.

- **Question MN311** was clarified to focus on women’s knowledge of newborn symptoms requiring immediate care at a health facility.
- Eight additional indicators were added to the tabulation plan:
 - Indicator 1.22 was added to measure the percentage of mothers who self-administered misoprostol after delivery. This indicator is only relevant to calculate for program areas that are doing advanced distribution of misoprostol.
 - Additional indicators for respectful maternal care were added, breaking the previous indicator into two: Indicator 3.1 measures the percentage of mothers who wanted a birth companion present, and indicator 3.2 measures the percentage of mothers who had a birth companion, with optional disaggregation by companion of choice.
 - Six gender indicators (10.1–10.6) were added to the tabulation plan. Indicators 10.1–10.5 measure birth preparedness support from a woman’s husband/partner. Indicator 10.6 measures decision-making about delivery location.
- The survey questionnaire has been programmed into a mobile-friendly module in addition to the Microsoft Excel version, which is intended to minimize mobile programming errors made through independent user adaptations and make mobile collection easier.

4. Notes for Program Managers

This section outlines items that program managers/survey leaders need to prepare in advance before they implement the KPC and train a data collection team.

Context Considerations

To choose the pieces of the MNC KPC module and then adapt them appropriately for your program, the following should be determined:

- What is the national policy (or policies) for MNC?
- How is the policy implemented in the project area?
- Are there community-based providers who provide MNC services? If so, what are their roles? What drug(s) are they allowed to administer?
- What programs educate mothers at the community level on newborn care and danger signs?
- Are HIV counseling and testing components of routine antenatal care?
- What are the standard components of antenatal care?
- Is the project area endemic for malaria? Is malaria present sporadically?
- Is IPT recommended in the project area? If it is not recommended, is case management of malaria in pregnancy recommended?
- Are bed nets used to prevent malaria in the project area? If so, are ITNs still commonly used in your project area, and do owners retreat their nets? Are LLINs most commonly used?
- Are oxytocin injections used to prevent postpartum hemorrhage in the project area?
- Is misoprostol recommended or used to prevent postpartum hemorrhage in the project area?

Choosing Indicators

There are a large number of indicators presented in this module. It is important that program managers recognize that they do not need to collect data or report each and every one of them. As with all surveys, program managers need to strike a balance between collecting sufficient information to make decisions and assess progress, and collecting too much information that unnecessarily consumes limited resources. The scope and focus on the program and the local context (answers to questions above) will help determine which questions and indicators to include in the survey. For example, if national policy for malaria in pregnancy is case management and not IPT, the project will not use the indicator for IPT coverage.

When selecting indicators, it is important to consider both the long-term and the short-term objectives and how each will be measured. Benchmark indicators, which measure progress made toward achieving greater outcomes, are key to ensuring programs and initiatives are on track to reaching long-term goals.

The indicators listed as key maternal health indicators should be included in all surveys if the project has a maternal health component. Likewise, the indicators listed as key newborn health indicators should be included in all surveys if the project has a newborn health component. For all other MNC indicators, program managers will need to choose those indicators that best meet program needs.

Questionnaire Overview

The MNC questionnaire is divided into three sections: pregnancy, delivery and essential newborn care, and postnatal care. Questions that may be useful to collect but that are not needed to calculate any of the indicators in this module have been included with a footnote. They have not been omitted because they may provide additional information useful for program implementation. These questions can be used to disaggregate existing indicators or develop additional program-specific indicators. In some cases, program managers may need to add more questions to the survey to be able to report additional program-specific indicators (e.g., distribution of bed nets through antenatal care).

After the list of program indicators to be collected from the household survey is finalized, any questions that are not needed to calculate the selected indicators can be removed from the questionnaire. For instance, if IPT for malaria is not practiced in the program area, questions used to calculate IPT indicators are not needed. Similarly, if HIV testing is not part of antenatal care in the program area, the associated survey questions are not needed.

Some survey questions include instructions to the interviewer to show the respondent an example or picture to help her remember (e.g., brands of LLINs, misoprostol pills, iron pills, deworming medication, and malaria prevention drugs). Decide before the survey is implemented what is best. Ensure that the interviewer instructions within the questionnaire are adapted appropriately, the interviewers have the necessary materials, and they are properly trained.

It is important to note the survey question that merges “immediate” and “less than 1 hour” as the time at which the newborn was dried. These two answers cannot be separated because “less than 1 hour” includes “immediate.” However, the practice that is being promoted is immediate drying, which refers to drying just after birth as part of transition to breathing. If observation of clinical practices are conducted in a concurrent health facility survey, a more precision response would be useful.

Survey question **MN224** asks about whether a blade used to cut the umbilical cord during a home birth was boiled; this is a newer question and has not yet been validated. Multiple survey questions included in this module may have validity issues due to the mother’s poor recall of the period immediately following birth: **MN213**, **MN214**, **MN215**, and **MN302**. If these questions are included in your survey, interpretation of these results should be done with caution. Updates to postnatal care survey questions that account for these validity issues are anticipated in 2018.

