



**Liberia Ministry of Health
National Malaria Control Program**

Malaria Communication Strategy

2016–2020



President's Malaria Initiative



Forward

Malaria is endemic in Liberia and the entire population of more than four million is at risk. Children under five and pregnant women are the most affected groups. According to data from the recent Health Facility Survey, outpatient and inpatient deaths due to malaria have decreased since 2005. Even so, there are still challenges that affect progress. Coverage of intermittent preventive treatment for malaria in pregnancy has decreased since 2011.¹

The fourth Liberia National Malaria Strategic Plan (NSP) for 2016–2020 addresses the need to scale-up malaria control and prevention activities to build on gains made under the Millennium Development Goals and to continue making progress under the new Sustainable Development Goals (SDG). This new NSP addresses gaps observed in the implementation of the 2010–2015 Strategy and puts forth a more detailed budgeted strategy dealing with the malaria situation in Liberia by these target dates. Given the lessons learned from negative effect of the Ebola Virus Disease (EVD) on malaria programming, the NSP includes a plan to ensure malaria control activities are able to continue with minimal disruptions in the event of an emergency.

The objectives and activities set out in this document reflect the priorities and goals of World Health Organization (WHO), the Roll Back Malaria Partnership (RBM), and the President’s Malaria Initiative (PMI). Best practices and successes from other African countries will also inform the scale-up of future malaria control and prevention measures, from the health facility down to the community level. In addition, a new focus on private sector involvement will increase broader coverage of health-care delivery in Liberia.

Three broad strategies make up Liberia’s renewed commitment to malaria prevention and control. The first strategy refers to a more effective malaria control and prevention and focuses on improved treatment through scaled up availability and use of Artemisinin-based Combination Therapy (ACT) as the first-line treatment for malaria. The scale-up is three-tiered: firstly, making fixed-dose combination therapies available in all health facilities, and training

health staff in their use; secondly, reinforcing the role of the community health committees and their health workers by providing malaria control tools and training these workers for their tasks; and thirdly, making the same ACT drugs available in the private sector, among private health care providers, and in pharmacies and medicine stores. All the above will be backed by parasitological testing of all suspected malaria cases before treatment in line with the WHO 3Ts:

- All suspected malaria cases be **tested** before treating
- Only parasitological confirmed malaria be **treated**
- **Track** malaria testing and treatment to gauge progress made on reducing malaria burden

The second strategy is a vector-control approach that is also three-tiered. Vector-control activities will provide long-lasting insecticide-treated nets (LLINs) through mass distribution to all family units and routine distribution to pregnant women at antenatal visits and institutional delivery to ensure pregnant women and newborn babies continue to be protected from malaria in between mass universal campaigns. The strategy will also continue targeted indoor residual spraying (IRS) of households and will consider other vector management strategies of environmental control to achieve maximum results.

The third strategy will focus on malaria in pregnancy interventions. Liberia’s newly updated National Guidelines for Malaria in Pregnancy (2015) follows WHO recommendations on timing, frequency, and dosage protocol (the first dose as early as possible in the second trimester and subsequent doses given one month apart until delivery) for intermittent preventive therapy for malaria in pregnancy (IPTp).² Social and behavior change communication (SBCC) activities to prevent and control malaria in pregnancy include encouraging pregnant women to sleep under LLINs, increasing the number of pregnant women who receive maximum coverage of IPTp, and ensuring prompt testing and treatment seeking for fever.

¹ World Health Organization. WHO policy brief for the implementation of intermittent preventive treatment of malaria in pregnancy using sulfadoxine-pyrimethamine. 2013

¹ Liberia Demographic Health Survey. 2013

The National Malaria Control Program (NMCP) will also work to identify coordinating mechanisms, surveillance systems, and social mobilization responsibilities during emergency response. This emergency preparedness emphasis does not change how social mobilization operated during the EVD outbreak, but it does lay out guidance and a series of considerations that will allow malaria activities to continue alongside those related to emerging threats and emergencies. It is hoped that further development of a platform for addressing routine and emergent needs for social mobilization will also prepare the NMCP to engage in pre-elimination efforts in the future.

The purpose of the Malaria Communication Strategy 2016–2020 is to contribute to targets laid out in the NSP 2016–2020 by intensifying social and behavior change activities at all levels of society. Recent findings indicate a high community knowledge about the cause of malaria and how to prevent it, however, there are gaps between knowledge and practice. Based on findings from the EVD response, innovative community and interpersonal behavioral change communications will be strengthened. SBCC trainings for service providers, community health volunteers (CHVs), TV shows, radio spots, leaflets, drama, road shows, community dialogues, and schools health promotion are examples of channels to be used to close gaps between malaria knowledge and practice. The key messages developed for this Malaria Communication Strategy will place emphasis on positive actionable messages for communities and individuals, underscoring the importance of sleeping under LLINs, seeking early treatment for fever, completing ACT therapy, allowing rooms to be sprayed during IRS, and the need for pregnant woman to take their preventive malaria medicine three or more times before delivery.

This Malaria Communication Strategy is the second to be developed. The first strategy was finalized in 2005. The 2016 revision is the result of two consultative workshops involving partners of the Ministry of Health, donors, non-governmental organizations and international partners. The strategy produced is an example of tight collaboration between the National Health Promotion Division (NHPD), the Community Health Services Division (CHSD), the NMCP and partners.

The global malaria control landscape has changed a great deal since 2005. The Liberian malaria landscape has changed significantly as well and requires a renewed examination of partnerships, strategic approaches, key messages, and strategic use of communication channels to further encourage the adoption of positive behaviors to prevent and control malaria.

This revised Malaria Communication Strategy takes current knowledge, beliefs, and practices into account to better contribute to the overall goal of halving malaria cases and deaths by 2020. The strategy seeks to facilitate the achievement of the following National Strategic Plan 2016–2020 objectives:

- To increase access to prompt diagnosis and effective treatment targeting 85% of population by 2020.
- To ensure that 80% of the population are protected by malaria preventive measures by 2020.
- To increase the proportion of the population who practice malaria preventive measures from 40% to 85% and sustain knowledge at 98% by the end of 2020.

Although the Malaria Communication Strategy seeks to support all three of these objectives, the achievement of the third will be the chief priority of this strategy, as it is the most closely aligned with achievable SBCC activities.

Increasing consistent use of LLINs will be the core intervention of this revised strategy. This does not imply a lesser role of case management and malaria in pregnancy interventions. Achievement of the other objectives will come to focus during the implementation of this revised strategy.

