

PMI COMMUNICATION AND SOCIAL MOBILIZATION GUIDELINES

Introduction

Achieving and maintaining the goals of the President's Malaria Initiative (PMI) and of national malaria programs depend on correct and consistent use of insecticide-treated nets (ITNs), acceptance of indoor residual spraying (IRS), and adherence to treatment and prevention therapies. Past malaria control programs have taught us the importance of communication and community participation to attain sustainable shifts in the behaviors of individuals and communities around malaria treatment and prevention. The new resources and myriad new partners available for malaria programs now provide an opportunity to fully address the underlying behaviors related to malaria prevention and treatment in the design and operation of programs.

Purpose

The purpose of these guidelines is to assist in the development, implementation, monitoring and evaluation of programs to influence behaviors and mobilize communities to create long term normative shifts towards desired behaviors and to sustain enabling behaviors around the four PMI interventions. These behaviors are:

- Increased demand for malaria services and products;
- Acceptance of IRS;
- Improved adherence to treatment regimens and IPTp during pregnancy;
- Regular ITN use by the general population, focusing on vulnerable groups including pregnant women and children under five;
- Prompt, appropriate treatment with ACTs for children under five within 24 hours of onset of symptoms; and
- Community involvement in malaria control.

Who will use these guidelines?

These guidelines were developed for PMI country teams¹ along with counterparts in National Malaria Control Programs and other relevant departments within the Ministry of Health and other implementing partners. The guidelines can be used in the selection, management, monitoring, and evaluation of the PMI communication and social mobilization activities. The guidelines also can be a tool for local capacity building with a wide range of communication partners. In some cases the PMI team itself will employ the guidelines to design and carry out programs. In other cases the PMI team will use the guidelines to decide what broad programs need to be implemented and assist in-country contractors, grantees, and/or local partners to help design and implement programs.

What do these guidelines contain?

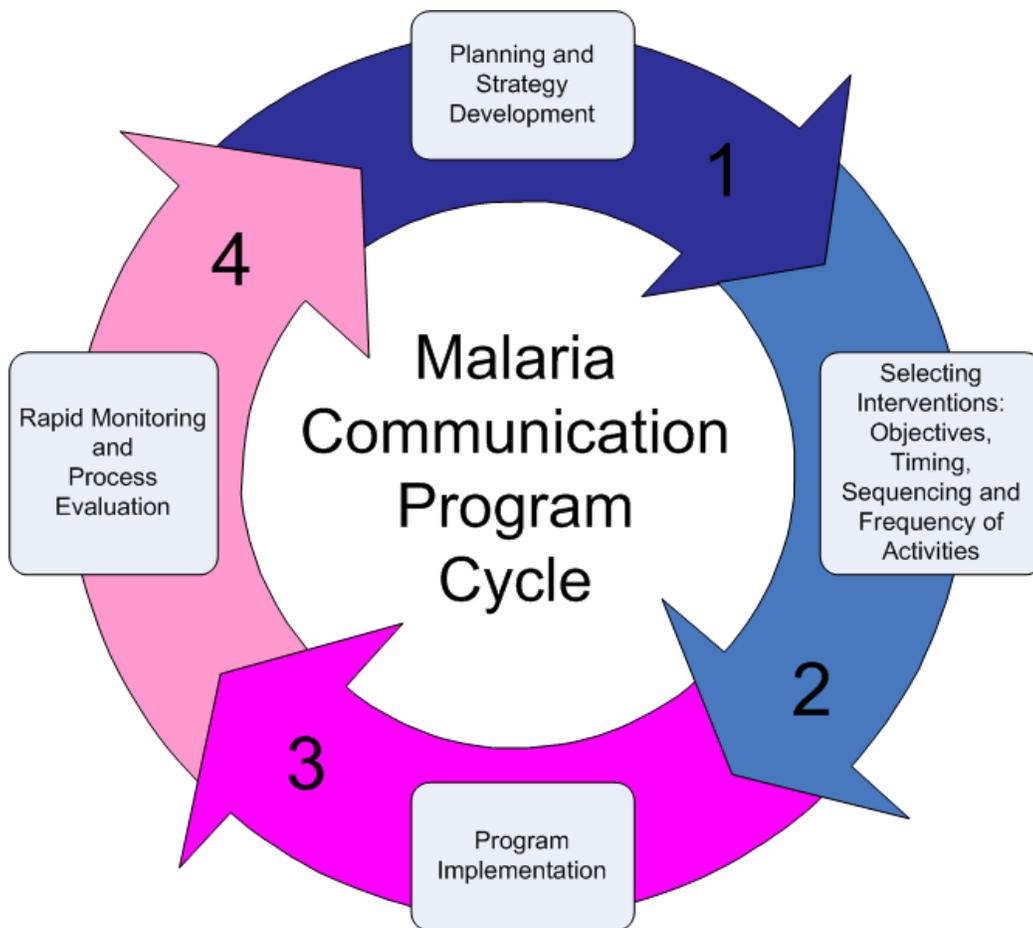
The guidelines contain information about how to plan, implement, monitor, and evaluate a behavior change-social mobilization process to reach individuals and communities affected by malaria. The guidelines are structured as a planning framework. They explain how to establish goals and objectives, review existing data and conduct a rapid assessment, develop a strategy with a budgeted plan of activities, and monitor and evaluate the process.

¹ PMI teams include USAID/CDC headquarters staff, USAID/CDC in-country PMI advisors, and others involved in country team activities.

What are the guidelines based on?

These guidelines are derived from existing reviews and research, including a review of published and unpublished literature on the impact and effectiveness of communication for IRS, ITNs, case management, and prevention of malaria in pregnancy.

The guidelines are based broadly on existing planning and strategy models for communication and social mobilization, which contain a similar set of steps and elements.



Modified from: Making Health Communication Programs Work, US Department of Health and Human Services, NIH, National Cancer Institute, p. 11.

Table of Contents

<u>Background.....</u>	<u>5</u>
What We Know about Communications/Social Mobilization and Malaria Programs.....	5
Communication Programming in Three Stages of PMI Lifecycle	6
<u>Step One: Planning and Strategy Development.....</u>	<u>8</u>
PMI Messages and Audiences in a Nutshell.....	8
Rapid Assessment.....	10
<u>Step Two: Selecting Interventions: Objectives, Timing, Sequencing, and Frequency of Activities.....</u>	<u>13</u>
Communication Activity Options.....	13
<u>Step Three: Program Implementation.....</u>	<u>20</u>
Program Budgets and Functions	24
Capacity Building within Communication Activities and Exit-strategy or Devolution of Activities to Host Countries	26
Integration of PMI Communication Activities with Other Child Survival, Maternal Health, and Infectious Disease Interventions.....	26
<u>Step Four: Monitoring and Evaluation</u>	<u>28</u>
Minimum Monitoring and Evaluation Standards for Communication Activities	29
How/Where to Collect Data for Output Indicators and Relate Them with Process and PMI Outcome Indicators	31
<u>References and Web Links</u>	<u>33</u>
<u>Glossary of Terms.....</u>	<u>35</u>
<u>Appendix A: Intervention Tables Presented by Target Group Domain</u>	<u>38</u>
<u>Appendix B: Process and Output Indicators for Communication, Recall, Intention and Behavior</u>	<u>43</u>
<u>Appendix C: USAID Implementing Partners That Focus on Communication</u>	<u>49</u>
<u>Appendix D: Generic Scope of Work for Communication and Social Mobilization Activities</u>	<u>55</u>
<u>Appendix E: Example of Cross-Tabulation and Analysis of Results.....</u>	<u>59</u>

Acronyms and Abbreviations

ACSD	Accelerated approach to child survival and development
ACT	Artemisinin-based combination therapy
ANC	Antenatal care
BCC	Behavior change communication
CHW	Community-based health worker
C-IMCI	Community-integrated management of childhood illness
CM	Case management
DHS	Demographic and Health Survey
HBMF	Home-based management of fever
HE	Health education
HEU	Health education unit
IEC	Information, education, and communication
IMCI	Integrated management of childhood illness
IPC	Interpersonal communication
IPTp	Intermittent preventive treatment in pregnancy
IRS	Indoor residual spraying
ITN	Insecticide-treated net
KAP	Knowledge-attitude-practice
LLIN	Long-lasting insecticide-treated net
MICS	Multiple Indicator Cluster Survey
MIP	Malaria in pregnancy
MIS	Malaria Indicator Survey
MOH	Ministry of Health
MOP	Malaria Operational Plan
NMCP	National Malaria Control Program
PMI	President's Malaria Initiative
PRA	Participatory Rural Appraisal
RDT	Rapid diagnostic test
RED	Reaching every district
SES	Socioeconomic status
SP	Sulfadoxine-pyrimethamine

Background

What We Know about Communications/Social Mobilization and Malaria Programs

A systematic review of published and unpublished studies and programmatic documentation (annual reports, project evaluations and technical briefs) of communication interventions related to IRS, ITNs, case management and IPTp programs was conducted for the purpose of this guidance. It found some but not extensive documentation on the evaluation of communication programs, defined broadly to include Information, Education and Communication (IEC), Behavior Change Communication (BCC), social marketing, and health education for the four intervention areas. The findings do not provide sufficient evidence to make programmatic decisions regarding the effectiveness of particular channels, specific messages, or types of integrated approaches. Communication programs integrated into larger malaria control and treatment interventions are rarely evaluated separately from the other programmatic activities. The review, however, revealed some important patterns and consistencies:

Community education campaigns – with teachers, village leaders, children, parents and volunteers providing education - are the most reported approach for prevention and treatment messages. Important lessons learned are:

- Outreach schemes using community members as distributors of information for message dissemination have been relatively successful when proper materials and training are given to the individuals best placed in the community to take on roles as educators.
- Small groups of committed individuals can plan and execute a project as well as if not better than a large committee.
- When using volunteers in the community, sustaining the interest of volunteers and ensuring that relevant and achievable goals are set is essential.

Health worker and vendor training were used more than any other intervention to inform community members about malaria case management and malaria in pregnancy. These interventions commonly involved creation of job aids and materials such as posters, pamphlets, and brochures to alert community members about how to recognize signs of malaria and determine the appropriate dosage for treatment of malaria. Important lessons learned are:

- Medical outlets/vendors are good places to make timely information accessible.
- Improving health worker capacity and providing clear messages about IPTp and SP has been effective in increasing coverage of SP.
- Alternate medical vendors/providers can be successful in administering antimalarials, not just health workers, especially in rural areas.

Interpersonal communication (IPC) is considered a good way to promote malaria prevention and treatment.

- Interpersonal communication targeting key stakeholders can be effective in improving treatment-seeking behavior.
- House-to-house strategy is effective in increasing appropriate use of ITNs, as most people have difficulty hanging them or are not familiar with retreatment practices.
- In the instance of IRS, door-to-door explanation of the process assisted workers in gaining access to houses for spraying.

Local and Mass media campaigns were almost exclusively used to promote increased and proper use of ITNs. Some critical lessons learned from ITN efforts include:

- ‘Shock’ messages around malaria were not well received.
- In all countries where campaigns ran, an increase occurred in malaria and ITN awareness and in ITN sales. Continuous, repetitive information is important for message transmission.
- Messages tailored to a country or regions were preferable to a holistic, pan-African approach.
- Generic mass media campaigns needed clear branding and messages to ensure awareness-raising of the appropriate products.

The literature examined was rich in information obtained from formative research. A recurring theme found in every communication intervention was the importance of *community involvement* and participation. Community members, including health workers, medical vendors, teachers, and government officials provided invaluable insights to help make programs successful.

Communication Programming in Three Stages of PMI Lifecycle

The table below presents communication programming for the four interventions in the three stages of the PMI lifecycle: Preparation; Implementation at Scale, and National Ownership and Sustainability. The left hand column shows the specific communication activities that address different stages from introduction, to scale up, and national ownership and sustainability. Desired program objectives on the right side are illustrated at each phase in the lifecycle. A country could be at different (or similar) stages in the lifecycle for different interventions. It is also important to note that certain interventions will require sustained input at the preparation phase while, at the same time, scaling up to keep a stable, enabling environment, for example, ongoing coordination of ITN logistics while achieving universal net coverage. Selection of communication programs will change as malaria efforts scale up in a country.

Four key elements ensure ownership and country buy-in of communication approaches at every stage in the lifecycle. Country ownership is essential to BCC success.

- Make communication approaches integral parts of the national malaria control efforts and malaria operational plans (MOPs)
- Use data and evidence for design and evaluation
- Ensure consistent, appropriate behaviours and messages across organizations
- Involve clients, communities, service providers, the media, policy makers and political leaders in their design, implementation, and evaluation

STAGES OF LIFECYCLE AND COMMUNICATION ACTIVITIES ²	MALARIA PROGRAM OBJECTIVES			
	PREVENTION			TREATMENT
	ITNs	IRS	IPTp	Case management
PREPARATION: PROVIDING A POSITIVE POLICY ENVIRONMENT and INFRASTRUCTURE Advocacy, consensus building	Removal of taxes/tariffs on importation of ITNs or materials to manufacture them; stream-lined messages/approach for ITNs, LLINs and re-treatment	Coordinated approach at national level along with policies/guidelines for IRS	Policy/guidelines adopted for IPTp with SP and treatment of malaria in pregnant women	Policy/guidelines adopted for ACT implementation, new policies considered/ adopted for HBMF, severe malaria, diagnostics
	Coordinated/streamlined distribution system	Quality cadre of trained sprayers; logistics systems for IRS commodities present	Quality drugs are continuously available for use in ANC clinics	Quality drugs in place for case management Public and private sector health care providers trained in quality case management and referral
IMPLEMENTATION AT SCALE Ongoing mass media, IPC, social marketing, community mobilization	Establishment of net culture, demand for LLINs, high coverage among the most vulnerable groups: children under 5 and pregnant women; Universal coverage with LLINs	Community acceptance of IRS	Health workers providing SP during ANC according to guidelines Increased uptake of ANC	Public and private sector health care providers adhering to guidelines; General accessibility
NATIONAL OWNERSHIP AND SUSTAINABILITY Repetition of messages, IPC, mass media, community mobilization	Correct and consistent use of ITNs/LLINs among general and vulnerable populations, strategy for replacing worn out ITNs/LLINs and for providing new ITNs/LLINs as needed for new population (births/immigrants)	Efficient and timely logistics of IRS Commodities; community demand for IRS; community of practice pre/during/post IRS campaigns	Acceptance of SP, early and timely uptake of ANC; client demand for IPTp services	Community compliance with drug regimen, vulnerable/marginalized groups with access to treatment, client demand for early care seeking, treatment and referral for severe malaria

² Prior to PMI, four technical partners (WHO, CDC, MSH's RPM Plus and JHPIEGO's MNH) joined together in 2002 to form the Malaria Action Coalition (MAC), funded by USAID, to achieve the Abuja targets and RBM goals. Initially, MAC's focus was to help countries adopt new and appropriate policies for two malaria interventions: malaria in pregnancy (IPTp with SP) and for case management (treatment with ACTs). Because policies by and large did change rather quickly in the African countries where MAC worked, in 2004 MAC turned its focus to technical issues. As a result of MAC's work from 2002 – 2007, most PMI countries are at a later stage for IPTp and case management in the lifecycle above.

Step One: Planning and Strategy Development

PMI Messages and Audiences in a Nutshell³

Communication strategies and activities should be designed to encourage specific target audiences to take a certain action and specify why and how. Many communication theories focus on progressive change. This includes receiving messages, recalling them, believing them, intending to act on them, and acting. Below is a list of key belief and action messages that should be promoted in malaria communication strategies;

Messages

Belief:

1. Mosquitoes cause malaria
2. Mosquitoes that bite at night are the only cause of malaria
3. Malaria is serious, can be fatal
4. Children under 5 and pregnant women are most vulnerable
5. Malaria transmission can occur year-round
6. You can prevent malaria in your home
7. There is an effective treatment for malaria.
8. IRS is an effective means of malaria prevention and control
9. Insecticides used in IRS are safe
10. ITNs are an effective means of malaria prevention and control
11. ITNs are safe for the general population and specifically children under 5 and/or pregnant women
12. ITNs must be used nightly
13. It's important to take medicine to prevent malaria when pregnant
14. IPTp is safe
15. It's important to seek treatment for fever in children within 24 hours from a qualified provider

Action:

1. Acquire ITN
2. Sleep under an ITN every night
3. Prepare buildings for spraying and allow sprayers inside structures
4. Seek treatment from qualified health worker within 24 hours of onset of fever of child
5. Take the complete dose of antimalarial correctly
6. Go to ANC before 4 months pregnant
7. Return to ANC as scheduled

Audiences

The following lists the four PMI interventions, their mode of delivery, and key audiences with the recommended key actions for each:

ITNs: Delivered free through mass campaigns, routine delivery through ANC/EPI visits, social marketing, voucher programs

³ Adapted from Seidel, R. Behavior Change Perspectives and Communication guidelines on six Child Survival Interventions (AED/CCP), Dec, 2005.