Common Survey Question Considerations for Adaptation

Many of the indicators and corresponding questions in this module are based on international standards or current best practices, but some may need to be modified because of national policy, local context, or language. The following table contains common adjustments to consider. *The tabulation plan must be adjusted in parallel.*

Table 11. Questionnaire Questions That May Require Adaptation

Question No.	Consideration
Pregnancy (Submodule MN1)	
MN102	Adapt list of antenatal care locations as needed.
MN103	Adapt list of antenatal care providers as needed.
MN107	Adapt list of antenatal care services as needed.
MN108	Adapt list of counseling topics as needed. Ensure that the wording makes sense locally.
MN114	Tailor to country recommendations and to what is needed for behavior change communication. Ensure that the wording makes sense locally.
MN122 and MN123	Only include if advanced distribution of misoprostol is occurring in the program area.
MN128 and MN129	Adapt list of malaria drugs as needed.
MN132	Adapt list of long-lasting insecticidal net brands to reflect locally available products.
MN136	Adapt list of locations where mother was treated for fever during pregnancy as needed.
Labor, Delivery, and Essential Newborn Care (Submodule MN2)	
MN201	Adapt list of delivery locations as needed.
MN203	Adapt list of birth assistants as needed.
MN206	Adapt list of birth companions as needed.
MN218	Tailor to country recommendations and to what is needed for behavior change communication. Ensure that the wording makes sense locally.
MN224	Adapt list of instruments used to cut the umbilical cord as needed.
MN227	Adapt list of materials that could be placed on the umbilical cord stump as needed.
Postnatal Care (Submodule MN3)	
MN303 and MN308	Adapt list of postnatal care providers as needed.
MN304 and MN309	Adapt list of postnatal care locations as needed.
MN305 and MN311	Tailor to country recommendations and to what is needed for behavior change communication. Ensure that the wording makes sense locally.

5. Notes for Interviewers

For this module, questions are asked about the youngest child age 0–23 months or about the pregnancy and delivery of this child.

Asking Questions and Recording Answers

It is important that you ask each question *exactly as it is written* on the questionnaire. In addition to the questions, there are statements that appear in all capital letters, indicating that they are interviewer instructions and should not be read aloud to the mother. Several of these are filter questions to help the interviewer know where to proceed next with the questionnaire. For example, **MN223** asks, “Check **MN201**: Did the mother

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deliver at home?” If the answer is “home birth,” you would then ask **MN224**. If the answer is “facility birth,” you would then skip to **MN225**.

Most questions in this module have precoded responses that should *not be read aloud to the mother*. When you ask a question, you should listen to the mother’s response and then circle the code next to the category that best matches her answer or write the mother’s response on the survey form, if appropriate. Sometimes it will be appropriate to circle multiple answers. Read the instructions on the questionnaire carefully for each question.

When you see a question with “(NAME),” you should insert the name of the child about whom you are interviewing the mother (the child whose name is listed on the cover page). For example, **MN220** reads, “Was (NAME) weighed at birth?” If the child’s name is Carlos, you will ask the mother, “Was Carlos weighed at birth?” For filter questions, “(NAME)” tells you that the question refers specifically to the child listed on the cover page.

The skip pattern for some questions indicates “END” rather than a question number. If “END” is indicated, this means end the current submodule and skip to next applicable submodule.

Filling in Identification Information

To calculate the indicators for this module, the child’s date of birth must be recorded. Normally, this module is part of a larger KPC survey. This information is collected at the beginning of the interview, but it is important to make sure that date of birth and other crucial identification information (cluster number or supervision area, household number, and record number) are recorded as part of the survey.

Important Notes about Asking Certain Questions

Pregnancy

MN120 (iron tablets): Because some women may not know that they were given iron tablets, show the woman the sample tablets (or a picture of the tablets) as you ask this question. Note that this question is not asking whether she consumed the tablets she was given or bought but whether she had tablets in her possession during the pregnancy.

MN121 (iron tablets): If the respondent was given or bought iron tablets (YES in **MN120**), ask her for how many days during her pregnancy she took the tablets. If the answer is not numeric, probe for the approximate number of tablets. Record the response in the boxes. Remember to put a leading zero in front if the number of days is less than 100; 30 days would be “030.”

MN122 (misoprostol): Because some women may not know that they were given tablets to prevent too much bleeding during pregnancy, show the woman the sample tablets (or a picture of the tablets) as you ask this question. Note that this question is not asking if she consumed the tablets but if she had tablets in possession during the pregnancy. This question is only relevant and should only be included if the program area had advanced distribution of misoprostol.

MN123 (misoprostol): Though this section of the module focuses on pregnancy and time before delivery, this question follows up on the previous question to help determine if the woman self-administered misoprostol that was distributed in advance. Note that questions about misoprostol administration are also included in the next section of this module (**MN215** and **MN216**), but this question helps identify the source of misoprostol taken in program areas where there is advanced distribution of misoprostol.

MN124 (deworming treatment): Because some women may not know that they were given tablets for intestinal worms during pregnancy, show the woman the sample tablets (or a picture of the tablets) as you ask this question.

MN128 and MN129 (antimalarial drugs): If the respondent took an antimalarial drug to prevent malaria during her last pregnancy but she does not know which drug it was or cannot remember the name, ask her to show you the package that the drug came in. If she does not have the package, show her typical antimalarial drugs (or a picture of the drugs) and ask if she took any of them. If she mentions that she was given three big, white tablets to take all at the same time to prevent malaria, circle “A” on the assumption that she took SP/Fansidar. Note that you should circle more than one code if the respondent says that she took more than one type of drug to prevent malaria.

