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SOCIAL AND BEHAVIOR CHANGE COMMUNICATION FOR MALARIA IN PREGNANCY: STRATEGY DEVELOPMENT GUIDANCE



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U.S. President's Malaria Initiative

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ACRONYMS

ACT	Artemisinin-based Combination Therapy
ALMA	African Leaders Malaria Alliance
ANC	Antenatal Care
CCP	Johns Hopkins Center for Communication Programs
CHW	Community Health Worker
DHS	Demographic and Health Survey
HC3	Health Communication Capacity Collaborative
I-Kit	Implementation Kit
inSCALE	Innovations at Scale for Community Access and Lasting Effects Project
IPTp	Intermittent Preventive Treatment in Pregnancy
IST	In-Service Training
ISTp	Intermittent Screening and Treatment in Pregnancy
ITN	Insecticide-Treated Bed Net
LLIN	Long Lasting Insecticide-Treated Net
M&E	Monitoring and Evaluation
MiP	Malaria in Pregnancy
MIS	Malaria Indicator Survey
MOH	Ministry of Health
NMCP	National Malaria Control Program
PMI	U.S. President's Malaria Initiative
RBM	Roll Back Malaria Partnership
RMNCH	Reproductive, Maternal, Newborn and Child Health
SBCC	Social and Behavior Change Communication
SMART	Specific, Measurable, Achievable, Realistic and Time-Sensitive
SMS	Short Message Service
SP	Sulfadoxine-Pyrimethamine
USAID	United States Agency for International Development
WHO	World Health Organization



INTRODUCTION

About this Implementation Kit

This Implementation Kit (I-Kit) was developed to help social and behavior change communication (SBCC) and malaria in pregnancy (MiP) program managers and stakeholders address identified gaps and improve SBCC strategies and interventions for MiP, especially those interventions targeting service providers. This guidance is divided into four sections:

- Integrating MiP issues into an SBCC situation analysis
- Segmenting MiP audiences and developing problem statements
- Choosing measurable MiP communication and behavior objectives
- Drafting the MiP section of a malaria SBCC strategy document

Background

MiP is a significant public health issue with harmful consequences for not only pregnant women but also unborn and newborn children.¹ Every year, MiP is responsible for the deaths of over 100,000 newborns and 10,000 pregnant women around the world.² MiP is also associated with anemia, spontaneous abortion, stillbirth, prematurity, low birth weight and severe malaria. Young women in their first and second pregnancies and those who are infected with HIV are at highest risk for these MiP-associated illnesses,³ which are most prevalent in sub-Saharan Africa.

Given MiP's prevalence and severity, it is crucial that malaria prevention and control interventions effectively reach and support women before and during pregnancy. Fortunately, the means to prevent and treat MiP are inexpensive and cost-effective. The World Health Organization (WHO) recommends the following evidence-based strategies to prevent, diagnose and treat MiP⁴:

- Use of long lasting insecticide-treated nets (LLINs) by pregnant women
- Scale up of intermittent preventive treatment in pregnancy (IPTp) with sulfadoxine-pyrimethamine (SP) in all areas in sub-Saharan Africa with moderate to high malaria transmission
- Prompt diagnostic testing of suspected malaria and treatment of confirmed malaria infections

Through the scale up of effective interventions, the global malaria incidence was reduced by 37 percent and global malaria mortality by 60 percent between 2000 and 2015.⁵ Between 2009 and 2012 alone, 94,000 newborn lives were saved through MiP interventions.⁶ Despite these gains, scale up of interventions to

1 World Health Organization (WHO). (2016). *Malaria in Pregnant Women*. Geneva, Switzerland: WHO. Retrieved from http://www.who.int/malaria/areas/high_risk_groups/pregnancy/en/.

2 Roll Back Malaria (RBM) Malaria in Pregnancy Working Group. (2016). *Investing in Malaria in Pregnancy in Sub-Saharan Africa: Saving Women's and Children's Lives*. Retrieved from <http://www.rollbackmalaria.org/files/files/working-groups/MiPWG/RBMMiPWG%20Infographic%2023May2016.pdf>.

3 Center for Disease Control and Prevention. (2016). *Intermittent Preventive Treatment of Malaria for Pregnant Women (IPTp)*. Retrieved from http://www.cdc.gov/malaria/malaria_worldwide/reduction/iptp.html.

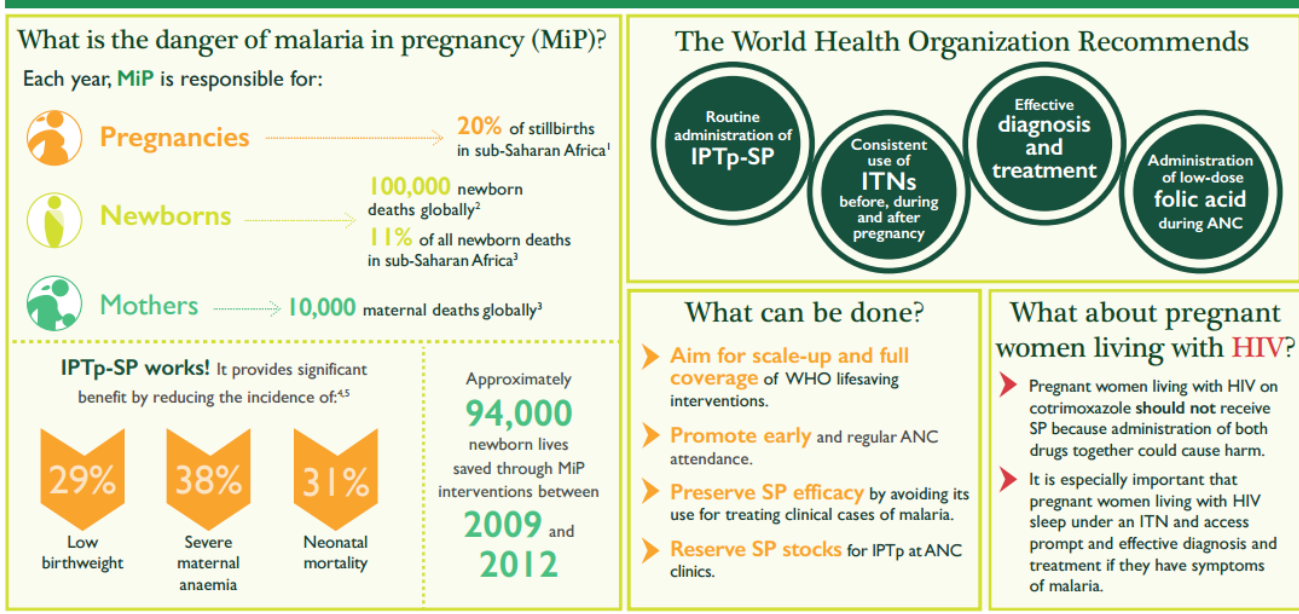
4 World Health Organization (WHO). (2013). *WHO policy brief for the implementation of intermittent preventive treatment of malaria in pregnancy using sulfadoxine-pyrimethamine (IPTp-SP)*. Geneva, Switzerland: WHO. Retrieved from http://www.who.int/malaria/publications/atoz/policy_brief_iptp_sp_policy_recommendation/en/.

5 World Health Organization (WHO). (2016). *Eliminating Malaria*. Geneva, Switzerland: WHO. Retrieved from <http://www.who.int/malaria/publications/atoz/eliminating-malaria/en/>.

6 Hill, J., & van Eijk, A. (2014). *The contribution of malaria control to maternal and newborn health*. *Roll Back Malaria Progress and Impact Series No. 10*.



Investing in Malaria in Pregnancy in Sub-Saharan Africa: Saving Women's and Children's Lives



IPTp-SP = intermittent preventive treatment in pregnancy with sulphadoxine-pyrimethamine
ANC = antenatal care
ITN = insecticide-treated net
WHO = World Health Organization
MiP = malaria in pregnancy



The Roll Back Malaria MiP Working Group produced a two-page infographic to raise awareness and advocate for increased resources to prevent MiP.

prevent and treat MiP remain suboptimal.⁷ In 2014, 40 percent of pregnant women received two or more doses of IPTp and only 17 percent received the recommended three or more doses.⁸ Data from 10 sub-Saharan African countries taken between 2009 and 2013 also shows that just 35 percent of pregnant women in households with at least one insecticide-treated bed net (ITN) used one.⁹ At the community level, this is, in part, a result of low access to and demand for interventions to prevent and treat MiP. However, the disparity between the high rates of women who attend antenatal care (ANC)¹⁰ and significantly lower rates of women who receive IPTp or an ITN point to insufficient provision of MiP commodities and services by providers.¹¹

7 Roll Back Malaria Partnership. (2015). Global Call to Action. Retrieved from <http://www.rollbackmalaria.org/architecture/mip/call-to-action>.

8 World Health Organization (WHO). (2015). World Malaria Report 2015. Geneva, Switzerland: WHO. Retrieved from <http://www.who.int/malaria/publications/world-malaria-report-2015/report/en/>.

9 Ricotta, E., Koenker, H., Kilian, A., & Lynch, M. (2014). Are pregnant women prioritized for bed nets? An assessment using survey data from 10 African countries. *Global Health: Science and Practice*, 2(2), 165-172.