Policy makers

- Ensure adequate supplies are available at front line facilities and in the community
- Endorse the removal of taxes and major financial barriers
- Support a coordinated and harmonized ITN strategy

Families, decision makers, e.g. heads of households, mothers

- Acquire ITNs
- Hang ITNs correctly; use them consistently

Health service providers and community volunteers, distributors (vendors)

- Promote ITNs at every opportunity (ANC visits, Child visits, etc)
- Give information on how/when to use ITN, including demonstrating how to hang
- Distribute and explain vouchers as needed and provide information on where to get ITNs

Community leaders, organizations

- Promote ITNs at every opportunity (community meetings, child health days, etc) and special events
- Demonstrate use, hanging, etc.

IRS: Delivered through annual/semi-annual campaigns prior to rainy season

Policy makers

- Explain the rationale and implications of IRS
- Include IRS as a malaria prevention strategy for the national malaria control program

Families

- Prepare buildings before spraying
- Allow sprayers inside home
- Don't wash walls after spraying

Sprayers

- Carry out effective, quality operations
- Wear protective equipment (ensure women are not pregnant, potentially exposing the fetus)

Community leaders, organizations

- Facilitate spraying within their communities (planning, discussing with community, etc.)

IPTp: Delivered through routine ANC visits, at least twice

Policy makers

- Understand the dangers of malaria during pregnancy
- Enforce the national IPTp policy

Women, mothers

- Attend ANC in first trimester and return regularly
- Take SP doses, as per country policy

Health service providers

- Provide correct SP dose to healthy pregnant women at correct times and explain its purpose and potential side-effects
- Encourage early and frequent ANC attendance; give appointments for next visit

Community leaders, organizations

- Encourage early and frequent ANC visits, especially for IPTp

Treatment of Fever: Delivered through community/home-based channels, the private sector, at the health facility, and in some cases, through traditional healers

Policy makers

- Support the introduction of evidence-based practices for case management
- Endorse classification of first line ACT for over-the-counter sale and distribution
- Support the establishment of a quality control system for anti-malarials

Families

- Recognize signs and symptoms of malaria and the high risk that malaria poses for children under 5 and pregnant women
- Seek treatment for children within 24 hours of on-set of fever
- Acquire and give the right ACT, in the right dose, for the right number of days
- Recognize signs of severity/complications/failure to respond to treatment and seek help promptly

Health service providers (including community-based, where appropriate)

- Ask about previous treatments (to identify treatment failures) and symptom history
- Prescribe the right ACT in the right doses
- Explain clearly how to take medication and discuss side effects
- In areas of stable malaria transmission, treat all febrile children under 5 with the appropriate ACT.
- Recognize signs of severe disease and treat or refer

Medicine dispensers

- Ask about previous treatments (to identify treatment failures) and symptom history
- Dispense the right ACT in the right doses
- Explain clearly how to take medication and discuss side effects
- In areas of stable malaria transmission, treat all febrile children under 5 with the appropriate ACT
- Ask about signs of severity and refer to health center when necessary

Rapid Assessment

The first step to designing and implementing a communication/social mobilization strategy is to understand the current behaviors of the target audiences and their motivations.

Each PMI country team completed a needs assessment that included a review of the existing policies, plans, and activities for malaria control. The gaps identified in policy, commodities and program implementation provided overall guidance for the Malaria Operational Plan (MOP). The assessment results and information from the most recent MOPs - especially any community mobilization and demand creation gaps and/or opportunities addressing cultural change, ownership and participation - should serve as the starting point for developing a communication strategy and activities.

Rapid Assessment

Most of the rapid assessment and formative research will take place in the initial planning stages of communication activities. The rapid assessment will allow PMI teams to compile and *assess* current knowledge, beliefs, practices, opinions, and other behavioral determinants.

Formative research can have enormous impact on how communication activities are designed: for example, results of qualitative research in Kenya (Minja 2005)⁴ about how the term “malaria” was used to describe fever and mild illness resulted in a reorientation of the communication campaign establishing “malaria” as an illness that could result in death.

Before gathering any new information, collect and review whatever information already exists in country (or in neighboring countries with similar ethnic groups in their population), using sources that can include:⁵

- Household survey results, including Demographic and Health Surveys (DHS)
- Health facility data
- MOH/NMCP, health education unit policies, guidelines, training materials
- Program review reports (focused program review, comprehensive review or desk review)
- Country program profile
- KAP (knowledge-attitude-practice) survey results (constitutes literature search-both published and gray)
- Qualitative research or ethnographic study reports about what people know, believe, and do concerning malaria/fever, including what they call different types of fever, what they believe causes them, and how they treat them
- Other donors/partners implementing malaria activities, including bilaterals
- Interviewing researchers who have conducted studies on these topics.

It is important to understand the program’s target audiences, specifically: who they are, what they believe and what they do and do not do, and that this focus will differ from country to country. Here are some key types of information to look for in the above sources.

Key Questions to Help Describe a Target Audience

- Who are they? (age, gender, ethnicity, family relationship/status, daily activities or work)
- What do they know about malaria prevention and treatment?
- What do they know about the severity of malaria in children and pregnant women?
- Are they a trusted source of information?
- What are they doing now to prevent and treat malaria?
- Why aren’t they doing other behaviors to prevent or treat malaria?
- What is making it hard for them to do what they “should” be doing?
- What would make it easier for them to do what they “should” be doing?
- Who influences the target audience about malaria treatment and prevention?

PMI teams should collect information at the beginning of the communication planning process to be able to tailor information and activities to the populations they are trying to reach and affect. Countries may already have baseline information collected that should be utilized. In addition, the rapid assessment should identify and review malaria communication and social mobilization programs already underway in the country.

Formative Assessment

Once the rapid assessment has been completed and analyzed, gaps can be identified. To get the missing information, limited formative assessments should be conducted, and should not constitute a lengthy process. This formative research can be quantitative and/or qualitative. As a rule, quantitative methods (such as surveys on knowledge, attitudes and behaviors using questionnaires—the “what”) are more focused on precise

⁴ Minja, *et al*, Available at: http://findarticles.com/p/articles/mi_qa3800/is_200507/ai_n14685896.

⁵ Text and Key Questions table adapted from Spot ON Malaria Guide: Pg 16-17.

measurement of pre-determined questions and qualitative methods (e.g., focus groups, in-depth interviews, participant observation—the “why”) are more exploratory and focused on an understanding of complex realities and processes. Some different methods suggested to get this missing information about different target audiences are listed in the following table.

Target audiences	Suggested Methods
Health service providers (health workers, pharmacists, drug sellers)	Organizational assessment Observations Facility survey Mystery client visits
Parents of sick children	Child health outpatient interviews Exit interviews Observations
Pregnant women	ANC interviews Observations
General population, individual	KAP study Focus groups Participatory Rural Appraisal Behavioral/Product Trials

The findings from any new formative assessments, combined with those from the rapid assessment, should be used to develop the communication strategy that will describe interventions and define the objectives, timing, sequencing, and frequency of activities.

Several examples of rapid/formative assessments and their components are available, and PMI teams can consult the A Field Guide to Designing a Health Communication Strategy, which was produced by the Center for Communications Programs at the Johns Hopkins University: <http://www.jhuccp.org/pubs/fg/02/>.

Step Two: Selecting Interventions: Objectives, Timing, Sequencing, and Frequency of Activities

After gathering and analyzing the information from a Rapid Assessment, the next logical step in the process is to determine what types of activities are needed to achieve the goals and priorities of the PMI team in light of the information collected.

PMI teams should work with the MOH IEC/BCC/Health Education Unit in conjunction with relevant MOH programs (e.g. NMCP, maternal and child health) to develop a comprehensive communication strategy and integrated activities, designating a lead partner for communication to maximize harmony and synergy. The strategy should reflect the needs of target audiences -- careful consideration is needed to include these audiences in the strategy development. Coordination with the NMCP is especially important as malaria control scales up. The magnitude of combined malaria interventions is expected to have a major impact on malaria-related morbidity and mortality resulting in possible hypo- or meso-endemic transmission areas. Annually, through the MOP planning process, PMI teams should revisit successes and challenges in communications activity implementation in each intervention in order to modify these approaches as disease patterns shift and different communications activities and messages are warranted.

To strategically determine what activities to undertake, use the data collected from the rapid (formative) implementation review to answer the following questions:

1. Who are the priority and supporting groups that need to act?
2. What are the desired behaviors/actions for these populations to achieve the PMI goals?
3. Which factors would enable these key behaviors/actions? Which barriers need to be reduced?
4. What are the recommended activities to build on these factors/overcome these barriers?

Communication Activity Options

The approach⁶ illustrated in the following tables for each of the four PMI interventions is designed to avoid the common pitfall of leaping directly from selecting a target audience to developing communication materials. A positive policy environment and infrastructure are critical to communication planning and implementation; the tables below assume that most of the advocacy and consensus building has already taken place for the key interventions promoted, as is the case in most PMI countries, so that most countries are in the second stage of the lifecycle (refer to lifecycle in background section).

How to use these tables:

Each intervention is sorted by audience, desired behaviors, social or other outcome, assets, challenges, suggested approaches/specific techniques, rapid assessment and monitoring and evaluation options. Note that each PMI team will have country-specific assets and challenges, and potentially different target audiences. The tables focus on communication approaches and specific techniques sorted by the target audience, which is intended to complement the broader country-specific malaria strategy⁷. Many of these approaches are cross-cutting and have been chosen based on programmatic use and experience. *Asterisks have been placed after the suggested approaches/specific techniques which the literature review has shown to be most effective.* PMI teams should ensure that if multiple communication channels are being used across interventions that the end product

⁶ Adapted from the BEHAVE Framework http://www.coregroup.org/working_groups/behave_guide.cfm

⁷ Note: Suggested approaches/techniques listed for health service providers do not replace formal capacity building and training/education, or supervision. Health service providers can include private providers, public providers, and health workers.

is an integrated communications plan. PMI teams should use information from the Rapid Assessment to prioritize target audiences under each intervention, review country-specific assets and challenges to have a firm understanding of non-communication specific issues, and select appropriate approaches and or techniques that will contribute to the desired behavioral, social, or other outcome. A glossary of terms is available for specific approaches and techniques listed in the tables. Once activities are prioritized, the next step is step three, program implementation.

Appendix A is a modified version of the four tables presented in *target group domains*, which is helpful for the PMI team when reviewing specific activities across interventions managed by one partner/project. For example, the domain table that targets communities and individuals would be useful for a PMI team that is designing a contract or agreement, across the four interventions, which focuses on these target groups.

Prevention: Insecticide-treated nets

Desired Behavioral, Social or Other Outcome	Assets	Challenges	Suggested Approaches/Specific Techniques	Rapid Assessment	Monitoring and Evaluation
Policy makers					
<p>Policy makers support a coordinated and harmonized ITN strategy</p> <p>National leadership endorses evidence-based, standardized messages</p>	<p>LLINs are promoted worldwide; Net culture present</p> <p>Universal country Coverage/distribution</p> <p>Political will for policy change exists</p> <p>Presence of donor coordination</p>	<p>Taxes/tariffs still exist on ITNs</p> <p>Poor visibility of NMCP</p> <p>Short-term gain vs. sustainability</p>	<p>Championing leaders in harmonized distribution strategies</p> <p>Showcasing effective approaches</p> <p>Streamlining/consistency in messages, consensus meetings</p>	<p>Stakeholder interviews</p> <p>Key informant interview</p>	<p>Policy change</p> <p>Consensus panel</p> <p>Organized committee</p>
Health service providers⁸					
<p>Service providers target vulnerable populations</p> <p>Service providers (public/private) provide correct information about nets (and re-treatment where appropriate)</p> <p>Service providers counsel during ANC and other points of service on the benefits/correct use of treated nets</p>	<p>Addressing vulnerable populations are a key priority area among leaders</p> <p>Vibrant private sector exists</p> <p>Health workers are well trained on benefits of ITNs</p> <p>Adequate training facilities available</p>	<p>Distribution challenges in remote areas; difficult to identify/ reach vulnerable populations</p> <p>Lack in availability of ITNs</p> <p>Small proportion of target population go to health facilities</p>	<p>Social marketing (including voucher programs) to target groups**</p> <p>Service provider recognition (e.g. Gold Star, branding)</p> <p>Job aides/point of purchase/service materials</p> <p>Values clarification and IPC training for service providers</p>	<p>Sample survey of providers</p> <p>Observations</p>	<p>Monitoring reports, mystery clients</p>
General population, women, individuals					
<p>People know how malaria is transmitted and the risks</p> <p>People (especially the most vulnerable) use nets as a key part to preventing malaria</p> <p>Women make family health decisions such as obtaining and using ITNs</p> <p>Community members know how to use nets correctly (and re-treat them if necessary)</p> <p>Family members hang nets properly</p>	<p>Strong logistics management system in place</p> <p>Willingness/ability to pay for nets among vulnerable groups</p> <p>Presence of net culture</p> <p>Presence of PVO/NGO networks, employer-based schemes and boarding schools</p> <p>Strong logistics management system in place</p> <p>Presence of PVO/NGO networks</p> <p>Strong national radio coverage</p>	<p>Low literacy levels</p> <p>Preference of other ineffective methods for mosquito control</p> <p>Limited coordination/ implementation capacity at sub-district level and below</p> <p>Men may control money flow</p> <p>Lack in availability of re-treatment kits; lack of ITNs due to stock outs in the public sector</p> <p>Limited coordination/ implementation capacity at sub-district level and below</p> <p>Remoteness of target populations</p>	<p>Locally adapted, pictorial IEC materials, mass media**, IPC in community</p> <p>Positive deviance among ITN users in community</p> <p>Targeted voucher programs**</p> <p>Health education during ANC and immunization clinics**</p> <p>Targeted IEC, community mobilization, IPC, door to door campaigns by Community Health Workers (CHW)**</p> <p>Community re-treatment days, modeling ITN use in health settings and schools**</p> <p>Demonstration campaigns around net hanging, modeling ITN use in health** settings and schools, targeted IEC material</p> <p>Radio programming, TV spots</p> <p>Traditional media, story tellers, drama puppetry</p>	<p>Sec. data analysis (DHS), KAP</p> <p>Focus groups</p>	<p>Monitoring reports</p> <p>Behavioral surveillance survey</p> <p>Cost-benefit analysis</p> <p>Sample survey of women</p> <p>Behavioral surveillance survey</p> <p>Tracking survey</p> <p>Campaign follow up survey</p>

⁸ Health service providers can include private providers, public providers, and health workers

Prevention: Indoor residual spraying

Desired Behavioral, Social or Other Outcome	Assets	Challenges	Suggested Approaches/Specific Techniques	Rapid Assessment	Monitoring and Evaluation
Policy makers					
<p>Policy makers know the rationale and implications of IRS</p> <p>National promotion of IRS as a malaria prevention strategy for the national malaria control program</p>	<p>Existence of long standing IRS program</p> <p>Political will for policy change present</p> <p>Donor coordination exists</p>	<p>Resistance to IRS programs</p> <p>Poor visibility of NMCP</p>	<p>Informative/advocacy meetings for IRS</p> <p>Country visits to successful IRS programs</p>	<p>Stakeholder interviews</p> <p>Key informant interview</p>	<p>Policy change</p> <p>Consensus panel</p> <p>Guideline development</p>
Opinion leaders					
<p>Community leaders know the rationale, benefits and approaches of IRS</p> <p>Leaders engage in micro-planning for IRS activities</p>	<p>Strong community networks present</p> <p>Opinion leaders are trusted and influential</p>	<p>Limited coordination/ implementation capacity at sub-district level/below; resistance/ bottlenecks from community leaders</p>	<p>Participatory meetings with community leaders</p> <p>Sensitizing community leaders through Informational gatherings</p> <p>Panel discussions</p>	<p>Community meetings</p> <p>Focus groups</p>	<p>Tracking survey</p> <p>Community meeting</p>
IRS sprayers, including female sprayers					
<p>Sprayers carry out effective, quality spray operations</p> <p>Female sprayers practice undertake safety measures, e.g. pregnancy tests prior to spray operations and do not breastfeed during spraying</p>	<p>Adequate training facilities available</p> <p>High staff retention</p>	<p>Low literacy levels</p>	<p>Standard certification of sprayers</p> <p>Sprayer Q/A pocket guide (job aide)</p> <p>Pictorial, simple IEC materials for safety among female sprayers</p>	<p>Observations</p> <p>Sample survey of sprayers</p>	<p>Observations</p> <p>Sample survey of sprayers</p>
General population, individuals					
<p>People know not to wash walls after spray activities</p> <p>Community knows that insecticide is invisible on walls, safe and effective</p> <p>Communities prepare structures/ houses prior to spraying</p> <p>Villagers allow sprayers inside their house/structure for IRS</p>	<p>Influential community leaders</p> <p>Mass media has strong influence on population</p> <p>Presence of PVO/NGO networks</p> <p>Strong national radio coverage</p>	<p>Low literacy levels</p> <p>Limited coordination/ implementation capacity at sub-district level and below</p> <p>Resistance among community leaders</p> <p>Cultural taboos, especially to spray bedrooms</p>	<p>Micro planning prior to campaign</p> <p>Dramas/songs</p> <p>Billboards</p> <p>Distribution of fact sheets/leaflets for literate/illiterate (including pictures)</p> <p>Community sensitization meetings</p> <p>Radio "frequently asked questions" interviews for community concerns</p> <p>Mobile van/loudspeaker endorsement</p> <p>Door-to-door campaigns**</p> <p>Popular stars endorsement</p>	<p>Community meeting</p> <p>Focus groups</p>	<p>Tracking survey</p> <p>KAP survey</p> <p>Campaign follow up survey</p>