MN130 (antimalarial drug doses): This asks about *preventive doses of SP/Fansidar*, not curative doses given if the respondent had a fever. Only count the doses of SP/Fansidar taken during the respondent’s pregnancy to prevent malaria. Do not count the doses she received to treat her fever. This question asks about the number of times the woman took SP/Fansidar, not the number of tablets she took. If she says she only took three tablets one time, record “01” for the number of doses.

Special note: If the respondent says she had malaria or a fever during the pregnancy and was given drugs to treat the malaria or fever, that would not be considered preventive. Drugs to prevent malaria are only drugs that are taken during pregnancy when the woman does not have malaria already.

MN132 (LLINs): Local names of LLINs will be used in this question. If possible, observe the net. If it is not possible to observe the net, use the pictures you were given to aid in identification.

Labor, Delivery, and Essential Newborn Care

Instructions in this section refer to MNC submodule 2, which contains questions about the mother during labor, delivery, and essential newborn care. The following provides clarifying information for two questions. The rest should be clear from the instructions on the questionnaire.

MN216: Because some women may not know that they took tablets to prevent too much bleeding just after she delivered her baby, show the woman the sample tablets (or a picture of the tablets) as you ask this question.

MN230: Since women may not understand what placement of the baby on her bare chest means, show the women an example of skin-to-skin position.

Postnatal Care for the Mother

MN301: Since women may not understand what a “check” means, clarify that the provider may have asked questions or counseled her on her health (in areas such as nutrition, family planning, or hygiene), or the provider may have examined the mother (for example, to check for excessive bleeding).

Postnatal Care for the Newborn

MN306: Since women may not understand what a “check” on her baby’s health means, clarify that the provider may have checked the baby’s cord, assessed the baby’s temperature, weighed the baby, observed the mother breastfeeding, or counseled on danger signs for newborns.

6. Tabulation Plan

The tabulation plan roughly follows the questionnaire. It does not follow the indicator tables because of the duplication among the maternal and newborn tables. The first column in the tabulation plan table indicates whether the indicator is a maternal health indicator (M), a newborn health indicator (N), or both (M/N).

	Indicator	Numerator, Denominator, Calculation
Knowledge (Submodules MN1, MN2, and MN3)		
M	5.1 Knowledge of danger signs during pregnancy Percentage of mothers of children age 0–23 months who knew at least two danger signs during pregnancy	Number of mothers of children 0–23 months who know at least two danger signs during pregnancy MN114 = At least two responses (A–F) × 100 <hr/> Total number of mothers of children age 0–23 months in the survey
M	5.2 Knowledge of maternal danger signs during delivery Percentage of mothers of children age 0–23 months who know at least two danger signs during delivery	Number of mothers of children age 0–23 months who know at least two danger signs during delivery MN218 = At least two responses (A–G) × 100 <hr/> Total number of mothers of children age 0–23 months in the survey
M	5.3 Knowledge of postpartum danger signs Percentage of mothers of children age 0–23 months who know at least two postpartum danger signs for the mother	Number of mothers of children age 0–23 months who know at least two postpartum danger signs for the mother MN305 = At least two responses (A–F) × 100 <hr/> Total number of children age 0–23 months in the survey
N	9.1 Knowledge of newborn danger signs Percentage of mothers of children age 0–23 who know at least two newborn danger signs	Number of mothers of children 0–23 months who know at least two newborn danger signs MN311 = At least two responses (A–K) × 100 <hr/> Total number of mothers of children age 0–23 months in the survey
Pregnancy (Submodule MN1)		
M/N	1.1, 6.1 Antenatal care (1+) Percentage of mothers of children age 0–23 months who had one or more antenatal visits while pregnant with their youngest child	Number of mothers of children age 0–23 months who had one or more antenatal visits while pregnant with their youngest child MN101 = 1 × 100 <hr/> Total number of mothers of children age 0–23 months in the survey

	Indicator	Numerator, Denominator, Calculation
M/N	1.2, 6.2 Antenatal care (4+) Percentage of mothers of children age 0–23 months who had four or more antenatal visits while pregnant with their youngest child	<p>Number of mothers of children age 0–23 months who had four or more antenatal visits while pregnant with their youngest child</p> $\frac{4 \leq \text{MNI05} < 98}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	1.13.a Intermittent preventive treatment for malaria (1 dose) Percentage of mothers of children age 0–23 months who received one or more doses of intermittent preventive treatment (IPT) for malaria while pregnant with their youngest child	<p>Number of mothers of children age 0–23 months who received one or more doses of IPT for malaria while pregnant with their youngest child</p> $\frac{\text{MNI30} \geq 1}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	1.13.b IPT for malaria (2 doses) Percentage of mothers of children age 0–23 months who received two or more doses of IPT for malaria while pregnant with their youngest child	<p>Number of mothers of children age 0–23 months who received two or more doses of IPT for malaria while pregnant with their youngest child</p> $\frac{\text{MNI30} \geq 2}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	1.13.c IPT for malaria (3 doses) Percentage of mothers of children age 0–23 months who received three or more doses of IPT for malaria while pregnant with their youngest child	<p>Number of mothers of children age 0–23 months who received three or more doses of IPT for malaria while pregnant with their youngest child</p> $\frac{\text{MNI30} \geq 3}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	1.13.d IPT for malaria (4+ doses) Percentage of mothers of children age 0–23 months who received four or more doses of IPT for malaria while pregnant with their youngest child	<p>Number of mothers of children age 0–23 months who received four or more doses of IPT for malaria while pregnant with their youngest child</p> $\frac{\text{MNI30} \geq 4}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	1.14 Long-lasting insecticidal net use Percentage of mothers of children age 0–23 months who slept under a long-lasting insecticidal net (LLIN) all of the time or most of the time while pregnant with their youngest child	<p>Number of mothers of children age 0–23 months who slept under an LLIN all of the time or most of the time while pregnant with their youngest child</p> $\frac{[(\text{MNI131} = 1 \text{ OR } 2) \text{ AND } (\text{MNI133} = 1 \text{ OR } 2)]}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$