10 United Nations International Children's Emergency Fund (UNICEF). (2016). UNICEF Data: Monitoring the Situation of Children and Women. Antenatal Care Coverage. Retrieved from <http://www.data.unicef.org/maternal-health/antenatal-care.html>.

11 Hill, J., Hoyt, J., van Eijk, A. M., D'Mello-Guyett, L., ter Kuile, F. O., Steketee, R., ... & Webster, J. (2013). Factors affecting the delivery, access, and use of interventions to prevent malaria in pregnancy in sub-Saharan Africa: a systematic review and meta-analysis. *PLoS Med*, 10(7), e1001488.

Justification

Why Was this I-Kit Developed?

Research has identified several barriers to the delivery and use of MiP prevention and treatment services in sub-Saharan Africa. These barriers occur at the individual, social, environmental and health system levels. A number of national and community-based SBCC initiatives have been implemented to address these barriers; however, their impact is limited because these efforts tend to focus on only the pregnant woman or her male partner. A 2015 United States President's Malaria Initiative (PMI) literature review of activities and programs designed to increase service provider adherence to MiP guidelines found few examples of SBCC activities targeting service providers despite a growing body of evidence that service providers' attitudes are a key determinant to the use of MiP services.¹²

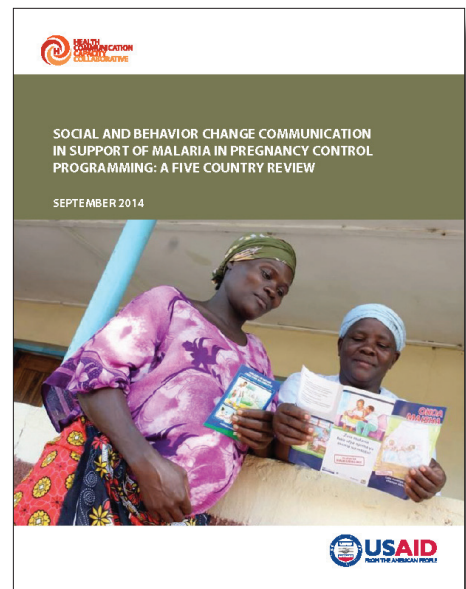
Moreover, many SBCC activities are not strategically developed and miss opportunities to improve their reach and impact. A 2014 PMI review of MiP content in malaria communication strategies from five sub-Saharan African countries found a lack of documented formative research to inform priorities, as well as weak audience segmentation, unclear roles and responsibilities between national malaria control programs (NMCPs) and reproductive health programs and inconsistencies between national malaria strategic plans and their supporting malaria communication strategies.¹³ This review found few examples of SBCC targeting service providers in national malaria communication strategies.

This I-Kit was developed to help SBCC and MiP program managers and stakeholders address some of these gaps and improve SBCC strategies and interventions for MiP, especially those interventions targeting service providers.

First Consider

Integration

MiP is a crosscutting issue that involves a variety of partners – from NMCP and reproductive, maternal and child health units, to ministry of health (MOH) technical working group members and leadership from health promotion and community services units. PMI teams and NMCP units are also likely to work in collaboration with reproductive, maternal, newborn and child health (RMNCH) specialists that are not focused exclusively on malaria. As users go through this I-Kit, they should think of ways to collaborate with these stakeholders – public and private sector, those working at the



The Health Communication Capacity Collaborative (HC3) review of MiP SBCC strategies describes the structure and content of five country strategies and provides recommendations for improving MiP content.



The Maternal and Child Health Integrated Program's review of MiP issues highlights the need for better integration between NMCPs and reproductive health programs.

- 12 Health Communication Capacity Collaborative (HC3). (2015). Interventions Targeting Health Workers to Improve Provision of Malaria in Pregnancy Services and Commodities: an SBCC Perspective. Baltimore, Maryland, USA: Johns Hopkins Center for Communication Programs.
- 13 Health Communication Capacity Collaborative (HC3). (2014). Social and behavior change communication in support of malaria in pregnancy control prevention. Baltimore, Maryland, USA: Johns Hopkins Center for Communication Programs.

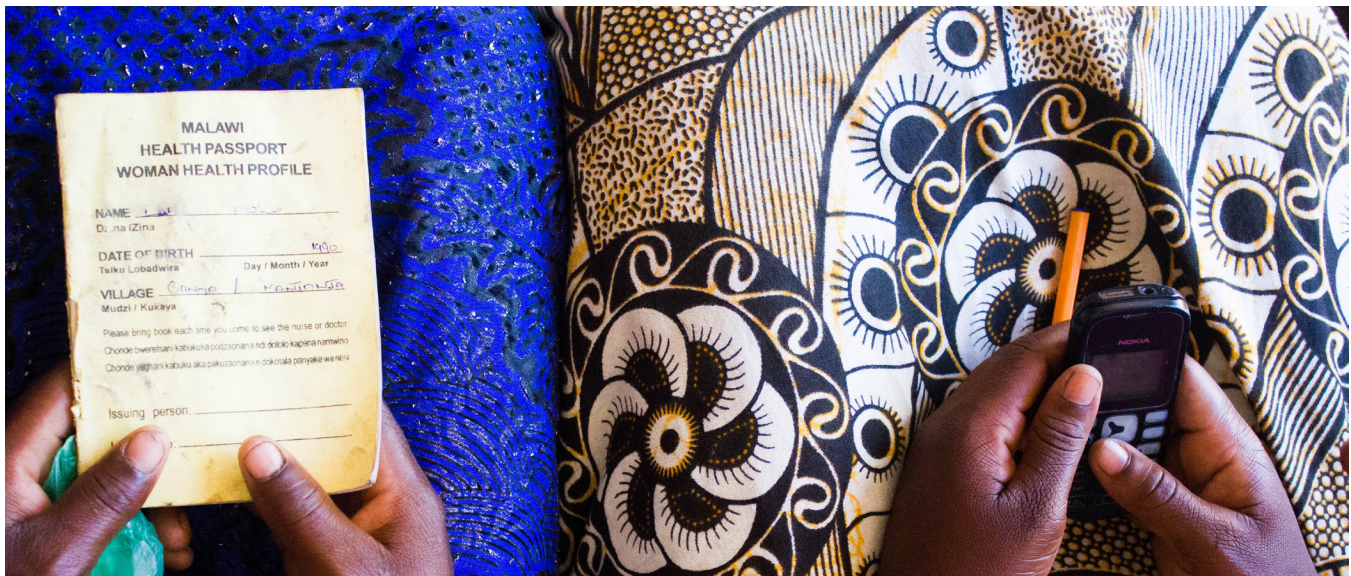
national-level or policy level and those working at the regional, district or community level. Users may find it useful to convene a stakeholder workshop when designing or updating a malaria communication strategy to encourage feedback and input from various perspectives and ensure buy-in from all relevant MOH units and implementing partners. It is often best to include these partners in the creative strategy development process to identify blind spots and reduce inefficiencies.

[How-To Guide – Step-by-Step Guidance on Conducting a Stakeholder Workshop](#)

Commodities, Supervision and Training

The assumption underlying any communication strategy is that the necessary service delivery, policy, management, logistics and supplies exist. Malaria communication programs cannot succeed if:

- National protocols and service delivery guidelines are not adequately disseminated and understood
- The right commodities (e.g., artemisinin-based combination therapy – ACT, LLINs, rapid diagnostic tests and SP) are not consistently available
- Service providers do not receive adequate training, oversight and supportive supervision – utilize advocacy to move these forward when necessary



CONDUCTING A SITUATION ANALYSIS

About this Section

A growing body of evidence on MiP interventions highlights a number of considerations and lessons learned for designing and implementing MiP SBCC strategies. Conducting a situation analysis will provide a strong foundation of what is known about MiP at the global level as well as within a specific country's social, economic, political and epidemiological context. To conduct a comprehensive situation analysis, review the following types of secondary data:

- Global and national malaria guidance documents and policies
- National health and demographic, facility and epidemiological data
- National and subnational MiP program materials and evaluations

Review the data sources, case studies and considerations included in these sections to ensure your situation analysis identifies the evidence-based approaches and lessons learned. This information will strengthen the MiP section of your malaria SBCC strategy. Considerations listed in the service provider and community sections are meant to help determine which factors are most influential. *While some patterns exist across countries or regions, the listed examples are intended to be ideas for inquiry, not representative truth.* This section gives a brief list of national and subnational data to review to gain a deeper understanding of the context in which one is working.

Global Guidelines

The [Roll Back Malaria \(RBM\) Partnership](#), [WHO](#) and [PMI](#) have produced a number of global guidance documents and consensus statements that should be considered when conducting a situation analysis. Some of these resources are listed below.



- **Consensus Statement: Optimizing the Delivery of Malaria in Pregnancy Interventions (PMI, 2013):** This consensus statement should be reviewed to ensure MiP priorities, interventions, monitoring and evaluation (M&E) and research are evidence-based and in line with priorities agreed on by global MiP stakeholders.



- **WHO Policy Brief for the Implementation of Intermittent Preventive Treatment of Malaria in Pregnancy Using Sulfadoxine-Pyrimethamine (IPTp-SP) (WHO, 2014):** This policy brief contains the latest IPTp guidelines clarifying the method and timing of SP delivery. Use this brief to ensure IPTp guidance is accurate and up to date.



