Think | BIG
Behavior Integration Guidance

ESTABLISH BEHAVIORAL OUTCOME INDICATORS

http://www.thinkbigonline.org
# TABLE OF CONTENTS

**OVERVIEW**  

**PURPOSE**  

**INTENDED USERS**  

**HOW THIS FITS INTO THINK | BIG**  

**ESTIMATED TIME NEEDED**  

**SAMPLES INCLUDED**  

**WHAT IS THINK | BIG?**  

**THINK | BIG AND BEHAVIORAL OUTCOMES**  

**INSTRUCTIONS**  

**FIRST STEPS**  

**PLAN A: FIND EXISTING EVIDENCE-BASED BEHAVIORAL OUTCOME INDICATORS**  

**PLAN B: DESIGN NEW EVIDENCE-BASED BEHAVIORAL OUTCOME INDICATORS**  

**TIPS FOR MEASURING BEHAVIORAL OUTCOME AND FACTOR-LEVEL INDICATORS**  

**APPENDICES**  

**APPENDIX A: SAMPLE PRIORITY BEHAVIOR LIST WITH BEHAVIOR OUTCOME INDICATORS**  

**APPENDIX B: SAMPLE BEHAVIOR PROFILE AND INDICATORS**  

**APPENDIX C: SAMPLE PERFORMANCE INDICATOR REFERENCE SHEET: ADOLESCENT FIRST BIRTH**  

**APPENDIX D: BEHAVIORAL OUTCOME INDICATORS FOR SELECT PRIORITY BEHAVIORS**  

**APPENDIX E: USAID PERFORMANCE MONITORING INDICATOR CRITERIA CHECKLIST**
LIST OF FIGURES

FIGURE 1: HOW ESTABLISH BEHAVIORAL OUTCOME INDICATORS FITS INTO THE THINK | BIG PROCESS ................................................................................................................................................... 1
FIGURE 2: SAMPLE BEHAVIOR PROFILE WITH USE (BEHAVIORAL OUTCOME) AND ACCESS (FACTOR-LEVEL) INDICATORS ................................................................................................................................................... 7

LIST OF TABLES

TABLE 1: EXAMPLE OF AN INDICATOR TABLE USING EXISTING INDICATORS ................................................. 4
TABLE 2: EXAMPLE OF AN INDICATOR TABLE USING NEWLY DEVELOPED INDICATORS ......................... 6
OVERVIEW

PURPOSE
Development activities have many required and competing measurement priorities. Programs must meet
the need for quality data and direct measurement of program results, while also meeting any additional
measurement requirements. Too often, lack of time or resources results in the use of performance
monitoring indicators developed without deep technical consideration of the intricacies behind them, or
of the context in which these metrics are collected. Such metrics often are related to the result of
interest, but are not the most appropriate ones.

This tool provides high-level guidance rooted in widely-accepted best practices in monitoring and
evaluation (M&E) and behavior change that can be used to enhance the development of behavioral,
outcome-level indicators. Apply a similar degree of thoughtfulness to the selection of indicators to
measure factors impeding or motivating the behaviors and supporting actor actions required to enable
the behaviors.

INTENDED USERS
This tool is suitable for both M&E and
technical specialists interested in
enhancing their behavioral metrics. M&E
and technical experts should jointly
select final indicators.

HOW THIS FITS INTO THINK | BIG
As shown in Figure 1, establishing
behavioral outcome indicators is part of
Step 3 of Think | BIG: Track and Adapt.

ESTIMATED TIME NEEDED
2 hours per indicator, in addition to external
consultations and indicator research

SAMPLES INCLUDED
- Appendix A: Sample Priority Behavior List with Behavioral Outcome Indicators
- Appendix B: Sample Behavior Profile and Indicators
- Appendix C: Sample Performance Indicator Reference Sheet: Adolescent First Birth

RESOURCES
- Appendix D: Behavioral Outcome Indicators for Select Priority Behaviors
- Appendix E: USAID Performance Monitoring Indicator Criteria Checklist
• Indicators (illustrative or actual), which can be found on the ACCELERATE and reputable development data websites, in Performance Monitoring Plans (PMPs), global surveys, research publications, and other sources.
• Performance Indicator Reference Sheets (PIRS) or any comparable document that elaborates the details of the indicators under consideration.
• USAID Monitoring Toolkit Indicator Resources
• USAID Monitoring Toolkit: Selecting Performance Indicators

BEFORE YOU START

WHAT IS THINK | BIG?