Treatment: Case management, prompt, effective treatment

Desired Behavioral, Social or Other Outcome	Assets	Challenges	Suggested Approaches/Specific Techniques	Rapid Assessment	Monitoring and Evaluation
Policy makers					
<p>Policy makers are up to date on the latest evidence-based practices for effective malaria case management, e.g. severe malaria, quality laboratory diagnosis, use of RDTs, community based treatment</p> <p>Policy makers support the introduction of evidence-based practices for case management</p> <p>National drug authority classifies first line ACT for over-the counter sale and distribution</p> <p>National drug authority has established quality control system for anti-malarials</p>	<p>Treatment policies are up to date</p> <p>Political will for policy change present</p> <p>Donor coordination exists</p>	<p>Resistance among policy makers to new interventions</p> <p>Fake drugs</p> <p>Poor visibility of NMCP</p>	<p>Stakeholder consensus meeting on effective interventions</p> <p>Study tour to countries with effective policies</p> <p>Advocacy meetings to encourage adoption of evidence-based policies</p> <p>Advocacy among national drug authorities to reclassify anti-malarials for over-the-counter distribution</p> <p>Advocate for banning of all anti-malarial monotherapies</p> <p>Advocate for strong quality assurance program for antimalarial drugs</p>	<p>Stakeholder interviews</p> <p>Key informant interview</p>	<p>Policy change</p> <p>Consensus panel</p> <p>Organized committee</p>
Health service providers (including community health workers)					
<p>Service providers know which drug brands meet quality standards</p> <p>Service providers counsel on proper drug selection and compliance among clients</p> <p>Service providers know new treatment regimens among health workers, e.g. rectal artesunate, injectable artemether</p> <p>Health workers provide accurate information on prompt, effective treatment including compliance with the complete regimen</p> <p>Health workers provide supervision of drug compliance over time</p>	<p>Quality antimalarial drugs available</p> <p>Strong logistics management system in place</p> <p>Adequate training facilities available</p> <p>Vibrant private sector exists</p> <p>Strong logistics management system in place</p> <p>Adequate training facilities available</p> <p>High staff retention</p>	<p>High out of pocket expenditure for drugs</p> <p>Sub-standard/poor quality pharmacies</p> <p>Production/sale of fake drugs; weak drug quality monitoring system</p> <p>Weak dissemination of national policy to service provider level</p> <p>Lack of motivation among staff</p> <p>Weak supervisory systems</p> <p>Resistance among health providers to follow new treatment regimen</p>	<p>Creation of over-brand for quality anti-malarials and education to consumers to trust that brand</p> <p>Social marketing and drug packaging/inserts</p> <p>Franchising/training of private providers to promote quality**</p> <p>Labeling community drug distributors and using media channels to direct the public to them**</p> <p>Sensitization and job aides about malaria treatment guidelines for health workers and drug vendors</p> <p>Distance learning approaches to update health workers and community health workers</p> <p>IPC skills training for health workers**</p> <p>Distance learning and cross-fertilization approaches (peer to peer, visits) to update health workers and CHWs on new regimens</p>	<p>Stakeholder interview</p> <p>Key informant interview</p> <p>Organizational assessment</p> <p>Observation</p> <p>Facility survey</p> <p>Sample survey of providers</p>	<p>Policy change</p> <p>Consensus panel</p> <p>Monitoring reports</p> <p>Mystery clients</p>

Treatment: Case management, prompt, effective treatment (continued)

Opinion leaders					
<p>Leaders recognize malaria symptoms and reject traditional beliefs/practices (e.g. convulsions are not seen as a sign of severe illness and delay use of effective treatment)</p> <p>Leaders promote proper symptom recognition/early care seeking and discourage harmful traditional practices for malaria treatment in communities</p>	<p>Opinion leaders trusted, strong influence</p>	<p>Over reliance by population on ineffective medicinal sources</p>	<p>Identification of solutions through use of participatory methods that engage community leaders, elders, traditional healers, religious leaders, birth attendants</p>	<p>Community meetings</p> <p>Key informant interviews</p>	<p>Tracking survey</p> <p>Behavioral surveillance survey</p>
General population, women, individuals					
<p>People know how malaria is transmitted and are aware of the particular dangers of malaria to young children and pregnant women</p> <p>People know which drugs are the most effective for malaria treatment, and families know correct dose recommended for treatment</p> <p>Communities recognize the signs of severe illness that require immediate medical attention</p> <p>Caretakers demand quality information and counseling on new anti-malarial drugs and approaches</p> <p>Individuals receiving malaria treatment adhere to treatment regimen</p>	<p>Insurance schemes to ensure affordability of drugs</p> <p>Presence of PVO/NGO networks</p> <p>High national radio coverage</p> <p>Strong logistics management system in place</p>	<p>Far distance to health facilities</p> <p>Over reliance by population on ineffective medicinal sources</p> <p>High out of pocket expenditure for drugs and/or services</p> <p>Limited coordination/ implementation capacity at sub-district level and below</p> <p>Low literacy levels</p>	<p>Dissemination of information about symptom recognition, importance of prompt treatment in young children, effective drugs and importance of compliance through:</p> <p>Radio, TV, traditional media (story telling, drama, puppetry), integration into school curriculum and workplace</p> <p>Health education during ANC and immunization clinics</p> <p>Simple, pictorial IEC materials</p> <p>Pre-packaged treatment (could be socially marketed)</p> <p>Consumer education and point of service material including dosage by age</p>	<p>Sec. data analysis (DHS)</p> <p>Focus groups</p>	<p>KAP surveys</p>
<p>Poor or marginalized groups seek treatment for malaria promptly</p> <p>Women make family health decisions such as how money should be spent if someone is sick from malaria</p> <p>Communities demand high quality, prompt and effective treatment from their health service providers</p>	<p>Strong logistics management system in place</p> <p>Strong presence/ organization of women's organizations</p> <p>Health facility supervision system in place to ensure quality</p>	<p>Far distance to health facilities</p> <p>Cultural taboos</p> <p>Limited availability of health facilities</p>	<p>Identifying community drug distributors and using local media, to direct the public to them</p> <p>Integrate home based management of fever/malaria with community approaches in integrated management</p> <p>Door-to-door counseling of mothers/caretakers</p> <p>Improving delivery of ACTs through community based medicine sellers, where appropriate**</p> <p>Health education among communities to understand/demand quality services</p>	<p>Focus groups</p> <p>Community meeting</p>	<p>Tracking survey</p> <p>Behavioral survey</p>

Prevention: Intermittent Preventive Treatment among Pregnant Women (IPTp)

Desired Behavioral, Social or Other Outcome	Assets	Challenges	Suggested Approaches/Specific Techniques	Rapid Assessment	Monitoring and Evaluation
Policy makers					
<p>Policy makers know the dangers of malaria during pregnancy</p> <p>MOH enforces IPTp policy, the policy for treatment of malaria in pregnant women, and early and frequent attendance at ANC</p>	<p>Policy in place for IPTp</p> <p>Political will for policy change exists</p> <p>Donor coordination present</p>	<p>Resistance among policy makers to new interventions</p> <p>Poor visibility of NMCP</p>	<p>Advocacy with MOH/districts on benefits of IPTp as part of ANC, effects of malaria in pregnancy, making IPT part of safe motherhood communications,</p> <p>Consensus meetings on importance of timely and frequent ANC visits</p>	<p>Stakeholder interview</p>	<p>Policy change</p> <p>Guideline implementation</p>
Health service providers					
<p>Health providers know the correct SP guidelines</p> <p>Health workers provide the recommended SP dose to pregnant women, and do not save SP for those who are sick with malaria</p> <p>Health workers encourage women take SP during pregnancy, and encourage early and frequent attendance at ANC</p> <p>Health workers know that symptoms of malaria in pregnant women should be treated as severe malaria</p>	<p>SP is free and available at all health facilities</p> <p>Adequate training facilities available</p> <p>High staff retention</p>	<p>SP promoted as a first line drug for malaria treatment or alternative when first line drug is out of stock</p> <p>Resistance among health workers to modify treatment regimen or to use SP in pregnancy</p> <p>SP not available in ANC clinics</p>	<p>Sensitization and job aids for workers</p> <p>Distance learning approaches for health workers</p> <p>Peer exchange programs—Positive Deviance</p> <p>Point of service materials prepared for clients</p> <p>IPC training for service providers**</p> <p>Training as part of supervisory visits</p>	<p>Sec. data analysis (DHS)</p> <p>Facility survey</p> <p>Focus groups</p>	<p>Monitoring reports</p>
Opinion leaders					
<p>Opinion leaders know the dangers in malaria in pregnancy and asymptomatic malaria</p> <p>Village chiefs/leaders encourage early and frequent ANC visits, especially to receive SP for MIP</p>	<p>Insurance schemes to ensure affordability of drugs available</p> <p>Opinion leaders are trusted and influential</p> <p>Presence of PVO/NGO networks</p>	<p>Over reliance by population on ineffective medicinal sources</p> <p>Cultural taboos</p>	<p>Sensitizing traditional birth attendants and women's leaders in community</p> <p>Participatory methods that engage community leaders, elders, healers, religious leaders, birth attendants</p>	<p>Community meetings</p> <p>Key informant interviews</p> <p>Focus groups</p>	<p>Tracking survey</p> <p>KAP survey</p> <p>Behavioral surveillance survey</p>
Community, women					
<p>Women know the dangers of malaria in pregnancy and that asymptomatic malaria can be common</p> <p>Women attend ANC early and frequently</p> <p>Women comply with the recommended two doses of SP for IPTp</p>	<p>High/timely ANC attendance</p> <p>High national radio coverage</p>	<p>Limited coordination/ implementation capacity at sub-district level and below</p> <p>Cultural taboos</p>	<p>Client education during ANC and FP clinics</p> <p>IEC materials through women's groups and women's micro-finance groups, workplace health education programs</p> <p>Media approaches (TV, radio, dramas) encouraging timely uptake of ANC and adherence to SP</p> <p>Community approaches (radio listening groups, road shows, women's groups)</p>	<p>Focus groups</p> <p>Sec. data analysis (DHS)</p>	<p>Monitoring reports</p> <p>KAP survey</p>

Step Three: Program Implementation

Most materials and media for the general public should be developed AFTER the appropriate policies have been implemented, the products are commonly available, key messages have been determined, and health staff has been trained. To help plan the timing of activities over the lifecycle of the program, the following table is a **Checklist of Communication Interventions/Activities to Consider** along with a description of how and when they should be introduced. While the checklist reviews the specific communications activities, PMI teams will have to select the appropriate partners implementing communications activities and relative budgets. **Appendix C** provides a list of USAID implementing partners that focus on communication, their focus areas, and points of contact. Please note, this is not an exhaustive list, and missions have their own bilateral programs that also have communication components.

Checklist of Communication Interventions/Activities to Consider

Type of Activity	Timing
Core set of materials – brochure, objectives, tech briefs, etc.	At beginning of project
Consensus building meetings	Throughout project, but especially important during initial stages – after strategy is developed – and when interventions change. Use core materials
Key message development	Early on – after strategy development – to assure consistency from different sources. Should be developed by target audience and specify phases – which messages first, which next, etc.
Develop job aids and tools and copy points for media	Based on key messages
Build capacity of health workers and community resources to communicate using job aids and tools	Once key messages have been developed: Develop and carry out training for health workers Ensure that trainees can effectively deliver the key messages for the interventions and use the job aids and tools Need to assess and do refresher training
Interpersonal communication (e.g., community-level public meetings with heads of households, house-to-house activities, or small-scale training sessions with expectant mothers given by health workers, community health workers, and other community influentials)	Once training is completed Need to plan schedule for community activities. Good to have health facility staff oversee and participate as possible in community level activities (quality control and coordination).
Mass Media – Radio spots, television spots, Print materials Interpersonal methods can be supported by materials such as: <ul style="list-style-type: none"> • Fact sheets with a list of questions for people to ask health care providers • Slides and a script to assist presenters • How-to booklets and talking points for discussions in private homes or within the community • Videos to trigger discussion • Job aids to remind professionals such as health workers, drug sellers or sprayers of talking points 	To support the interpersonal communication. Should be based on the same messages that were developed earlier. Also should use same images, situations, stories, be unified. High intensity just before and during malaria season. Might be particularly useful during commemorative or other special occasions (e.g., malaria days, immunization days, child health weeks) Ensure that all media and print developed in appropriate versions – for example, with appropriate language and illustrations for different groups - and produced in sufficient copies to reach the target audiences.

The following is a sample timeline for selected communication activities. The timeline includes a “flying schedule” for television and radio messages that shows how to strategically space the spots. With “flying,” a

message platform appears for a specified time (e.g. quarterly) before a different message or activity begins. This strategic schedule maximizes the impact of focused messages on target audiences.

Communication Activity Implementation Plan
Hash marked boxes indicate months of activity



As media and materials are based on key messages and target audiences, it will be important to plan how and when to phase in new messages and materials. Communication activities for the general public about malaria

should be more intensive just before and during the malaria season, or prior to specific events like spraying rounds or distributions of nets.

When creating an overall timeline of activities, it is important to have realistic expectations. Consider which preparatory activities need to be addressed first – followed by a subsequent sequence of activities – and estimate how long each activity will take. With regard to developing materials, for example, PMI teams should consider the cycle of creating draft materials-pretesting materials-revising materials-pretesting-(revising)-dissemination/outreach. Adequate time should be allotted for each step in the cycle; this depends on who is working on each step and their schedule and availability. It's best to plan for at least two rounds of pretesting. Keep in mind that delays happen. Think about occurrences or conditions that have created delays in the past, and factor those in during the timeline development process. Some factors might include conflicting schedules and unavailability of key personnel, delays with producing/printing materials, holidays or other observances, unexpected illnesses among key personnel, and political transitions or civil society unrest.

Materials/media planning and dissemination

Planning materials/media to be developed is facilitated by crafting a creative brief that allows PMI team members and implementing partners to review and agree upon key aspects of products and activities. The creative brief is also useful to help the team decide what elements any communication activity should include. The components of a creative brief are contained below.

Creative Brief Outline

➤ *Intended Audiences*

What types of people do you want to reach?

➤ *Objectives*

What do you want your intended audiences to do after they hear, watch, or experience the message?

➤ *Obstacles*

What beliefs, cultural practices, peer pressure, misinformation, etc. stand between your audience and the desired objective?

➤ *Key Promise*

Select one single promise/benefit that the audience will experience (GG: after acting on message?) upon seeing, hearing, or reading the objectives that you have set.

➤ *Support Statement/Reason Why*

Include the reasons why the key promise/benefit outweighs the obstacles and the reasons why what you are promising or promoting is beneficial. These often become the messages.

➤ *Tone*

What feeling or personality should your message have? Should it be authoritative, light, emotional? Choose a tone.

➤ *Media*

What channels will the message use, or what form will the message take? Who/what is the messenger? Television? Radio? Newspaper? Internet? Poster? Flyer? Person? All of the above?

➤ *Openings*

What opportunities (times and places) exist for reaching your audience?

➤ *Creative Considerations*

Is there anything else the creative staff should know? Will it be in more than one language? Should they make sure that all nationalities are represented?

When communication implementation plans are developed, it is important to consider how to distribute materials that are developed. Below is a **Checklist for Effective Dissemination of Communication Materials**:⁹

Checklist for Effective Dissemination of Communication Materials

- Design a dissemination plan that specifies:
 - Who is supposed to use and therefore receive the materials?
 - In what quantity end users need them
 - When the end users need to have them
 - By what means they will be provided to the intended users
 - Who is responsible for providing them the budget needed to do so

⁹ Adapted from the World Health Organization, Stop TB Partnership, *Advocacy, Communication, and Social Mobilization (ACSM) for Tuberculosis Control: A Handbook for Country Programs*, Forthcoming.