- **Intermittent Screening and Treatment in Pregnancy and the Safety of ACTs in the First Trimester (WHO, 2015):** This reference document provides recommendations on Intermittent Screening and Treatment in pregnancy (ISTp) and use of ACT in the first trimester. Consult this resource to understand why global stakeholders discourage ISTp as an alternative to IPTp-SP.



- **Consensus Statement on Folic Acid Supplementation during Pregnancy (RBM Partnership's Malaria in Pregnancy Working Group, 2015):** Refer to this consensus statement to ensure folic acid is procured in doses that will not interfere with the SP. It also answers a number of MiP frequently asked questions.

Service Provider Considerations

Research on service providers has identified a number of factors that could influence patients' MiP service uptake and provider adherence to guidelines. Review these factors for applicability to your local context. *Users should note that the following list of behavior determinants is not meant to be comprehensive, and consists of examples taken from recent published work.*

Recent program reports and research found the following factors:

- **Social and Demographic Factors**

Some articles have indicated that health worker age and experience may determine the quality of services or adherence to national guidelines.^{14,15} However, this varies among studies. Some studies found that more years of working experience (three or more) were associated with better service provider adherence to malaria testing and treatment guidelines. Others reported younger health workers adhered more closely to guidelines than older health workers.^{16,17} What motivates or influences facility-based service providers may

- 14 Kambarami, R. A., Mbuya, M. N., Pelletier, D., Fundira, D., Tavengwa, N. V., & Stoltzfus, R. J. (2016). Factors Associated With Community Health Worker Performance Differ by Task in a Multi-Tasked Setting in Rural Zimbabwe. *Global Health: Science and Practice*, 4(2), 238-250.
- 15 Jaskiewicz, W., & Tulenko, K. (2012). Increasing community health worker productivity and effectiveness: a review of the influence of the work environment. *Human resources for health*, 10(1), 1.
- 16 Kok, M. C., Dieleman, M., Taegtmeier, M., Broerse, J. E., Kane, S. S., Ormel, H., ... & de Koning, K. A. (2015). Which intervention design factors influence performance of community health workers in low-and middle-income countries? A systematic review. *Health policy and planning*, 30(9), 1207-1227.
- 17 Selemani, M., Masanja, I. M., Kajungu, D., Amuri, M., Njizi, M., Khatib, R. A., ... & de Savigny, D. (2013). Health worker factors associated with prescribing of artemisinin combination therapy for uncomplicated malaria in rural Tanzania. *Malaria journal*, 12(1), 1.

be very different from community-based health workers. Where and when this proves to be true, malaria communication strategies should include SBCC interventions targeting service providers and/or community health workers (CHWs), taking care to tailor these efforts to each group by segmenting them by age and/or experience.

Situation Analysis: These findings suggest attitudes of different cadres of health workers often vary. If the situation analysis reveals variances in attitudes and behaviors between the different levels of health workers, it may be necessary to design separate and tailored content for trainings and/or supportive supervision based on the divisions identified in the analysis.

Measuring Attitudes: Variances in attitudes, beliefs and behaviors between different levels of health workers can be measured using [Likert scales](#), asking a respondent to rate their agreement with a statement on a scale that ranges from approval to disapproval. These scales might be included on surveys administered during in-service training or asked during supportive supervision visits.

***The Importance of a Formative Research: Factors Associated with Community Health Worker Performance Differ by Task in a Multi-Tasked Setting in Rural Zimbabwe*^{18,19}**

CHWs in rural Zimbabwe were assessed to determine whether demographic and work characteristics were related to task performance. The study found that CHWs who referred the most pregnant women were female, unmarried, under 40 years old, were from larger households, felt they had sufficient resources to carry out their responsibilities and received positive feedback from supervisors and the community. CHWs who scored high delivering household behavior change lessons were from smaller households and received more supportive supervision. This assessment, backed by similar findings, describes how factors associated with performance of one task were not the same as those associated with performance of another.^{20,21} This suggests that in environments where service providers and health workers have multiple tasks to perform, a single means of improving all tasks may not be effective. What did appear common was that, in addition to improving the work environment, efforts to improve performance should be paired with building support among workers' families and communities. Study authors caution that "CHW programs should consider creating facilitative work environments that include developing familial and community support and address CHW needs."

- **Attitudinal Factors**

A number of studies show that service providers' attitudes – not only their level of knowledge or training – can affect the type and level of care they provide. A study in Tanzania found IPTp delivery among service providers was attributed to mistrust of the medicine. Providers did not understand the reasoning for continued use of SP for IPTp when the drug had been discontinued for first-line treatment.²² A systematic review and meta-analysis of factors affecting delivery, access and use of interventions to prevent MiP in sub-Saharan Africa also found poor knowledge and perceptions among service providers regarding IPTp using SP. In many instances, service

18 Kambarami, R. A., Mbuya, M. N., Pelletier, D., Fundira, D., Tavengwa, N. V., & Stoltzfus, R. J. (2016). Factors Associated With Community Health Worker Performance Differ by Task in a Multi-Tasked Setting in Rural Zimbabwe. *Global Health: Science and Practice*, 4(2), 238-250.

19 Zurovac, D., Njogu, J., Akhwale, W., Hamer, D. H., & Snow, R. W. (2008). Translation of artemether-lumefantrine treatment policy into paediatric clinical practice: an early experience from Kenya. *Tropical Medicine & International Health*, 13(1), 99-107.

20 Steinhardt, L. C., Onikpo, F., Kouamé, J., Piercefield, E., Lama, M., Deming, M. S., & Rowe, A. K. (2015). Predictors of health worker performance after Integrated Management of Childhood Illness training in Benin: a cohort study. *BMC health services research*, 15(1), 1.

21 Kwarteng, A., Asante, K. P., Abokyi, L., Gyaase, S., Febir, L. G., Mahama, E., ... & Amenga-Etego, S. (2015). Provider compliance to artemisinin-based combination therapy at primary health care facilities in the middle belt of Ghana. *Malaria journal*, 14(1), 1.

22 Anders, K., Marchant, T., Chambo, P., Mapunda, P., & Reyburn, H. (2008). Timing of intermittent preventive treatment for malaria during pregnancy and the implications of current policy on early uptake in north-east Tanzania. *Malaria journal*, 7(1), 1.

providers blamed pregnant women's behavior for poor IPTp uptake^{23,24} or treated them in an unprofessional manner.²⁵ Furthermore, the type of information communicated to pregnant women about IPTp varied widely across studies.

Situation Analysis: These studies demonstrate that provider knowledge is not the only determinant of whether a woman will receive the proper SP dose and counseling for IPTp. As provider attitudes often play a substantial role in determining the provision of IPTp, inquiry into provider knowledge and awareness of national guidelines may be insufficient. Likewise, providing written guidelines as a sole means of initiating change may be ineffective.

Theory: SBCC is often used to encourage the adoption of new behaviors. In health facilities, where in-service training and supportive supervision exist, access to information like MiP policy and guidelines is likely higher. When an individual or group is already aware of a desired practice, use of theories and approaches emphasizing behavior maintenance may be effective. The decision criteria that leads people to initiate a new behavior is markedly different from those that drive them to maintain that behavior.^{26,27} Theories like **Stages of Change** (sometimes called the Transtheoretical Model) and the **Diffusion of Innovation** predict challenges or challenging environments, and provide structured ways to determine how to prepare individuals or groups for sustained change. For example, the Stages of Change theory assesses whether an individual or group falls into one of five categories along the continuum of not behaving, adopting a behavior and continuing to behave in a certain way. These stages are pre-contemplation, contemplation, preparation, action and maintenance. Different interventions are designed to address the specific concerns of each audience, depending on where they are on the continuum. The continuum is not linear, meaning it is not assumed people only advance through these stages. It assumes many people will try a new behavior (action), fail and then require more motivation or encouragement (preparation) before they try again and eventually move into the maintenance stage. The case study below, designed using the Stages of Change, shows how planning for challenges in maintaining a new behavior may improve attempts that might otherwise fall short.

Behavior Adoption versus Maintenance: “Even if You Know Everything, You Can Forget”²⁸

A cluster-randomized trial of an intervention designed to improve service provider adherence to malaria prescription and counseling practices took place in Kenya. The project team sent short message service (SMS) messages with information and motivating quotes to providers' mobile phones on a regular basis, which resulted in improved case management practices. This study was intentionally designed to operate at the action and maintenance stages of behavior change by creating an enabling environment and then using cues to action.