This second edition of Liberia’s National Malaria Communication Plan builds on a wealth of experience and will serve as a guide to a more coordinated strategic approach to malaria communication with the Liberian people.



Daniel Somah
National Malaria Control Program SBCC Focal Person
Republic of Liberia

Acknowledgments

The Ministry of Health through the National Malaria Control Program extends profound thanks and appreciation to Center for Disease Control and the President's Malaria Initiative, Management Sciences for Health, Health Communication Capacity Collaborative, Partnership for Advancing Community-based Services, Plan International Liberia, the World Health Organization Liberian office and the United Nations Children's Fund for financial and technical support in revising the Malaria SBCC Strategy. Your support was indeed strategic to the process, a gesture for which we owe you a depth of gratitude.

We also acknowledge the invaluable contributions of other National Malaria Control Program partners including: national and international NGOs, the National Health Promotion Division of the Ministry of Health. This acknowledgment would be incomplete without recognition of the Global Fund for HIV/AIDS, Tuberculosis and Malaria. The Global Fund has greatly assisted the NMCP to begin concretization of its vision. We entertain the hope that the Liberian people will enjoy a life free of malaria in the near future.

We recognize the technical leadership of the NMCP manager, Oliver Pratt, as well as Kwabena Larbi, of Management Sciences for Health, who helped develop the early draft of this strategy. Government officials and partners who contributed to the final review and edition of this strategy include:

Paye Konah Nyansaiye, Deputy Program Manager	National Malaria Control Program
Daniel Somah, SBCC Focal Person	National Malaria Control Program
Rev. John Sumo, Director	National Health Promotion Division
Richard Zeon, SBCC FP	National Health Promotion Division
Mark Arthur, CHSD Officer	Community Health Services Division
Christie Reed, Resident Advisor	President's Malaria Initiative, CDC
Mike Toso, Program Officer	Health Communication Capacity Collaborative
Teah Doegmah, Senior Technical Advisor	Health Communication Capacity Collaborative
Justin DeNormandie, BCC Technical Advisor	Partnership for Advancing Community-based Services
Siadeyo Torgbenu, BCC Manager	Partnership for Advancing Community-based Services
Ibrahim Kampara, Technical Advisor	Plan International Liberia
Victor Koko, Research Officer	National Malaria Control Program
Agnes Jannafo, MIP Coordinator	National Malaria Control Program
Wynston Williams, Procurement	National Malaria Control Program
Joseph Olade, IT Specialist	National Malaria Control Program
Asatu Donlo, iCCM Coordinator	National Malaria Control Program
Agnes Nador, Vector Control Coordinator	National Malaria Control Program
Wolo Jetoh, Vector Technician	National Malaria Control Program
Hawa Gbah, iCCM Assistant	National Malaria Control Program
Roseline Chesson, Technical Advisor	VectorWorks
Amanda Newlove, Response Volunteer	Peace Corps

Table of Contents

ACRONYMS.....	7
INTRODUCTION.....	9
BACKGROUND.....	10
ROLL OF COMMUNICATION IN MALARIA.....	10
PATHWAYS CONCEPTUAL FRAMEWORK.....	13
STRATEGIC COMMUNICATION FOR MALARIA CONTROL.....	14
STRATEGY 1: VECTOR CONTROL.....	14
Policy, roles and responsibilities.....	14
Problem statement, SBCC emphasis.....	15
Behavioral objectives, communication objectives, key promises, supporting points....	16
Audiences.....	17
Agents, messages.....	18
Monitoring.....	19
Evaluation.....	20
STRATEGY 2: MALARIA IN PREGNANCY.....	21
Policy, roles and responsibilities, problem statement.....	21
SBCC emphasis.....	22
Behavioral objectives, communication objectives, key promises, supporting points....	22
Audiences.....	23
Agents, messages.....	23
Monitoring, evaluation.....	24
STRATEGY 3: MALARIA CASE MANAGEMENT.....	25
Policy, roles and responsibilities.....	25
Problem statement, SBCC emphasis.....	26
Behavioral objectives, communication objectives, key promises, supporting points....	26
Audiences, agents, messages, monitoring.....	28
Evaluation.....	29
EMERGENCY PREPAREDNESS.....	30
REFERENCES.....	31

Acronyms

ACT	Artemisinin-Based Combination Therapy
AIM	Action and Investment to Defeat Malaria
ANC	Antenatal Care
CBO	Community-Based Organization
CHT	County Health Team
CHV	Community Health Worker
CHSD	Community Health Services Division
CHSS	Communitith Health Services Supervisors
DHPFP	District Health Promotion Focal Person
DHS	Liberia Demography Health Survey
FBO	Faith Based Organization
GTS	Global Technical Strategy for malaria
HPFP	Health Promotion Focal Person
IPC	Interpersonal Communication
IPTp	Intermittent Preventive Treatment in Pregnancy
IRS	Indoor Residual Spraying
ITN	Insecticide-Treated Net
IVM	Integrated Vector Management
LLIN	Long-Lasting Insecticide-Treated Net
MCH	Maternal and Child Health
MCS	Malaria Communication Strategy
MDGs	Millennium Development Goals
MIP	Malaria in Pregnancy
MIS	Malaria Indicator Survey
MOH	Ministry of Health
mRDT	Rapid Diagnostic Test
NFHD	National Family Health Division
NGO	Non-Governmental Organization
NHPD	National Health Promotion Division
NMCP	National Malaria Control Program
NMSP	National Malaria Strategic Plan
OPD	Outpatient epartment
RBM	Roll Back Malaria
PMI	President’s Malaria Initiative
SBCC	Social and Behavior Change Communication
SDGs	Sustainable Development Goals

Acronyms

SP	Sulphadoxine-Pyrimethamine
TBA	Traditional Birth Attendant
TTM	Trained Traditional Midwife
TWG	Technical Working Group
UC	Universal Coverage
VC	Vector Control
WHO	World Health Organization

Introduction

The fourth Liberia National Malaria Strategic Plan (NSP) will employ a multi-faceted approach to scaling-up malaria control and prevention activities between 2016 and 2020. Innovations introduced in this Malaria Communication Strategy reflect lessons learned in Liberia since 2005, as well as global guidance on new areas of focus and priority. As countries review progress made under the Millennium Development Goals (MDGs), it is important to acknowledge that changes in approach are needed to sustain and build upon gains made.

The newly developed Sustainable Development Goals (SDGs) focus on action that promotes economic growth, social inclusion, and environmental protection. The Liberian National Malaria Control Program is committed to achieving both economic growth and reduction of malaria morbidity and mortality, with a new focus on engagement with the private sector to increase access to rapid diagnostic testing, and treatment for all. Social and behavior change communication (SBCC) will create demand for these products as they become increasingly available.

