

# The President's Malaria Initiative Monitoring and Evaluation Strategy for Behavior Change Communication

This strategy document articulates PMI's BCC M&E priorities and approach. Its target audiences are PMI's resident advisors, country teams, partners, and collaborating National Malaria Control Programs.

Behavior change communication (BCC) is an essential component of creating demand for malaria treatment and prevention, changing household and healthworker practices, and mobilizing communities for malaria control. The ultimate goal of the President's Malaria Initiative (PMI) BCC program is to increase the reach and effectiveness of its malaria interventions. Thus, it is critical that PMI BCC implementing partners monitor and evaluate BCC processes, outputs, and outcomes as recommended in this strategy. Acknowledging the limitations in determining a direct causal pathway between BCC activities and impact in malaria related-morbidity and mortality, the PMI BCC monitoring and evaluation (M&E) strategy focuses on the collection and use of output and outcome indicators to demonstrate BCC's contribution to malaria prevention and control.

## I. PMI's BCC M&E Strategy

The primary goal of the PMI BCC M&E strategy is to support National Malaria Control Programs (NMCPs), in-country stakeholders, and PMI implementing partners in effectively monitoring and evaluating the quality of BCC activities and their impact on desired behavioral outcomes. The strategy is guided by the principle that BCC interventions should reflect NMCP and PMI priorities with these priorities being based on sound strategies and approaches. Therefore, PMI will work with NMCPs to develop appropriate and realistic national BCC strategies and plans to monitor and evaluate their results.

**Monitoring** of BCC activities involves monitoring activities carried out by NMCPs, local governments, PMI implementing partners, and other in-country stakeholders. Within the overall PMI M&E framework, monitoring refers to tracking **process and output indicators** to ensure activities are being implemented as intended (i.e., measuring the reach and delivery of activities). Data collection for monitoring BCC activities should be an ongoing process and generally comes from implementing partner reports and relevant NMCP data (e.g., supervision, training reports).

**Evaluation** of BCC activities is conducted on a periodic basis to determine whether or not the activities have reached their objectives. Within the PMI framework, evaluation refers to measuring **outcome indicators**, including recall of messages, changes in attitudes or intentions, and changes in behavior. Data collection for evaluation of BCC activities may come from large- or small-scale community-based surveys, or other special data collection activities (e.g., health facility "exit" interviews, pre/post training assessments).

The main elements of PMI's BCC M&E strategy are outlined below:

### **Goal**

- Support and strengthen PMI countries' M&E of BCC activities

### **Expected result**

- Provision of timely, quality data for decision-making to NMCPs and PMI to inform BCC program

### **Objectives**

- PMI-funded BCC implementing partners will use a standard M&E reporting system for BCC interventions using the PMI BCC Tracking Tool; partners will submit the tracking tool on a yearly basis.
- BCC implementing partners will include process, output, and outcome indicators for their interventions in the Tracking Tool reporting.

## **II. PMI BCC M & E Plans**

In an effort to better understand comprehensively and systematically the quality and impact of BCC interventions across PMI countries, PMI country teams should ensure that implementing partners have developed M&E plans and are reporting annual progress on process, output, and outcome indicators in the PMI BCC Tracking Tool. M&E plans should reflect NMCP priorities articulated in the NMCP's national BCC strategy. **See Appendix 1 for a sample M&E plan.**

Partners have various ways of documenting their work (e.g., work plans, M&E plans, contractual reporting); it is important that this documentation specifies:

- Targeted behavior, BCC intervention to address the behavior, intervention goal, key message(s), and intervention's target audience(s)
- Indicators for each intervention, including operational numerators and denominators, baselines, and targets
- Data sources to calculate the indicators, reporting frequency, responsible party

### **A. Targeted Behaviors, BCC Intervention, Intervention Goal, Target Audience(s)**

The M&E plan should state the desired behavior that the intervention seeks to change (see list below) and describe the intervention itself, including the message(s) to be used. The goal of the intervention should be articulated, as well as the key audience(s) being targeted.

#### **Key Behaviors**

Appropriate demand for, use of, and adherence to malaria services and products including:

- Prompt diagnosis and appropriate treatment with artemisinin-based combination treatments (ACTs) of the general population, with special attention to children under five years of age, within 24 hours of onset of symptoms
  - Patient demand for appropriate diagnostic testing at health facilities
  - Health worker adherence to appropriate case management protocols
- Consistent use of insecticide-treated nets (ITNs) by the general population, with special attention to vulnerable groups including pregnant women and children under five years
- Household acceptance of indoor residual spraying (IRS)
- Patient adherence to intermittent preventive treatment during pregnancy (IPTp)
  - Health worker adherence to IPTp protocols.