	Indicator	Numerator, Denominator, Calculation
M	1.15 Care seeking for fever during pregnancy Percentage of mothers of children age 0–23 months with fever at any time while pregnant with their youngest child who sought advice or treatment from an appropriate provider	<p>Number of mothers of children age 0–23 months with fever at any time while pregnant with their youngest child who sought advice or treatment from an appropriate provider</p> <p style="text-align: right;">x 100</p> <hr/> <p>Number of mothers of children age 0–23 months in the survey with fever at any time while pregnant with their youngest child</p> <p style="text-align: center;">MNI 36 = ANY (A–E, G–J)</p> <p style="text-align: center;">MNI 34 = I</p>
M	1.3 Iron tablets (possession) Percentage of mothers of children age 0–23 months who received or purchased any iron tablets or syrup during the most recent pregnancy while pregnant with their youngest child	<p>Number of mothers of children age 0–23 months who received or purchased any iron tablets or syrup during the most recent pregnancy while pregnant with their youngest child</p> <p style="text-align: right;">x 100</p> <hr/> <p style="text-align: center;">MNI 20 = I</p> <p>Total number of mothers of children age 0–23 months in the survey</p>
M	1.4 Iron tablets (consumption) Percentage of mothers of children age 0–23 months who received or purchased iron tablets or syrup and took them for 90 or more days while pregnant with their youngest child	<p>Number of mothers of children age 0–23 months who received or purchased iron tablets or syrup and took them for 90 or more days while pregnant with their youngest child</p> <p style="text-align: right;">x 100</p> <hr/> <p style="text-align: center;">90 ≤ MNI 21 < 998</p> <p>Total number of mothers of children age 0–23 months in the survey</p>
M	1.6 HIV testing during pregnancy Percentage of mothers of children age 0–23 months who while pregnant with their youngest child were tested for HIV and received their results	<p>Number of mothers of children age 0–23 months who while pregnant with their youngest child were tested for HIV and received their results</p> <p style="text-align: right;">x 100</p> <hr/> <p style="text-align: center;">MNI 11 = I</p> <p>Total number of mothers of children age 0–23 months in the survey</p>
M	1.8 TB testing during pregnancy Percentage of mothers of children age 0–23 months who while pregnant with their youngest child were tested for TB	<p>Number of mothers of children age 0–23 months who while pregnant with their youngest child were tested for TB</p> <p style="text-align: right;">x 100</p> <hr/> <p style="text-align: center;">MNI 12 = I</p> <p>Total number of mothers of children age 0–23 months in the survey</p>
M	1.7 Syphilis screening during pregnancy Percentage of mothers of children age 0–23 months who while pregnant with their youngest child were screened for syphilis	<p>Number of mothers of children age 0–23 months who while pregnant with their youngest child were screened for syphilis</p> <p style="text-align: right;">x 100</p> <hr/> <p style="text-align: center;">MNI 13 = I</p> <p>Total number of mothers of children age 0–23 months in the survey</p>

	Indicator	Numerator, Denominator, Calculation
M	1.11 Urine test during pregnancy Percentage of mothers of children age 0–23 months who while pregnant with their youngest child received a urine test during an antenatal care visit	<p>Number of mothers of children age 0–23 months who while pregnant with their youngest child received a urine test during an antenatal care visit</p> $\frac{\text{MNI07 (B) = I}}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	1.12 Blood pressure taken during pregnancy Percentage of mothers of children age 0–23 months who while pregnant with their youngest child had their blood pressure taken during an antenatal care visit	<p>Number of mothers of children age 0–23 months who while pregnant with their youngest child had their blood pressure taken during an antenatal care visit</p> $\frac{\text{MNI07 (A) = I}}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	1.9 Deworming treatment during pregnancy Percentage of mothers of children age 0–23 months who while pregnant with their youngest child took deworming treatment	<p>Number of mothers of children age 0–23 months who while pregnant with their youngest child received/took deworming treatment</p> $\frac{\text{MNI24 = I}}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M/N	1.5, 6.3 Neonatal tetanus protection/maternal tetanus toxoid vaccination Percentage of children age 0–23 months who were protected at birth from neonatal tetanus through maternal tetanus toxoid vaccination	<p>Number of mothers with children age 0–23 months who before the birth of their youngest child received at least two tetanus toxoid vaccinations</p> $\frac{(\text{2} \leq \text{MNI16} < \text{8}) \text{ OR } [(\text{MNI15} = \text{1}) \text{ AND } (\text{1} \leq \text{MNI19} < \text{8})]}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	1.10.1 Danger sign counseling during pregnancy Percentage of mothers of children age 0–23 months who while pregnant with their youngest child were counseled on danger signs during pregnancy, delivery, or the postnatal period (mother and newborn)	<p>Number of mothers of children age 0–23 months who while pregnant with their youngest child were counseled on danger signs during pregnancy, delivery, or the postnatal period (mother and newborn)</p> $\frac{[\text{MNI07(A) = 1 OR MNI07(G) = 1 OR MNI07(H) = 1 OR MNI07(I) = 1]}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$