The World Health Organization's (WHO) recently launched Global Technical Strategy for Malaria 2016–2030 provides additional direction on means with which to reduce malaria morbidity and mortality. The call for universal coverage of core malaria interventions for all populations, with a focus on use of surveillance to inform decision-making resonates with lessons learned in Liberia during the Ebola crisis. As a result of this experience, Liberia's NMCP is focusing on emergency preparedness, and developing a set of guidelines for maintaining malaria social mobilization activities during future crises. Sustained focus on a robust emergency preparedness system benefits all health areas, and prepares Liberia for future pre-elimination efforts that require attention to every last case of malaria. Behavior change efforts will need to be tailored to help communities contextualize what it means to take action, even in the absence of an immediate threat.

The Roll Back Malaria Partnership (RBM) has recently updated its guide to collective action the Action and Investment to defeat Malaria (AIM 2016–2030) for

all engaged in the fight against malaria. A “human-centered response,” to increased access and availability to malaria commodities and services, is described as treating those living in malaria affected communities as the first point of reference, not as “extras.” The Liberian National Malaria Control Program's Social and Behavior Change unit expects allocated resources to increase interpersonal communication (IPC) and social mobilization activities that address the unique and changing contexts within which different communities exist.

The President's Malaria Initiative (PMI) has invested heavily in efforts to prevent and control malaria in Liberia. During the Ebola crisis, PMI support sustained health services and worked to adapt LLIN and malaria case management strategies in a challenging and changing environment. PMI's new strategy for 2015–2020 is consistent with support provided in the past, and continues to focus on scale-up of core interventions like increased use of LLINs, prompt care seeking and appropriate treatment of fever, and prevention of malaria in pregnancy. Social and behavior change communication activities planned in Liberia's Malaria Communication Strategy prioritize these core interventions, particularly increased LLIN use.

As global priorities and targets shift and evolve, the Liberian National Malaria Control Program will continue to adopt innovative means with which to contextualize malaria prevention and control in its communities. This second edition of Liberia's Malaria Communication Strategy provides a framework from which county, district, and community planning, implementation, and evaluation will take place through 2020.



Oliver Pratt
National Malaria Control Program Manager
Ministry of Health
Republic of Liberia

Background

Malaria transmission is holoendemic and stable throughout the year in Liberia, leaving over four million inhabitants at risk of malaria infection. According to the most recent Health Facility Survey, malaria accounted for over 42% of outpatient and 39% of inpatient deaths. Between 2013 and 2014, gains that might have been made to reduce malaria morbidity and mortality in Liberia were made increasingly improbably as the Ebola outbreak dismantled much of the country's health system. The Liberia Demographic Health Survey 2013, taken before the outbreak, showed:

- 24% of children under five who had a fever in the previous two weeks received artemisinin-combination therapy (ACT)
- 56% of those in households that own at least one insecticide-treated net (ITN) slept under one the night before
- 63% of children under five in households that own at least one ITN slept under one the night before
- 63% of pregnant women in households that own at least one ITN slept under one the night before the survey
- 48% of women received two or more doses of IPTp during their most recent pregnancy

The Ebola crisis had an incalculable impact on the availability of and access to malaria services and commodities. Due to lack of trust in health facilities during the crisis, the National Malaria Control Program (NMCP) and Medicines Sans Frontiers France carried out two rounds of mass drug administration in the New Kru, Logan, Clara, and Tweh Townships on Bushrod Island to stem potential increases in infection during a time when use of health facilities was greatly reduced. Use of rapid diagnostic tests to confirm malaria among those with fever was suspended in many areas due to fear of contact with bodily fluids. As malaria prevention and control activities resume, short- and mid-term progress should be viewed in light of these challenges.

Coordination, supervision, and implementation of malaria communication activities in Liberia

Central level: Malaria social and behavior change

communication (SBCC) is the shared responsibility of the NMCP, Community Health Services Division (CHSD), and the National Health Promotion Division (NHPD). All three divisions are independent entities within the Ministry of Health that work together to achieve common goals. In a malaria context, the NHPD coordinates and validates SBCC messages and materials. The NMCP SBCC unit provides strategic guidance, a work plan, and program evaluation. Both divisions rely on the CHSD at the County, District and Community levels for supervision of activities.

County and District levels: The CHSD oversees community health structures but operationalization of the SBCC plans at all levels is done through NHPD. County-level health promotion activities are overseen by County Health Promotion Focal Persons (CHFPF) of the CHSD. Each county has one Health Promotion Focal Person (HPFP). Most HPFP's will have received SBCC training at some point. This is less common among District Health Promotion Focal Persons (DHPFPs). Trainings to improve skills like interpersonal communication (IPC) are funded through implementing partners rather than the NHPD. The ability to schedule regular trainings or SBCC skills building that increase a deliberately designed set of skills over time rests on coordination between the NMCP, CHSD, NHPD, and their partners.

Community level: CHVs provide health promotion activities at the community level. These include trained traditional midwives (TTM) and general community health workers (gCHV). CHVs, gCHVs, and TTMs are supervised by the Officer-in-charge of catchment facility community health committees (CHC). These committees are responsible for the supervision of health promotion activities at the community and engage chiefs, elders, and community members as needed. As noted in the Revised National Community Health Services Strategy 2016–2021, effective communication in communities relies on the active presence of both CHCs and CHVs.

Role of communication in malaria

Information, education, and communication (IEC) is the process of working with individuals and

communities to promote positive, healthy behaviors. SBCC takes this process a step further by promoting healthy behaviors and deliberately working to establish a socially supportive environment that will enable individuals and communities to initiate and sustain new behaviors. While information is essential, it is important to recognize that making information available is not the objective of communication. Effective communication is an exchange, one influenced by psychological, cognitive, and emotional factors. Strategic communication seeks to address multiple behavioral determinants, and the environment within which they exist, in order to achieve positive health outcomes.

Elements of several theories of behavior change inform this strategy's approach. These include:

- **Protection Motivation Theory:**³ A model based on this theory, called the Extended Parallel Process Model, has been used to predict behavior as a response to simultaneously increasing confidence, and perceived fear (susceptibility, severity).
- **Social Cognitive Theory:**⁴ Knowledge acquisition often comes from observing others. Increasing an individual's confidence in their ability to take certain actions must be accompanied by positive responses received after performing it, and the presence of an enabling environment.
- **Theory of Reasoned Action:**⁵ Decisions to take certain actions are based on an individual's motivations and expectations. Attitudes regarding whether the result of an action will be positive or negative, and subjective norms regarding perceived social pressure or support are important factors that influence intention to act.