- Use those channels that are most convenient for the audience, not those most easily used by the program/distributor; to decide this, find out (by asking audience members or from review of already collected information) what channels and formats are easiest for them to use.
- When feasible, make resources available in more than one format (e.g., print and electronic) and via multiple distribution channels.
- Do not depend on partners to take on the dissemination burden; no matter how well intentioned, they are likely to be too busy to make this a priority.

Program Budgets and Functions

PMI programs will vary with regard to what communication activities are conducted for which interventions. Costs (for air time, daily rates, per diem) vary significantly by country. Below is a checklist of program functions, in general following the order of implementation, and of items that need to be budgeted for each function. The ballpark figure for communication activities within the PMI budget should be 5%-15%, depending on challenges and assets. For details on activities costs in country, the best sources would be the IEC/BCC/HEU unit at the MOH, UNICEF and/or USAID projects, especially those with in-country offices.

Appendix D provides a generic Scope of Work for communication and social mobilization activities that can be used for communication program design.

Itemized List of Selected Cost Components for Communication¹⁰

Program Function	Budget items	Cost Estimate ¹¹
Audience research	Staff time Consultants and/or subcontracts Per diem, lodging, and travel expenses Fuel Supplies	Staff: 5,000 Consultants: 5,000 100/day 50/day 40/day
Strategy formulation	Staff time Consultants Per diem, lodging, and travel expenses Meeting room rent Supplies	3,000 3,000 100/day 100/day 20/day
Development of print materials (for all audiences)	Staff time and consultant time (e.g., for writing, drawing, photography, design, word processing) Dissemination costs (postage, fuel, staff time)	Overall, 4-7,000
Development and airing of broadcast materials	Staff time and consultant time (managerial, creative, and technical input) Cost of subcontract to advertising firm Air time	3,000 4,000 360/TV spot/90 airings
Development of local communication channels (e.g., drama groups, mosque announcements, miking, etc.)	Staff time and consultant time (managerial, creative, and technical input) Cost of subcontract and/or of ongoing expenses (per diem, travel, etc.) Equipment purchase or rental	Overall, 300-700/session/community More if more technology is used.
Pre-testing of materials	Staff and consultant time and expenses (per diem, lodging, travel) and/or subcontract Supplies (e.g., paper, video equipment, tape recorders)	Overall, 3-10,000
Production of materials	Printing Audio and video recording and production	.40 per leaflet .20 per flyer 17,500 per billboard/yr
Dissemination and orientation of materials	Staff and consultant time (e.g., for planning, implementing) Per diem, lodging, travel expense Fuel Production and copying of forms for tracking	2-3,000/orientation session
Training in communication, social mobilization, or advocacy	Staff and consultant time and/or subcontract for planning, implementing, and evaluation training of health staff, local leaders, journalists, etc. Per diem and expenses of participants Rental of venues	8-10,000/workshop if local 100/day
Management and Supervision	Staff time travel	400/day

¹⁰ Sources: Immunization Essentials: A Practical Field Guide, USAID, 2003.

http://www.immunizationbasics.jsi.com/Resources_General.htm; Guidelines for Developing Home Based Reminder Materials. Favin, Shafritz, et al., <http://www.projecthope.org/media/pdf/mrmfull.pdf>, 2004.

¹¹ All costs in USD. Costs for each item noted are very variable and dependant on many factors, including what kind of staff is used and their salary levels; how wide an area the activities cover, how extensive the program is; distance that needs to be travelled to activity sites; as well as the country of activity.

Capacity Building within Communication Activities and Exit-strategy or Devolution of Activities to Host Countries

It is important to define the role of the NMCP/MOH leadership and oversight in the process of developing and implementing the communications program, as well as the Country Coordinating Mechanisms (CCM; if one is functioning) and other donor and NGO, CBO, and FBO partners. The NMCP/MOH should have a leadership or oversight role alongside the contractors, for capacity building, buy-in, and to avoid the creation of parallel systems. CCMs sometimes already include communications committees.

As with other components of PMI interventions, the communications component has as an underlying goal of building local communications capacity. Often, the challenge is to bring together organizations and agencies with specific capabilities at the beginning of the process to agree on and work toward a common goal. Typically gaps exist in the technical knowledge and management skills needed to undertake the development and execution of communication strategies. As a starting point, PMI advisors should be familiar with and build on experiences of previous local projects working in health communication. PMI advisors should urge contractors to make full use of the existing local resources, NGOs/FBOs, universities, advertising agencies and other institutions that have been in existence for some time and are most likely to be sustainable.

In settings where the local resources for communication are strong, subcontracting with those institutions will provide a natural devolution of this component of PMI. Key MOH personnel also should be closely involved in managing this component to ensure national ownership. Where in-country communication capacity is weaker, the bilateral or centrally funded partner will need to work closely with both the MoH and other local institutions to build it and achieve the greatest level of capacity transfer.

Capacity building activities can include:

- Joint monitoring and training activities with NMCP/MOH counterparts
- Training of trainers
- Specific workshops on M&E, technical and creative work

Integration of PMI Communication Activities with Other Child Survival, Maternal Health, and Infectious Disease Interventions

PMI communication activities can be used to strengthen integrated approaches at three levels:

1) to improve health worker performance at the health facility; 2) for appropriate management of childhood illnesses at the community levels, and 3) to increase prompt, care-seeking behaviors, compliance with therapy for childhood illnesses, and providing additional nourishment during and after illness at the household level. Preventive malaria measures, including use of ITNs, IPT and IRS should also be integrated at all three levels.

Health worker performance at the health facility

At the facility level, communication, including job aids and coaching in interpersonal communication skills should be used to support pre-service and in-service training in integrated management of childhood illness (IMCI) and other approaches for managing childhood illnesses. The algorithms for management of childhood illnesses will vary little across sub-Saharan Africa, but the communication materials will need to be adapted to local languages and cultures at national and in many cases sub-national levels. PMI teams need to ensure that contractors have an understanding of these issues and capabilities to develop appropriate IEC/BCC approaches and materials.

Management of childhood illnesses at the community levels

Interventions in several African countries, have demonstrated that community-based health workers (CHWs) can effectively deliver differential treatment for childhood illnesses based on clinical symptoms. The CHW also can be a key to initiate prompt referral for severe illness. Communication can help overcome some commonly held beliefs that may be obstacles for referral such as the belief that convulsions in children can best be treated by traditional healers.

As with facility-based health workers, CHWs benefit from an integrated approach can help reduce over-treatment for malaria and save lives of children with pneumonia and diarrhea. Communication approaches and materials should be used to enhance training, refresher training, coaching, supervision and other activities designed to improve CHW performance. However, PMI continues to follow World Health Organization (WHO) malaria guidelines that call for the presumptive treatment of all children under five with fever in areas of stable, malaria transmission. In addition, because ACTs are relatively new, the prescription of ACTs has been limited to formal health facilities. This has reduced access to the first-line malaria treatment at the community level.

The fundamental elements of IMCI at the community level are well established but, as with the comparable material for facility-based programs, these need to be adapted to national and sub-national settings. Several of the most commonly used community-based approaches (C-IMCI, ACSD and RED)¹² promote integration, therefore, PMI teams will want to ensure that contractors provide appropriate support to ensure a strong communication component to complement the use of any of these approaches.

Prompt, care-seeking behaviors, compliance with therapy for childhood illnesses, and supportive nutritional actions at the household level

It is important that the general population and, in particular, caregivers know how to differentiate the signs of common illness from severe illness in children and that they understand the importance of seeking care at the onset of symptoms. Early treatment for fever, rapid breathing, and diarrhea are crucial to saving lives, and caregivers should know the importance of seeking treatment immediately. Children with signs of severe illness, caregivers—with community support—should immediately be taken to a health facility. The integration of malaria with pneumonia and diarrhea communication strategies, targeting caregivers is an efficient approach that builds greater credibility with the population. Local radio, drama, songs, market day promotions, community mobilization, and other methods may be used to effectively engage groups as well as individual caregivers.

For all programs, the focus should be on improving caregiver understanding and behaviors for the following: recognition of signs of uncomplicated and severe childhood illnesses; prompt care seeking; understanding of and compliance with the treatment regimen; understanding the need for and providing continuous fluids during illness, and; supplementary feedings during convalescence.

¹² Accelerated Child Survival Development programme (ACSD) is an integrated, results-based approach that includes the Expanded Programme on Immunization, prevention and case management of the main childhood killer diseases and antenatal care. Reaching Every District (RED) approach was launched jointly by WHO and UNICEF in 2003 as an extension of routine immunization services and aims at improving organization of immunization services to guarantee sustainable and equitable immunization for every child.

Step Four: Monitoring and Evaluation

Monitoring and evaluation. To demonstrate success, PMI will monitor its efforts and evaluate impact of malaria control efforts in PMI countries. The PMI monitoring and evaluation framework is based on a set of input, process, output, outcome, and impact indicators.

Monitoring of PMI communications activities will focus on program implementation and process and output indicators. Although PMI does not expect to evaluate each communication intervention individually, there is an interest in evaluating BCC/IEC to demonstrate outcomes and highlight lessons learned to inform BCC/IEC policy and programs. This type of evaluation will be based on outcome indicators.

PMI outcome indicators all have a behavioral component. For instance, the proportion of children aged less than five years who slept under an insecticide-treated net the night before a survey is equally dependent on household ownership and use behavior. Progress toward these outcomes is measured in surveys, such as DHS and MIS, every few years. Repeated measurement of these outcomes may suggest the success (or failure) of communications activities, while not being able to tease out their specific contribution.

Monitoring: Monitoring is most often based on process and output indicators to track program activities. Communication activities should be monitored to show what activities have been done.

Monitoring will help assess whether program activities are on track, how close they are to meeting the projected timeline and budget, and whether staff members perform their roles correctly. Even before communication activities are launched, create monitoring mechanisms to receive feedback on the interventions and to identify any problems early so that they can be addressed quickly. This type of information should be collected and reviewed regularly to make program adjustments and to assure that the incoming data are reliable, complete, and timely.

Program implementers will need to keep track of their program input, records of how their programs are implemented, what types of activities are conducted, when, where, and by whom. By and large, this type of monitoring allows managers to describe the process of strategy, materials, and activity development and implementation, including methodology and when the steps happened.

There is not a standard set of process and output indicators specific to BCC/IEC programs within PMI. Process and output indicators can vary from country to country to reflect the country's specific communication plan. A list of suggested process and output indicators to consider for monitoring is shown in **Appendix B**.

Evaluation: The outcome and impact evaluation of PMI will not specifically evaluate BCC/IEC; however, PMI's monitoring and evaluation staff consider behavior change a necessary step to achieving success. Given the need for behavior change to support malaria prevention and treatment, the fact that BCC/IEC success is likely to be context-specific, and the lack of a set of BCC/IEC interventions with demonstrated success in the field, BCC/IEC should be evaluated in its own right. PMI will measure cost-effectiveness of communication activities where feasible and appropriate.

PMI can evaluate the success of communication activities by tracking progress toward outcome indicators in program areas. Changes in outcome indicators should be interpreted alongside output indicators for communications interventions as reported through routine monitoring of communications activities in the same areas.

A list of outcome indicators is shown in **Appendix B**. Most of the outcome indicators listed are standard RBM/MERG indicators. *PMI teams should note that the M&E of communications activities is not part of the USAID mission performance monitoring report (PMP).*

Minimum Monitoring and Evaluation Standards for Communication Activities

Following is a list of required minimum monitoring and evaluation standards for communication activities for in country monitoring (but are not needed for the PMP report).

1. Describe the process of strategy, materials, and activity development and implementation, including methodology and when the steps happened. The following steps should be described in detail, including how, when, how many, and target audience
 - Audience research – including instruments, methodology, and results
 - Strategy formulation
 - Print materials developed
 - Broadcast materials developed
 - Local communication channels
 - Pre-testing – including instruments, methodology, and results
 - Production
 - Broadcast
 - Dissemination/Orientation
 - Training/orientation
 - Supervision
 - Monitoring– including instruments, methodology, and results
 - Evaluation– including instruments, methodology, and results

Provide human and financial inputs for each step above, including development costs, if available. When materials/activities are developed simultaneously only aggregated development costs, such as “2 person months and \$50,000 to develop all the radio and print materials” will be available.

2. Provide data for the process indicators in **Appendix B** for activities and materials – number, frequency, etc. – that are possible to measure, such as number of booklets produced and distributed, number of radio spots aired X times during October through December 2007, etc. Note that information on the number of people exposed to some interventions (asterisked indicators in Annex B) will be rough estimates - for example, the number of people attending group or community talks varies from occasion to occasion, and numbers attending each talk are rarely reported or aggregated.

The Rapid Monitoring Checklist below gives examples of questions that can be used to collect relevant monitoring information, a list of tools to collect the information, and suggested approaches for using the tools. As mentioned earlier, this checklist can be used to receive feedback on the interventions and to identify any problems early so that they can be addressed quickly.

Rapid Monitoring Checklist ¹³

Types of questions to use to collect monitoring information	Suggested tools to track different components of communication activities (process and output)	Suggested approaches for using tools to collect monitoring information
How many people participated in activities?	<ul style="list-style-type: none"> • Materials inventory at different points in the system (central store, regional stores, etc.) available during supervisory spot-checks at end distributors' locations (health facilities, drug shops, with spray teams) • Materials distribution list • Activity reports • Television and radio logs that show when programs are aired • Media clipping services • News and information searches • Focus groups • Staff surveys • Partner feedback • Timeline and budget assessment • Attitude or household surveys • Training records and results of pre-post tests • Observations • Supervisory reports 	Conduct regular spot checks of materials distribution at representative points in the field.
How many materials were disseminated?		Hire a media monitoring company or recruit volunteers to determine if planned program activities are being implemented according to set schedules.
How many materials were partners given? How many were disseminated by these partners?		Review and document feedback from the field (from supervisors, health teams and caregivers) regarding what materials are present and sources of people's information on malaria and malaria interventions.
Were staff and partners adequately trained to carry out their roles effectively? Did they perform their roles correctly?		Monitor key media channels.
How many news stories have appeared as a result of communication efforts?		Conduct exit interviews with caregivers at antenatal health clinics or door-to-door to determine which messages they received and their knowledge, attitudes and practices regarding treatment of malaria during pregnancy.
Were activities carried out within budget and according to the expected timeline?		Hold focus group discussions between rounds or after a campaign, including questions on social mobilization and communication messages
How were the activities managed? Were work plans followed? How well did staff perform their duties? Were relations among partners successful? Were donors kept apprised of activities? Were logistics managed well? Were other resources managed well?		Conduct interviews among randomly selected mothers or heads of household about beliefs regarding IRS
Has the target audience changed its knowledge, attitudes, awareness or opinions regarding ITNs, IRS, IPTp or case management?		

¹³ Adapted from the World Health Organization, Stop TB Partnership, *Advocacy, Communication, and Social Mobilization (ACSM) for Tuberculosis Control: A Handbook for Country Programs*, Forthcoming.

To meet monitoring standards, it is important to keep ongoing records about activities and costs from the beginning steps of any communication intervention

3. Describe how process indicators (and any output indicators collected) relate to the results of the relevant PMI outcome indicators.

For example, if there are a large number of activities (and/or a high degree of positive beliefs, and/or positive intentions among a particular group) on IRS, that could be a reason why a high result was achieved for the PMI outcome indicator of “Proportion of households reporting that their compound/house was sprayed with IRS in the last 12 months.” It would be more reliable if there were actual data that had measures of belief and reports of spraying for the same individuals. The next section is a description of how data of this type can be collected.

Optional evaluation standards, as budget and time permit:

Describe how the process indicators relate to results of relevant output indicators, for example:

- Were more people reached with IRS messages by radio spots or by community activities?
- Among those who believe that ITNs are effective to prevent/control malaria, what sources of information were they most exposed to?
- What messages do those who sought care for febrile children within 24 hours most recall?
- Were women reached more by client information on IPT or radio spots?

How/Where to Collect Data for Output Indicators and Relate Them with Process and PMI Outcome Indicators

Various reports, such as DHS, MICS, MIS, as well as other studies, include data that could be mined to shed light on communications activities. For example, DHS reports usually include a number of cross-tabulations of results. The DHS questionnaire also includes questions on the frequency with which respondents are exposed to different media channels – written, radio and TV. It would be useful to look at this media exposure information cross-tabbed by all of the other socio-demographic measures as well as by variables associated with risk of malaria, and after communication interventions have started, by measures of behaviors related to recommendations. Usually, those with higher exposure to media are higher SES, urban residents.

Looking at differences in results between people who perform the desired behavior and those who do not in terms of demographic and other relevant information (such as access to media) can help categorize how the current users differ from the non-users and provide insight into actions needed to encourage non-users to become users.