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- 23 Hill, J., D'Mello-Guyett, L., Hoyt, J., van Eijk, A. M., ter Kuile, F. O., & Webster, J. (2014). Women's access and provider practices for the case management of malaria during pregnancy: a systematic review and meta-analysis. *PLoS Med*, 11(8), e1001688.
 - 24 Hill, J., Kayentao, K., Achieng, F., Diarra, S., Dellicour, S., Diawara, S. I., ... & ter Kuile, F. O. (2015). Access and use of interventions to prevent and treat malaria among pregnant women in Kenya and Mali: a qualitative study. *PLoS one*, 10(3), e0119848.
 - 25 Onyeneho, N. G., Idemili-Aronu, N., Igwe, I., & Iremeka, F. U. (2015). Perception and attitudes towards preventives of malaria infection during pregnancy in Enugu State, Nigeria. *Journal of Health, Population and Nutrition*, 33(1), 1.
 - 26 Marlatt, G. A., & Donovan, D. M. (Eds.). (2005). Relapse prevention: Maintenance strategies in the treatment of addictive behaviors. *Guilford Press*.
 - 27 Rothman, A. J. (2000). Toward a theory-based analysis of behavioral maintenance. *Health Psychology*, 19(1S), 64.
 - 28 Jones, C. O., Wasunna, B., Sudoi, R., Githinji, S., Snow, R. W., & Zurovac, D. (2012). “Even if you know everything you can forget”: health worker perceptions of mobile phone text-messaging to improve malaria case-management in Kenya. *PLoS One*, 7(6), e38636.

- **Social Influence**

Just as clients have some social influence on their providers, providers themselves influence one another. Measuring individual behavior change may prove less effective than assessing the work culture in different health facilities (as in the example below). Research shows that pregnant women's preference for ACT drugs in first trimester, as well as perceptions of drug safety and risk of malaria during pregnancy, have influenced MiP-related behaviors in multiple countries.^{29,30} In Cameroon and Cambodia, women's drug preferences and perceptions about their affordability were found to influence service provider prescription practices.^{31,32} The evidence base for how preferences and perceptions affect service providers' prescription practices at the global level is limited. Reports that pregnant women are unaware of the risks of MiP and/or mistrust the safety of SP are neither widespread nor consistent; however, issues of social influence do exist and should be considered.

Situation Analysis: When conducting a situation analysis, measuring social norms and influences can be just as important as an individual's knowledge and behavior.

Measuring Social Norms: Measuring social norms and/or the influence different groups of people may have on service providers could be done with in-depth interviews, focus groups or a doer/non-doer analysis. In a doer/non-doer analysis, key barriers to behavior are identified by using either focus groups or individual surveys. In both scenarios, questions are asked separately of those who engage in a behavior and those who do not. Their answers are then compared. This analysis often identifies primary target groups, what actions should be taken to change a behavior, psycho-social or structural barriers most likely to influence action and what strategies are most likely to address identified barriers.

Using Formative Research to Design Interventions to Improve CHW Motivation, Retention and Performance in Mozambique and Uganda³³

The Innovations at Scale for Community Access and Lasting Effects (inSCALE) project conducted two interventions to improve health worker motivation and sustained performance. In-depth interviews and focus group discussions conducted in both Uganda and Mozambique indicated that CHWs responded to the influence of group identification; the CHWs surveyed valued feedback and feeling connected to both their health system and the communities they serve. Designers of the inSCALE project set out to determine if being a member of a well-defined group (in this example, a community health volunteer) motivates or drives a member to perform well in order to attain social identity within the group. If actions that promote the positive social identity of a group are clear and understood by all members, it is possible members will be motivated to work for the betterment of the group. In Uganda and Mozambique, interventions were designed to create a sense of shared experience, focusing on the alignment between workers and program goals. A participatory, local community approach using village health clubs (in Uganda) and an information communication technology approach using mobile phones (in Mozambique) were designed to appeal to CHWs' goals and desire for status and feelings of connectedness. Currently undergoing evaluation as part

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- 29 Hill, J., D'Mello-Guyett, L., Hoyt, J., van Eijk, A. M., ter Kuile, F. O., & Webster, J. (2014). Women's access and provider practices for the case management of malaria during pregnancy: a systematic review and meta-analysis. *PLoS Med*, 11(8), e1001688.
 - 30 O'Connell, K. A., Samandari, G., Phok, S., Dysoley, L., Yeung, S., Allen, H., & Littrell, M. (2012). "Souls of the ancestor that knock us out" and other tales. A qualitative study to identify demand-side factors influencing malaria case management in Cambodia. *Malaria journal*, 11(1), 1.
 - 31 Irimu, G. W., Greene, A., Gathara, D., Kihara, H., Maina, C., Mbori-Ngacha, D., ... & English, M. (2014). Factors influencing performance of health workers in the management of seriously sick children at a Kenyan tertiary hospital- participatory action research. *BMC health services research*, 14(1), 1.
 - 32 Namazzi, G., Waiswa, P., Nakakeeto, M., Nakibuuka, V. K., Namutamba, S., Najjemba, M., ... & Peterson, S. (2015). Strengthening health facilities for maternal and newborn care: experiences from rural eastern Uganda. *Glob Health Action*, 8(0), 24271.
 - 33 Strachan, D. L., Källander, K., Nakirunda, M., Ndima, S., Muiambo, A., & Hill, Z. (2015). Using theory and formative research to design interventions to improve community health worker motivation, retention and performance in Mozambique and Uganda. *Human resources for health*, 13(1), 1.

of a randomized control trial, the inSCALE project represents a new and promising approach to improving health worker motivation and performance.

- **Multichannel Communication**

When conducting a situation analysis, it is important to note the lessons learned from existing service provider SBCC activities that could strengthen your strategy. Reviewing studies examining the efficacy of pre-service and in-service training (IST), supportive supervision and information communication technology can provide valuable insights.^{34,35}

Situation Analysis: Gather information during ISTs and supportive supervision to help decide which channel of communication is most likely to change service provider behavior. While there is not enough evidence to support recommending any one IST, supportive supervision or information technology approach in an MiP context, broader research shows that multichannel efforts to change service provider behavior may be more effective than standalone efforts.^{36,37} Programs that disseminate simple written guidelines are generally ineffective.

Pairing Supervision with Community Mobilization: Strengthening Malaria Service Delivery through Supportive Supervision and Community Mobilization³⁸

A study testing two ways to improve malaria service delivery in India demonstrates the effectiveness of using multiple, mutually reinforcing communication channels. One approach provided supportive supervision to health workers along with community mobilization support. The other approach provided only community mobilization support. Study results showed higher levels of bed net use and care seeking among individuals exposed to both community mobilization and health workers who were given supportive supervision. These findings are consistent with evidence from settings in Asia and Africa, where community-based interventions engaging women's groups have led to substantial increases in neonatal survival in high-mortality settings.³⁹ The cost of combined interventions was 97 cents per capita, lower than a comparable program in rural Kenya.⁴⁰

Community Considerations

A number of community-level factors have been shown to influence the use of MiP interventions. As with the service provider considerations, primary or secondary research should be used to determine which factors a communication strategy will need to address. Some of these may include **awareness, social support, response-efficacy, self-efficacy, attitudes and perceived risk**. Read more about a new line of inquiry, **Gateway Behaviors**, on the next page.

34 Rowe, A.K., Rowe, S.Y., Peters, D.H., Holloway, K.A., Chalker, J., Ross-Degnan, D. (2015, March). *The Health Care Provider Performance Review: a systematic review of the effectiveness of strategies to improve health care provider performance in low- and middle-income countries*. Presentation of preliminary results, Washington, D.C.

35 Cundill, B., Mbakilwa, H., Chandler, C. I., Mtove, G., Mtei, F., Willetts, A., ... & Whitty, C. J. (2015). Prescriber and patient-oriented behavioural interventions to improve use of malaria rapid diagnostic tests in Tanzania: facility-based cluster randomised trial. *BMC medicine*, 13(1), 1.

36 Rowe, A. K., de Savigny, D., Lanata, C. F., & Victora, C. G. (2005). How can we achieve and maintain high-quality performance of health workers in low-resource settings?. *The Lancet*, 366(9490), 1026-1035.

37 Masanja, I. M., Selemani, M., Khatib, R. A., Amuri, B., Kuepfer, I., Kajungu, D., ... & Skarbinski, J. (2013). Correct dosing of artemether-lumefantrine for management of uncomplicated malaria in rural Tanzania: do facility and patient characteristics matter?. *Malaria journal*, 12(1), 1.

38 Das, A., Friedman, J., Kandpal, E., Ramana, G. N., Gupta, R. K. D., Pradhan, M. M., & Govindaraj, R. (2014). Strengthening malaria service delivery through supportive supervision and community mobilization in an endemic Indian setting: an evaluation of nested delivery models. *Malaria journal*, 13(1), 1.

39 Nair, N., Tripathy, P., Costello, A., & Prost, A. (2012). Mobilizing women's groups for improved maternal and newborn health: evidence for impact, and challenges for sustainability and scale up. *International Journal of Gynecology & Obstetrics*, 119, S22-S25.

40 Goodman, C. A., Mutemi, W. M., Baya, E. K., Willetts, A., & Marsh, V. (2006). The cost-effectiveness of improving malaria home management: shopkeeper training in rural Kenya. *Health policy and planning*, 21(4), 275-288.

- **Awareness**

Many pregnant women are not aware malaria parasites can survive in the placenta without causing symptoms.

Situation Analysis: Pregnant women in many contexts have been found to be unaware that IPTp exists or that it prevents malaria during pregnancy.^{41,42} In order to determine whether or not pregnant women are aware of IPTp and its benefits, rely on [Malaria Indicator Survey \(MIS\) questionnaires](#) or other household surveys. As mentioned earlier, it is important to decide whether to promote ANC or ask pregnant women to be responsible for asking about and recalling the various medications they will receive there.