Liberia's Malaria Communication Strategy will influence positive behavior change by addressing individual attitudes, beliefs, and practices, while working to improve the social and environmental contexts within which they exist. The Pathways Framework⁶ (Figure 1), based on the socio-ecological model of behavior change, addresses the following elements:

³ Rogers RW, Protection motivation theory. 1983.
⁴ Bandura A, Social cognitive theory. 1977.

Underlying conditions: Liberia's human resources, financial resources, social, political, and economic conditions make up underlying conditions that influence structural, social, and individual behaviors.

Communication domains: Communication activities will focus on working to improve the socio-political environment (favorable environment and policies), working with those who provide health services and information (to improve access to services and life-saving commodities), and working with individuals and their communities.

Exposure and reach: It is necessary to record the number of those reached with SBCC activities, and to conduct pre and post tests or surveys (when possible) to indicate whether or not activities had the intended effect. A proportion of those exposed to SBCC malaria messages who demonstrate accurate knowledge of malaria's cause and ways to prevent it, and report practicing priority behaviors, will indicate the relative success of activities and campaigns. Refer to the activities section of each intervention strategy.

Initial outcomes: The short-term effect of communication activities can be measured by observing changes in not only knowledge, but attitudes, beliefs, values, perceived risk or benefit, emotional responses, self-efficacy (confidence), perceived social support and personal advocacy. Changes in these factors may lead directly to behavior change, but often signal progress towards it over time. For this reason, it is essential to measure not only communication objectives, but behaviors that lead to positive health outcomes. These attitudes can be measured using the Roll Back Malaria Communication Community of Practice Guidelines.² No key promises or supporting points are included for objectives related to knowledge. Refer to communication objectives in the evaluation section of each intervention.

Behavioral outcomes: Observed or reported changes in behavior are a more robust indicator that individuals and communities are becoming healthier. Often measured using household surveys, measures of changed behaviors should be reported

⁵ Fishbein M, Ajzen I, Theory of reasoned action. 1967.
⁶ Kincaid DL, Figueroa ME, Underwood C. Pathways.

as a proportion (%) of the total number of those who responded to questions. Refer to behavioral objectives in the evaluation section of each intervention.

Impact: Results in terms of sustainable health will be measured in terms of decreased morbidity and mortality. The goal of Liberia's National Malaria Strategic Plan 2016–2020 is to decrease malaria mortality by 50% by 2020. These indicators are measured by the Malaria Indicator Survey, and Demographic Health Survey. Impact indicators shown in the evaluation section of each intervention are drawn directly from Liberia's National Malaria Control Program Monitoring and Evaluation Plan 2016–2020.

Advocacy: The NMCP will dedicate time and staff to advocating for SBCC resource allocation at the central level. Ministry of Health resource allocation occurs only once every two years, necessitating additional channels of outreach. The Global Fund is a second important source of potential SBCC resources. NMCP personnel will engage with Global Fund representatives during allocation and re-allocation of funds. The NMCP will also continue to communicate with PMI about the importance of continued SBCC funding and support. Lastly, NMCP personnel will engage the private sector. Collaboration with cellular service providers, plantations, and mining operators has met with some success, but has occurred on an ad-hoc basis in the past. The NMCP will focus on a longer term plan, and approach private sector companies with a specific timeline with re-occurring, costed activities. The focus of these visits will be providing a detailed analysis of the cost-benefit to educating employees about malaria. These advocacy efforts will be planned and coordinated by the NMCP SBCC focal person.

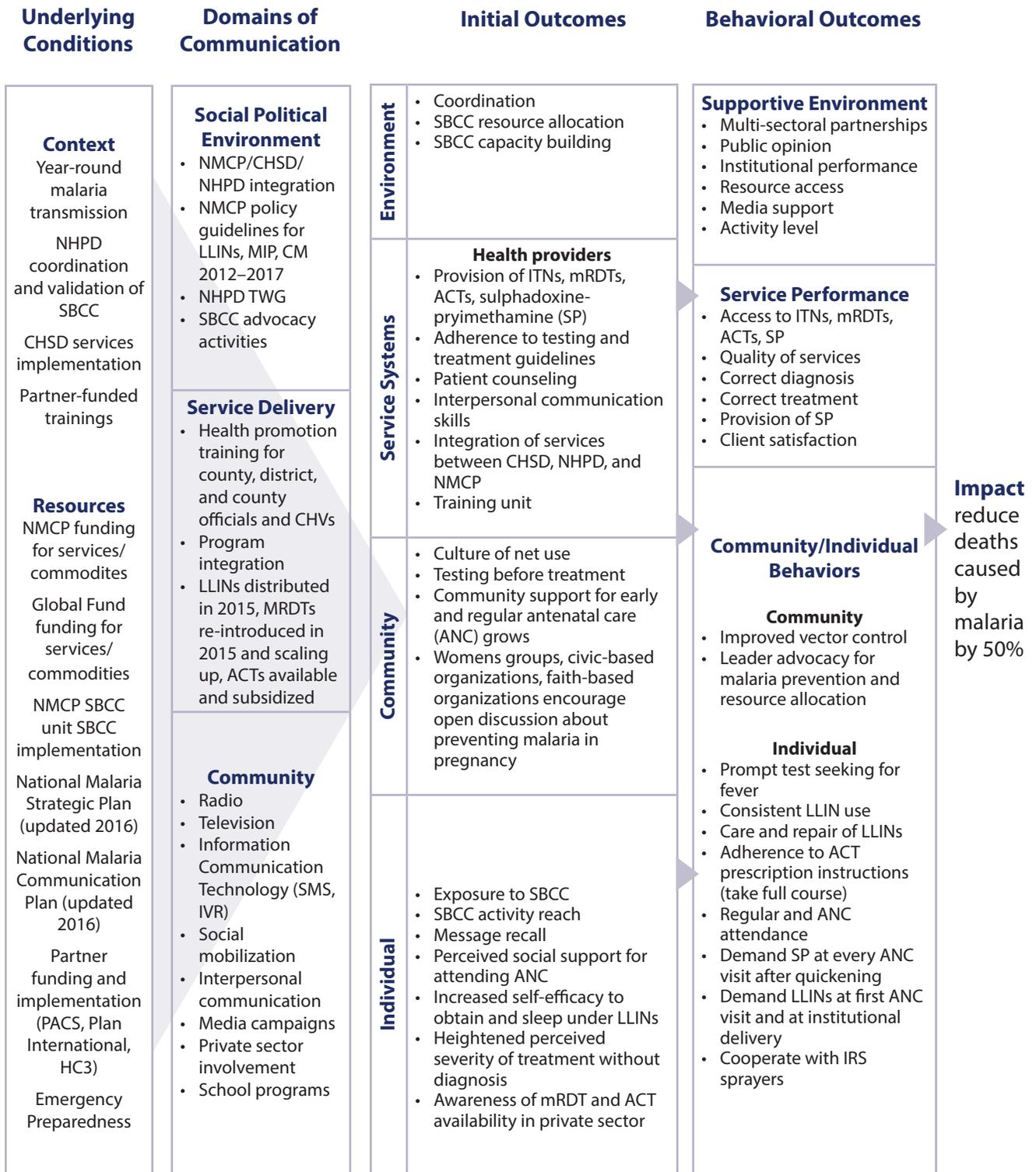
Implementation plan: Following this strategy's validation by the NHPD Technical Working Group (TWG), the following steps will be taken:

