SBCC MIS Module Technical Summary

(list of indicators; questions; rationale, use and interpretation)

Overview

The RBM SBCC Working Group proposed an *optional* standard module of malaria SBCC-related questions. The module will include the existing SBCC questions/indicators about recall of malaria messages and message source along with six new indicators that measure other behavioral determinants.

Summary List of Indicators

Table 1. Indicators and resulting guidance/application for SBCC programs

<table>
<thead>
<tr>
<th>Existing Indicators</th>
<th>Resulting Guidance/ Applications for SBCC programs</th>
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</thead>
<tbody>
<tr>
<td>Percentage of people who recall hearing or seeing any malaria message within the last six months</td>
<td>Which populations/areas need to be targeted</td>
</tr>
<tr>
<td>Source of malaria message</td>
<td>Which communication approaches are effectively reaching the target population</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Proposed Additional Indicators</th>
<th>Resulting Guidance/ Applications for SBCC Programs</th>
</tr>
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<tbody>
<tr>
<td>1. Percentage of people that name ITNs as a prevention method</td>
<td>What messages to use and how to frame these messages. SBCC programs understand that emotions and beliefs frequently drive behavior. For example, messages advising families to seek care from CHWs/health facilities can be framed in a way that seems alarming (incite a sense of risk/fear), or in a way that exerts social pressure. The choice of what framing to utilize can be informed by data from the proposed indicators.</td>
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<td>2. Percentage of people who perceive they are at risk from malaria</td>
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<tr>
<td>3. Percentage of people who feel that the consequences of malaria are serious</td>
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<tr>
<td>4. Percentage of people who are confident in their ability to perform specific malaria-related behaviors</td>
<td></td>
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<tr>
<td>5. Percentage of people with a favorable attitude toward care-seeking</td>
<td></td>
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<tr>
<td>6. Percentage of people that believe the majority of their community currently practice specific malaria-related behaviors</td>
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</table>
Figure 1. Factors influencing behavior change.

Malaria SBCC module indicators

Malaria SBCC

MEDIUM-TERM OUTCOMES
- Knowledge and attitudes toward malaria behaviors, products and services improved
  - Percentage of people that name ITNs as a prevention method
  - Percentage of people who perceive they are at risk from malaria
  - Percentage of people who feel that the consequences of malaria are serious
  - Percentage of people who are confident in their ability to perform specific malaria-related behaviors
  - Percentage of people with a favorable attitude toward care-seeking
  - Percentage of people that believe the majority of community currently practice specific malaria-related behaviors

SHORT-TERM OUTCOMES
- Population reached with SBCC activities
  - Proportion of people who recall hearing or seeing any malaria message in the last 6 months
  - Source of malaria message

Access to malaria commodities and services

Behavior change

LONG-TERM OUTCOMES
- Practice healthy malaria behaviors
  - Net use to access ratio
  - Proportion of children under five years old with fever in the last two weeks for whom advice or treatment was sought