Liberia: Developing an Operational Definition of “Accurate Knowledge”

In 2016, **African Leaders Malaria Alliance (ALMA)** representatives visited Liberia to decide on indicators to track on the country’s new scorecard.⁴³ The Liberian NMCP was the first country program to elect to track a malaria SBCC indicator. The indicator chosen was the percentage of respondents with accurate knowledge of malaria transmission and prevention. Accurate knowledge of malaria transmission is defined as having answered only “mosquitoes cause malaria,” (listing no other causes). Accurate knowledge of malaria transmission and prevention (among pregnant women) was defined as stating that “sleeping under an LLIN or early and regular ANC attendance prevent malaria,” and listing no other methods. This information is collected in MIS surveys and can be calculated historically to identify trends.

- **Social Support**

In some contexts, decisions regarding personal health take place between partners – men serve as the primary decision makers and financial gatekeepers for women’s care-seeking behaviors. Communicating with a pregnant woman’s spouse, family and key members of her community or social network may increase the chances she will be encouraged and supported to attend ANC regularly. Social support may be particularly important in areas where exposing one’s pregnancy status is not desirable or acceptable, especially in the early stages of a pregnancy.^{44,45}

Situation Analysis: Conduct formative research or a rapid assessment to determine barriers and facilitators to ANC attendance or use of healthcare facilities. Consider identifying care-seeking decision makers and ensure they are the focus of SBCC efforts to create an enabling environment for pregnant women willing to attend ANC.

- **Response-Efficacy**

Demand for commodities like LLINs and SP may depend on a woman’s trust or belief that they are an effective means of protecting herself and her unborn child from malaria. Studies in Kenya and Mali have documented low awareness of the benefits of IPTp during pregnancy.⁴⁶ It is important to not only raise awareness that MiP

41 Hill, J., Hoyt, J., van Eijk, A. M., D’Mello-Guyett, L., ter Kuile, F. O., Steketee, R., ... & Webster, J. (2013). Factors affecting the delivery, access, and use of interventions to prevent malaria in pregnancy in sub-Saharan Africa: a systematic review and meta-analysis. *PLoS Med*, 10(7), e1001488.

42 Wanzira, H., Katamba, H., Okullo, A. E., & Rubahika, D. (2016). The challenge of using intermittent preventive therapy with sulfadoxine/pyrimethamine among pregnant women in Uganda. *Malaria Journal*, 15(1), 401.

43 The ALMA scorecard is a tracking and action tool provided to heads of state and government and their ministries to ensure transparency, accountability and action on malaria control across Africa. The scorecard is produced quarterly. Visit ALMA2030.org for more information.

44 Ribera, J. M., Hausmann-Muela, S., D’Alessandro, U., & Grietens, K. P. (2007). Malaria in pregnancy: What can the social sciences contribute?. *PLoS Med*, 4(4), e92.

45 Finlayson, K., & Downe, S. (2013). Why do women not use antenatal services in low-and middle-income countries? A meta-synthesis of qualitative studies. *PLoS Med*, 10(1), e1001373.

46 Hill, J., Kayentao, K., Achieng, F., Diarra, S., Dellicour, S., Diawara, S. I., ... & ter Kuile, F. O. (2015). Access and use of interventions to prevent and treat malaria among pregnant women in Kenya and Mali: a qualitative study. *PLoS one*, 10(3), e0119848.

is dangerous but also convince pregnant women and their families that the benefits of attending ANC and receiving IPTp outweigh the challenges.

Situation Analysis: The perception that a behavior will control the threat of sickness is powerful. A situation analysis might include exploration into whether or not pregnant women or those who influence them are aware of the benefits of ANC. Belief that a behavior or commodity will protect against malaria may lead to higher adoption of new behaviors, such as early and regular ANC attendance. Consider using concrete examples of a behavior's benefit to convince target populations to adopt it.

Concrete Demonstration of ITN Efficacy in Zambia ⁴⁷

The Champion Communities approach – a participatory behavior change methodology that supports communities to lead the design, implementation, monitoring, and celebration of their own public health programming and improvements – was used in Zambia to demonstrate the effectiveness of prompt care seeking and ITN use. This participatory approach combines interpersonal communication with data collection. Communities in Zambia set their own goals and conducted monthly surveys to determine progress. The evaluation of the approach reported higher rates of prompt care seeking and net use in communities that saw concrete benefits related to these behaviors. Christina Wakefield, the project's director, attributes the initiative's success to the communities' reaction to dramatic decreases in malaria sickness following widespread adoption of these behaviors. [Learn more about this project here.](#)

• **Attitudes**

Service providers failing to foster a welcoming atmosphere for clients during ANC is not uncommon. Assuring women they will be treated with respect may increase the likelihood they will attend ANC early and regularly thereafter.

Situation Analysis: While conducting a situation analysis, assessing the quality of service provider interaction with ANC clients through focus group discussions, patient exit interviews and IST sessions may shed light on working conditions or attitudes that effect patient counseling. Mali's recent revision of the [Mali Communication and Advocacy Plan for Controlling Malaria 2014-2018](#) includes indicators that track specific service provider interactions with ANC clients:

- **Problem:** Providers do not welcome clients according to standards
- **Primary Target Audiences:** Matrons, nurses in obstetrics, midwives and gynecologists
- **Secondary Target Audiences:** Supervisors (e.g., technical director of the community health center, midwives at reproductive health centers and in the regions' malaria focus points)
- **Desired Behaviors:** Providers welcome clients warmly, in accordance with established standards; supervisors correct the providers and encourage them to offer a warmer welcome
- **Objectives:**
 - » By 2018, 80 percent of providers will comply with standards for the quality of the welcome offered during ANC services.
 - » By 2018, at least 70 percent of pregnant women who use ANC/IPTp services will be satisfied with the way they are welcomed.
 - » By 2018, the quality of services and care for pregnant women will be improved.

⁴⁷ [Communications Support for Health \(CSH\) Programme. \(2014\). Zambia communications support for health: stop malaria champion communities programme evaluation. Washington, DC: USAID.](#)

- **Perceived Risk**

Pregnant women weigh any number of fears unrelated to disease when making the decision to go to an ANC visit. Perceived risk of malaria itself may be important to address but evidence shows describing this risk might be paired with messages about other important motivators. Poverty, inequality and livelihood insecurity can jointly and independently determine access to health care.^{48,49,50}

For example, while some women have expressed mistrust in the safety of SP during pregnancy,⁵¹ numerous studies have also documented a lack of patient counseling, leading to low awareness of what kind of medicines are taken (and what they are taken for) during ANC. While requiring providers to explain the benefits and reasons for each medicine prescribed at ANC is important, asking pregnant women to recall the names and benefits of many medicines may not prove realistic. For simplicity's sake, it may be sufficient to encourage pregnant women to attend ANC. The framing of this message, however, can be crafted to include overall health benefits, not just of the risk for a single disease. Justification for framing the importance of attending ANC in the context of overall health and not because of a single disease is described in the Malawi ethnographic study example below.

Situation Analysis: Paying attention to disease-specific behaviors among a target population or “at-risk” group is common. The Malawi study demonstrates how, in some contexts, focusing on a single disease instead of inquiring about general pregnancy concerns may be too narrow. Focus group discussions, in-depth interviews and/or ethnographic studies are ways to determine whether malaria is thought of as separate from causes of illness, and whether designing campaigns directed at overall healthy pregnancies may resonate more.

***Malaria, Danger and Risk Perceptions among the Yao in Rural Malawi*⁵²**

Women's concerns about witchcraft, extramarital affairs and multiple illnesses affected pregnant women's perceptions about MiP in a Malawi study. These concerns were narrowed down by researchers into four different dimensions of perceived risk: (1) perceived adverse consequences in pregnancy; (2) ease of treatment and cure; (3) transmission and agency to control; and (4) type of risk (social or medical). Researchers argue that these risks exist in environments where multiple diseases, health concerns and dangers are possible causes of illness. Pregnant women in this study prioritized different threats based on their relevance at a given time, not uniformly in every instance. This study argues that in some areas of Malawi MiP should be studied in the context of pregnancy itself: “Malaria does not stand alone as an isolated issue in people's lives, especially in resource-poor communities where people are confronted with pressing concerns on a daily basis.”

Local Context

Analyzing global, national and sub-national data sources should give planners an understanding of what has happened to date, but there may be areas to learn more. If knowledge gaps have been identified (e.g., health worker and service provider knowledge and attitudes), it may be necessary to conduct further qualitative and/or quantitative research on the issues.