1. Print and disseminate at the central, county, and district levels as well as among implementing partners.
2. Develop a work plan with a detailed timeline for the strategy's implementation.
3. Strengthen NMCP, NHPD, and CHSD capacity

to train service providers in interpersonal communication and counseling skills and CHV interpersonal and social mobilization skills.

4. Incorporate SBCC monitoring, intermediate, and outcome indicators into Liberia's county and district reporting and supervision systems.
5. Collaborate with the National Family Health Division (NFHD) to clarify roles and responsibilities regarding LLIN and IPTp promotion.
6. Develop a five-year plan that describes the scale up of malaria SBCC interventions.

Figure 1: Pathways Conceptual Framework



Adapted from Kincaid, Figueroa and Underwood

Strategic Communication for Malaria Control and Prevention

Vision: The vision of the Liberia malaria program is a healthier Liberia with universal access to high quality malaria interventions with no malaria deaths.

Mission and Values: The mission of the Liberia malaria program is to achieve the highest requisite capacity for the provision of comprehensive, coordinated and evidence-based interventions to eliminate malaria in Liberia.

Goal: Create and sustain a comprehensive, evidence-based strategic communication plan that results in coordinated, context-specific action to reduce deaths caused by malaria by 50% by 2020.

Objectives:

- To ensure that 80% of the population are protected by malaria preventive measures by the end of 2020.
- To increase the proportion of the population who practice malaria preventive measures from 40% to 85% and sustain knowledge at 98% by the end of 2020.

Guiding Principles:

All aspects of the Malaria Communication Strategy 2016–2020 will rely on:

- Evidence-based decision making;
- Strategic selection of priorities that reflect NMCP capacity;
- Integrated, context-appropriate and gender sensitive approaches.

Strategy 1: Vector Control

National Malaria Strategic Plan Objectives:

- To ensure that 80% of the population are protected by malaria preventive measures by the end of 2020.
- To increase the proportion of the population who practice malaria preventive measures from 40% to 85% and sustain knowledge at 98% by the end of 2020.

National integrated vector management policy:

Liberia's National Policy and Strategic Plan on Integrated Vector Management (IVM) 2012–2017 mandates SBCC to support a comprehensive vector control program. This will consist of activities to encourage use of long-lasting insecticide-treated nets (LLINs), and acceptance of indoor residual spraying (IRS). LLINs are provided free of charge in universal coverage (UC) campaigns, and through routine channels such as a pregnant woman's first antenatal care (ANC) visit, and at institutional delivery. Liberia's Strategic Plan and Operational Guidelines on LLINs 2012–2017 defines UC as one LLIN for each sleeping space or three bed-nets per household, and aims to increase the utilization level to 85% among the whole population.

Roles and responsibilities: LLINs

Increasing LLIN use among pregnant women and children under five is a high priority, as they are at the highest risk of malaria morbidity and mortality. As such, while it is important to encourage increased LLIN ownership, the emphasis of this strategic plan will be to increase correct and consistent LLIN use. At the central level, national guidelines mandate the involvement of political and administrative officials in meetings and mass-media campaigns supporting LLIN distribution. Policy maker engagement and involvement of civil society and media in IVM advocacy will also be important. At community level, year round net use must be encouraged by CHVs and local leaders (chiefs, traditional and religious leaders). Net care and repair messaging should also be included in comprehensive IVM messaging when possible. National guidelines mandate support for community-based services through incentive programs for community participation in vector control.

Roles and responsibilities: IRS

Advocacy and social mobilization activities supporting IRS will achieve implementation scale-up by increasing community acceptance, and creating an enabling policy environment. At the community level, SBCC activities should promote buy-in and maximize acceptance rates. The general public should be informed about the purpose of IRS, given actions to reduce exposure, and have a chance to have clarification on common questions or misconceptions. SBCC activities should take place prior to and during IRS spray rounds. From an advocacy standpoint, communication efforts should contextualize potential risks and clarify established safeguards to address potential confusion.

Problem Statement:

Net ownership and access in Liberia has increased but use remains suboptimal. Between 2011 and 2013, ITN use remained almost unchanged. Recent behavioral studies shed light on several possible factors that influence net use.

A 2013 household survey⁷ found that in households with at least one ITN, significant demographic predictors of use were being female, having a secondary education or higher, and being married. The vast majority of those surveyed felt they were able to obtain enough nets for their family, were confident they could sleep under nets, and believed the best way to prevent malaria is to sleep under a net. However, three-fourths of respondents also stated that their chances of getting malaria were about the same whether they slept under a net or not, leaving some doubt as to actual confidence in a net's protective ability. Most found heat made it difficult to sleep under a net, and a significant number of respondents expressed concern about the safety of the insecticide on the nets. Men were more likely than women to have participated in discussion about which sleeping spaces are covered by a net.

A 2014 qualitative net study⁸ found that most Liberians questioned knew mosquitoes cause malaria, and nearly all respondents mentioned nets as their preferred method of preventing malaria. While awareness of the cause of malaria and ways to prevent it was high, requests for more information about malaria and nets were also common. Seasonal net use was commonly cited. Similar to the 2013 household survey, discomfort due to heat and concerns about the safety of insecticide use on the nets were cited as reasons for not using nets.

A 2015 KAP survey⁹ found that while discomfort and heat were not particularly strong predictors of net use, the presence of social support- such as encouragement from family members or a partner, and net use being a high family priority- was believed to be very important, as were outcome expectations like belief that a net can protect against malaria and belief that a net can save the life of one's child. Children under five sleeping under a net was highly correlated with the belief that nets can save a child's life, and if net use in the family is a priority.