Behavior Integration is a way to design and implement programs that defines outcomes as specific behaviors required to achieve the development goal. It ensures that strategy, project, and activity design are behavior-led rather than intervention-driven. Behavior Integration means ensuring that the behaviors required to achieve your goal—for example, a reduction in maternal and child deaths—are at the center of program planning and implementation. Think | BIG (Behavior Integration Guidance) is the process for doing this.

Think | BIG offers several opportunities to measure changes in your prioritized behaviors and in your behaviors’ contribution to the overall goal. The online Prioritization and Behavior Profile tools at www.thinkbigonline.org/tools invite users to include a behavioral outcome indicator as well as factor-level indicators in the Priority Behavior List and Behavior Profile. Ensure that you have selected, prioritized, and analyzed behaviors for your program using Think | BIG online or offline tools before you establish indicators using this tool. Appendix A: Sample Priority Behaviors List with Behavioral Outcome Indicators provides an example of a Priority Behavior List with indicators, and Appendix B: Sample Behavior Profile and Indicators provides a sample Behavior Profile (Adolescent First Birth) modified to show indicators for factors and actor actions. Appendix C contains a sample Performance Indicator Reference Sheet for this same behavior to give you a full picture of key considerations in selecting indicators.

THINK | BIG AND BEHAVIORAL OUTCOMES

Behavioral outcomes help monitor the progress towards long-term, sustainable change in the conditions and behaviors of people, functionality of systems, and effectiveness of institutions. Historically in development, most performance metrics have quantified the efforts of the program, and not their influence on people, systems, and institutions. Examples of traditional performance metrics include:

• Number of community health workers trained using donor funding;
• Number of books distributed in targeted districts;
• Number of school feeding programs established in the last 12 months.

These are important output metrics that help programs quantify their efforts and boost a type of accountability to themselves, beneficiaries, and donors. For example, the output indicator, number of bednets distributed in target districts, allows us to measure bednet distribution efforts, but this indicator does not measure the influence programmatic efforts had on the beneficiary.
Less commonly have programs designed behavioral outcome metrics. In the bednet example, an outcome indicator would allow us to measure actual use of the bednet as a result of the program’s efforts. Measuring outcomes allows programs to monitor changes in program beneficiaries and better understand how close they are to achieving their desired impact. In the same bednet example, the desired impact according to the program’s theory of change could be a reduction in malaria incidence. Think | BIG strongly encourages the use of behavioral outcome indicators. Appendix D: Behavioral Outcome Indicators for Select Priority Behaviors lists select indicators that have been used by DHS and others.

INSTRUCTIONS

To ensure that your indicators measure your prioritized behavioral outcomes and reflect your logical pathways to change, follow the steps below. After the First (three) Steps, try to identify existing indicators that can be appropriately used to measure your behavior following Plan A. If you cannot find suitable indicators, follow the steps under Plan B to develop them. If you find you are missing needed information, pause, gather the needed information, and begin again when you have it. If trying to identify behavioral outcome indicators makes you re-think how your behavior is written or to re-think other aspects of your Behavior Profile, pause until you have refined the profile in question. Use the online or offline Prioritize Behaviors tool at https://thinkbigonline.org/tools if you have not yet established your behavioral priorities.

FIRST STEPS

1. **IDENTIFY a behavior of interest:** Identify one behavior of interest from your Behavior Profiles or from your behaviorally-focused results framework. Appendix A includes examples of well-written behaviors.

2. **UNDERSTAND the behavior:** Collaborate with technical team members who developed the Behavior Profile or results framework to understand the behavior you want to measure.
   a. Ask critical questions such as:
      i. Does this behavior focus on a specific population (i.e. children 6-24 months, pregnant women, or decision-makers) or location (urban vs. rural)?
      ii. Is the behavior, as written, specific enough to be measured with one well-defined indicator? This means each of the words in the behavior has a clear definition. For example, words or phrases like “held accountable” (“Citizens hold schools accountable for delivery of quality education”) or “businesses” (“Businesses use long-term financing to grow”) will need to be further defined in order to measure the behavior.
   b. If, based on the responses to those questions, the behavior is not clear or otherwise suitable, work collaboratively to better understand the behavior or to refine it sufficiently.

   Note: As the indicator is being developed, the behavior may undergo several iterations.