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- 48 Farmer, P. E., Nizeye, B., Stulac, S., & Keshavjee, S. (2006). Structural violence and clinical medicine. *PLoS Med*, 3(10), e449.
 - 49 Obrist, B., Iteba, N., Lengeler, C., Makemba, A., Mshana, C., Nathan, R., ... & Schulze, A. (2007). Access to health care in contexts of livelihood insecurity: a framework for analysis and action. *PLoS Med*, 4(10), e308.
 - 50 Sommerfeld, J., Sanon, M., Kouyaté, B. A., & Sauerborn, R. (2002). Perceptions of risk, vulnerability, and disease prevention in rural Burkina Faso: Implications for community-based health care and insurance. *Human Organization*, 61(2), 139-146.
 - 51 Hill, J., Hoyt, J., van Eijk, A. M., D'Mello-Guyett, L., ter Kuile, F. O., Steketee, R., ... & Webster, J. (2013). Factors affecting the delivery, access, and use of interventions to prevent malaria in pregnancy in sub-Saharan Africa: a systematic review and meta-analysis. *PLoS Med*, 10(7), e1001488.
 - 52 Launiala, A., & Honkasalo, M. L. (2010). Malaria, danger, and risk perceptions among the Yao in rural Malawi. *Medical anthropology quarterly*, 24(3), 399-420.

Qualitative research might take the form of focus group discussions among pregnant women and those who influence their health behaviors and care-seeking decisions. Key informant interviews with gatekeepers and providers such as community drug vendors, traditional birth attendants, facility-based service providers and health workers can provide invaluable information about what people do, why they do it and the obstacles to address to affect positive behavior change. Findings should also inform how to best formulate messaging and choose appropriate channels.

Quantitative research may include household surveys with the target audience, as well as other populations who might influence their care-seeking behaviors. The Behavior Change Communication (BCC) Indicator Guide, developed by the RBM Partnership, contains a list of standard behavioral indicators, appropriate prioritization of those indicators and sample MIS questions to measure them. These MIS questions can be asked both at the beginning of a program during the formative research phase, as well as at the end of a program during the assessment phase.

Household Survey Data

Data Source	Indicators
Malaria Indicator Survey	<ul style="list-style-type: none"> • Women aged 15 to 49 exposed to malaria messages • Percentage of LLINs obtained at ANC appointments • Pregnant women who slept under an LLIN • IPTp uptake
Demographic Health Survey (DHS)	<ul style="list-style-type: none"> • Exposure to mass media • ANC attendance • Pregnant women who slept under an LLIN • IPTp uptake
Multiple Cluster Indicator Survey	<ul style="list-style-type: none"> • Pregnant women who slept under an LLIN • IPTp uptake • Access to mass media and information communication technology

Health Services Data

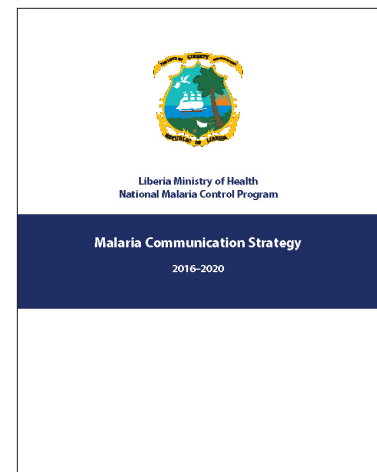
Data Source	Indicators
Health Management Information System and/or DHIS 2	<ul style="list-style-type: none"> • Malaria cases • ANC visits one through four by districts • ANC visits one through four coverage • ANC trends
Patient exit interviews	<ul style="list-style-type: none"> • Satisfaction with interpersonal communication • Satisfaction with patient counseling (e.g., explanation of IPTp benefits, LLIN benefits, etc.)
IST or supportive supervision, in-depth interviews and/or focus groups	<ul style="list-style-type: none"> • Understanding of IPTp guidelines • Positive attitudes regarding safety of SP • Affirmation that adherence to IPTp guidelines are a social norm in the workplace • Response-efficacy in SP (belief that it is effective) • Self-efficacy to adhere to IPTp guidelines

Example: Malaria in Pregnancy in Liberia

Situation: According to a 2013 malaria SBCC survey, less than one fifth of Liberians responded that they had discussed the issue of MIP with spouses or friends in the last year. The majority of those surveyed felt most women attend at least four ANC visits. Many women asked about IPTp expressed doubt that taking it would reduce their chances of getting malaria during their pregnancy. In this survey, the most important source of information about IPTp was service providers (mentioned more frequently as an information source than radio or other forms of mass media). The Liberia Technical Guidelines for MIP 2015 states that pregnant women do not attend as many ANC visits as they could, and often show up late in their pregnancy. Many do not arrive with their ANC card in hand. DHS data indicates that less than half of pregnant women in Liberia received two or more doses of SP by 2013. This proportion has remained almost unchanged since 2011.

SBCC Emphasis: Taken as a whole, this survey data suggests that SBCC activities at the community level should aim to increase knowledge about MiP, promote positive attitudes regarding the efficacy of IPTp and emphasize interpersonal communication within the family and with friends about IPTp. Community Health Volunteers (CHVs) and Trained Traditional Midwives (TTMs) should encourage early and regular ANC attendance, and remind pregnant women to demand both SP and LLINs. At the facility level, service providers – the most frequently cited source of information regarding IPTp – should be encouraged to counsel pregnant women on the importance, safety and efficacy of IPTp.

Beyond awareness, these interventions should seek to address response-efficacy (confidence in the effectiveness) of IPTp among pregnant women, and to increase self-efficacy (confidence in one's ability) to attend ANC early and every month thereafter. The benefits of ANC should be emphasized. Family and friends of pregnant women should be encouraged to discuss the importance of ANC attendance with them. Service provider self-efficacy to provide counseling to pregnant women during each and every ANC consultation must also be raised.



Liberia Malaria Communication Strategy 2016-2020



AUDIENCE SEGMENTATION AND PROBLEM STATEMENTS

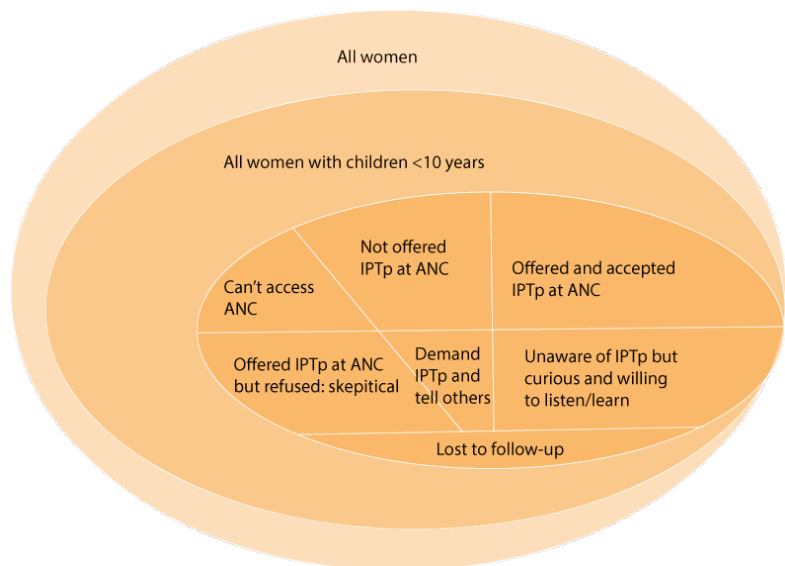
About this Section

A complete situation analysis will summarize current information and provide a detailed account of findings from new primary research. This summary will help inform decisions regarding:

- Primary, secondary and tertiary audience segmentation
- Prioritizing and defining problems

Audience Segmentation

Specific audience segmentation is an important way to ensure SBCC activities are tailored and appropriate. Segmentation consists of dividing a large group into smaller sub-groups with similar needs, preferences and characteristics of influences to ensure messages are targeted to a specific population's motivations and needs. When segmenting, it is important to examine the demographic, geographic, sociocultural, behavioral and psychographic characteristics of both primary audience(s) and secondary audience(s).



Adapted from the PMI 2016 Technical Guidance⁵³

[Step-by-Step Guidance on Audience Segmentation](#)

Primary audiences are groups of people directly affected by or at the highest risk for a particular health issue. For example, all pregnant women are at risk for MiP, but women in their first and second pregnancy are at the highest risk. Likewise, while all women in their first and second pregnancies are at great risk, those who are HIV positive are at an even greater risk, as HIV treatment and IPTp with SP should not be used in combination.

⁵³ President's Malaria Initiative (PMI). (2015, March). President's Malaria Initiative Technical Guidance. Retrieved from [https://www.pmi.gov/docs/default-source/default-document-library/tools-curricula/pmi-technical-guidance-\(march-2016\).pdf?sfvrsn=8](https://www.pmi.gov/docs/default-source/default-document-library/tools-curricula/pmi-technical-guidance-(march-2016).pdf?sfvrsn=8).

Groups can be segmented by not only demographic factors, but also by actions or attitudes. Those who do or do not practice certain behaviors, or those who have a certain disposition to behaviors, could be targeted. For example, you may decide to target women who are aware of IPTp and its benefits, but who refuse to attend ANC.⁵⁴ Women who are aware of the benefits of ANC and express willingness to attend ANC but lack access are another example of a potential audience. Focusing on the behaviors of those who – with authority or influence to grant or restrict access to MiP services – could be chosen as either primary or secondary audiences.

[Step-by-Step Guidance on Audience Analysis](#)

Secondary audiences are often those with the ability or social influence to directly affect the knowledge, attitudes and behavior of a primary audience. MiP services often involve travel to health facilities, paying costs associated with medicine or care and service provider allocation of commodities like LLINs. In many contexts, their spouse’s support or permission, family, local leaders and friends play an important role in determining whether pregnant women can access these services. Examples of secondary audiences for MiP might include in-laws, traditional or trained midwives, social support groups and/or extended family.