	Indicator	Numerator, Denominator, Calculation
M	1.10.2 Nutrition counseling during pregnancy Percentage of mothers of children age 0–23 months who while pregnant with their youngest child were counseled on nutrition during pregnancy	<p>Number of mothers of children age 0–23 months who while pregnant with their youngest child were counseled on nutrition during pregnancy</p> $\frac{\text{MNI08(B)} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	1.10.3 Rest counseling during pregnancy Percentage of mothers of children age 0–23 months who while pregnant with their youngest child were counseled on rest during pregnancy	<p>Number of mothers of children age 0–23 months who while pregnant with their youngest child were counseled on rest during pregnancy</p> $\frac{\text{MNI08(C)} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	1.10.4 Self-care counseling during pregnancy Percentage of mothers of children age 0–23 months who while pregnant with their youngest child were counseled on self-care during pregnancy	<p>Number of mothers of children age 0–23 months who while pregnant with their youngest child were counseled on self-care during pregnancy</p> $\frac{\text{MNI08(D)} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	1.10.5 Birth planning counseling during pregnancy Percentage of mothers of children age 0–23 months who while pregnant with their youngest child were counseled on birth planning	<p>Number of mothers of children age 0–23 months who while pregnant with their youngest child were counseled on birth planning</p> $\frac{\text{MNI08(E)} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	1.10.6 Postpartum family planning counseling during pregnancy Percentage of mothers of children age 0–23 months who while pregnant with their youngest child were counseled on postpartum family planning	<p>Number of mothers of children age 0–23 months who while pregnant with their youngest child were counseled on postpartum family planning</p> $\frac{\text{MNI08(F)} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
N	1.10.7 Breastfeeding counseling during pregnancy Percentage of mothers of children age 0–23 months who were counseled on breastfeeding while pregnant with their youngest child	<p>Number of mothers of children age 0–23 months who were counseled on breastfeeding while pregnant with their youngest child</p> $\frac{\text{MNI08(J)} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$

	Indicator	Numerator, Denominator, Calculation
M	I.16 Birth Preparedness (any) Percentage of mothers of children age 0–23 months who made birth preparations before the birth of their youngest child	<p>Number of mothers of children age 0–23 months who made any birth preparations before the birth of their youngest child</p> $\frac{\text{MNI25 ANY (A-D)} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	I.17 Birth preparedness: money saved Percentage of mothers of children age 0–23 months who saved money for the birth of their youngest child	<p>Number of mothers of children 0–23 months who saved money for the birth of their youngest child</p> $\frac{\text{MNI25(A)} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	I.18 Birth preparedness: transportation plan Percentage of mothers of children age 0–23 months who had a transportation and emergency plan in place for the birth of their youngest child	<p>Number of mothers of children 0–23 months who had a transportation and emergency plan in place for the birth of their youngest child</p> $\frac{\text{MNI25(B)} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	I.19 Birth preparedness: birth companion Percentage of mothers of children age 0–23 months who before the birth of their youngest child decided on a birth companion	<p>Number of mothers of children age 0–23 months who before the birth of their youngest child decided on a birth companion</p> $\frac{\text{MNI25(C)} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	I.20 Birth preparedness: delivery place Percentage of mothers of children age 0–23 months who before the birth of their youngest child decided on a place to deliver	<p>Number of mothers of children 0–23 months who before the birth of their youngest child decided on a place to deliver</p> $\frac{\text{MNI25(D)} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	I.21 Misoprostol (possession) Percentage of mothers of children age 0–23 months who did not give birth in a health facility who were given misoprostol during an antenatal care visit to be taken immediately after delivery of her child	<p>Number of mothers of children age 0–23 months who did not give birth in a health facility who were given misoprostol during an antenatal care visit to be taken immediately after delivery of her child</p> $\frac{\text{MNI22} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$