Questions

Table 2: Indicator Definitions and Questions

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Numerator and Denominator</th>
<th>Question</th>
<th>Response Options</th>
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</thead>
</table>
| [Already in DHS/MIS] | n/a | In the past 6 months, have you seen or heard any messages about malaria | - Yes  
- No  
- Don’t know |
| Percentage of people who recall hearing or seeing any | n/a | Where did you see or hear these messages | - On the radio?  
- On the television?  
- On a poster or billboard?  
- From a community health worker?  
- At a community event?  
- Anywhere else? |
<table>
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| Malaria messages within the last six months | | (1) What are the things that people can do to prevent them from getting malaria? | - Sleep under a mosquito net  
- Sleep under an insecticide-treated mosquito net  
- Use mosquito repellant  
- Take preventive medication  
- Spray house with insecticide  
- [local customizations]  
- Other |
| New Percentage of people that name ITNs as a prevention method | Numerator: Total number of women who name nets as a prevention method  
Denominator: Total number of women aged 15-49 | (2) People in this community only get malaria during the rainy season | - Agree  
- Disagree  
- Don’t know |
| | Numerator: Total number of men who name nets as a prevention method  
Denominator: Total number of men aged 15-59 | | |
| New Percentage of people who perceive they are at risk from malaria | Numerator: Total number of women who disagree with the statement, “people in this community only get malaria during the rainy season.”  
Denominator: Total number of women aged 15-49 | | |
| | Numerator: Total number of men who disagree with the statement, “people in this community only get malaria during the rainy season.”  
Denominator: Total number of men aged 15-59 | | |
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<td></td>
<td>Denominator: Total number of men aged 15-59</td>
<td>(3) When your child has a fever, you almost always worry it might be malaria</td>
<td>– Agree – Disagree – Don’t know</td>
</tr>
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<td></td>
<td>Numerator: Total number of women who agree with the statement, “when your child has a fever, you almost always worry it might be malaria.”</td>
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<td></td>
<td>Denominator: Total number of women aged 15-49 who have had a live birth in the past 5 years.</td>
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<td></td>
<td>(This may be applicable to the men’s questionnaire as well if having a live birth in the past 5 years can be feasibly traced to the male respondent)</td>
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<tr>
<td>[New]</td>
<td>Numerator: Total number of women who agree with each of two statements about malaria</td>
<td>(4) You don’t worry about malaria because it can be easily treated</td>
<td>– Agree – Disagree – Don’t know</td>
</tr>
<tr>
<td>Percentage of people who feel that consequences of malaria are serious</td>
<td>Denominator: Total number of women aged 15-49</td>
<td></td>
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<td></td>
<td>Numerator: Total number of men who agree with each of two statements about malaria</td>
<td>(5) Only weak children can die from malaria</td>
<td>– Agree – Disagree – Don’t know</td>
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<tr>
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<td>[New]</td>
<td>Denominator: Total number of men aged 15-59</td>
<td>(6) You can sleep under a mosquito net for the entire night when there are lots of mosquitoes</td>
<td>- Agree</td>
</tr>
<tr>
<td>Percentage of people who are confident in their ability to perform specific</td>
<td>Numerator: Total number of women who agree to each of two statements about malaria</td>
<td></td>
<td>- Disagree</td>
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<td>malaria-related behaviors</td>
<td>Denominator: Total number of women aged 15-49</td>
<td></td>
<td>- Don’t know</td>
</tr>
<tr>
<td></td>
<td>Numerator: Total number of men who agree with each of two statements about malaria</td>
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<tr>
<td></td>
<td>Denominator: Total number of men aged 15-59</td>
<td>(7) You can sleep under a mosquito net for the entire night when there are few mosquitoes</td>
<td>- Agree</td>
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<tr>
<td>[New]</td>
<td></td>
<td></td>
<td>- Disagree</td>
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<tr>
<td>Percentage of people with a favorable attitude toward care-seeking</td>
<td></td>
<td></td>
<td>- Don’t know</td>
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<td></td>
<td></td>
<td>(8) When my child has a fever, it is best to start by giving them any medicine I have at home.</td>
<td>- Agree</td>
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<td></td>
<td></td>
<td></td>
<td>- Disagree</td>
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<td></td>
<td></td>
<td></td>
<td>- Don’t know</td>
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<td>feasiably traced to the male respondent)</td>
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</table>
| **[New]** | Numerator: Total number of women who agree with each of two statements about malaria | (9) At least half of the people in your community take their children to a health provider on the same day or day after they develop a fever | – Agree  
– Disagree  
– Don’t know |
| Percentage of people that believe the majority of their community currently practice specific malaria-related behaviors | Denominator: Total number of women aged 15-49 | | |
| | Numerator: Total number of men who agree with each of two statements about malaria | | |
| | Denominator: Total number of men aged 15-59 | (10) Among those who have nets, at least half of the people in your community sleep under a net every night | – Agree  
– Disagree  
– Don’t know |

*Notes on word choice:*

- “Could you” vs. “will you sleep under a net” – The latter measures intention, while the former measures perceived ability. Example: could you go to the gym at 5 am? (Answer: theoretically yes). But will you go to the gym at 5 am? (Answer: No, I do not intend to go to the gym at 5 am). Many factors can prevent an individual from performing a behavior, even when they have an intention to do so. Intention is strongest when attitudes, social expectations, and perceived ability favor the behavior.
- “I” vs. “you” – While piloting the surveys, questions were more easily understood when interviewers ask “You” questions.
- “At least half,” “more than half,” “most,” “majority” – “At least half” is specific enough to reduce confusion. For example, “most or the majority” can mean 60% or 80% depending on the individual. In previous surveys, Likert scales (none, less than half, more than half, etc.) were condensed into “at least half” during report writing and analysis so this may ultimately be the most DHS-friendly choice of words.

**Knowledge of ITNs as a prevention method – notes on question construction**

i. This is NOT limited to women who cite ONLY nets as a prevention method.
ii. “Nets” can mean any kind of net. Since most nets in a given country are treated, any net and ITNs are functionally equivalent.
iii. The options must include the relevant preventive measures implemented in the community. If any of these preventive measures are not implemented in the target community, such as seasonal malaria prophylaxis, it should not be included as an option. Other options should include false preventive measures for malaria including cutting grass, keeping the house surroundings clean, and avoiding drinking dirty water. The respondent is only counted in the numerator if they name at least one of the relevant preventive interventions and none of the incorrect behaviors.

iv. The question is unprompted. This creates the risk that people will only state what is top of mind. On the other hand, use of probes such as “anything else” could remind people that there are correct answers that they should give. Another approach, that of asking about each potential method, would make the interview even lengthier. There is also a small risk that asking incorrect methods would reinforce misconceptions. Therefore, this would not be recommended.