### **B. Indicators for Each Intervention**

Process, output, and outcome indicators, described below, should be included in the BCC M&E plan:

#### **Monitoring:**

- **Process Indicators:** Reflect tasks necessary to successfully implement activity (e.g., pre-testing messages, printing materials, training sensitization teams).
- **Output Indicators:** Reflect reach (e.g., number of people who hear the message) and delivery (e.g., number of people who receive the intervention, number of nets hung by door-to-door household team) of the activity to the target audience. Specify the level of coverage of its interventions (e.g., number/proportion of districts vs. national coverage), as well as demographic information on individuals reached by BCC activities broken down by sex and age, to the extent possible.

**Evaluation:**

- **Outcome Indicators:** Reflect the degree to which the activity achieved the desired effect on the target audience that would ultimately lead to the behavioral outcome. (These should be reported as proportions.)
  - Knowledge (recall of messages, awareness, understanding)
  - Attitudes (intentions, feelings towards intervention safety or efficacy)
  - Behaviors (practices)

A logic model is one tool that may help implementing partners to conceptualize and communicate the links between the problem the intervention is designed to address (malaria-related morbidity and mortality) and BCC. These links include the outputs (number of people who receive intervention) along with the knowledge, attitudes, and behavior changes associated with BCC. **See Appendix 2 for a sample logic model.**

Most USAID contractual mechanisms are required to have a Performance Management Plan (PMP). PMPs have primarily measured process indicators such as number of brochures printed or number of radio spots aired. While this is helpful to account for resources spent, it is not sufficient to determine the intervention’s success in achieving desired objectives. The types of indicators that should be incorporated into PMI implementing partners’ PMPs include outcome indicators related to changes in knowledge, attitudes, beliefs, and intentions, as well as the actual behaviors targeted by the intervention. These indicators should be specific to the populations targeted by the campaign.

**PMI implementing partners carrying out BCC activities should report on these indicators annually by using the PMI BCC Tracking Tool.**

**C. Data Sources to Calculate Indicators, Reporting Frequency, Responsible Party**

BCC data may be captured using existing data sources including national household surveys, health worker reports, and health facility records. However, data from these sources may be difficult to interpret due to sampling issues, inconsistent reporting, or geographic areas of intervention. For example, national household surveys may not be able to provide the subnational estimates required to measure outcomes of a BCC intervention, especially if the intervention is targeted to a limited geographic area.

To reduce costs, PMI encourages integration with other intervention programs’ M&E activities where possible. However, technical staff must ensure the existing data collection methodology is appropriate for the types of information required by the BCC M&E plan. Where there are no existing mechanisms,

implementing partners, country teams and the PMI M&E and Communications Teams should work together to develop instruments, tools, and methodologies to measure necessary indicators. Such tools and methodologies will frequently include both quantitative and qualitative approaches. The opportunity may exist to purchase questions that measure reach, recall, and possibly attitude in an omnibus survey.

The plan should also specify how often the data will be collected and who will be responsible for doing so.

### **III. Measuring the Effectiveness of BCC Activities on Changing Behavior**

Although it may not be possible to attribute changes in behavior to a specific BCC intervention, behavior change outcomes should be measured simultaneously with all other BCC outcomes (e.g., changes in attitudes, knowledge). Even in the absence of a statistically significant association, descriptive behavioral outcome data can suggest potential associations with BCC interventions and be used to inform programmatic decision-making. The strength and confidence level of any measured association will depend upon the data collection and sampling methods selected. Multiple factors including resources and technical capacity, available data sources, and geographic coverage of the intervention will influence selection of an evaluation design. Implementing partners should be mindful of these methodological limitations when interpreting data related to behavioral outcomes.

Please contact the PMI M&E Team and/or the PMI BCC Team to discuss any protocols that propose to establish associations between communication interventions and behaviors.

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### **IV. Operations Research**

Many countries have unanswered questions related to BCC, such as what are the most cost-effective channels of communication and what are the best methods for targeting BCC interventions? However, such questions are beyond the scope of routine M&E for BCC. While formative research, such as message pre-testing, should inform the development of communication strategies, comparison of specific strategies may be more appropriate for operations research (OR). Country teams should discuss these questions with PMI's OR Committee.

### **V. Global Harmonization**

At the international level, the PMI Communications Team is working to revitalize the Roll Back Malaria Partnership's communications sub-working group, which should serve as a forum for global leadership in malaria BCC. Specifically PMI is helping the Roll Back Malaria partnership to:

- Develop a long-term strategic vision, goals, and objectives for BCC for malaria prevention and control, and provide guidance on what constitutes BCC best practices;
- Develop a research agenda to add to the growing evidence base on BCC for malaria prevention and control; and
- Cost out the resource needs over the next 5 years to achieve these goals and targets.