	Indicator	Numerator, Denominator, Calculation
M	1.22 Misoprostol (self-administration) Percentage of mothers of children age 0–23 months who self-administered after delivery of her child	<p>Number of mothers of children age 0–23 months who self-administered misoprostol after delivery of her child</p> $\frac{\text{MNI23} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
Labor and Delivery (Submodule MN2)		
M/N	2.1, 7.1 Skilled attendant at birth Percentage of last-born children age 0–23 months whose births were attended by skilled health personnel	<p>Number of last-born children age 0–23 months whose births were attended by skilled health personnel (doctor, nurse, midwife, auxiliary midwife, or other health staff with midwifery skills)</p> $\frac{\text{MN203} = \text{Any response (A–D)}}{\text{Total number of last-born children age 0–23 months in the survey}} \times 100$
M/N	2.2, 7.2 Facility birth Percentage of last-born children age 0–23 months who were born in a health facility	<p>Number of last-born children age 0–23 months who were born in a health facility (excludes mobile clinic)</p> $\frac{\text{MN201} = \text{Any response (A–C, F, G)}}{\text{Total number of children age 0–23 months in the survey}} \times 100$
M	2.4 Augmented delivery Percentage of mothers of children age 0–23 months who were delivered using augmented delivery (induced or accelerated labor) when giving birth to their youngest child	<p>Number of mothers of children age 0–23 months whose labor for the most recent live birth were augmented after they had already started</p> $\frac{(\text{MN209} = I) \text{ OR } (\text{MN211} = I)}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$ <p><i>Indicator should be disaggregated by place of delivery. Responses to place of delivery should be grouped as relevant to program area.</i></p>
M	2.5 Assisted delivery Percentage of mothers of children age 0–23 months who when giving birth to their youngest child were delivered with forceps or vacuum/ suction	<p>Number of mothers of children age 0–23 months whose last-born child was delivered with forceps or vacuum/suction</p> $\frac{\text{MN213} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$ <p><i>Indicator should be disaggregated by place of delivery. Responses to place of delivery should be grouped as relevant to program area.</i></p>

	Indicator	Numerator, Denominator, Calculation
M	2.3 Cesarean section Percentage of last-born children age 0–23 months who were delivered their youngest child by cesarean section	<p>Number of last-born children age 0–23 months who were delivered by cesarean section</p> $\frac{\text{MN214} = I}{\text{Total number of last-born children age 0–23 months in the survey}} \times 100$
M	2.6 Oxytocin injection Percentage of mothers of children age 0–23 months who received an injection immediately after they delivered their youngest child to prevent postpartum hemorrhage	<p>Number of mothers of children age 0–23 months who received an injection immediately after they delivered their youngest child to prevent postpartum hemorrhage</p> $\frac{\text{MN215} = I}{\text{Total number of mothers of children age 0–23 months in the survey}}$ <p><i>Indicator should be disaggregated by place of delivery, home birth, and level of facility.</i></p>
M	2.7 Misoprostol use Percentage of mothers of children age 0–23 months who took misoprostol immediately after they delivered their youngest child to prevent postpartum hemorrhage	<p>Number of mothers of children age 0–23 months who took misoprostol immediately after they delivered their youngest child to prevent postpartum hemorrhage</p> $\frac{\text{MN216} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$ <p><i>Indicator should be disaggregated by place of delivery, home birth, and level of facility.</i></p>
M	3.1 Birth companion wanted Percentage of mothers of children age 0–23 months who wanted a birth companion during labor and/or delivery of their youngest child	<p>Number of mothers of children age 0–23 months who wanted a birth companion during labor and/or delivery of their youngest child</p> $\frac{\text{MN204} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	3.2 Birth companion present Percentage of mothers of children age 0–23 months who had a birth companion with them during labor and/or delivery of their youngest child Optional disaggregation by birth companion: by: <ul style="list-style-type: none"> • Mother • Mother-in-law • Sister • Child's father • Other family member • Sister-in-law • Friend/neighbor • Traditional birth attendant 	<p>Number of mothers of children age 0–23 months who had a support person or birth companion during labor and/or delivery of their last-born child (total)</p> $\frac{\text{MN205} = I \text{ OR } \text{MN206} = \text{Any response (A–G, X)}}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$ <p><i>Optional indicator can be disaggregated by birth companion (MN206 A–G, X).</i></p>

	Indicator	Numerator, Denominator, Calculation
M	3.3 Laboring positions Percentage of mothers of children age 0–23 months who were able to labor with their youngest child in the positions they wanted	<p>Number of mothers of children age 0–23 months who were able to labor with their youngest child in the positions they wanted</p> $\frac{\text{MN207} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	3.4 Birth position Percentage of mothers of children age 0–23 months who delivered their youngest child in the position they wanted to be in	<p>Number of mothers of children age 0–23 months who delivered their youngest child in the position they wanted to be in</p> $\frac{\text{MN208} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	3.5 Disrespectful care (self) Percentage of mothers of children age 0–23 months who experienced physical or verbal abuse during labor or childbirth or immediate postpartum in a health facility	<p>Number of mothers of children age 0–23 months who when giving birth to their youngest child experienced physical or verbal abuse during labor or childbirth or immediate postpartum in a health facility</p> $\frac{\text{ANY ([MN239 A and/or B] = I)}}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	3.6 Disrespectful care (others) Percentage of mothers of children age 0–23 months who reported awareness that other women experienced physical or verbal abuse during labor or childbirth or immediate postpartum in a health facility	<p>Number of mothers of children age 0–23 months who reported awareness that other women experienced physical or verbal abuse during labor or childbirth or immediate postpartum in a health facility</p> $\frac{\text{ANY ([MN240 A and/or B] = I)}}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
M	3.7 Facility recommendation Percentage of mothers of children age 0–23 months who would recommend the health facility to a friend or family member to give birth	<p>Number of mothers of children age 0–23 months who would recommend the health facility to a friend or family member to give birth</p> $\frac{\text{MN241} = I}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$