Appendix E is a table and analysis of its data adapted from the NetMark household study in Ghana from 2004¹⁴ that shows how results vary by segments (including net usage) for an attitude question (rather than an outcome variable). This approach can be used for any question.

Quantitative interviews at central locations where certain types of people gather are effective for finding relevant respondents more efficiently. The data collected will have a number of limitations; key among these is that the results will pertain only to those people who frequent these places.

Information about children under 5 (health facility interviews):

¹⁴ <http://www.netmarkafrica.org/research/quantitative/2004%20HH%20Surveys/Complete%20Ghana%209-26-05.pdf> pp 58-59.

One good way to get output information related to how recently feverish children were treated (PMI indicator) is to collect information among parents who have brought a feverish child to a health facility for care after they have been seen by the provider (exit interview). This is a more efficient way than a household survey to find relevant respondents to collect the following important information for recent febrile illnesses:

- Whether a child brought to the facility was given an ACT
- How long after the onset of fever the child was brought to the facility
- Where did they hear/see information about how to treat febrile children and what specific messages they heard/saw

Observations of the interaction between the provider and the patient's guardian will provide a good picture of what and how the provider is telling and asking the guardian and could help explain issues or problems such as poor adherence to the treatment protocol.

Information regarding pregnant women (ANC):

Antenatal clinics are the best places to find enough qualified respondents to answer questions related to the PMI outcome indicator for pregnant women sleeping under a net the previous night. Collecting this data through household surveys might be impractical, as a large number of households would need to be visited to find enough pregnant women for the data to be reliable.

This is also a good sample to find out information about IPTp usage in previous pregnancy as well as the output indicators listed in Annex B for IPT, ITN and IRS.

Observing the interaction between the provider and the pregnant women to see what is said and done can also help explain why the women might not be performing PMI-related behaviors.

Pharmacies, drug selling shops, shops that sell ITNs:

Places that dispense malaria medication are efficient places to conduct exit interviews with parents of febrile children about medicine acquired, recall of messages, care seeking, and intention to adhere to treatment. Parents can also be asked about their exposure to media, community activities, and the advice given by drug sellers. Parent interaction with drug sellers can be examined as a third party observer or as a second-party participant, in the guise of a mystery client.

Exit interviews following community events/malaria days:

Exit interviews following community/national events are most useful for immediate checks on some of the output indicators related to receiving and understanding key messages. Output indicators on beliefs and intentions can also be measured; however, immediate reactions to new information may not be reliable in predicting future practice. Questions on PMI proxy outcome measures can also be asked, but should only be related to information collected about exposure and understanding that respondents had *prior* to this event; it will be too soon to relate their actions (taken previously) to this new exposure.

Markets and other central locations:

These sites are also useful for collecting information about exposure and intention output indicators. To attempt to relate these measures to process and PMI outcome indicator measures, it is important to include questions about sources and content of information and relevant actions taken.

References and Web Links

Note that all weblinks were current as of October 2007.

About.com. No Date. *Marketing Terms and Definitions*. Found at <http://marketing.about.com/od/marketingglossary/l/bldefflighting.htm>.

Boyce, Carolyn and Neale, Palena. May 2006. *USING MYSTERY CLIENTS: A Guide to Using Mystery Clients for Evaluation Input*. Watertown, MA: Pathfinder International. Found at http://www.pathfind.org/site/DocServer/m_e_tool_series_mystery_clients.pdf?docID=6303.

Cowan, Cate and Shafritz, Lonna. 2005. *Spot On Malaria: A Guide to Adapting, Creating and Producing Effective Radio Spots*. Washington, DC: CHANGE Project. Found at <http://www.changeproject.org/pubs/spotonguide.pdf>.

Favin, Shafritz, et al. 2004. *Guidelines for Developing Home Based Reminder Materials Project*. Washington, DC: Change Project and Project HOPE. Found at <http://www.projecthope.org/media/pdf/mrmfull.pdf>.

Herman, Elizabeth and Bentley, Margaret. 1993. *Rapid Assessment Procedures (RAP) to Improve the Household Management of Diarrhea*. Boston, MA: International Nutrition Foundation for Developing Countries (INFDC). Found at <http://www.unu.edu/unupress/food2/UIN04E/uin04e00.htm#Contents>.

Howard-Grabman, Lisa and Snetro, Gail. No Date. *How to Mobilize Communities for Health and Social Change*. Baltimore, MD: Health Communication Partnership. Found at http://www.hcpartnership.org/Publications/Field_Guides/Mobilize/pdf/index.php.

Lukas, Carol. October 1999. *Organization Assessment: Stepping Back...Taking Stock*. Found at www.fieldstonealliance.org/client/client_pages/articles_tools/Article-Organization_Assessment.cfm.

McNulty, Judiann. August 2005. Positive Deviance/Hearth Essential Elements. A Resource Guide for Sustainably Rehabilitating Malnourished Children (Addendum). CORE group.

Minja, Happiness (2005) Integrating Local and Biomedical Knowledge and Communication: Experiences from KINET Project in Southern Tanzania. Society of Applied Anthropology. Provided by ProQuest Information and Learning Company, Available at: http://findarticles.com/p/articles/mi_qa3800/is_200507/ai_n14685896.

Mitchell, Ellen, et. al. Accelerating the Pace of Progress in South Africa An Evaluation of the Impact of Values Clarification Workshops on Termination of Pregnancy Access in Limpopo Province. Found at http://www.ipas.org/Publications/asset_upload_file778_3046.pdf.

National Cancer Institute. No Date. *Making Health Communication Programs Work*. Found at <http://www.nci.nih.gov/pinkbook/>.

NetMark 2004 Survey on Insecticide-treated Nets (ITNs) in Ghana, NetMark Project/ AED, 2005 <http://www.netmarkafrica.org/research/quantitative/2004%20HHSurveys/Complete%20Ghana%209-26-05.pdf>.

Roll Back Malaria, MEASURE Evaluation, World Health Organization, UNICEF. 2006. *Guidelines for Core Population Coverage Indicators for Roll Back Malaria: To Be Obtained from Household Surveys*. Calverton, Maryland. Found at

http://www.rollbackmalaria.org/partnership/wg/wg_monitoring/docs/GuidelinesForCorePopulationFINAL9-20_Malaria.pdf.

Seidel, R. Behavior Change Perspectives and Communication guidelines on six Child Survival Interventions (AED/CCP), Dec, 2005) <http://www.globalhealthcommunication.org/tools/76>

Stop TB Partnership, WHO. *Advocacy, Communication, and Social Mobilization (ACSM) for Tuberculosis Control: A Handbook for Country Programs. (forthcoming)*

USAID. October 2003. *Immunization Essentials: A Practical Field Guide*. Washington, D.C. Found at http://www.usaid.gov/our_work/global_health/mch/ch/publications/immunization_essentials.html.

WHO. 2006. *WHO Guidelines for the Treatment of Malaria*. Geneva, Switzerland. Found at <http://www.who.int/malaria/docs/TreatmentGuidelines2006.pdf>.

Glossary of Terms

Except where otherwise noted, all terms and definitions come from the National Cancer Institute publication "Making Health Communication Programs Work".

Attitudes. An individual's predispositions toward an issue, person, or group, which influence his or her response to be positive or negative, favorable or unfavorable.

Baseline study. The collection and analysis of data regarding an intended audience or situation prior to intervention.

Central-location intercept interviews. A method used for pretesting messages and materials. It involves "intercepting" potential intended audience members at a highly trafficked location (such as a shopping mall), asking them a few questions to see if they fit the intended audience's characteristics, showing them the messages or materials, and then administering a questionnaire of predominantly closed-ended questions. Because respondents form a convenience sample, the results cannot be projected to the population. Also called mall intercept interviews.

Channel. The route of message delivery (e.g., mass media channels include television, radio, newspapers, magazines; interpersonal channels include health professional to patient; community channels include community events, such as health fairs or sporting events).

Communication strategy. A statement that describes:

- The intended audience members
- The settings, channels, and activities that should be used to reach them
- The image that program communications should convey
- The action intended audience members should take as a result of exposure to your communication
- A compelling benefit they will receive by taking the action
- Support that convinces them they will experience the benefit

Creative brief. A short (one- to two-page) version of the communication strategy statement, used to guide development of materials and activities. The short creative brief is sometimes used in place of the longer communication strategy statement, especially if the program is not very complex.

Education entertainment. A form of health communication in which educational content and information is intentionally incorporated into an entertainment format (e.g., songs, comics, non-news television or radio programming, movies).

Environmental factors. Factors that are external to an individual but can influence the individual's behavior (e.g., policies, access to services, geography, physical features such as sidewalks and parks).

Flighting. A media schedule that involves more advertising at certain times and less advertising during other time periods. (about.com, no date)

Focus group. A qualitative research technique in which an experienced moderator guides about 8 to 10 participants through a discussion of a selected topic, allowing them to talk freely and spontaneously. Focus groups are often used to identify previously unknown issues or concerns or to explore reactions to potential actions, benefits, or concepts during the planning and development stages.

Formative evaluation. Evaluative research conducted during program development. May include state-of-the-art reviews, pretesting messages and materials, and pilot testing a program on a small scale before full implementation.

Frequency. The average number of times an audience is exposed to a specific media message.

Impact evaluation. A type of research designed to identify whether and to what extent a program contributed to accomplishing its stated goals (here, more global than outcome evaluation).

In-depth interviews. A type of qualitative research in which a trained interviewer guides an individual through a discussion of a selected topic, allowing the person to talk freely and spontaneously. This technique is often used to identify previously unknown issues or concerns, or to explore reactions to potential actions, benefits, or concepts during the planning and development stages.

Intended audience. The audience selected for program messages and materials (see segmentation). The primary intended audience consists of those individuals the program is designed to affect. The secondary intended audience is the group (or groups) that can help reach or influence the primary audience. (Intended audience is also referred to as "target audience.")

Intended population. A broad definition of the audience for a program. The intended population is defined by the epidemiology of the problem and factors contributing to it (e.g., women ages 40 and over for a mammography screening program).

KAP survey. A KAP (knowledge-attitude-practice) survey collects information about cultural beliefs by asking a structured and predetermined set of questions. (Herman and Bentley 1993)

Mystery client. Trained people (usually community members) who visit program facilities in the assumed role of clients, and then report (by completing a survey or through an interview) on their experience. (Boyce and Neale 2006)

Outcome evaluation. Research designed to assess the extent to which a program achieved its objectives.

Participatory rural appraisal (PRA). A family of approaches and methods to enable rural people to share and analyze their knowledge of life and conditions, to plan, and to act. (Howard-Grabman and Snetro, no date)

Positive deviance. An intensive behavior change intervention that identifies affordable, acceptable, effective, and sustainable practices that are already used by at-risk people and do not conflict with local culture. Through learning what their neighbors with equally limited resources are doing to combat illness, families are empowered to adopt better practices even with very limited access to health services.

Pretesting. A type of formative evaluation that involves systematically gathering intended audience reactions to messages and materials before the messages and materials are produced in final form.

Probe. A technique used primarily in qualitative research (e.g., focus groups, in-depth interviews) to solicit additional information about a question or issue. Probes should be neutral (e.g., "What else can you tell me about ____?"), not directive ("Do you think the pamphlet was suggesting that you take a particular step, such as changing your diet?").

Process evaluation. Research conducted to document and study the functioning of different components of program implementation; includes assessments of whether materials are being distributed to the right people and

in what quantities, whether and to what extent program activities are occurring, and other measures of how and how well the program is working.

PSA. A public service announcement; an advertisement that a mass media outlet (e.g., magazine, newspaper, radio station, television station, Web site, outdoor venue) prints or broadcasts without charging the sponsoring organization.

Public relations. Marketing activities designed to raise the public's awareness about a product, service, individual, or issue; management of an organization's public image that helps the public understand the organization and its products.

Quantitative research. Research designed to gather objective information by asking a large number of people identical (and predominantly closed-ended) questions. Results are expressed in numerical terms (e.g., 35 percent are aware of X and 65 percent are not), and, if the respondents are a representative random sample, quantitative data can be used to draw conclusions about the intended audience as a whole. Quantitative research is useful for measuring the extent to which knowledge, attitudes, or behaviors are prevalent in an intended audience.

Random sample. A sample of respondents selected from an intended population in which every member of the population had an equal chance of being included.

Reach. The number of people or households exposed to a specific media message during a specific period of time.

Recall. In pretesting, a measure that describes the extent to which respondents remember seeing or hearing a message that was shown in a competitive media environment—usually centers on recall of the main idea, not the verbatim message.

Segmentation. Subdividing an overall population into homogeneous subsets in order to better describe and understand a group, predict behavior, and tailor messages and programs to match specific interests, needs, or other group characteristics. Segments may be demographic (e.g., age, sex, education, life cycle), geographic (e.g., Southeastern U.S., rural, north side of town), or psychographic (e.g., personality, lifestyle, usage patterns, risk factors, benefits sought), or they may be based on a combination of these factors.

Social marketing. The application and adaptation of commercial marketing concepts to the planning, development, implementation, and evaluation of programs that are designed to bring about behavior change to improve the welfare of individuals or their society. Social marketing emphasizes thorough market research to identify and understand the intended audience and what is preventing them from adopting a certain health behavior, and to then develop, monitor, and constantly adjust a program to stimulate appropriate behavior change. Social marketing programs can address any or all of the traditional marketing mix variables—product, price, place, or promotion.

Social mobilization: a process of bringing together all feasible inter-sectoral partners and allies to determine felt-needs and raise awareness of, and demand for, a particular development objective. (Howard-Grabman and Snetro, no date)

Tailored communication. Messages crafted for and delivered to each individual based on individual needs, interests, and circumstances.

Values clarification. An umbrella term for any intervention aimed at changing attitudes by providing new information and facts and encouraging the critical rethinking of cultural myths and assumptions. It encourages exploration of personal value systems and relationship to the needs of clients.

Appendix A: Intervention Tables Presented by Target Group Domain¹⁵

Domain: Policy Makers

Desired Behavioral, Social or Other Outcome	Assets	Challenges	Suggested Approaches/Specific Techniques	Rapid Assessment	Monitoring and Evaluation
ITNs					
<p>Policy makers support a coordinated and harmonized ITN strategy</p> <p>National leadership endorses evidence-based, standardized messages</p>	<p>LLINs are promoted worldwide; net culture present</p> <p>Universal country coverage/distribution</p> <p>Political will for policy change exists</p> <p>Presence of donor coordination</p>	<p>Taxes/tariffs still exist on ITNs</p> <p>Poor visibility of NMCP</p> <p>Short-term gain vs. sustainability</p>	<p>Championing leaders in harmonized distribution strategies</p> <p>Showcasing effective approaches</p> <p>Streamlining/consistency in messages, consensus meetings</p>	<p>Stakeholder Interviews</p> <p>Key informant interview</p>	<p>Policy change</p> <p>Consensus panel</p> <p>Organized committee</p>
IRS					
<p>Policy makers know the rationale and implications of IRS</p> <p>National promotion of IRS as a malaria prevention strategy for the national malaria control program</p>	<p>Existence of long standing IRS program</p> <p>Political will for policy change present</p> <p>Donor coordination exists</p>	<p>Resistance to IRS programs</p> <p>Poor visibility of NMCP</p>	<p>Informative/advocacy meetings for IRS</p> <p>Country visits to successful IRS programs</p>	<p>Stakeholder Interviews</p> <p>Key informant interview</p>	<p>Policy change</p> <p>Consensus panel</p> <p>Guideline development</p>
Treatment: case management, prompt effective treatment					
<p>Policy makers are up to date on the latest evidence-based practices for effective malaria case management, e.g. severe malaria, quality laboratory diagnosis, use of RDTs, community based treatment</p> <p>Policy makers support the introduction of evidence-based practices for case management</p> <p>National drug authority classifies first line ACT for over-the counter sale and distribution</p> <p>National drug authority has established quality control system for anti-malarials</p>	<p>Treatment policies are up to date</p> <p>Political will for policy change present</p> <p>Donor coordination exists</p>	<p>Resistance among policy makers to new interventions</p> <p>Fake drugs</p> <p>Poor visibility of NMCP</p>	<p>Stakeholder consensus meeting on effective interventions</p> <p>Study tour to countries with effective policies</p> <p>Advocacy meetings to encourage adoption of evidence-based policies</p> <p>Advocacy among national drug authorities to reclassify anti-malarials for over-the-counter distribution</p> <p>Advocate for banning of all anti-malarial monotherapies</p> <p>Advocate for strong quality assurance program for antimalarial drugs</p>	<p>Stakeholder Interviews</p> <p>Key informant interview</p>	<p>Policy change</p> <p>Consensus panel</p> <p>Organized committee</p>
IPTp					
<p>Policy makers know the dangers of malaria during pregnancy</p> <p>MOH enforces IPTp, the policy for treatment of malaria in pregnant women, and early/frequent attendance at ANC</p>	<p>Policy in place for IPTp</p> <p>Political will for policy change exists</p> <p>Donor coordination present</p>	<p>Resistance among policy makers to new interventions</p> <p>Poor visibility of NMCP</p>	<p>Advocacy with MOH/districts on benefits of IPTp as part of ANC, effects of malaria in pregnancy, making IPT part of safe motherhood communications,</p> <p>Consensus meetings on importance of timely and frequent ANC visits</p>	<p>Stakeholder Interview</p>	<p>Policy change</p> <p>Guideline implementation</p>

¹⁵ Asterisks have been placed after the suggested approaches/specific techniques which the literature review has shown to be most effective.