***Suggest including it in the women’s questionnaire, and optionally the men’s

Rationale, Use and Interpretation

<table>
<thead>
<tr>
<th>Percentage of people that name ITNs as a prevention method</th>
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<td><strong>Background:</strong> Data shows that levels of knowledge of ITNs as a prevention method are very high. In a multi-country analysis of DHS and MIS data, 14 of 15 countries had rates ranging from 77-95%(^6). However, knowledge questions like these are popular among countries and it is unlikely that they will agree to remove them wholly. Standardizing this question will at least facilitate comparisons over time, and across countries. The analysis has shown that knowledge of ITNs as a prevention method is predictive of net use (given access), but the model did not control for other beliefs due to a lack of standard indicators for these beliefs in the same surveys.</td>
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**Use/Interpretation:** High levels of knowledge should prompt SBCC programs to shift from “factual” types of messaging to messaging that uses other types of framing (as informed by the other indicators above). Low levels of knowledge indicate a need to raise awareness that ITNs prevent malaria.

To make the proposed question even more useful, a sub-analysis can be conducted to measure the proportion of people with misconceptions about malaria prevention. People who believe in the effectiveness of measures that are not recommended by the National Malaria Control Programs would count in the numerator. If misconceptions are widespread, SBCC programs can attempt to dispel them in their messaging.

**Users:** Donors, National Malaria Control Programs, Ministry of Health – Health Promotion Offices, Social and behavior change communication implementing partners, health/development communication researchers, RBM SBCC Working Group
Percentage of people who perceive they are at risk from malaria

**Background:** The first question measures the percentage of people who correctly believe that malaria can happen to them during low-transmission season. It looks a little like the question about people’s confidence to use nets where there are lots/few mosquitoes. The difference is that people may feel confident that they can do it, but they may not actually do it if they do not feel that they are at risk of malaria.

**Use/Interpretation:** If a high percentage of the population feel that they are not at risk of getting malaria during the dry season, then they are less likely to use a net. SBCC programs should use this data to promote the risk that people can get malaria all year round, so they should use nets throughout the year.

Conversely, if a high percentage of the population feel that they are at risk during the dry season, but net use during dry season (which is when the DHS fields) is low, SBCC programs should consider the self-efficacy indicator above (confident to use nets in dry season) to see if they should focus on boosting people’s confidence to practice the behavior.

The question about seasonality is advantageous in an MIS and DHS survey because they tend to field in different seasons. This allows a country to monitor seasonal shifts in population perceptions of risk.

**Consideration:** The question can be used only in countries with seasonal malaria (ex: not equatorial countries like DRC)

The second question measures the percentage of people who believe that malaria can happen to their own children. Populations with low rates of this perception may need SBCC messaging focused on this belief. SBCC messages based on this belief can be powerful emotionally because it invokes people’s protective instincts in a personal way. Perceptions of one (or one’s loved) ones’ vulnerability to malaria can be vital to maintaining vigilance (net use and care-seeking) in both high and low transmission settings. When rates are high, SBCC messages can be framed to promote testing – “many fevers are not malaria, get a test within 24 hours to be sure.”

**Consideration:** The second question is asked only of women who had a live birth in the past 5 years. This will capture many caregivers of children under 5 but not all of them (for example, grandmothers).
**Users:** Donors, National Malaria Control Programs, Ministry of Health – Health Promotion Offices, Social and behavior change communication implementing partners, health/development communication researchers, RBM SBCC Working Group

**Percentage of people who feel that the consequences of malaria are serious**

**Background:** This indicator measures the percentage of people who feel that malaria poses a serious threat (perceived severity). One may be vulnerable to malaria but if that person believes malaria is trivial/easily cured they do not have a high motivation to use nets consistently or seek care promptly.

**Use/Interpretation:** If a small percentage of the population feels that malaria is not a serious issue, SBCC programs should seek to boost levels of this belief.

Conversely, if a high percentage of the population feels that malaria is a serious issue, SBCC programs should also check if a high percentage of the population feels confident that they can use nets consistently and seek care from qualified providers. When people experience significant fear but have little belief that they can act they will be more likely to deny the importance of the issue or accept it fatalistically.