	Indicator	Numerator, Denominator, Calculation
Essential Newborn Care and Postnatal Care (Submodules MN2 and MN3)		
N	7.4 Birthweight Percentage of last-born children age 0–23 months with a reported birthweight	<p>Number of last-born children 0–23 months with a reported birthweight</p> $\frac{\text{MN220} = \text{I}}{\text{Total number of last-born children age 0–23 months in the survey}} \times 100$
N	8.4 Clean cord cut Percentage of last-born children age 0–23 months who had their umbilical cords cut with a clean instrument (<i>home births only</i>)	<p>Number of children age 0–23 months who had their umbilical cord cut with a clean instrument</p> $\frac{[\text{MN224} = \text{I OR (MN224} = \text{2, 3, or 4 AND MN225} = \text{1)}]}{\text{Total number of last-born children age 0–23 months not born in a facility in the survey}} \times 100$ <p>MN201 = ANY (J–L)</p>
N	8.8 Appropriate cord care Percentage of last-born children age 0–23 months who had nothing harmful applied to the umbilical cord stump	<p>Number of last-born children age 0–23 months who had nothing harmful applied to the umbilical cord stump</p> $\frac{(\text{MN226} = \text{2}) \text{ OR } (\text{MN227} = \text{C})}{\text{Total number of last-born children age 0–23 months in the survey}} \times 100$
N	8.5 Thermal care: immediate drying Percentage of last-born children age 0–23 months who were dried immediately after birth <i>Note: This answer merges “immediate” and “less than 1 hour” because “less than 1 hour” includes “immediate.” However, the practice that is promoted is immediate drying, which refers to drying just after birth as part of transition to breathing.</i>	<p>Number of last-born children age 0–23 months who were dried immediately after birth</p> $\frac{\text{MN229} = \text{000}}{\text{Total number of children age 0–23 months in the survey}} \times 100$
N	8.6 Thermal care: skin-to-skin contact Percentage of last-born children age 0–23 months who were placed on the mother’s bare chest immediately after birth	<p>Number of last-born children age 0–23 months who were placed on the mother’s bare chest immediately after birth</p> $\frac{\text{MN231} = \text{000}}{\text{Total number of last-born children age 0–23 months in the survey}} \times 100$

	Indicator	Numerator, Denominator, Calculation
N	8.7 Thermal care: delayed bathing Percentage of last-born children age 0–23 months whose first bath was delayed until at least 6 hours after birth	<p>Number of last-born children age 0–23 months whose first bath was delayed until at least 6 hours after birth</p> $\frac{106 \leq \text{MN232} < 998}{\text{Total number of last-born children age 0–23 months in the survey}} \times 100$
N	8.3 Early initiation of breastfeeding Percentage of last-born children age 0–23 months who were put to the breast within 1 hour of delivery	<p>Number of last-born children age 0–23 months who were put to the breast within 1 hour of delivery</p> $\frac{\text{MN235} = 000}{\text{Total number of last-born children age 0–23 months in the survey}} \times 100$
N	8.9 Feeding colostrum Percentage of last-born children age 0–23 months who were fed colostrum	<p>Number of last-born children age 0–23 months who were fed colostrum</p> $\frac{\text{MN236} = 1}{\text{Total number of last-born children age 0–23 months in the survey}} \times 100$
N	8.10 Pre-lacteal feeds Percentage of last-born children age 0–23 months who did not receive pre-lacteal feeds	<p>Number of children age 0–23 months who did not receive any pre-lacteal feeds</p> $\frac{\text{MN237} = 2}{\text{Total number of last-born children age 0–23 months in the survey}} \times 100$
N	8.11 Prophylactic eye care Percentage of children age 0–23 months who received appropriate preventive eye care within the first hour after birth	<p>Number of last-born children 0–23 months who received eye ointment or eye drops within the first hour after birth</p> $\frac{\text{MN233} = 1}{\text{Total number of last-born children age 0–23 months in the survey}} \times 100$
M	4.1, 8.1 Postnatal care for mothers Percentage of mothers of children age 0–23 who received postnatal care from an appropriately trained health worker within 2 days of birth of their youngest child	<p>Number of mothers of children age 0–23 who received postnatal care from an appropriately trained health worker within 2 days of birth of their youngest child.</p> $\frac{[(100 < \text{MN302} \leq 123 \text{ OR } \text{MN302} = 201 \text{ OR } 202) \text{ AND } (\text{MN303} = \text{Any response (A - F)})]}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$