Domain: Health service providers and community health workers

Desired Behavioral, Social or Other Outcome	Assets	Challenges	Suggested Approaches/Specific Techniques	Rapid Assessment	Monitoring and Evaluation
ITNs					
Service providers target vulnerable populations	Addressing vulnerable populations are a key priority area among leaders	Distribution challenges in remote areas; difficult to identify/reach vulnerable populations	Social marketing (including voucher programs) to target groups**	Sample survey of providers	Monitoring reports, mystery clients
Service providers (public/private) provide correct information about nets (and re-treatment where appropriate)	Vibrant private sector exists Health workers are well trained on benefits of ITNs	Lack in availability of ITNs	Service provider recognition (e.g. Gold Star, branding) Job aides/point of purchase/service materials	Observations	
Service providers counsel during ANC and other points of service on the benefits/correct use of treated nets	Adequate training facilities available	Small proportion of target population go to health facilities	Values clarification and IPC training for service providers		
Treatment: case management, prompt effective treatment					
Service providers know which drug brands meet quality standards	Quality antimalarial drugs available	High out of pocket expenditure for drugs	Creation of over-brand for quality anti-malarials and education to consumers to trust that brand	Stakeholder Interview	Policy change
Service providers counsel on proper drug selection and compliance among clients	Strong logistics management system in place Adequate training facilities available Vibrant private sector exists	Sub-standard/poor quality pharmacies Production/sale of fake drugs; weak drug quality monitoring system	Social marketing and drug packaging/inserts Franchising/training of private providers to promote quality** Labeling community drug distributors and using media channels to direct the public to them**	Key informant interview Organizational assessment	Consensus panel Monitoring reports
Service providers know new treatment regimens among health workers, e.g. rectal artesunate, injectable artemether	Strong logistics management system in place	Weak dissemination of national policy to service provider level	Sensitization and job aides about malaria treatment guidelines for health workers and drug vendors	Observation Facility survey	Monitoring reports Mystery clients
Health workers provide accurate information on prompt, effective treatment including compliance with the complete regimen	Adequate training facilities available	Lack of motivation among staff	Distance learning approaches to update health workers and community health workers; IPC skills training for health workers**	Sample survey of providers	Monitoring reports
Health workers provide supervision of drug compliance over time	High staff retention	Weak supervisory systems Resistance among health providers to follow new treatment regimen	Distance learning and cross-fertilization approaches (peer to peer, visits) to update health workers and CHWs on new regimens		
IPTp					
Health providers know the correct SP guidelines	SP is free and available at all health facilities	SP promoted as a first line drug for malaria treatment or alternative when first line drug is out of stock; SP not available in ANC clinics	Sensitization and job aids for workers	Sec. data analysis (DHS)	Monitoring reports
Health workers provide the recommended SP dose to pregnant women, and do not save SP for those who are sick with malaria	Adequate training facilities available		Distance learning approaches for health workers Peer exchange programs—PD	Facility survey	
Health workers encourage women take SP during pregnancy, and encourage early and frequent attendance at ANC	High staff retention	Resistance among health workers to modify treatment regimen or to use SP in pregnancy	Point of service materials prepared for clients IPC training for service providers**	Focus groups	
Health workers know that symptoms of malaria in pregnant women should be treated as severe malaria			Training as part of supervisory visits		

Domain: Opinion leaders

Desired Behavioral, Social or Other Outcome	Assets	Challenges	Suggested Approaches/Specific Techniques	Rapid Assessment	Monitoring and Evaluation
ITNs: N/A					
IRS					
<p>Community leaders know the rationale, benefits and approaches of IRS</p> <p>Leaders engage in micro-planning for IRS activities</p>	<p>Strong community networks present</p> <p>Opinion leaders are trusted and influential</p>	<p>Limited coordination/ implementation capacity at sub-district level/below; resistance/ bottlenecks from community leaders</p>	<p>Participatory meetings with community leaders</p> <p>Sensitizing community leaders through Informational gatherings</p> <p>Panel discussions</p>	<p>Community meetings</p> <p>Focus groups</p>	<p>Tracking survey</p>
Treatment: case management, prompt effective treatment					
<p>Leaders recognize malaria symptoms and reject traditional beliefs/practices (e.g. convulsions are not seen as a sign of severe illness and delay use of effective treatment)</p> <p>Leaders promote proper symptom recognition/early care seeking and discourage harmful traditional practices for malaria treatment in communities</p>	<p>Opinion leaders trusted, strong influence</p>	<p>Over reliance by population on ineffective medicinal sources</p>	<p>Identification of solutions through use of participatory methods that engage community leaders, elders, traditional healers, religious leaders, birth attendants</p>	<p>Community meetings</p> <p>Key informant interviews</p>	<p>Tracking survey</p> <p>Behavioral surveillance survey</p>
IPTp					
<p>Opinion leaders know the dangers in malaria in pregnancy and asymptomatic malaria</p> <p>Village chiefs/leaders encourage early and frequent ANC visits, especially to receive SP for MIP</p>	<p>Insurance schemes to ensure affordability of drugs available</p> <p>Opinion leaders are trusted and influential</p> <p>Presence of PVO/NGO networks</p>	<p>Over reliance by population on ineffective medicinal sources</p> <p>Cultural taboos</p>	<p>Sensitizing traditional birth attendants and women's leaders in community</p> <p>Participatory methods that engage community leaders, elders, healers, religious leaders, birth attendants</p>	<p>Community meetings</p> <p>Focus groups</p> <p>Key informant interviews</p> <p>Focus groups</p>	<p>Tracking survey</p> <p>KAP survey</p> <p>Behavioral surveillance survey</p>

Domain: General population, women, individuals

Desired Behavioral, Social or Other Outcome	Assets	Challenges	Suggested Approaches/Specific Techniques	Rapid Assessment	Monitoring and Evaluation
ITNs					
<p>People know how malaria is transmitted and the risks</p> <p>People (especially the most vulnerable) use nets as a key part to preventing malaria</p> <p>Women make family health decisions such as obtaining and using ITNs</p> <p>Community members know how to use nets correctly (and re-treat them if necessary)</p> <p>Family members hang nets properly</p>	<p>Strong logistics management system in place</p> <p>Willingness/ability to pay for nets among vulnerable groups</p> <p>Presence of net culture</p> <p>Presence of PVO/NGO networks, employer-based schemes and boarding schools</p> <p>Strong logistics management system in place</p> <p>Presence of PVO/NGO networks</p> <p>Strong national radio coverage</p>	<p>Low literacy levels</p> <p>Preference of other ineffective methods for mosquito control</p> <p>Limited coordination/ implementation capacity at sub-district level and below</p> <p>Men may control money flow</p> <p>Lack in availability of re-treatment kits; lack of ITNs due to stock outs in the public sector</p> <p>Limited coordination/ implementation capacity at sub-district level and below</p> <p>Remoteness of target populations</p>	<p>Locally adapted, pictorial IEC materials, mass media**, IPC in community</p> <p>Positive deviance among ITN users in community</p> <p>Targeted voucher programs**</p> <p>Health education during ANC and immunization clinics**</p> <p>Targeted IEC, community mobilization, IPC, door to door campaigns by Community Health Workers (CHW)**</p> <p>Community re-treatment days, modeling ITN use in health settings and schools**</p> <p>Demonstration campaigns around net hanging, modeling ITN use in health** settings and schools, targeted IEC material</p> <p>Radio programming, TV spots</p> <p>Traditional media, story tellers, drama puppetry</p>	<p>Sec. data analysis (DHS), KAP</p> <p>Focus groups</p>	<p>Monitoring reports</p> <p>Behavioral surveillance survey, tracking survey</p> <p>Cost-benefit analysis</p> <p>Sample survey of women</p> <p>Behavioral surveillance survey, tracking survey</p> <p>Campaign follow up survey</p>
IRS (including sprayers and women)					
<p>Sprayers carry out effective, quality spray operations</p> <p>Female sprayers practice undertake safety measures, e.g. pregnancy tests prior to spray operations</p>	<p>Adequate training facilities available</p> <p>High staff retention</p>	<p>Low literacy levels</p>	<p>Standard certification of sprayers</p> <p>Sprayer Q/A pocket guide (job aide)</p> <p>Pictorial, simple IEC materials for safety among female sprayers</p>	<p>Observations</p> <p>Sample survey of sprayers</p>	<p>Observations</p> <p>Sample survey of sprayers</p>
<p>People know not to wash walls after spray activities</p> <p>Community knows that insecticide is invisible on walls, safe and effective</p> <p>Communities prepare structures/ houses prior to spraying</p> <p>Villagers allow sprayers inside their house/structure for IRS</p>	<p>Influential community leaders</p> <p>Mass media has strong influence on population</p> <p>Presence of PVO/NGO networks</p> <p>Strong national radio coverage</p>	<p>Low literacy levels</p> <p>Limited coordination/ implementation capacity at sub-district level and below</p> <p>Resistance among community leaders</p> <p>Cultural taboos, especially to spray bedrooms</p>	<p>Micro planning prior to campaign</p> <p>Dramas/songs</p> <p>Billboards</p> <p>Distribution of fact sheets/leaflets for literate/illiterate (including pictures)</p> <p>Community sensitization meetings</p> <p>Radio "frequently asked questions" interviews for community concerns</p> <p>Mobile van/loudspeaker endorsement</p> <p>Door-to-door campaigns**</p> <p>Popular stars endorsement</p>	<p>Community meeting</p> <p>Focus groups</p>	<p>Tracking survey</p> <p>KAP survey</p> <p>Campaign follow up survey</p>

Domain: General population, women, individuals (continued)

Treatment: case management, prompt effective treatment

<p>People know how malaria is transmitted and are aware of the particular dangers of malaria to young children and pregnant women</p> <p>People know which drugs are the most effective for malaria treatment, and families know correct dose recommended for treatment</p> <p>Communities recognize the signs of severe illness that require immediate medical attention</p> <p>Caretakers demand quality information and counseling on new anti-malarial drugs and approaches</p> <p>Individuals receiving malaria treatment adhere to treatment regimen</p>	<p>Insurance schemes to ensure affordability of drugs</p> <p>Presence of PVO/NGO networks</p> <p>High national radio coverage</p> <p>Strong logistics management system in place</p>	<p>Far distance to health facilities</p> <p>Over reliance by population on ineffective medicinal sources</p> <p>High out of pocket expenditure for drugs and/or services</p> <p>Limited coordination/ implementation capacity at sub-district level and below</p> <p>Low literacy levels</p>	<p>Dissemination of information about symptom recognition, importance of prompt treatment in young children, effective drugs and importance of compliance through:</p> <p>Radio, TV, traditional media (story telling, drama, puppetry), integration into school curriculum and workplace</p> <p>Health education during ANC and immunization clinics</p> <p>Simple, pictorial IEC materials</p> <p>Pre-packaged treatment (could be socially marketed)</p> <p>Consumer education and point of service material including dosage by age</p>	<p>Sec. data analysis (DHS), Focus groups</p>	<p>KAP surveys</p>
<p>Poor or marginalized groups seek treatment for malaria promptly</p> <p>Women make family health decisions such as how money should be spent if someone is sick from malaria</p> <p>Communities demand high quality, prompt and effective treatment from their health service providers</p>	<p>Strong logistics management system in place</p> <p>Strong presence/ organization of women's organizations</p> <p>Health facility supervision system in place to ensure quality</p>	<p>Far distance to health facilities</p> <p>Cultural taboos</p> <p>Limited availability of health facilities</p>	<p>Identifying community drug distributors and using local media, to direct the public to them</p> <p>Integrate home based management of fever/malaria with community approaches in integrated management</p> <p>Door-to-door counseling of mothers/caretakers</p> <p>Improving delivery of ACTs through community based medicine sellers, where appropriate**</p> <p>Health education among communities to understand/demand quality services</p>	<p>Focus groups</p> <p>Community meeting</p>	<p>Tracking survey, behavioral survey</p>
IPTp					
<p>Women know the dangers of malaria in pregnancy and that asymptomatic malaria can be common</p> <p>Women attend ANC early and frequently</p> <p>Women comply with the recommended two doses of SP for IPTp</p>	<p>High/timely ANC attendance</p> <p>High national radio coverage</p>	<p>Limited coordination/ implementation capacity at sub-district level and below</p> <p>Cultural taboos</p>	<p>Client education during ANC and FP clinics</p> <p>IEC materials through women's groups and women's micro-finance groups, workplace health education programs</p> <p>Media approaches (TV, radio, dramas) encouraging timely uptake of ANC and adherence to SP</p> <p>Community approaches (radio listening groups, road shows, women's groups)</p>	<p>Focus groups</p> <p>Sec. data analysis (DHS)</p>	<p>Monitoring reports</p> <p>KAP survey</p>

Appendix B: Process and Output Indicators for Communication, Recall, Intention and Behavior

Process and Output Indicators for Communication

Process Indicators	Output Indicators	PMI Outcome Indicators (Based on PMI M&E Guidance)
Cross-Cutting Materials and Messages		
<ul style="list-style-type: none"> •# of materials produced, by type, target audience, etc. •# of copies of materials distributed, by time, organization and type •# of job aids for HWs, dispensers, ITN sellers, sprayers •# of copies of job aids disseminated, by time, recipient and type •# and type of media materials developed •# and type of media broadcast, by station, time (planned and documented – media reports from stations) •# of broadcast time and newspaper space purchased •amount and type of point of purchase materials produced •# and type of point on purchase materials disseminated, by time, recipient and type •# of press conferences organized •# of stories published/broadcast 	<p>Proportion of target audience who:</p> <ul style="list-style-type: none"> • Have received (heard/seen) something about malaria • Are able to cite specific materials/sources (recall) • Are able to cite specific messages of program, slogan, tagline, jingle (recall) <p>Proportion of target audience who know/believe:</p> <ul style="list-style-type: none"> • Mosquitoes cause malaria • Mosquitoes that bite at night are the only cause of malaria • Malaria is serious, can be fatal • Children under 5 and pregnant women are most vulnerable • Malaria transmission can occur year-round • You can prevent malaria in your home • There is an effective treatment for malaria. 	

Process Indicators	Output Indicators	PMI Outcome Indicators (Based on PMI M&E Guidance)
Community Activities		
<ul style="list-style-type: none"> • # of community activities conducted, by type, topic, place, date * • # of committee meetings, by topic, place, date * • # of organizations participating and role 	# of target audience reached by activities by type, topic, place, date, gender (people reached by community activities) *	

* These indicators are very difficult to measure: they are managed by multiple partner organizations with limited ability to track and report on every activity and numbers of people attending each. Results for these indicators will need to be estimated.