3. **Consider your means to collect data:** Every project faces budgetary, time, and human resource constraints. As you select or develop indicators, assess each through a lens of whether you have
the practical means to collect the data. While clever proxies sometimes exist, directly measuring behaviors typically requires collection of survey or observation data. With input from both M&E and technical specialists, consider your ability to properly execute the necessary data collection methods with the available resources or your ability to use existing data sources so that the indicators you select are realistic.

**PLAN A: FIND EXISTING EVIDENCE-BASED BEHAVIORAL OUTCOME INDICATORS**

Ideally, you can select a behavioral indicator that has already been vetted and successfully used in your sector of interest. Having technical consensus around the design of an indicator, i.e., precise wording of what is to be measured and methodology to measure it, greatly strengthens a team’s ability to capture relevant data that allow comparison to the same indicator in other contexts or timeframes.

1. **SEARCH existing sources:** Search evidence-based sources of indicators for metrics that will allow you to measure the behavior directly, effectively, and efficiently.
   - Search MEASURE Evaluation (for health-related indicators) and internationally recognized databases and surveys like the World Development Indicators (WDI), Demographic and Health Surveys (DHS), and Multiple Indicator Cluster Survey (MICS). Selecting indicators for which representative population data are already collected by these survey mechanisms can provide highly reliable data at no cost. Alternatively, if your program opts to collect its own data on the same indicators captured in these surveys due to differing timeframes or target populations of interest, using the same indicators facilitates comparisons.
   - Search your country’s information systems, implementing partner performance monitoring plans, PIRS (Appendix C provides an example), and research papers.
   - Find additional indicator sources in the USAID Monitoring Toolkit’s Indicator Resources.
   - Consult with other M&E and technical staff, subject matter experts, and key stakeholders, as appropriate.

2. **COMPILE indicators and supporting information:** Using Table 1 as a model, create a table or spreadsheet to organize important information on the potential indicators from existing sources that could be used to measure this behavior. Compile possible indicators from existing sources into the table.

**Table 1: Example of an Indicator Table Using Existing Indicators**

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Indicator</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Indicator type</th>
<th>Evidence based justification for use</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caregivers treat diarrhea for children under five with oral rehydration solution (ORS)</td>
<td>Percentage of children born in the last 5 years with diarrhea in the last 2 weeks who were given ORS</td>
<td>Number of children born in the last 5 years who had diarrhea in the 2 weeks preceding the survey and received ORS</td>
<td>Total number of children under age 5 who were ill with diarrhea in the 2 weeks preceding the interview</td>
<td>X</td>
<td>Direct measure; globally recognized indicator aligned with major global survey instruments</td>
<td>Demographic and Health Survey</td>
</tr>
</tbody>
</table>
3. **SELECT an appropriate indicator**: Use Appendix E: USAID Performance Monitoring Indicator Criteria Checklist to help you select the best indicator. **M&E staff and technical experts should collaborate on indicator selection to ensure that proper M&E techniques are coupled with subject matter and behavior-specific expertise.** If at all possible, test and validate all selected indicators to be sure that they are contextually appropriate, reliable, and valid.

**PLAN B: DESIGN NEW EVIDENCE-BASED BEHAVIORAL OUTCOME INDICATORS**

If a thorough review of existing indicators determines that no appropriate indicators exist to measure your behavior, design a new indicator.

1. **REVIEW evidence**: Collaborate with the technical experts and other appropriate key informants, implementing partners, government stakeholders, and others, to review substantial appropriate evidence about how to properly measure the behavior of interest. The World Health Organization and peer-reviewed literature (search Google Scholar or PubMed) are useful places to start. Be sure to review recent and context-appropriate evidence. Use your research to answer questions such as:

   - Exactly what will the primary audience have to do for the enumerator to know that a behavior is changing?
   - Are there any scientifically proven ways to measure that change?
   - Are there things that should not be counted as a change in behavior?

2. **DESIGN a new indicator**: Use the following formula to design a new indicator:

   \[
   \text{[percentage/number/proportion of]} + \text{[who/what]} + \text{[verb (did, receive, etc.)]} + \text{[optional: when, where, how long, disaggregation]}
   \]

   The elements of this formula are common in all indicators. They can be reordered, as seen here:

   \[
   \text{[Percentage of]} + \text{[live births]} + \text{[in the three years preceding the survey]} + \text{[delivered at a health facility]}
   \]