**Users:** Donors, National Malaria Control Programs, Ministry of Health - Health Promotion Offices, Social and behavior change communication implementing partners, health/development communication researchers, RBM SBCC Working Group

**Percentage of people who are confident in their ability to perform specific malaria-related behaviors**

**Background:** This indicator measures self-efficacy, which is the belief that one can practice the malaria-related behavior well. If people are not confident about their ability to perform it, they will be unlikely adopt the behavior.

**Use/Interpretation:** High or increasing rates of self-efficacy coupled with high behavioral rates suggest that SBCC efforts are not needed in this area. Low or decreasing rates of self-efficacy and low or decreasing behavioral rates is a sign that SBCC programs should focus on building people’s confidence that they possess the ability to practice these behaviors.
Messaging should address the specific behavior, ex: “You can sleep under nets even when it is hot and there are few mosquitoes around.” “You can go to the clinic for your sick child.” SBCC programs may wish to use in-depth interpersonal communication methods (like community dialogues) or the visual demonstrations on mass/digital media to build people’s skills and confidence in how to navigate specific situational challenges impeding adoption or maintenance of the behavior.

**Users:** Donors, National Malaria Control Programs, Ministry of Health – Health Promotion Offices, Social and behavior change communication implementing partners, health/development communication researchers, RBM SBCC Working Group

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### Percentage of people with a favorable attitude toward care-seeking

**Rationale:** Taking medicines at home can lead to delays in prompt care-seeking for children under 5. This indicator measures what percentage of the population favor taking medicine at home before seeking advice or treatment from a qualified provider.

**Use/Interpretation:** If a high percentage of the population favors presumptive treatment at home, then SBCC programs should focus on raising the sense of urgency (delays in treatment can be serious). If there is a low percentage, no messaging in this area is necessary. Data analysts might find it useful to compare the percentage of mothers who favor taking medicines vs. mothers sought care within 24-48 hours and those who did not.

Limitation: It does not measure other factors that could also lead to delayed care-seeking, such as tepid sponging or buying medicine at a drug shop. The question is asked only of women who had a live birth in the past 5 years. This will capture many caregivers of children under 5 but not all of them (for example, grandmothers). This question asks respondents about one’s own children. This make it more likely that they will reflect on what they do.

**Users:** Donors, National Malaria Control Programs, Ministry of Health – Health Promotion Offices, Social and behavior change communication implementing partners, health/development communication researchers, RBM SBCC Working Group
**Percentage of people that believe the majority of their friends and community currently practice a specific malaria-related behavior**

**Background:** People have a strong desire to fit in (i.e., do as others do) or conform to the expectations of peers and the community at large. SBCC programs can begin to alter behaviors if they portray certain behaviors as socially unacceptable or socially desirable.

**Use/Interpretation:** This indicator can be used to assess the effectiveness of SBCC strategies in influencing the perception that their community members are adopting the recommended behavior. Even if behavioral rates remain the same, rising levels of this perception suggests that SBCC programs are successfully building a critical mass/momentum that could eventually lead to behavior change. Low or decreasing rates suggest that SBCC program planners should emphasize net use or care-seeking as socially desirable.

If more than 50% of responses were “Don’t Know” (for example, if people are saying that they do not know if others are using nets in the privacy of their bedrooms, or if people are taking sick children to clinics) it may be a sign of low social cohesion in a certain geographic area (ex: cities), and messaging would not emphasize social desirability/unacceptability.

Caution about analysis/interpretation at the cluster level: “community” is not a reference to a specific geographic area but to the individual’s own definition of their community – this can be their family, friends, neighbors, schoolmates, etc. The module does not define “community” for them because we cannot know to whom people compare themselves.

Moreover, it is not important to know whether respondents guess correctly about the behaviors of the people in their community. People may have hazy ideas about others’ behavior. However, they can be motivated to practice the recommended behavior if they think other people are doing it.

**Users:** Donors, National Malaria Control Programs, Ministry of Health – Health Promotion Offices, Social and behavior change communication implementing partners, health/development communication researchers, RBM SBCC Working Group

Cross-cutting interpretation considerations:

- The above factors have a cumulative effect on one’s behaviors. Knowing that one should use a net, for example, is not enough to change behavior if one does not also believe oneself to be at risk, or that one can even do it. People who possess multiple correct beliefs are more likely to practice the
recommended behaviors. The malaria SBCC module helps programs identify which beliefs, singly or in combination, to promote.

- Traditional DHS tables comparing indicators by region, SES, age group, urban/rural etc. allow SBCC program planners to identify populations that need to be prioritized. This is especially useful for understanding how to allocate limited SBCC resources.

- Questions that look at seasonality have the advantage of being able to have data from both rainy (MIS) and dry seasons (DHS), and can be used to determine if messages focusing on seasonal behavior should be developed and when those SBCC activities should take place.