Process Indicators	Output Indicators	PMI Outcome Indicators (Based on PMI M&E Guidance)
Interpersonal communication		
<p>Number of people trained in providing messages /interpersonal counseling/etc.</p> <ol style="list-style-type: none"> 1. Health workers 2. Community Leaders (including teachers) 3. Drug dispensers 4. ITN sellers/distributors 5. Sprayers 6. Community committee members 7. Community Health workers, TBAs, etc. 8. Journalists 	<p>Pre-post test results of training</p> <p>Proportion of HWs, distributors etc. who provide:</p> <ul style="list-style-type: none"> • messages to clients/patients at each contact • proper usage information • service/supply (ITNs, ACTs, IPT, etc) <p>(Measured through observations)</p> <p>Proportion of target audience who recall and understand interpersonal messages</p> <ul style="list-style-type: none"> • can recall dosage information given • intend to follow advice given • know where to acquire which products <p>(Measured through exit interviews)</p>	
Indoor Residual Spraying (IRS)		
	<p>Received:</p> <ul style="list-style-type: none"> • Proportion of the intended target group who heard any of the mobile van/loudspeaker endorsements about IRS • Proportion of targeted villages where IRS community question and answer meetings were held prior to spray visits • Proportion of the intended target group who heard any of the radio spots about IRS 	<p><i>Proportion of households reporting that their compound/household was sprayed with a residual insecticide in the last 12 months (RBM/MERG suggested, not final)</i></p> <p><i>Proportion of targeted houses adequately sprayed with a residual insecticide in the last 12 months</i></p>
	<p>Recall:</p> <ul style="list-style-type: none"> • Proportion who can repeat the messages they heard, the slogan, tagline, jingle 	<p><i>(adequately to be defined according t (RBM/MERG suggested, not final)</i></p>
	<p>Believe:</p> <ul style="list-style-type: none"> • Proportion of household heads who believe IRS is an effective means of malaria prevention and control • Proportion of target audience who believe insecticides used in IRS to be safe 	<p><i>(RBM/MERG suggested, not final)</i></p>

Process Indicators	Output Indicators	PMI Outcome Indicators (Based on PMI M&E Guidance)
	Intend: <ul style="list-style-type: none"> • Proportion of group who are willing to prepare their house properly and welcome sprayers • Proportion of those having had IRS who intend to continue the next time 	
Insecticide-treated Nets (ITNs)		
	Received <ul style="list-style-type: none"> • Proportion of the intended target group who heard any of the radio spots on ITNs • Proportion of the intended target group who were visited by community health workers and shown how to hang the net 	<i>Proportion of population of all ages who slept under an ITN the previous night (RBM/MERG)</i> <i>Proportion of children under five years old who slept under an ITN the previous night (RBM/MERG)</i>
	Recall <ul style="list-style-type: none"> • Proportion of target group who know who the most important users of ITNs should be • Proportion of target group who can explain/demonstrate how to hang an ITN properly 	<i>Proportion of pregnant women who slept under an ITN the previous night (RBM/MERG)</i>
	Believe <ul style="list-style-type: none"> • Proportion of target group who believes that ITNs are safe for children under 5 and/or pregnant women • Proportion who believe that nets must be used nightly 	<i>Proportion of pregnant women who slept under an ITN the previous night (RBM/MERG)</i>
	Intend <ul style="list-style-type: none"> • Proportion who intend to acquire an ITN in next X time. • Proportion who intend to use their net nightly for appropriate person 	

Process Indicators	Output Indicators	PMI Outcome Indicators (Based on PMI M&E Guidance)
Case Management/Prompt, Effective Treatment		
	Received <ul style="list-style-type: none"> • Proportion of the target group who heard any of the radio spots on malaria treatment • Proportion of targeted population who were reached by traditional media (drama) on treatment 	<i>Proportion of children under five years old with fever in the last two weeks who received treatment with ACTs within 24 hours of onset of fever (PMI specific)</i>
	Recall <ul style="list-style-type: none"> • Proportion of target group who know what medicine to give their child with a fever • Proportion of target group who know for how many days a child with a fever should receive his/her medications • Proportion of target group who know where to access the recommended antimalarial • Proportion of target group who can recognize signs and symptoms of febrile illness in children under 5 	<i>Proportion of children under five years old with fever in the last two weeks who received treatment with an antimalarial according to national policy within 24 hours of onset of fever (RBM/MERG)</i>
	Believe <ul style="list-style-type: none"> • Proportion of target group who believe it's important to seek treatment for fever within 24 hours from a qualified provider. 	
	Intend <ul style="list-style-type: none"> • Proportion of target group who intend to get the first line antimalarial within 24 hours the next time their child has fever. • Proportion of those who received treatment who intend to complete protocol. 	
	Action taken <ul style="list-style-type: none"> • Proportion of parents of children under 5 with fever who sought treatment from qualified health personnel within 24 hours of onset of fever 	

Process Indicators	Output Indicators	PMI Outcome Indicators (Based on PMI M&E Guidance)
Malaria in Pregnancy		
	Received <ul style="list-style-type: none"> • Proportion of the intended target group who heard any of the radio spots on IPT • Proportion of women visiting in ANCs targeted who receive client information on IPT 	<i>Proportion of women who have received two or more doses of IPTp during their last pregnancy in the last two years (RBM/MERG)</i>
	Recall <ul style="list-style-type: none"> • Proportion of women who know how IPTp helps them and their baby • Proportion of pregnant women who know when to go for first antenatal care visit 	
	Believe <ul style="list-style-type: none"> • Proportion of women who believe it's important to take medicine to prevent malaria when pregnant • Proportion who believe the medicine is safe 	
	Intend <ul style="list-style-type: none"> • Proportion of women who intend to get at least 2 doses of IPT if they should become pregnant 	
	Action taken <ul style="list-style-type: none"> • Going to ANC before 4 months • Returning to ANC as scheduled 	

Appendix C: USAID Implementing Partners That Focus on Communication

PMI teams can access the following mechanisms through three ways:

1. Field Support into a task order, contract, cooperative agreement or grant
2. Mission-based task order or award, contract, cooperative agreement or grant
3. Associate Award under Leader with Associate Award

Note that task orders can cover a period beyond the dates of award for an Indefinite Quantity Contract (IQC). An associate award can cover up to 5 years beyond the original leader award. The mechanisms can be malaria specific, communications specific or provide general support. PMI teams should review the specific services provided for each mechanism. The following list breaks down the available mechanisms in each these categories:

Malaria specific: Indoor Residual Spraying, NetMark Plus, Malaria Communities Program

Communications specific: Communication for Change (C-CHANGE), Health Policy Initiative (HPI) IQC, Private Sector Program (PSP)

General support: Basic Support for Institutionalizing Child Survival III (BASICS III), Technical Assistance and Support Contract, Three (TASCthree)

Malaria Specific

Indoor Residual Spraying: Multi-award IQC, Geographic Scope: Worldwide, 09/06 – 09/11

Purpose: To establish a world-wide procurement mechanism to implement indoor residual spraying (IRS) programs to prevent malaria. This IQC will enhance USAID's ability to implement IRS programs on the ground through cost-effective commodities procurement for IRS, IRS logistics systems, access to technical expertise, and implementation of IRS in countries affected by malaria.

Services Provided: Prepare and execute logistical plans for IRS related commodity procurement and distribution, including the purchase, storage and handling of sprayers, insecticides and any other supplies required to carry out the proposed IRS operations.

- Provide operational management support (i.e. field supervision, operations planning, day to-day implementation management) to IRS activities.
- Ensure compliance with all USG environmental regulations, including the conduct of Environmental Impact Assessments in compliance with 22 CFR 216.
- Furnish expert short- and long-term technical assistance for IRS activities.
- Organize skills training for capacity development and on-going supervision and monitoring for safe and effective spraying in accordance with World Health Organization (WHO) guidelines.

Partners: Research Triangle International

Means of Access: Issuance of Task Orders, or Field Support

Points of Contact: CTO: Michael MacDonald GH/HIDN/ID Telephone: 202-712-5403, Fax: (202) 216-3702
Email: mmacdonald@usaid.gov and Gene Brantly, Telephone: 202-974-7801, epb@rti.org

NetMark Plus: Cooperative Agreement, Geographic Scope: Africa, 09/99 – 09/09

Purpose: NetMark Plus represents the cutting edge in partnerships for prevention of malaria. Funded by USAID and implemented by the Academy for Educational Development (AED), NetMark Plus is an eight year, \$65.4 million dollar project designed to reduce the impact of malaria in sub-Saharan Africa through the increased use of insecticide treated mosquito nets (ITNs), and insecticide treatment kits for nets, through partnership and joint investment with a wide range of international and local commercial partners.

Services Provided: Since its launch in 1999 NetMark has worked with the commercial sector to identify and overcome the barriers to the creation of commercially viable markets for ITNs in Ghana, Nigeria, Senegal and Zambia that would lessen the burden on the public sector by creating demand and corresponding supply for those who can afford to pay.

In September 2002, USAID amended the cooperative agreement with AED to allow for an expansion of NetMark into new countries and broadening its mandate beyond the program's original focus on commercial expansion. Now named NetMark Plus, the program is designed to create better links between the three components of Roll Back Malaria's Strategic Framework for Scaling Up Insecticide-Treated Netting (ITN) Programs in Africa: commercial expansion, subsidized time-limited interventions (market priming), and sustained equity provision interventions (targeted subsidies).

Partners: Academy for Educational Development is the prime and its core partners on NetMark include the Malaria Consortium (UK), Group Africa, and FCB Advertising. Commercial partners include BASF, Bayer AG, Siamdutch Mosquito Netting Company, A-Z Textiles and Vestergaard Frandsen. AED is currently in negotiations with these companies and others for the expansion of the program throughout sub-Saharan Africa.

Means of Access: Field Support

Points of Contact: CTO Sonali Korde, Telephone: 202-712-1609, Fax: (202) 216-3702, skorde@usaid.gov; David McGuire Telephone: (202) 884-8506, Fax (202) 884-8844 Email: dmcguire@aed.org

Malaria Communities Program: Cooperative Agreement, Geographic scope: Africa, 09/07 – 09/12

Purpose: The Malaria Communities Program (MCP) seeks to identify and support new partner organizations and other local partners in PMI focus countries to carry out sustainable malaria prevention and control activities under the Presidential Malaria Initiative. MCP seeks to enable local capacity to undertake community-based malaria prevention and treatment activities, thus building ownership of malaria control for the long-term. During fiscal year 2007 awardees will be limited to organizations working in the first seven PMI focus countries: Angola; Malawi; Mozambique; Rwanda; Senegal; Tanzania, and Uganda. In fiscal year 2008 eligibility will be extended to all 15 PMI focus countries. Organizations awarded under the MCP are expected to work under the leadership of the USAID Mission with the support of the PMI in-country team (comprised of USAID and CDC staff) and in coordination and partnership with the National Malaria Control Program (NMCP), existing PMI partners, and with a range of other malaria stakeholders in country.

Services Provided: Key activities supported under the MCP include: the distribution, education on proper use, and promotion of insecticide treated nets; promotion and implementation of net retreatment activities; information, education, and communication activities to support household mobilization for indoor residual spraying; support community/facility-based activities aimed at preventing and treating malaria in pregnant women and children under five, and support activities aimed at promoting appropriate health seeking behavior among community members aimed at increasing early and effective treatment of malaria.

Current awards:

- Minnesota International Health Volunteers (MIHV) in Uganda: GHN-A-00-07-00005
- Episcopal Relief and Development (ERD) in Angola: GHN-A-00-07-00007
- Christian Reformed World Relief (CRWRC) in Malawi: GHN-A-00-07-00008
- Lutheran World Relief (LWR) in Tanzania: GHN-A-00-07-00009
- Christian Social Services Commission (CSSC) in Tanzania: GHN-A-00-07-00012

Means of Access: Field Support

Points of Contact: CTO Julie Wallace, Telephone: 202-712-0428, Fax: 202-216-3702, Email: jwallace@usaid.gov

Communication specific

Communication for Change (C-CHANGE), Cooperative Agreement, Leader with Associate Awards, Geographic Scope: Worldwide, 09/07 – 09/12

Purpose: Work across sectors to improve the effectiveness and sustainability of communication as an integral part of development efforts.

Services Provided: The program will work in all the major health areas. It will also provide communication support to programs focusing on the environment, agriculture, and livelihoods, as well as programs in civil society and democracy and governance.

Partners: Academy for Educational Development, CARE, The Catholic University of Peru, Centre for Media Studies (India), IDEO, Institut Supérieur des Sciences de l'Information et de la Communication (Senegal), Internews, Kasetsart University (Thailand), Makerere University (Uganda), New Concept Information Systems (India), Ohio University, Social Surveys (Uganda) Soul City (South Africa) Straight Talk (Uganda) Tata Consulting (India) University of Capetown School of Business, University of Washington, Witwatersrand University (south Africa)

Means of Access: Field Support and Associate Awards AID/W Activity Director

Points of Contact: CTO Gloria A. Coe, Telephone 202-712-5591, Email gcoe@usaid.gov; Director Susan Zimicki, Telephone 202-884-8825, Email szimicki@aed.org

Health Policy Initiative (HPI) IQC, Indefinite Quantity Contract, Geographic Scope: Worldwide, 09/05 – 09/10

Purpose: The Health Policy Initiative (HPI) project is a multiple-award indefinite quantity contract (IQC) designed to exercise global leadership and provide field level programming in health policy development and implementation.

Services Provided: The technical and related assistance provided under this procurement is expected to improve the enabling environment for health, ultimately making it possible for men and women around the world to obtain and use the information and services they need for better health, especially in the areas of family planning/reproductive health (FP/RH), HIV/AIDS, and maternal health (MH). Create policies that improve equitable and affordable access to high-quality services and information.

- Strengthen public sector and civil society champions and support them to assume leadership in the policy process.
- Increase health sector resources (public, private, non-governmental organizations and community-based organizations) and allocate them more effectively and equitably.
- Strengthen multi-sectoral engagement and host country coordination in the design, implementation and financing of health programs.
- Use timely and accurate data for evidence-based decision-making.

Partners: Abt Associates, Chemonics, Constella Futures, and Research Triangle Incorporated (RTI)

Means of Access: Task Orders

Points of Contact: CTO, Mai Hijazi, Telephone: 202-712-1494, Fax: (202) 216-3046, mhijazi@usaid.gov
Please contact the CTO regarding options TA: Diana Prieto – Telephone: 202-712-0662, dprieto@usaid.gov

Private Sector Program (PSP): Indefinite Quantity Contract (IQC), Geographic Scope: Worldwide, 09/04 – 09/09

Purpose: PSP promotes private and particularly commercial sector strategies to expand access to quality reproductive health and voluntary family planning (and other key health) products and services in developing countries. PSP can be used to access technical assistance related to interventions involving private providers, NGOs, the private commercial sector, faith-based organizations, professional associations, social franchises and other private for profit or non-profit entities.

Services Provided: The IQC mechanism allows USAID missions and Bureaus to easily access high quality technical assistance and support for activities involving the private sector in health. Missions can access PSP either by issuing mission-managed task orders under the IQC, or by putting field support into the core-funded task order, Private Sector Partnerships-One (PSP-One, see User's Guide description).

Mission-funded task orders under the PSP IQC holders can be long-term or intermittent, depending on individual requirements. Task orders awarded under PSP can extend up to 36 months beyond the end date of the contract, September 30, 2009, as long as they are awarded before that end date. Task orders are developed, awarded, and managed by the requesting unit (The USAID Mission or Bureau). The Global Health Bureau in Washington provides guidance and assistance when requested.

Partners: The six IQC holders are Abt Associates, The Academy for Educational Development, Chemonics International, The Futures Group International, John Snow, Inc., and University Research Company. Each of these prime contractors heads a consortium of organizations with broad and deep expertise in such technical areas as social marketing, quality assurance, health financing, social franchising, public-private partnerships, policy, and behavior change communications.

Means of Access: Direct Task Order

Points of Contact: CTO Patricia Mengech, Telephone: 202-712-5712, Fax: 202-216-3046, pmengech@usaid.gov TA: Marguerite Farrell, Telephone: 202-712-0458, Fax: 202-216-3046 mfarrell@usaid.gov

General support

Basic Support for Institutionalizing Child Survival III (BASICS III): Indefinite Quantity Contract, Geographic Scope: Worldwide, 07/04 – 07-09

Purpose: BASICS III is a single award Indefinite Quantity Contract (IQC) to support Missions and Bureaus to scale up and increase the family, community and health system use of key child health and nutrition interventions. Activities will work within the strategic framework of USAID Missions and Bureaus.

Services Provided:

- Focus on priority areas of unmet need in nutrition, diarrheal disease, pneumonia, malaria, neonatal health and HIV/AIDS.
- Provide support for interventions in birth spacing and humanitarian assistance.
- Strengthen health systems for more effective and efficient delivery of child survival interventions.
- Advance policy and global leadership for child health, providing services to AID/W and missions for global and national advocacy activities, and the formulation and implementation of child health policies and strategies.
- Identify, adapt, apply and transfer cost-effective approaches for achieving improved coverage and outcome-level results for child health and nutrition interventions.
- Collaborate with and provide support to Private Voluntary Organizations (PVOs) in priority areas and utilize the learning and experiences of PVOs in community-based approaches to expand coverage at regional and national levels.

Partners: BASICS III is implemented by The Partnership for Child Health Care, Inc. which includes the following partners: Academy for Educational Development, John Snow Inc., Management Sciences for Health, The Manoff Group, PATH, Save the Children and Tina Sanghvi Ltd.