While difficult to compare due to differing measurements, methodologies, and timeframes, these three studies highlight a number of issues to consider when considering how to encourage net use in Liberia. The belief that nets can prevent malaria in general, and among caretakers of children under five appears to be positively correlated with use. There is reason to believe that if convinced of the need to obtain a net, families believe they are able to do so. Attention should be paid to influencing those responsible for inter-household allocation of nets. Evidence of seasonal net use suggests that emphasis should be placed on sleeping under nets year-round. Finally, concerns about discomfort and insecticide on the nets should be addressed.

SBCC emphasis:

LLIN interventions should focus on the importance of sleeping under a net to prevent malaria. This may be

7 Attitudes, beliefs and practices relevant to malaria prevention and treatment in Liberia final report. 2013.

8 Allen D R, Shuford K. Qualitative Assessment of the Ownership and Use of Mass Distribution Campaign Nets in Liberia: A Report of Assessment Activities and Findings. 2014.

9 Partnership for Advancing Community-based Services. Knowledge, Attitudes and Practices Survey. 2015.

accomplished by increasing social support, with activities like encouraging discussion about LLIN use among individuals and households, particularly those responsible for inter-household allocation of nets over available sleeping spaces. Where use of LLINs are not yet believed to reduce the chances of getting malaria, simultaneously increasing perceived susceptibility of getting malaria and the confidence in LLINs effectiveness should be the focus of SBCC activities. Year-round LLIN use should be encouraged where seasonal use occurs. SBCC activities should also attempt to address concerns about discomfort and the safety of insecticide. These concerns may be addressed using personal advocacy from those who regularly sleep under nets, with a focus on ensuring LLIN recipients understand they must properly air out LLINs after first removing them from the package.

BEHAVIORAL OBJECTIVES: Vector Control	
Behavior	Communication
<p>Increase the proportion of pregnant women and children under five who obtain LLINs and use them everywhere, every night.</p>	<p>Communication Objectives:</p> <ul style="list-style-type: none"> • Increase the proportion of pregnant women who are aware they are entitled to one free LLIN at their first ANC visit, and one free LLIN at institutional delivery. • Increase the proportion of pregnant women who demand an LLIN during their first ANC visit and at institutional delivery. • Increase the proportion of pregnant women and caregivers of children under five who perceive themselves and their children to be in danger if they do not sleep under an LLIN year-round. • Increase the proportion of pregnant women and caregivers of children under five who initiate discussion within their household about the importance of LLIN use and who express it is a household priority. <p>Key Promise: When you and your children sleep under an LLIN malaria will be reduced, and your health and wellness will be preserved.</p> <p>Supporting point: LLINs for you and your child are provided free of charge.</p>
<p>Increase the proportion of individuals who obtain and use LLINs properly everywhere, every night.</p>	<p>Communication Objectives:</p> <ul style="list-style-type: none"> • Increase the proportion of individuals who perceive themselves to be in danger if they do not sleep under an LLIN year-round. • Increase the proportion of individuals who express confidence in an LLIN's effectiveness in preventing malaria. • Increase the proportion of individuals who encourage discussion about LLIN use and express it is a high priority. <p>Key Promise: Obtaining and using LLINs year-round saves money otherwise spent on trips to health facilities and on malaria medicine.</p> <p>Supporting Point: LLINs are available for free during mass distributions, during routine distribution channels (such as ANC and institutional delivery).</p>
<p>Increase the proportion of CHVs who demonstrate the ability to educate target audiences through interpersonal communication and counseling skills, and training and provision of support materials.</p>	<p>Communication objective:</p> <ul style="list-style-type: none"> • Increase the proportion of CHVs who express the self-efficacy to educate target audiences using interpersonal communication skills, counseling skills, and use of supporting materials. <p>Key Promise: Taking part in trainings to enhance skills will ensure increased ability to carry out duties with confidence.</p> <p>Support Point: Enhancing interpersonal communication and counseling skills will enable CHVs to better change the beliefs and attitudes of those they communicate with.</p>

BEHAVIORAL OBJECTIVES: Vector Control	
Behavior	Communication
Increase the proportion of LLIN owners who properly care for their net and repair as necessary.	<p>Communication objective:</p> <ul style="list-style-type: none"> Increase the proportion of LLIN owners who are confident in their ability to hang their net up during the day, tuck it in at night, wash with only mild soap (never with bleach), dry in the shade, and repair holes and tears regularly. <p>Key Promise: Properly maintained LLINs are more effective at preventing malaria than those with tears and holes.</p> <p>Support Point: Proper care and repair of LLINs extends the amount of time they will serve to protect against malaria, and reduces the cost of purchasing new nets.</p>
Increase the proportion of households that cooperate with spray operators and follow pre- and post- spray guidelines given by spray personnel.	<p>Communication objective:</p> <ul style="list-style-type: none"> Increase the proportion of household heads who express confidence in IRS efficacy. Reduce the proportion of household heads who express fear or misconceptions about chemicals used in IRS. <p>Key Promise: Complying with IRS sprayers reduces chances of getting malaria, and kills mosquitoes that transmit it.</p> <p>Support Point: IRS spraying takes only a day, and lasts for much longer.</p>
Increase the proportion of individuals with accurate knowledge of malaria transmission and prevention.	<p>Communication objective:</p> <ul style="list-style-type: none"> Increase the proportion of individuals who state that only mosquitoes cause malaria. Increase the proportion of individuals who state LLINs prevent malaria.

AUDIENCE SEGMENTATION: Vector Control	
Primary Audiences	Secondary Audiences
Household heads and caregivers responsible for inter-household allocation of LLINs and decision making regarding permission of entry for IRS sprayers, pregnant women, caregivers of children	Grandparents or in-laws who may allocate inter-household allocation of nets and/or permission to spray IRS in absence of primary caretakers