3. **COMPILE indicators and supporting information**: Using Table 2 as a model, create a table or spreadsheet to organize important information on the potential indicators from existing sources that could be used to measure this behavior. A variety of indicator types might be appropriate. The **USAID Monitoring Toolkit’s Selecting Performance Indicators** provides a review of the various types of indicators USAID uses. Consider adding notes from any evidence you have collected in the “REVIEW evidence” step above. Compile possible newly designed indicators into the table.
Table 2: Example of an Indicator Table Using Newly Developed Indicators

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Indicator</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Indicator type</th>
<th>Evidence based justification for use</th>
<th>Source</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children regularly read at home</td>
<td>% of households with observed reading materials that report children regularly read at home</td>
<td>Number of households with children where reading materials are observed in the home and a caregiver reports children read at home at least once per week</td>
<td>Number of households with children observed and interviewed</td>
<td>X</td>
<td>Combination of self-report and observation will minimize bias. A more direct measure is not feasible in this context</td>
<td>Household survey with observations</td>
<td></td>
</tr>
</tbody>
</table>

4. **SELECT an appropriate indicator**: Use Appendix E: USAID Performance Monitoring Indicator Criteria Checklist to select the best indicator. **M&E staff and technical experts should collaborate on the selection of the most appropriate indicator to ensure that proper M&E techniques are coupled with subject matter and behavior-specific expertise.** Test and validate all selected indicators to be sure that they are contextually appropriate, reliable, and valid.

**TIPS FOR MEASURING BEHAVIORAL OUTCOME AND FACTOR-LEVEL INDICATORS**

1. **Apply these tips to factor-level indicators as well.**

2. **Select only one outcome indicator to measure each behavior.** In rare instances, such as in Figure 2, below, two indicators for one behavior might be appropriate. It might also be appropriate for programs to measure a limited number of contextual issues related to the behavior. For example, if your behavior is Citizens participate in free, fair, and transparent electoral processes at all levels, you may consider measuring the number of eligible voters in addition to the measurement of the behavior.

3. **Review any existing research that might offer insight on how long it takes to see a measurable change in the behavior.** Some behaviors might only see a measurable change after 1-2 years. Others might only take a few months.

4. **Directly measure the behavior, unless directly measuring the behavior compromises the safety of the respondent or poses significant data quality issues.** Measuring directly means that the indicator specifically captures and measures the exact behavior in its entirety. When it is necessary to use a proxy metric, the rationale for use and/or assumptions should accompany the indicator.

   In the Behavior Profile snapshot below, the behavior is Population sleeps under an insecticide-treated net (ITN). A common mistake in measuring this behavior is to assume that the
corresponding indicator should measure whether the population has access to insecticide-treated nets (e.g., whether bednets are available in the marketplace), since populations without access to nets would not be able to sleep under the net. The behavior itself is interested in the use (i.e., sleeping under) of the bednet; therefore, a direct measurement of the behavior would quantify use, not access. As noted in the Behavior Profile below, access is a factor. It should also be measured, but not as a measure of the behavior.

In this example, two existing Demographic Health Survey (DHS) indicators [Percentage of pregnant women who slept under an insecticide-treated net (ITN) the night before the survey and Percentage of children under age five who slept under an insecticide treated net (ITN) the night before the survey] have been selected as direct measurements of this behavior. Since DHS collects the data for women and children who sleep under ITNs using two separate indicators in a household survey, both are being used to measure this behavior.

Figure 2: Sample Behavior Profile with Use (Behavioral Outcome) and Access (Factor-Level) Indicators
APPENDICES

The following appendices are included with this document:

Appendix A: Sample Priority Behavior List with Behavioral Outcome Indicators
Appendix B: Sample Behavior Profile and Indicators
Appendix C: Sample Performance Indicator Reference Sheet: Adolescent First Birth
Appendix D: Behavioral Outcome Indicators for Select Priority Behaviors
Appendix E: USAID Performance Monitoring Indicator Criteria Checklist
APPENDIX A: SAMPLE PRIORITY BEHAVIORS LIST WITH BEHAVIORAL OUTCOME INDICATORS

Development Objective
Social development improved

Global Health Goal
Child and maternal mortality decreased

Priority Behaviors

**Adolescent First Birth**
Sexually active adolescents use a modern contraceptive method to delay first birth until after age 18
- Percentage of sexually active unmarried women age 15-19 currently using any modern method of contraception
- [View Indicator & Trend data]
- 32%

**Antenatal Care**
Pregnant woman completes a full course of quality antenatal care (ANC)
- Percentage of women who had a live birth in the three years preceding the survey who had 4+ antenatal care visits
- [View Indicator & Trend data]
- 50%