[Consider adding language about how PMI M&E strategy and guidance documents for BCC will be shared with the MERG]

## Appendix 1

### Sample M&E Plan for Household LLIN Hang-Up Visits

*This is a sample M&E plan using the example of a house-to-house hang-up visit campaign to illustrate the key components that should be in an M&E plan. This template could be used for other types of BCC interventions such as health worker training to increase use of IPTp, targeted radio messages to encourage prompt care-seeking by parents for children with fever, and interpersonal communications to ensure compliance with IRS spray operators' instructions.*

- Targeted Behavior:** All household members sleep under an LLIN every night.
- BCC Intervention:** Door-to-door household LLIN hang-up visits:  
Two weeks after a universal coverage campaign in district X, a hang-up team will conduct door-to-door visits to assist households in hanging nets (if not already hanging). Teams will reinforce the key communication message, "Every household member should sleep under an LLIN every night of the year to prevent malaria."
- Intervention Goal:** To increase the likelihood that every individual in the household will sleep under an LLIN year-round by assisting households in hanging LLINs and reinforcing the key communication message through interpersonal interactions.
- Target Audience:** Heads of households (primary), children (secondary)
- Data Collection Methodology:** Pre-/post-intervention evaluation design:  
Teams will document each household visit on a form (including household name, location, number of people, number of nets, who slept under net last night, net hanging, intentions to use nets, and barriers to sleeping under a net). A sample of these households will be visited X months later (ideally during low transmission season) to collect follow-up data on recall of message, intention to sleep under LLIN, and target behavior. Household visit forms will serve as the data source.

| Indicator  | Data Source  | Reporting Frequency         | Responsible Party    |
|--|--|-----------------------------|----------------------|
| <b>Process</b><br><br><b>Number of individuals trained to conduct door-to-door visits</b>  | Training records   | One time; after training    | Implementing partner |
| <b>Output: Reach</b><br><b>Proportion of HH in target area visited by team</b><br><br><u>Num:</u> Number of HH in target area visited by team<br><u>Denom:</u> Number of HH in target area | HH visit forms- first visit<br><br>Census data for target area | One time; after first visit | Implementing partner |

| Indicator   | Data Source  | Reporting Frequency                                     | Responsible Party           |
|---|--|---|-----------------------------|
| <p><b>Output:</b> Service delivered</p> <p><b>Proportion of HH visited by team that either had a net already hanging or a net was hung by team</b></p> <p><b>Number of nets hung by team at time of visit</b></p> <p><u>Num</u>: Number of HH in target area visited by team with net already hanging or a net was hung by team</p> <p><u>Denom</u>: Number of HH in target area visited by team</p>  | <p>HH visit forms-<br/>first visit</p>                         | <p>One time; after first visit</p>                      | <p>Implementing partner</p> |
| <p><b>Outcome:</b> Recall/knowledge</p> <p><b>Proportion of HH receiving a hang-up visit that can recall the communication message at follow-up</b></p> <p><u>Num</u>: Number of HH visited at follow-up where someone in the HH recalls the communication message</p> <p><u>Denom</u>: Number of HH visited at follow-up</p> <p><i>*Assumes HH visited at follow-up received an initial visit where someone heard the communication message</i></p>                          | <p>HH visit forms-<br/>follow-up visit</p>                     | <p>One time; after follow-up visit</p>                  | <p>Implementing partner</p> |
| <p><b>Outcome:</b> Attitude/intention</p> <p><b>Proportion of HH receiving a hang-up visit that report it is likely everyone in the HH will sleep under an LLIN every night (and specify children &lt;5)</b></p> <p><u>Num</u>: Number of HH reporting an intention for everyone in HH to sleep under an LLIN every night</p> <p><u>Denom</u>: Number of HH visited (first visit and follow-up)</p> <p><i>Comparison of responses at first visit* and follow-up visit</i></p> | <p>HH visit forms-<br/>first visit and<br/>follow-up visit</p> | <p>Two times; after first visit and follow-up visit</p> | <p>Implementing partner</p> |

| Indicator  | Data Source  | Reporting Frequency                                     | Responsible Party           |
|--|--|---|-----------------------------|
| <p><b>Outcome:</b> Behavior</p> <p><b>Proportion of HH reporting everyone sleeping under an LLIN the previous night (and specify children &lt;5)</b></p> <p><u>Num:</u> Number of HH reporting that all HH members slept under an LLIN the previous night</p> <p><u>Denom:</u> Number of HH visited (first visit and follow-up)</p> <p><i>Comparison of responses at first visit and follow-up visit</i></p> | <p>HH visit forms- first visit and follow-up visit</p> | <p>Two times; after first visit and follow-up visit</p> | <p>Implementing partner</p> |

\* Question about intention to use LLINs would be asked before net hang-up and communication messages delivered.



**Appendix 2  
Sample Logic Model**