MESSAGES AND MESSAGE DELIVERY AGENTS	
<p>Agents: Caregivers, heads of household, those responsible for inter-household allocation of LLINs</p>	<p>Message: Mosquito nets are safe to use, the insecticide kills mosquitoes but will not harm you or your child. Message: When you sleep under a mosquito net, you avoid getting malaria and save time and money on trips to health facilities and medicine. Message: Use your mosquito net everywhere, every night. Message: Get your free mosquito net at first ANC visit and at institutional delivery.</p>
<p>Agents: Traditional, religious, and political leaders, service providers, community health workers, trained traditional midwives</p>	<p>Message: Mosquito nets prevent malaria and save lives. Message: Insecticide used in mosquito nets is safe for children and adults.</p>
<p>Agents: Consistent LLIN user (personal advocacy)</p>	<p>Message: When use my mosquito net, I get peaceful sleep. Message: When I tuck my mosquito net in properly, mosquitoes do not enter through the bottom. Message: Hanging up my mosquito net during the day has kept it in good condition, and keeps it away from children at play and animals.</p>
<p>Agents: Heads of household, community health workers</p>	<p>Message: Cooperate with IRS sprayers and let them spray in your house. Message: IRS is safe, and kills mosquitoes that spread malaria and other insects.</p>
<p>Agents: Caregivers, heads of household, grandparents, in-laws, those responsible for inter-household allocation of LLINs</p>	<p>Message: It is important to ensure every sleeping space is covered by a mosquito net. Message: Every one should sleep under an mosquito net, especially pregnant women and children under</p>
<p>Agents: District-level CHV supervisors</p>	<p>Message: Attend and complete CHVs trainings to enhance your SBCC skills.</p>

MONITORING: Vector Control	
Measure exposure and reach of the following activities	
CHANNELS	OUTPUTS
<p style="text-align: center;">Community</p> <ul style="list-style-type: none"> • Multi-channel SBCC support activities before, during, and after mass, replacement, and routine LLIN distributions • Health talks at public facilities • Drama targeting market places and public gatherings • Interpersonal communication through house-to-house education campaigns • Community dialogues • Radio magazine shows and spots • Television shows and spots • Information communication technology (SMS, IVR) • School health talks • Reminder cards or flyers to be distributed with LLINs <p style="text-align: center;">CHV</p> <ul style="list-style-type: none"> • Interpersonal communication and counseling skills training <p style="text-align: center;">Advocacy</p> <ul style="list-style-type: none"> • Advocacy/sensitization meetings • Media trainings and work with journalists • Media/press coverage of key LLIN or IRS campaigns • LLIN and IRS advocacy among: <ul style="list-style-type: none"> • Government, Ministry, administrative authorities, and governors • Health authorities • Customary authorities • Press/media, including town criers • Community leaders, women's and youth associations, religious leaders 	<p style="text-align: center;">Process Monitoring Indicators</p> <ul style="list-style-type: none"> • # of house-to-house visits before, during, after distributions • # of talks held at health facilities • # of market place dramas held • # of interpersonal communication activities carried out • # of community dialogues held • # of radio shows/spots aired • # of television shows/spots aired • # of SMS broadcast • # of school health talks held • # of reminder cards and flyers distributed • # of interpersonal communication and counseling skills trainings held • # of community advocacy sensitization meetings held • # of media trainings held • # of press releases organized and held • # of advocacy visits paid to central level-leaders • # of advocacy visits paid to community leaders

EVALUATION: Vector Control		
INTERMEDIATE	OUTCOME	IMPACT
<p>Communication Objectives</p> <ul style="list-style-type: none"> • % of individuals who perceive themselves to be in danger if they do not sleep under an LLIN year-round • % of individuals who express confidence in an LLINs effectiveness in preventing malaria. • Increase the proportion of individuals who encourage discussion about LLIN use and express it as a high priority • % of pregnant women who are aware they are entitled to one free LLIN at their first ANC visit, and one free LLIN at institutional delivery. • % of pregnant women who demand an LLIN during their first ANC visit and at institutional delivery • % of pregnant women and caregivers of children under five who perceive themselves and their children to be in danger if they do not sleep under an LLIN year-round. • % of pregnant women and caregivers of children under five who initiate discussion within their household about the importance of LLIN use and who express it is a household priority • % of household heads who express confidence in IRS efficacy. • % of household heads who express fear or misconceptions about chemicals used in IRS • % of CHVs who express the self-efficacy (confidence) to educate target audiences using interpersonal communication skills, counseling skills, and use of supporting materials • % of individuals who state that only mosquitoes cause malaria. • % of individuals who state that LLINs prevent malaria 	<p>Behavioral Objectives</p> <ul style="list-style-type: none"> • % of individuals who obtain and use LLINs properly everywhere, every night • % of pregnant women and children under five who obtain LLINs and use them everywhere, every night • % of LLIN owners who properly care for their net and repair as necessary • % of households that cooperate with spray operators and follow pre and post spray guidelines given by spray personnel • % of community health workers' who demonstrate the ability to educate target audiences through interpersonal communication and counseling skills, training, and provision of support materials 	<p>NMSP Objectives</p> <ul style="list-style-type: none"> • % of children under 5 years of age sleeping under an LLIN the previous night • % of pregnant women sleeping under an LLIN the previous night • % of households with at least two LLINs • % of households with at least one LLIN for every two people

Strategy 2: Malaria in Pregnancy

National Malaria Strategic Plan Objectives:

- Increase access to prompt diagnosis and effective treatment targeting 85% of the population by 2020.
- Ensure that 80% of the population are protected by malaria preventive measures by the end of 2020.
- To increase the proportion of the population who practice malaria preventive measures from 40% to 85% and sustain knowledge at 98% by the end of 2020.

National malaria in pregnancy policy:

The National Malaria Control Program's approach to combating malaria in pregnancy, consistent with WHO recommendations, includes provision of intermittent preventive treatment of malaria in pregnancy (IPTp) using sulphadoxine-pyrimethamine (SP), the provision of LLINs, and effective diagnosis and treatment. Liberia Technical Guidelines¹⁰ mandated the improved and sustained knowledge, attitudes, and practice on malaria prevention and control (including malaria in pregnancy) to 90%. The new NSP has increased this goal to achieve a 98% accurate knowledge level about malaria's cause, and 85% practice of preventive measures.

National Guidelines include use of multi-channel approaches for health education that emphasize radio spot messages in English and local languages, use of community health volunteers as key change agents for the dissemination of IPTp messages at the community level, use of service providers to remind pregnant women about their next ANC date, and use of local government authorities to sensitize community members about the importance of ANC attendance.

Roles and responsibilities: Malaria in pregnancy

SBCC activities encouraging pregnant women to make use of MIP services will be planned and coordinated at the central level, between the NFHD, CHSD, NMCP, and NHPD. At the facility and community levels midwives are largely responsible for communication with pregnant women. Facility personnel are responsible for patient counseling. At the community level CHVs and trained traditional midwives TTMs are responsible for communicating with pregnant women.

Problem statement:

According to a 2013 malaria SBCC survey, less than one fifth of Liberians responded that they had discussed the issue of malaria in pregnancy (MIP) with spouses or friends in the last year. The majority of those surveyed felt that 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 a source than radio). 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 received two or more doses of SP by 2013. This proportion has remained almost unchanged since 2011. 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. CHVs and 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.