**Birth Spacing**
After a live birth, women or their partners use a modern contraceptive method to avoid pregnancy for at least 24 months
- Percentage of currently married or in union women using family planning for spacing
- [View Indicator & Trend data]
- 27%

**Handwashing with Soap**
Family members wash hands with soap and running water at 4 critical times [after defecation, after changing diapers, before food preparation and before eating]
- Among households where place for handwashing was observed, percentage of households with soap and water: Soap includes soap or detergent in bar, liquid, powder or paste form.
- [View Indicator & Trend data]
- 11%

**Intermittent Preventive Treatment of Malaria in Pregnancy**
Pregnant women take intermittent preventive treatment of malaria (IPTp) during antenatal care (ANC) visits
- Percentage of women age 15-49 with a live birth in the two years preceding the survey who during the pregnancy took 3 or more doses of SP/Fanvil or at least one dose during an antenatal care visit
- [View Indicator & Trend data]
- 41%

- Percentage of women age 15-49 with a live birth in the two years preceding the survey who during the pregnancy took 2 or more doses of SP/Fanvil, with at least one dose during an antenatal care visit
- [View Indicator & Trend data]
- 76%

**Safe Disposal of Human Feces**
Family members safely dispose of human feces
- Percentage of households with improved and non-shared toilet facilities
- [View Indicator & Trend data]
- 11%
APPENDIX B: SAMPLE BEHAVIOR PROFILE AND INDICATORS

Think | BIG makes it possible to easily identify what should be measured and what type of indicator should be used. Using the sample Behavior Profile below, we have identified existing indicators from reliable sources to demonstrate how to measure progress.

![Behavior Profile Example]

### APPENDIX B: SAMPLE BEHAVIOR PROFILE AND INDICATORS

Think | BIG makes it possible to easily identify what should be measured and what type of indicator should be used. Using the sample Behavior Profile below, we have identified existing indicators from reliable sources to demonstrate how to measure progress.

- **Behavior**: Sexually active adolescents use a modern contraceptive method to delay first birth until after age 18
- **Steps**:
  1. Decide to use a modern contraceptive method
  2. Obtain family planning counseling from a qualified provider
  3. Select appropriate modern contraceptive method
  4. Obtain chosen method
  5. Use chosen method as instructed

### Behavior Analysis

**Factors**

- **Behavior and Steps**
- **Factors**
- **Supporting Actors and Actions**
- **Possible Program Strategies**

### Strategy

**Institutional**

- Policy makers: Create and enforce clear policies establishing adolescents’ rights to access a wide variety of modern contraception methods without judgment and with the expectation of privacy.
- Providers: Offer adolescent-friendly contraception services, including assurance of privacy and acceptance, counseling on appropriate methods and continuous care.

**Community**

- Community leaders: Provide forums for the broader community to discuss the issue of girls’ safety, support to girls’ future planning, and adolescent reproductive health service utilization.

**Household**

- Family members: Support and actively engage in all aspects of adolescents’ life including relationships and sexuality.

**Male Partners**

- Discuss and mutually agree on when and how to plan for the future.

**Social**

- Family and community support: Adolescents, especially girls, do not access family planning because they do not have social support and suffer stigmas and social exclusion if they are known to access family planning.

- Gender: Adolescents, especially girls, do not discuss or pursue family planning services because traditional concepts of masculinity drive sexual decision-making.

- Norms: Adolescents do not discuss or pursue family planning services because adolescent sexuality is often highly moralized in communities and can be especially taboo for girls.

**Internal**

- Self-efficacy: Adolescents, especially girls, do not discuss family planning with sexual partners or service providers because they lack confidence to do so.

### Possible Program Strategies

- **Enabling Environment**
  - Financing: Ensure reproductive health services are provided to adolescents at no-cost or highly subsidized (via vouchers, social franchising or other financing models).
  - Partnerships and Networks: Use a variety of service delivery mechanisms (outreach, posts, social franchising, etc.) and innovative partners to reach a wide range of adolescents and create confidence in accessing services.
  - Policies and Governance: Ensure and enforce clear policy around adolescents’ rights to access contraceptive services confidentially, respectfully and without a physical exam.

- **Systems, products and services**
  - Products and Technology: Offer a full range of contraceptive options to adolescents including long-acting reversible contraceptives.
  - Quality Improvement: Train providers to offer adolescent-friendly services including providing confidential, non-judgmental information and services, accurate information on medical eligibility criteria for adolescent contraceptive use, etc.