Means of Access: Field Support under Task Order 1, Task Orders awarded by missions

Points of Contact: CTO: Maria Francisco, Telephone: 202-712-0667, Fax: 202-216-3702, mfrancisco@usaid.gov; Activity Director: Fred White, Telephone: 703-312-6800, Fax: 703-312-6900, fwhite@basics.org

Technical Assistance and Support Contract, Three (TASCthree): Multi-award IQC, Geographic Scope: Worldwide, 09/06 – 09/11

Partners: The TASC3 web page provides individual contractors and contract information, www.tasc3.com

Means of Access: Direct Task Order

Points of Contact: CTO Yogesh Rajkotia, Telephone: 202-712-5508, Fax: 202-216-3702, Email: yrajkotia@usaid.gov; TA Jamila Squires, Telephone 202-661-0384, jsquires@usaid.gov

Purpose: TASCthree is designed to allow USAID Missions and Bureaus to easily access quality technical assistance and support for their activities in maternal and child health, nutrition, infectious disease, and HIV/AIDS. TASCthree works worldwide and has two separate tiers of contractors. The first tier, TASCthree-Global Health, contains multiple prime contractors and many subcontractors, covering the entire spectrum of USAID-supported health, infectious diseases, and population areas. The second tier, TASCthree - HIV/AIDS research, contains multiple contractors and a score of subcontractors, specializing in HIV/AIDS research activities.

Assistance procured through a task order with any one of the TASCthree prime contractors can be long-term or intermittent, depending on mission or bureau requirements. Task orders awarded under TASCthree can extend

up to 36 months beyond the end date of the contract, as long as they are awarded before that end date. Task orders are developed, awarded and managed by the requesting unit (the USAID Mission or Bureau). The Global Health Bureau in Washington provides guidance and assistance when requested (please send the request to the CTO/TA).

Services Provided: TASCthree provides resources and guidelines for missions and contractors to carry out the necessary processes for the procurement of task orders under this IQC. The combination of prime and subcontractors available under the two TASCthree tiers will provide a diverse mix of talents, skills, and experience as well as opportunities to work with many new partners. TASCthree also includes small business set asides among its prime contractors and many more among its subcontractors.

Appendix D: Generic Scope of Work for Communication and Social Mobilization Activities

Background

[Country] is one of 15 countries participating in the President's Malaria Initiative (PMI) to rapidly strengthen malaria prevention and treatment. USAID/[country] is working with the [country] Ministry of Health and other local partners to provide technical assistance in malaria to address overall gaps in [country]'s Plan of Action for Malaria Control in commodities, capacity building, and other technical areas.

This scope of work addresses the area of communication and social mobilization. Specifically, USAID, CDC, and their implementing partners will collaborate with the Ministry of Health and other local partners to provide technical assistance for the development, implementation and monitoring of communication and social mobilization activities to address key prevention, care-seeking and compliance behaviors among the target populations.

The purpose of these activities is to influence behaviors and mobilize communities to create long term normative shifts towards desired behaviors and to sustain enabling behaviors around the four PMI interventions. These behaviors are:

- Increased demand for malaria services and products
- Acceptance of IRS;
- Improved adherence to treatment regimens and IPTp during pregnancy;
- Regular ITN use by the general population, focusing on vulnerable groups including pregnant women and children under five, and prompt, appropriate treatment with ACTs within 24 hours of onset of symptoms; and
- Community involvement in malaria control.

The [title] program under PMI will run from 2008 to 2010. This scope of work covers work to be performed under field support/task order/associate award/bilateral for the period of XXX to XXX

General Goal

To provide technical, strategic, managerial and operational support to implement communication and social mobilization activities to influence behaviors and mobilize communities to create long term normative shifts towards desired behaviors and to sustain enabling behaviors around the four PMI interventions.

Specific Goal

In targeted areas of [intervention areas] achieve measurable changes in key behaviors related to the XXX [specify intervention] PMI intervention(s).

Expected Results

In targeted areas of [intervention areas], more than XX million people will have received, participated in, and acted on [select indicator in accordance with M&E plan] communication and social mobilization messages by [date].

Objectives

Under the supervision of the PMI country team, and in collaboration with the NMCP, Regional Health Bureaus and other Roll Back Malaria (RBM) partners in health and other related sectors, the grantee will support data-

based, communication and social mobilization activities to achieve measurable changes in knowledge and key behaviors for the [four or specify] PMI interventions by 2010; specifically:

- Undertake a rapid assessment to tailor communication and social mobilization activities to the needs of the target populations, review baseline information on beliefs and behaviors and review malaria communication and social mobilization programs already underway in the country, including the assessment results and information from the most recent MOPs - especially any community mobilization and demand creation gaps and/or opportunities addressing cultural change, ownership and participation.
- Develop, in coordination with the MOH IEC/BCC/Health Education Unit and other partners [identify] a comprehensive communication strategy and integrated activities, designating a lead partner for communication. The strategy should reflect the needs of target audiences. The strategy should also reflect the national malaria plan and any existing official malaria IEC/BCC plans. The strategy should describe how coordination with the NMCP will take place as malaria control scales up. The strategy should include:
 - Who are the priority and supporting groups that need to act?
 - What are the desired behaviors/actions for these populations to achieve the PMI goals?
 - Which factors would enable these key behaviors/actions? Which barriers need to be reduced?
 - What are the activities to build on these factors/overcome these barriers?
- Facilitate the building of the monitoring and process evaluation capability relevant for program improvement, including performance monitoring.
- Implement strategy
 - The strategy will include each of the [select] PMI interventions, sorted by audience, desired behaviors, social or other outcome, assets, challenges, approaches/specific techniques, rapid assessment and rapid monitoring and process options.
- Revise strategy annually, through the MOP planning process and ongoing monitoring and evaluation, in order to modify approaches as disease patterns shift and different communications activities and messages are warranted.

Management Plan

According to the size of the program, the [contractor, grantee, etc.] will establish an effective but minimal management structure in [country] to efficiently implement the communication and social mobilization program. This will include identifying hiring a Chief of Party based in [city, country] who will ensure that all systems and procedures are mobilized appropriately to support management of this project. S/he will be the principal point of contact with PMI and will bear ultimate responsibility for all project management tasks, including quality and cost control, performance monitoring, reporting, and client relations, including the MOH/NMCP. All in country positions should be filled by host country nationals, and all sub-contracts should be made with in country media/public relations, polling, etc. firms.

Specific Activities

- Partnership and Coordination [Specify relationship with NGO/PVO networks]
- Capacity Building [Among local organizations and government counterparts]

- Implementation of communication and social mobilization program [Contractor, grantee, etc] and its partners will provide technical and operational support for the different activities under the communication and social mobilization program, including all aspects of training, logistics, supervision, monitoring, and quality assurance. The following activities will be conducted in support of day-to-day operational management.

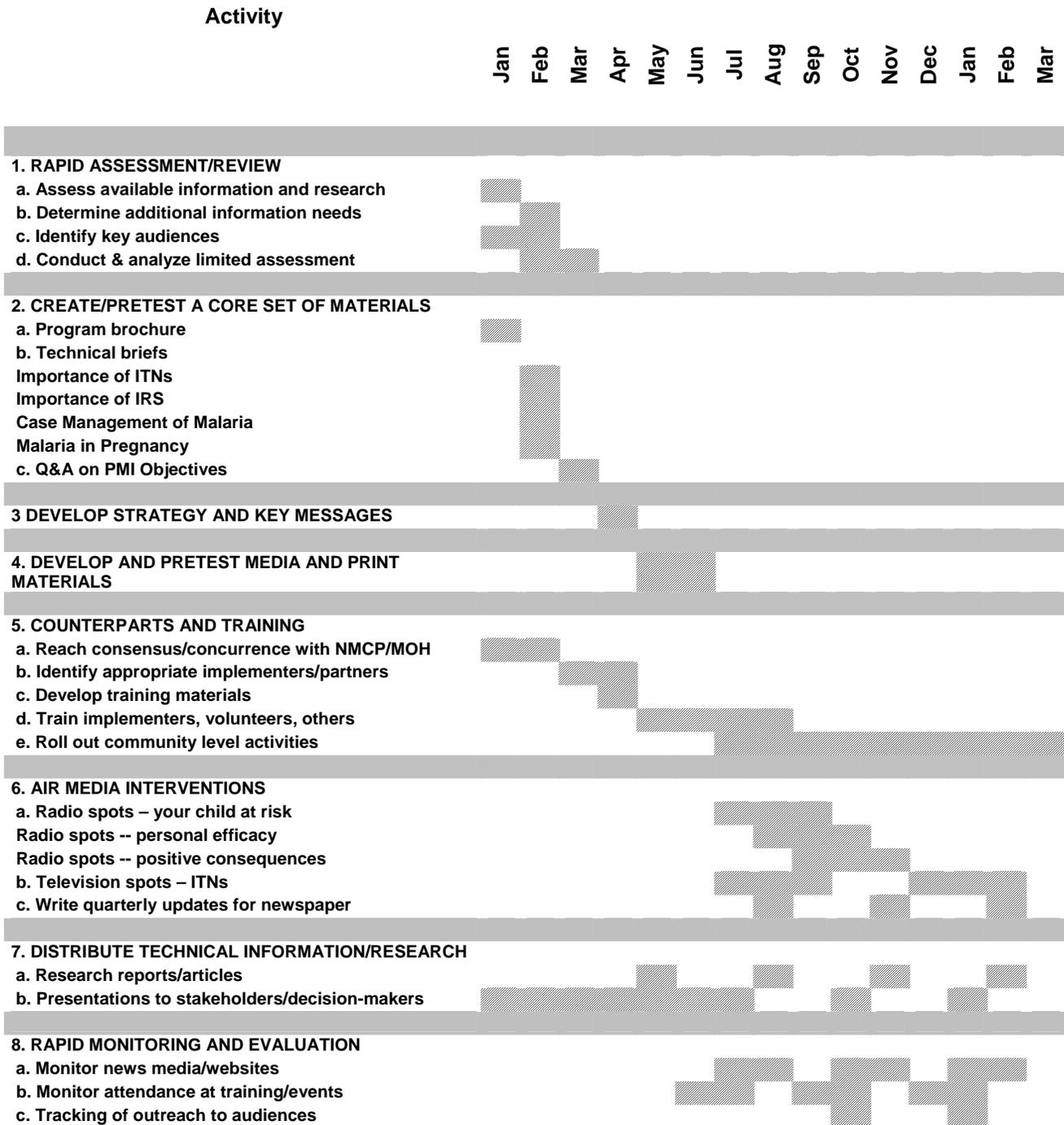
- i. *Materials development and testing* Specify
- ii. *Training* Specify
- iii. *Management* Specify
- iv. *Supervision*
- v. *Reporting* Specify
- vi. *Monitoring and Evaluation* Specify

Review indicators, methods, and data sources for monitoring and evaluation of communication and social mobilization with CDC, USAID and MOH/NMCP, and will develop a Performance Monitoring Plan.

Deliverables and Calendar: [specify using model below, adjust for country context]

Illustrative Communication Activity Implementation Plan

Hash marked boxes indicate months of activity



Appendix E: Example of Cross-Tabulation and Analysis of Results

Following is a table and analysis of its data adapted from the NetMark household study in Ghana from 2004¹⁶ that shows how results vary by segments (including net usage) for an attitude question (rather than an outcome variable). This approach can be used for any question.

Examination of the results in the “totals” column shows:

- Nearly all respondents (98%) named at least one advantage for a child under five to sleep under a treated net rather than an untreated net.
- Only 2% said they did not know of any advantage of a child under five sleeping under treated net rather than an untreated net.
- Most advantages cited had to do with its greater efficacy compared to an untreated net: “works better against mosquitoes/ fewer bites than an untreated net” (59%), “better at preventing malaria” (52%); “kills mosquitoes” (39%), “child will be more protected/ healthy” (37%). Another commonly cited advantage was that the “child would sleep better” (26%).

Examination of the data in the other columns in the table provides the following additional information, which can be used by program staff to determine how and where to reinforce local media, training, and community activities in order to improve results among groups whose results are lower compared to other groups.

- There were some small but notable differences between net owners and non-owners in advantages cited for a child under five sleeping under a treated net. Net owners were more likely to say “child is more protected/healthy” (40% vs. 35%), an important emotional end-benefit that can only be experienced by those who own nets. Net-owners were less likely than non-owners to say a treated net “works better/fewer bites than untreated” (62% vs. 57%) and “kills mosquitoes” (41% vs. 34%).
- Rural respondents were more likely than urban ones to mention “works better/fewer bites than untreated net” (61% vs. 56%) and “child is more protected/healthier” (40% vs. 32%) and as an advantage of a child under five sleeping under a treated net. This indicates that rural respondents have better images of ITNs on some important measures than do urban ones. This could be due to a number of reasons, possibly the fact that there are fewer competitive anti-mosquito products available in rural areas.
- There were differences in the five geographical areas in the five advantages (for a young child sleeping under an ITN) mentioned most often among the total sample : Kumasi residents were most likely to mention “works better/fewer bites” and, along with Accra residents “better at preventing malaria”. Accra residents were also most likely to mention “kills mosquitoes”. Keta residents were most likely to mention “child is more protected”, along with Tamale residents who were also most likely to mention “child sleeps better”. These differences could be due to previous beliefs or to different ways the intervention was implemented in different areas.
- The highest SES group was most likely to mention three of the top five advantages given: “better at preventing malaria”, “kills mosquitoes”, and “works better/fewer bites than an untreated net”. The lowest SES group was more likely than the highest to mention the other two “child is more protected/healthy” and “child sleeps better”. A reason to investigate for this result might be that the first three listed reasons are more often promoted by the media (to which the higher SES groups might have more exposure), while the other two are more mentioned by community workers (with whom the lower SES respondents may come more frequently in contact).

¹⁶<http://www.netmarkafrica.org/research/quantitative/2004%20HH%20Surveys/Complete%20Ghana%209-26-05.pdf> pp 58-59

Useful information would also be provided by cross tabulation of care seeking variables by PMI outcome indicators and SES data:

- Information on care-seeking for children with fever from MIS (Q. 315, 316A and 322), and MICS (Q. CA14 and ML 1-15) and DHS. These cross tabulations would show how care-seeking behavior is related to PMI outcomes and to SES data.
- Information on antenatal care visits from DHS and MICS (Q. MN2 and MN6A-D), which would provide an understanding about how antenatal visit behavior related to PMI outcomes.

Finally, cross-tabbing different PMI outcome indicators by each other would allow planners to determine whether people who perform one behavior are more likely to perform others, and if so, which ones.

If it is possible to add questions to other PMI surveys, consider including questions to measure some of the communication process and output indicators listed in Annex B, so that afterwards it would be possible to determine how they might relate to the PMI outcome indicators.

Most advantages cited had to do with its greater efficacy compared to an untreated net: “works better against mosquitoes/ fewer bites than an untreated net” (59%), “better at preventing malaria” (52%); “kills mosquitoes” (39%), “child will be more protected/ healthy” (37%). Another commonly cited advantage was that the “child would sleep better” (26%).

*Advantages of a child under five sleeping under a treated (rather than untreated) net
Among all respondents (multiple responses possible)*

	Total	Have net?		Sites (city plus surrounding rural areas)					Urban/Rural		Socio-Economic Status				
		Non-owners	Owners	Accra	Keta	Kumasi	Wa	Tamale	All Urban	All Rural	1 Low	2	3	4	5 High
Works better/ fewer bites than untreated net	59.2	62.3	57.1	66.1	62.5	77.0	52.5	37.8	56.1	61.3	51.0	63.5	58.3	58.3	65.0
Kills mosquitoes	38.7	41.3	34.4	52.8	39.2	35.7	33.4	32.1	38.7	38.6	32.5	35.8	37.4	36.3	51.3
Repels mosquitoes	15.5	14.7	16.8	8.6	15.3	13.3	17.4	22.7	15.4	15.5	16.9	17.9	14.9	15.7	12.0
Repels other insects	11.1	10.2	12.6	4.3	9.3	7.3	18.4	16.4	12.0	10.5	15.6	9.8	8.6	12.7	9.0
Better at preventing "malaria"	52.4	51.8	53.3	60.1	42.5	59.0	51.8	48.5	52.6	52.3	42.7	50.7	52.0	56.0	60.7
Better at preventing other illness	1.6	1.6	1.6	2.3	1.0	2.7	1.7	.3	1.2	1.9	3.0	1.7	1.3	.7	1.3
Child more protected	36.7	34.7	40.0	31.2	44.2	25.0	37.1	46.2	32.2	39.7	39.4	39.5	36.1	42.7	26.0
Saves money because child doesn't get sick	4.7	4.1	5.6	4.0	5.3	2.3	4.7	7.0	4.8	4.6	5.0	6.1	3.3	5.7	3.3
Child sleeps better	25.9	24.5	28.1	28.2	23.6	18.3	27.1	32.1	25.9	25.9	31.5	20.9	23.2	25.7	28.0
Other	.1	.2	.0	.0	.7	.0	.0	.0	.0	.2	.0	.3	.3	.0	.0
None	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Don't know	2.2	2.2	2.3	1.7	4.0	3.3	1.0	1.0	2.3	2.1	3.6	1.7	2.6	1.7	1.3
BASE	1500	572	928	301	301	300	299	299	599	901	302	296	302	300	300