Addressing both primary and secondary audiences ensures that individual, family, peer, community and social networks are leveraged to influence behavior.

Highest Biological Risk of Malaria⁵⁵:

1. Infants and young children, ages six months to five years
2. Pregnant women (risk is highest in first and second parity women with lower rates in later pregnancies); adolescent girls are also particularly vulnerable to malaria and in sub-Saharan Africa, and are often parasitic and anemic when they first become pregnant
3. Non-immune people (travelers, laborers and populations moving from low-transmission to high-transmission areas)
4. People living with HIV/AIDs (women with HIV and malaria co-infection are at high risk of severe anemia and adverse birth outcomes)

Problem Statements

Problem statements are short descriptions of a specific behavior that indicates who is affected, where the behavior occurs and (if possible) the extent of the problem. Problem statements should be clear and concise to ensure all stakeholders are on the same page regarding the purpose of the intervention. For example:

“More than 50 percent of the district’s pregnant women in their first and second pregnancies attend ANC late in their second trimester, resulting in receipt of few doses of IPTp before delivery.”

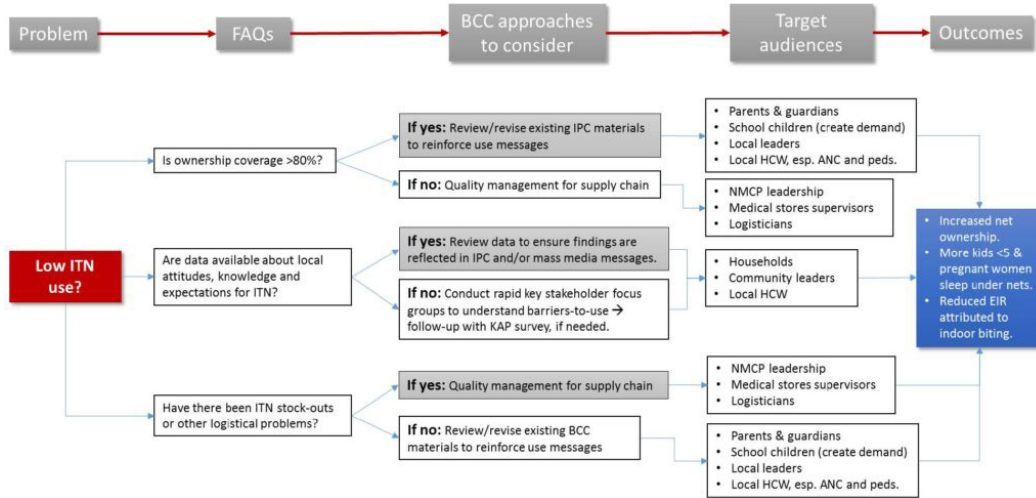
In drafting problem statements, a number of potential issues surrounding MiP may arise. However, it is important to keep in mind that effective SBCC is narrow in scope. SBCC strategies that try to address too many issues at once, are general or too broad may not effectively reach a particular audience. It is best to limit the number of problems a communication strategy addresses and only cover the amount of issues that can realistically be incorporated into programs with existing resources. It may be helpful to develop a number of problem statements first, and then prioritize the issues to be addressed based on needs and available resources.

54 World Health Organization, Department of Gender, Women and Health (GWH), Family and Community Health (FCH). (2007, June). Gender, Health and Malaria. Retrieved from http://www.who.int/gender/documents/gender_health_malaria.pdf.

55 President’s Malaria Initiative (PMI). (2015, March). President’s Malaria Initiative Technical Guidance. Retrieved from [https://www.pmi.gov/docs/default-source/default-document-library/tools-curricula/pmi-technical-guidance-\(march-2016\).pdf?sfvrsn=8](https://www.pmi.gov/docs/default-source/default-document-library/tools-curricula/pmi-technical-guidance-(march-2016).pdf?sfvrsn=8).

Given the crosscutting nature of MiP, it may be helpful to develop problem statements in a stakeholder workshop with a range of participants working at a high-level, as well as those working on the ground. To ensure the problem statement is based on data and not individuals' experiences, all participants should be given access to existing data, including the results of any primary data collection conducted and any lessons learned or identified while conducting the situation analysis.

SBCC Decision-Making Algorithm for Low ITN Use



This decision-making algorithm, found in PMI's 2017 Technical Guidance,⁵⁶ shows an example of how to begin with a problem statement, decide which SBCC approaches are appropriate and select target audiences.

56 President's Malaria Initiative (PMI). (2015, March). President's Malaria Initiative Technical Guidance. Retrieved from [https://www.pmi.gov/docs/default-source/default-document-library/tools-curricula/pmi-technical-guidance-\(march-2016\).pdf?sfvrsn=8](https://www.pmi.gov/docs/default-source/default-document-library/tools-curricula/pmi-technical-guidance-(march-2016).pdf?sfvrsn=8).



CHOOSING OBJECTIVES

About this Section

Once a number of problem statements have been written, it is important to prioritize them and decide which **communication and behavior objectives** will bring about solutions to each. When doing so, keep in mind which behaviors are possible to monitor and whether or not the capacity to measure change exists. The development of an M&E plan should begin at this stage, not after.

Communication Objectives

Communication objectives clearly and concisely answer how a program will relate the need, benefit and/ or urgency of adopting a specific behavior. These short-term objectives measure drivers of behavior, such as knowledge, awareness, attitudes and social norms. While these factors influence the way people act, they are considered short-term outcomes because they do not measure actual behavior change.

Behavior Objectives

Behavior objectives are descriptions of the actions a strategy intends to promote or change. These intermediate outcomes are behaviors that must happen in order to realize decreases in health outcomes like decreased morbidity and mortality.

Keep in mind that both communication and behavior objectives should be **specific, measurable, achievable, realistic and time-sensitive** (SMART) to ensure it is appropriate and possible to assess their impact.

Developing strong communication and behavior objectives early in program planning ensures a strategy's **outputs** (e.g., activities, services or products) will be capable of producing the **outcomes** (e.g., results or changes) needed. Determining short-term outcomes (e.g., MiP knowledge and attitudes) and intermediate outcomes (e.g., increases in pregnant women who receive IPTp) from the beginning is important because they will help guide the program and ensure all stakeholders agree on and understand the program's objectives prior to implementation. This is especially important for MiP, a health area with many donors, partners and program managers. One helpful way to imagine this pathway is through a logic model.

[Step-by-Step Guidance on Developing a Logic Model](#)

Communication Objectives

The [RBM SBCC Indicator Reference Guide](#) shows how to measure levels of behavior change for malaria prevention and case management at the country level. Exposure to messages, perception of risk, self-efficacy, response-efficacy and knowledge of malaria transmission and symptoms have all been associated with preventive behaviors. The indicators in this guide are meant to be adapted to any priority audience (e.g., spouses, service providers, etc.). Examples of communication objectives included in the guide pertinent to MiP include:

- Proportion of pregnant women who recall hearing or seeing any malaria message within the last six months
- Proportion of pregnant women who perceive they are at risk from malaria
- Proportion of pregnant women who feel the consequences of malaria are serious
- Proportion of pregnant women who believe the majority of their friends and family currently sleep under LLINs, take IPTp (if they are pregnant) and seek care for fever promptly
- Proportion of pregnant women who are confident in their ability to perform actions to prevent and control MiP
 - » Use Likert Scale to assess confidence in ability to obtain LLINs, IPTp or seek care promptly
- Proportion of pregnant women with a favorable opinion toward LLINs, IPTp and ANC personnel (service providers)
 - » Ask for opinions about LLINs, IPTp, ANC and MiP service providers
- Proportion of pregnant women who believe sleeping under LLINs, taking IPTp and seeking prompt care for fever will reduce their risk
 - » Ask about beliefs in LLINs, IPTp and prompt care seeking

Behavior Indicators

The RBM SBCC Indicator Reference Guide provides examples of behavior objectives as well. Examples of behavior objectives included in the guide pertinent to MiP include:

Community Indicators

- Proportion of pregnant women that slept under an LLIN the previous night
- Proportion of women who received three or more doses of IPTp during ANC visits during their last pregnancy
- Proportion of women who attended at least one, two or three ANC visits during their last pregnancy
- Proportion of pregnant women who have encouraged friends or relatives to sleep under an LLIN, demand IPTp or seek care for fever promptly
 - » Ask if women have encouraged these behaviors, which behaviors they encouraged, who they encouraged or who encouraged them

Service Provider Indicators

- Proportion of pregnant women in ANC who received IPTp according to national guidelines

DRAFTING A MALARIA IN PREGNANCY STRATEGY

About this Section

In this section you will be guided through each element of a MiP SBCC strategy. [Download the MiP SBCC Strategy Template](#) and complete it by reviewing each of the elements below. While the content and examples in this guidance are MiP specific, the process is not. This template and the steps to completing it may be used to guide the development of strategies to address any health topic. Download the template at <http://sbccimplementationkits.org/malaria-in-pregnancy/wp-content/uploads/sites/16/2016/11/MiP-SBCC-Strategy-Template-1.docx>.