- **Demand and use**
  - Communication: Use adolescent-appropriate media to reinforce messages and normalize adolescent access and use of modern contraception, and create opportunities for community-wide reflection on gender norms, and other issues and constraints.
  - Communication: Create peer-to-peer clubs and other opportunities to work with male and female adolescents on masculinity, healthy relationships and communication.

- Skills Building: Ensure schools adopt comprehensive sexual and reproductive health curriculum covering family planning options and deliver it by age rather than grades.
APPENDIX C: SAMPLE PERFORMANCE INDICATOR REFERENCE SHEET:
ADOLESCENT FIRST BIRTH

Note: This PIRS reflects an Accelerator Behavior indicator for which data are readily available through The Demographic and Health Surveys (DHS) Program. The Accelerator Behavior that can be measured using this indicator is shown in the “Name of Result Measured” field below, and can be updated as needed. Data for this indicator are displayed for maternal and child survival priority countries at acceleratorbehaviors.usaid.gov. Should a USAID Mission wish to adopt this indicator for its performance monitoring plan, this PIRS should be updated according to the needs of each Mission.

<table>
<thead>
<tr>
<th>USAID PERFORMANCE INDICATOR REFERENCE SHEET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Indicator:</strong> Current use of any modern method of contraception (sexually active unmarried women)</td>
</tr>
<tr>
<td><strong>Name of Result Measured (DO, IR, sub-IR, Project Purpose, Project Outcome, Project Output, etc.):</strong> Sexually active adolescents use a modern contraceptive method to delay first birth until after age 19</td>
</tr>
<tr>
<td><strong>Is This a Performance Plan and Report Indicator?</strong></td>
</tr>
<tr>
<td><strong>If yes, link to Foreign Assistance Framework:</strong></td>
</tr>
</tbody>
</table>

**DESCRIPTION**

**Precise Definition(s):** Percentage of sexually active unmarried women age 15-19 currently using any modern method of contraception

Calculated:
- Numerator: Number of sexually active unmarried adolescents age 15-19 currently using any modern method of contraception
- Denominator: Total number of sexually active unmarried women age 15-19

**Unit of Measure:** Percentage of women

**Data Type:** Percentage

**Disaggregated by:**

**Rationale for Indicator** (optional): This indicator represents a key behavior known to accelerate reduction of maternal and child mortality (https://thinkbigonline.org/adolescent_first_birth). Use of a modern method of family planning to delay a woman’s first birth until after the age of 19 can prevent up to 15% of newborn deaths (https://academic.oup.com/ije/article/36/2/368/718213). This is a preventive behavior that can be successfully carried out using a number of different modern contraceptive methods.

**PLAN FOR DATA COLLECTION BY USAID**

**Data Source:** Demographic and Health Survey Program (DHS), indicator ID: FP_CUSU_W_MOD. Data are readily available through the DHS Stat Compiler website: https://www.statcompiler.com/en/.

Secondary source: UNICEF Multiple Indicator Cluster Survey (MICS).

**Method of Data Collection and Construction:** DHS Household survey, Woman’s Questionnaire.


**Reporting Frequency:** Approximately every 5 years

**Individual(s) Responsible Data at USAID:**

**TARGETS AND BASELINES**

**Baseline Timeframe:**

**Rationale for Targets** (optional):

**DATA QUALITY ISSUES**

**Date of Data Quality Assessments and Name(s) of Reviewer(s):**
<table>
<thead>
<tr>
<th>Date of Future Data Quality Assessments (optional):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known Data Limitations:</td>
</tr>
<tr>
<td>Validity: This indicator does not capture contraception use of married adolescents between ages 15-19 and therefore misses an important at-risk segment of the population.</td>
</tr>
<tr>
<td>Timeliness: DHS survey timing may not align with program cycles and may be too infrequent for planning. However, data from MICS and DHS surveys combined may sufficiently bridge data gaps, as their timing alternates to provide more consistent data. USAID Missions may also wish to incorporate the same DHS questions and methodology into their own population-based surveys to ensure timeliness, though results may not be fully comparable to DHS and MICS.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANGES TO INDICATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes to Indicator:</td>
</tr>
<tr>
<td>Other Notes (optional):</td>
</tr>
</tbody>
</table>

| This Sheet Last Updated On: December 22, 2017 |
### APPENDIX D: BEHAVIORAL OUTCOME INDICATORS FOR SELECT PRIORITY BEHAVIORS