	Indicator	Numerator, Denominator, Calculation
N	8.2 Postnatal care for newborns Percentage of last-born children age 0–23 months who received a postnatal visit from an appropriately trained health worker within 2 days of birth	Number of last-born children age 0–23 months who received a postnatal visit from an appropriately trained health worker within 2 days of birth $\frac{[(100 < \text{MN307} \leq 123 \text{ OR } \text{MN307} = 201 \text{ OR } 202) \text{ AND } (\text{MN308} = \text{Any response (A-F)})]}{\text{Total number of last-born children age 0–23 months in the survey}} \times 100$
N	8.1.2 Postnatal care signal functions Percentage of last-born children age 0–23 months who had at least two signal functions checked within 2 days of birth	Number of last-born children age 0–23 months who had at least two signal functions checked within 2 days of birth $\frac{\text{MN310 [(A) – (E)] At least 2 responses = 1}}{\text{Total number of last-born children age 0–23 months in the survey}} \times 100$
Gender (Submodules MNI and MN2)		
G	10.1 Antenatal care accompaniment Percentage of mothers of children age 0–23 months whose husband/partner accompanied them to at least one antenatal counseling visit	Number of mothers of children age 0–23 months whose husband/partner accompanied them to at least one antenatal counseling visit $\frac{\text{MNI06} = 1}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
G	10.2 Birth preparedness support (any) Percentage of mothers of children 0–23 months whose husband/partner helped make birth preparations before the birth of their youngest child	Number of mothers of children 0–23 months whose husband/partner helped make birth preparations before the birth of their youngest child $\frac{\text{MNI26 ANY (A-C)} = 1}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
G	10.3 Birth preparedness support: money saved Percentage of mothers of children 0–23 months whose husband/partner helped save money for the birth of their youngest child	Number of mothers of children 0–23 months whose husband/partner helped save money for the birth of their youngest child $\frac{\text{MNI26(A)} = 1}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$
	10.4 Birth preparedness support: transportation plan Percentage of mothers of children 0–23 months whose husband/partner helped put a transportation plan in place for the birth of their youngest child	Number of mothers of children 0–23 months whose husband/partner helped put a transportation plan in place for the birth of their youngest child $\frac{\text{MNI26(B)} = 1}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$

	Indicator	Numerator, Denominator, Calculation
	10.5 Birth preparedness: delivery place Percentage of mothers of children 0–23 months whose husband/partner helped decided on a place to deliver before the birth of their youngest child	Number of mothers of children 0–23 months who before the birth of their youngest child decided on a place to deliver $\frac{\text{Number of mothers of children 0–23 months who before the birth of their youngest child decided on a place to deliver}}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$ MN126(C) = I
	10.7 Decision-making about delivery location Percentage of mothers of children 0–23 months who decided on the place to deliver their youngest child by themselves (independently) or jointly with someone else	Number of mothers of children 0–23 months who decided on the place to deliver their youngest child by themselves (independently) or jointly with someone else $\frac{\text{Number of mothers of children 0–23 months who decided on the place to deliver their youngest child by themselves (independently) or jointly with someone else}}{\text{Total number of mothers of children age 0–23 months in the survey}} \times 100$ MN202 = A, C, E, G, I, K, or M

7. Other Data Sources

Qualitative

Certain topics are better explored using qualitative research techniques rather than closed-ended questions. The qualitative research component will yield important information on community knowledge, beliefs, and normative practices related to MNC. For example, findings from focus group discussions could be used to modify the KPC questionnaire to reflect local terms, concepts, and customs. In addition, upon completion of the KPC survey, additional areas may need to be explored. Thus, program staff can employ qualitative methods to provide explanations for specific KPC results (e.g., why the rate of facility births is low). The following list contains a sample of topics relevant to MNC that could be explored through qualitative research means:

- How women care for themselves during pregnancy
- What types of preparations families make before birth
- Perceptions of facility births and births with a skilled birth attendant
- Barriers to facility births and births with a skilled birth attendant (distance to facilities, quality of care, cultural beliefs or practices, etc.)
- Who the influential groups are that affect the behaviors of pregnant women and mothers (e.g., religious leaders, mothers-in-law, husbands), and what specific role each group plays
- How families perceive danger signs/symptoms during pregnancy, delivery, and the postpartum period, and how they decide if and when to seek care for these signs/symptoms
- Availability and functioning of emergency health funds and community emergency transportation
- How communities perceive community-level private providers (e.g., informal providers, traditional birth attendants, traditional healers, drug distributors) and what role each group plays in maternal and child health
- Barriers to seeking/receiving postnatal care (e.g., transportation, cultural practices, quality of care)
- How communities perceive malaria during pregnancy (e.g., beliefs, case management, care seeking for fever, barriers to IPT in pregnancy)

- Special practices for mothers and their babies during the first few weeks after birth (e.g., cultural practices, cultural taboos, superstitions)
 - Difference between rural and urban communities
 - Differences between ethnic/tribal groups and nonethnic/nontribal groups

Please note that while potential topics are provided, the KPC tools do not include guidance on how to conduct qualitative studies.

Social/Verbal Autopsies

To investigate newborn or maternal deaths, social and verbal autopsies may be necessary to capture the circumstances contributing to the deaths. Program managers can find guidance on conducting verbal autopsies in the [2012 World Health Organization verbal autopsy instrument](#).

Health Facility Assessments

The KPC does not include indicators to assess many aspects of quality of care that pregnant women, postpartum women, and newborns are receiving from providers because caregiver recall is generally unreliable for such evaluation. Most projects will need to measure appropriateness of antenatal, labor/delivery, and postnatal care (both maternal and newborn), including counseling quality, and should use more direct methods for assessing provider performance, such as record review, observation, and exit interviews. Such assessments will also help to measure other critical areas, such as staffing, training, supervision, equipment, and commodity supply.

8. Survey Questionnaire

[See Excel file for MNC Questionnaire.]