1. Problem Statements

Which MiP Issues Are the Most Pressing?

Keep in mind the age old saying that “focus demands sacrifice.” SBCC is most effective when targeted. What issues does your country have the resources to address and measure?

Prompt Care Seeking for Fever
<ul style="list-style-type: none">• Are service providers adequately trained in interpersonal communication?• Do service providers provide patient counseling?• Are pregnant women seeking care for fever the same or next day of symptoms’ onset?
LLINs
<ul style="list-style-type: none">• Does your country distribute LLINs at/during ANC appointments or at/after institutional delivery, distribute LLINs through continuous distribution channels, subsidize or encourage obtaining LLINs in the private sector?• Do pregnant women sleep under LLINs during the dry seasons as well as rainy seasons?• Are pregnant women prioritized in inter-household allocation of LLINs?
IPTp
<ul style="list-style-type: none">• Policy Makers: Has procurement of small-dose folic acid been prioritized?• Policy Makers: Is the national IPTp policy enforced?• Service Providers: Are service providers providing correct SP to healthy pregnant women at correct times?• Service Providers: Are service providers explaining the purpose, benefits, and potential side-effects of SP?• Service Providers: Are service encouraging early and frequent ANC attendance?• Pregnant Women: Are pregnant women attending ANC early in their first trimester and monthly thereafter?

2. SBCC Emphasis

Broad, Flexible Approach

In two to three paragraphs, summarize only the most important findings of your situation analysis (i.e., behaviors that need to be changed or encouraged) and then introduce what theory-based strategy will be used to influence this change. At this level, it is important to lay out general areas of focus, leaving room for local variation and adaptation as regions in each country will have different needs.

Example

Perhaps levels of MiP knowledge and awareness are high in your country. Your situation analysis suggests that previous projects reported male involvement in household decision making is very important. National surveys report that women of reproductive age have high levels of radio exposure, and trust their peers most when asked who influences their attitudes. You decide not to base your national MiP focus on raising awareness or increasing perceived severity – an approach that might have relied on the Extended Parallel Process Model. Instead, stakeholders decide priority should be placed on increasing positive attitudes about ANC between husbands and wives, and strengthening confidence and trust between pregnant women and service providers. Choosing Social Learning Theory as a theoretical base, you direct regional authorities and implementing partners to pilot, refine and scale up interpersonal communication approaches that model positive interactions between couples, pregnant women and service providers, emphasizing the benefits of LLINs, IPTp and prompt care-seeking behavior. The reach of national television and radio stations is limited in your country, so you recommend SBCC capacity strengthening activities with local radio stations and journalists and direct funding to prioritize local media outlets, interpersonal communication and social mobilization channels.

3. Behavior Objectives

Which Behaviors Will Lead to the Greatest Reductions in Morbidity and Mortality?

These behaviors should match those prioritized in your country’s malaria strategic plan. Your list should not be an all-inclusive “wish list,” but a pragmatic selection of behaviors that can be measured over time.

Prompt Care Seeking for Fever

- Proportion of pregnant women who seek treatment for fever the same or next day
- Service Providers: Explain how to take medication, why it is necessary and the side effects

LLINs

- **Policy Makers:** Ensure adequate supplies of LLINs are available at front-line facilities and in the community
- **Policy Makers:** Endorse removal of taxes and major financial barriers to obtaining LLINs
- **Policy Makers:** Support, coordinate and harmonized LLIN distribution strategies
- Proportion of service providers who provide available LLINs during ANC or institutional service delivery
- Proportion of service providers who encourage pregnant women to sleep under an LLIN every night
- Proportion of pregnant women who slept under an LLIN the previous night
- Proportion of pregnant women who encouraged their friends and family to sleep under an LLIN
- Proportion of pregnant women who ask for an LLIN during ANC or service delivery
- Proportion of pregnant women who discuss LLIN use with their spouse
- Proportion of spouses who encourage their pregnant wife to sleep under an LLIN

IPTp

- **Policy makers:** Enforce national IPTp policy
- Proportion of pregnant women who attend ANC in first trimester
- Proportion of pregnant women who receive IPTp 1, 2, 3 and 4
- **Service providers:** Provide SP and explain its purpose and potential side-effects

4. Communication Objectives

How to Influence Behavior

Communication objectives are the most important aspect of an SBCC strategy. Be careful to base your decisions about how to influence your target audiences on available data.

Prompt Care Seeking for Fever
<ul style="list-style-type: none">• Increase perceived risk of malaria infection• Increase perceived severity of malaria infection to mother and unborn child• Increase self-efficacy to attend ANC early and regularly• Increase proportion of spouses who agree to discuss the importance of prompt care seeking for fever with their wives• Increase proportion of pregnant women who encourage others to attend ANC early and regularly
LLINs
<ul style="list-style-type: none">• Increase perceived response-efficacy of LLINs among pregnant women and their families• Increase self-efficacy to obtain LLINs (at ANC appointments or purchase them in the private sector)• Increase self-efficacy to sleep under LLIN every night
IPTp
<ul style="list-style-type: none">• Increase perceived response-efficacy of SP among pregnant women and service providers• Increase perceived safety of SP among pregnant women and service providers• Increase self-efficacy of pregnant women to request SP during ANC appointments

5. Target Audiences

Who to Influence?

Specific groups of people whose behavior needs to change or who can enable or support a specific change in the behavior of others.

Example
<p>Target Audiences for the Communication Objective: Increase the proportion of health facility-based doctors, nurses and midwives who believe SP is a life-saving and safe means of preventing MiP from 2016 baseline levels to more than 75 percent by 2020.</p> <ul style="list-style-type: none">• Pregnant women in their first and second pregnancies• Pregnant women with HIV• Pregnant women who understand the benefits of ANC but choose not to attend• Pregnant women who are unaware of the benefits of ANC• Service providers (i.e., doctors, nurses, midwives and CHWs)• Husbands of pregnant women• Mothers and mothers-in-law of pregnant women• Community leaders (i.e., religious, traditional and government leaders)• Community-based organizations such as women's savings and loan groups

6. Key Promises

Motivate Your Audience

Means of motivating or convincing a target audience that a behavior is beneficial to them.

Example

Target Audiences for the Communication Objective: Increase the proportion of health facility-based doctors, nurses and midwives who believe SP is a life-saving and safe means of preventing MiP from 2016 baseline levels to more than 75 percent by 2020.

- Your workload will be reduced because there will be fewer cases of severe anemia, stillbirths and miscarriages resulting from MiP.
- You will have better pregnancy outcomes.
- You will be recognized as a professional who provides quality care.

7. Supporting Points

Prove a Behavior Is Do-Able

Describe ways that a specific behavior is achievable and within someone's ability to adopt.

Example

Target Audiences for the Communication Objective: Increase the proportion of health facility-based doctors, nurses and midwives who believe SP is a life-saving and safe means of preventing MiP from 2016 baseline levels to more than 75 percent by 2020.

- IPTp-SP is cost-effective and prevents the adverse consequences of malaria (i.e., placental infection, clinical malaria, maternal anemia, fetal anemia, low birth weight and mortality).
- Severe maternal anemia is reduced by 38 percent.
- Low birth weight is reduced by 29 percent.
- Neonatal mortality is reduced by 31 percent.
- MiP interventions can avert newborn deaths. (About 300,000 deaths could have been averted if IPTp-SP and ITN coverage had increased to 80 percent from 2009 to 2012.)
- IPTp-SP continues to protect against low birth weight even in areas of low malaria transmission. (MiP interventions can avert newborn deaths.)
- IPTp will continue to be important until malaria has been eradicated.

8. Messages

Framing Message Content

The exact words that need to be communicated (and framed for maximum impact) to target audiences

9. Channels

Mediums of Communication

A mix of interpersonal communication, social mobilization, mass media or materials that will be used to influence identified audiences

10. Activities

Intervention Delivery

Articulate who will be communicating key messages and how this will be done

You Have Completed the MiP Section of Your Malaria SBCC Strategy

You will notice that this I-Kit began with guidance on how to conduct a situation analysis, but this SBCC strategy template does not include a situation analysis. A program may or may not elect to conduct a separate situation analysis for each programmatic area (vector control, MiP services or case management). It is more likely one general situation analysis will be done, and each programmatic area will include elements in this template. For this reason, choosing a theoretical model – a collection of several theories or theoretical concepts – may be more appropriate for an overall strategy, while specific theories may be more appropriate for programmatic areas like MiP. For example, the social-ecological and ideation models incorporate several theories and explain behavior change across different communication domains and in different levels of individual and social decision making. For more about choosing theories for intervention-specific areas use the [Center for Disease Control and Prevention's Theory Picker](#).

Would you like feedback on your new or revised MiP SBCC strategy? Email your strategy to miketoso@jhu.edu and the RBM SBCC Working Group MiP Task Force will review your strategy and submit feedback.

If you are interested in reviewing different country examples, a map featuring countries with malaria SBCC strategies can be found online at <http://sbccimplementationkits.org/malaria-in-pregnancy/drafting-a-malaria-in-pregnancy-strategy/>. Click on the country you are interested in to view its strategy.