- ▲ Denotes a **performance indicator** used to measure progress toward the behavioral outcome
- ◼ Denotes that a **direct indicator is not available**. A proxy, linked to the behavior by one or more assumptions, is used to measure progress

<table>
<thead>
<tr>
<th>SELECT HEALTH BEHAVIORS</th>
<th>BEHAVIORAL OUTCOME INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHILD HEALTH AND IMMUNIZATION</strong></td>
<td></td>
</tr>
<tr>
<td>Care for Pneumonia</td>
<td>Caregivers appropriately manage care for signs and symptoms of ARI in children ▲ Percentage of children born in the five years preceding the survey with acute respiratory infection taken to a health facility</td>
</tr>
<tr>
<td>Treatment for Diarrhea</td>
<td>Caregivers provide appropriate treatment for diarrhea at onset of symptoms in children ◼ Percentage of children born in the five years preceding the survey with diarrhea in the two weeks preceding the survey who received oral rehydration solution (ORS), that is either fluid from an ORS packet or a pre-packaged ORS fluid</td>
</tr>
<tr>
<td>Full Course of Immunizations</td>
<td>Caregivers complete a full course of timely vaccinations for infants and children under 2 years ◼ Percentage of children 12-23 months who had received all 8 basic vaccinations</td>
</tr>
<tr>
<td><strong>MALARIA</strong></td>
<td></td>
</tr>
<tr>
<td>Insecticide-Treated Net Use</td>
<td>Pregnant women and children sleep under an insecticide-treated net (ITN) ▲ Percentage of pregnant women who slept under an insecticide treated net (ITN) the night before the survey ◼ Percentage of children under age five who slept under an insecticide treated net (ITN) the night before the survey</td>
</tr>
<tr>
<td>Intermittent Preventive Treatment of Malaria in Pregnancy</td>
<td>Pregnant women take intermittent preventive treatment of malaria (IPTp) during antenatal care (ANC) visits ▲ Percentage of women age 15-49 with a live birth in the two years preceding the survey who during the pregnancy took 3 or more doses of SP/Fansidar, with at least one dose during an antenatal care visit ◼ Percentage of women age 15-49 with a live birth in the two years preceding the survey who during the pregnancy took 2 or more doses of SP/Fansidar, with at least one dose during an antenatal care visit</td>
</tr>
<tr>
<td>Care for Malaria</td>
<td>Caregivers appropriately manage care for signs and symptoms of malaria for children ▲ Among children under age five with fever in the two weeks preceding the survey, percentage for whom advice or treatment was sought from a health facility or provider</td>
</tr>
<tr>
<td><strong>MATERNAL HEALTH</strong></td>
<td></td>
</tr>
<tr>
<td>Antenatal Care</td>
<td>Pregnant women complete a full course of quality antenatal care (ANC) ▲ Percentage of women who had a live birth in the three years preceding the survey who had 4+ antenatal care visits</td>
</tr>
<tr>
<td>Delivery in Health Facility</td>
<td>Pregnant women deliver in a health facility with an equipped, qualified provider ▲ Percentage of live births in the three years preceding the survey delivered at a health facility</td>
</tr>
<tr>
<td><strong>NEWBORN HEALTH</strong></td>
<td></td>
</tr>
<tr>
<td>Essential Newborn Care</td>
<td>Caregivers provide essential newborn care immediately after birth ▲ Among last-born children born in the 2 years preceding the survey, percentage who started breastfeeding within 1 hour of delivery ◼ Percentage of live births in the three years preceding the survey delivered at a health facility. The proxy indicator is based on the assumption that newborns are more likely to receive the elements of essential newborn care if they are born in a health facility</td>
</tr>
</tbody>
</table>
### Care for Newborn Illness
Caregivers seek prompt and appropriate care for signs and symptoms of newborn illness

- Percentage of last births in the two years preceding the survey who had their first postnatal checkup within the first two days after birth.

  The proxy indicator is based on the assumption that caregivers who attend a postnatal checkup within the first two days are more likely to know the danger signs of newborn illness and take action, and are also accessing care during a child’s most vulnerable days.

### NUTRITION

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definition</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Initiation of Breastfeeding</td>
<td>Mothers initiate breastfeeding within one hour after delivery</td>
<td>Among last-born children born in the two years preceding the survey the percentage who started breastfeeding within 1 hour of birth</td>
</tr>
<tr>
<td>Exclusive Breastfeeding</td>
<td>Mothers breastfeed exclusively for six months after birth</td>
<td>Percentage of youngest children under two years of age living with the mother who are exclusively breastfed from age 0-5 months</td>
</tr>
<tr>
<td>Complementary Feeding</td>
<td>Caregivers feed adequate amounts of diverse, nutritious, age-appropriate foods to children from 6 to 23 months (inclusive), while continuing to breastfeed</td>
<td>Percentage of breastfed children age 6-23 months fed four or more food groups and the minimum meal frequency</td>
</tr>
</tbody>
</table>

### REPRODUCTIVE HEALTH

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definition</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent First Birth</td>
<td>Sexually active adolescents use a modern contraceptive method to delay first birth until after age 18</td>
<td>Percentage of sexually active unmarried women age 15-19 currently using any modern method of contraception</td>
</tr>
<tr>
<td>Birth Spacing</td>
<td>After a live birth, women or their partners use a modern contraceptive method to avoid pregnancy for at least 24 months</td>
<td>Percentage of currently married or in union women using family planning for spacing</td>
</tr>
</tbody>
</table>

### WASH

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definition</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handwashing with Soap</td>
<td>Family members wash hands with soap under running water at 4 critical times [after defecation, after changing diapers, before food preparation and before eating]</td>
<td>Among households where place for handwashing was observed, percentage of households with soap and water. Soap includes soap or detergent in bar, liquid, powder, or paste form</td>
</tr>
<tr>
<td>Safe Disposal of Human Feces</td>
<td>Family members safely dispose of human feces</td>
<td>Percentage of households with improved, non-shared toilet facilities</td>
</tr>
<tr>
<td>Safe Drinking Water</td>
<td>Family members drink safe water</td>
<td>Percentage of households whose main source of drinking water is an improved source</td>
</tr>
</tbody>
</table>

### HIV

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definition</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condom Use</td>
<td>Women and men use a condom during high risk sex</td>
<td>Percentage of women who say they used a condom the last time they had sex with a non-marital, non-cohabiting partner, of those who have had sex with such a partner in the last 12 months.</td>
</tr>
<tr>
<td>Male Condom Use during Paid Sex</td>
<td>Men use a condom during paid sexual intercourse</td>
<td>Percentage of men who say they used a condom the last time they had sex with a non-marital, non-cohabiting partner, of those who have had sex with such a partner in the last 12 months.</td>
</tr>
<tr>
<td>Testing</td>
<td>Women and men test for HIV and obtain test results</td>
<td>Percentage of women who have ever had an HIV test and received their results</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of men who have ever had an HIV test and received their results</td>
</tr>
</tbody>
</table>

Source: The DHS Program Indicator Data API, The Demographic and Health Surveys (DHS) Program
APPENDIX E: USAID PERFORMANCE MONITORING INDICATOR CRITERIA CHECKLIST

The USAID checklist below provides criteria against which to assess indicators for measuring expected outputs and outcomes of strategies, projects, or activities.

When selecting indicators, teams must consider the utility of data for management at the relevant level of decision making and ensure that the data collected will be of sufficient quality to be used as intended. Data quality standards include validity, integrity, precision, reliability, and timeliness. Teams should also balance the utility and quality of data with the cost of collecting the data and determine, for example, if indicator disaggregation is useful for effective monitoring and achievement of results. (USAID requires disaggregation by sex when measuring person-level data.)

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>✓</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Utility</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This indicator will be useful for management decision-making.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Validity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The indicator clearly and adequately measures the result it intends to measure. (If it is a proxy, is it an appropriate proxy?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The indicator reflects the right level in the results framework or logic model (not higher or lower).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The scope of the indicator matches to the scope of the result (e.g., it measures the same population affected by the intervention)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The data from this indicator will not be biased in a particular direction.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If indicator data collection is repeated by a different data collector, it will result in the same value of the indicator.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The indicator data will be collected consistently over time and across locations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Timeliness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency and timing of indicator data collection is useful for management decision making.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicator data is unlikely to be delayed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Precision</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The indicator is precise enough to measure expected changes and permit management decision making.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The margin of error of indicator data will be less than the expected change being measured.

**Integrity**
The collection of indicator data is not conducive to manipulation or transcription errors.

**Cost**
The indicator is worth the management and financial resources required to collect and analyze the indicator data.

**Disaggregation**
The indicator includes appropriate disaggregates, such as gender, age, and location, that are important for monitoring.