¹⁰ Liberia technical guidelines for malaria in pregnancy. 2015

SBCC emphasis:

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. 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.

BEHAVIORAL OBJECTIVES: Malaria in Pregnancy	
Behavior	Communication
Increase the proportion of pregnant women who attend ANC early and once a month thereafter.	<p>Communication Objective:</p> <ul style="list-style-type: none"> Increase the proportion of pregnant women who believe that early and regular ANC visits ensure they receive appropriate services to protect the health of their children. <p>Key Promise: Attending ANC early and regularly ensures a full check-up and receipt of medicine to prevent malaria during pregnancy.</p> <p>Supporting point: ANC check-ups and medicine to prevent malaria during pregnancy are free.</p>
Increase the proportion of pregnant women who demand IPTp every month beginning in their second trimester, up through institutional delivery.	<p>Communication Objectives:</p> <ul style="list-style-type: none"> Increase the proportion of pregnant women who express confidence in their ability to ask for SP during ANC. <p>Key Promise: IPTp is safe, and according to national guidelines service providers are required to provide it after quickening.</p> <p>Supporting point: IPTp is safe, free, and effective.</p>
Increase the proportion of pregnant women who demand an LLIN at their first ANC visit, and at institutional delivery.	<p>Communication Objectives:</p> <ul style="list-style-type: none"> Increase the proportion of pregnant women who are aware they are entitled to receive an LLIN at their first ANC visit, and at institutional delivery. <p>Key Promise: Sleeping under an LLIN will help prevent malaria during and after pregnancy.</p> <p>Supporting point: LLINs are free, and provided before and after delivery.</p>
Increase the proportion of pregnant women who sleep under an LLIN.	<p>Communication Objectives:</p> <ul style="list-style-type: none"> Increase the proportion of pregnant women who are encouraged by their family and friends to sleep under a net during their pregnancy. <p>Key Promise: Discussing malaria in pregnancy with family and friends will encourage them to sleep under an LLIN.</p> <p>Supporting point: LLINs are free, safe, and effective at preventing malaria.</p>
Increase the proportion of pregnant women who seek prompt care for fever.	<p>Communication Objective:</p> <ul style="list-style-type: none"> Increase the proportion of pregnant women who express prompt care seeking for fever during pregnancy is normal in their community. <p>Key Promise: Seeking care for fever, especially during pregnancy, shows a woman and her family care about carrying a child to term without complications.</p> <p>Supporting point: Promptly seeking confirmation that fever is not malaria will ensure a pregnant woman and her child do not suffer the harmful effects of malaria during pregnancy.</p>

BEHAVIORAL OBJECTIVES: Malaria in Pregnancy	
Behavior	Communication
Increase the proportion of service providers who encourage early and regular ANC attendance.	<p>Communication Objective:</p> <ul style="list-style-type: none"> Increase the proportion of service providers who express confidence in their ability to take the time to encourage early and regular ANC attendance. <p>Key Promise: Taking the time to encourage early and regular ANC attendance ensures fewer pregnant women suffer from malaria in pregnancy.</p> <p>Supporting point: Early and regular ANC attendance among patients will increase the number of doses of SP they can receive, decreasing their chances of malaria in pregnancy.</p>
Encourage the proportion of service providers who provide adequate counseling to pregnant women during ANC (on the important of prompt care seeking for fever, and on the importance, safety, and efficacy of IPTp) .	<p>Communication Objectives:</p> <ul style="list-style-type: none"> Increase the proportion of service providers who express that patient counseling is an essential responsibility. <p>Key Promise: Providing counseling helps pregnant women understand why they should follow provider instructions.</p> <p>Supporting point: Good counseling ensures better testing and treatment compliance among patients.</p>
Increase the proportion of pregnant women with accurate knowledge of ways to prevent malaria in pregnancy.	<p>Communication Objective:</p> <ul style="list-style-type: none"> Increase the proportion of pregnant women who state that IPTp (medicine) can prevent malaria in pregnancy.

AUDIENCE SEGMENTATION: Malaria in Pregnancy	
Primary Audiences	Secondary Audiences
Pregnant women, husbands, mothers in-law	Service providers, CHVs, grandmothers, friends
MESSAGES AND MESSAGE DELIVERY AGENTS	
Agents: Pregnant women (personal advocacy)	Message: Discussing malaria in pregnancy with your family and friends is important.
Agents: : Service providers, CHVs, elected, traditional, and religious leaders	Message: Attending ANC early, and every month after quickening until you deliver will keep you and your baby safe, and ensure you get medicine to prevent malaria and two LLINs.
Agents: Husbands, mothers, in-laws of pregnant women	Message: Discuss malaria in pregnancy with your family and make it known that early and regular ANC attendance is a priority.
Agents: Service providers, CHVs	Message: Get an LLIN at ANC and institutional delivery and sleep under it every night.
Agents: District-level CHVs supervisors	Message: Fever during pregnancy is dangerous, get tested right away if you have a fever.

MONITORING: Malaria in Pregnancy	
Measure exposure and reach of the following activities	
CHANNELS	OUTPUTS
<p style="text-align: center;">Community</p> <ul style="list-style-type: none"> • Interpersonal communication • Community dialogues • Radio magazine shows • Radio talk spots and shows (quarterly) • Television spots and shows (quarterly) • Community drama/theater groups (quarterly) • Information communication technology (SMS, IVR) • National-level media campaign to empower parents • Print materials • Town criers <p style="text-align: center;">Service Provider</p> <ul style="list-style-type: none"> • Pre- and in-service training • Supportive supervision, on-site coaching and mentoring • Regular forums for peer-to-peer sharing of data and data use • Print: job aids and treatment algorithm • Enhancement of service provider interpersonal communication and counseling skills 	<p style="text-align: center;">Process Monitoring Indicators</p> <ul style="list-style-type: none"> • # of house-to-house visits • # of community members reached during community dialogues • # of magazine shows/spots aired • # of television shows/spots aired • # of community theater presentations • # of SMS broadcasted • # of pre & in-service trainings held • # of supportive supervision, onsite coaching and mentoring sessions held • # of peer-to-peer sharing sessions held • # of job aids disseminated • # of town criers having carried out their duties • # of service provider interpersonal communication and counseling skills trainings

EVALUATION: Malaria in Pregnancy		
INTERMEDIATE	OUTCOME	IMPACT
<p style="text-align: center;">Communication Objectives</p> <ul style="list-style-type: none"> • % of pregnant woman who believe that early and regular ANC visits ensure they receive appropriate services to protect the health of their children • % of pregnant women who express confidence in their ability to ask for SP and LLINs of their service provider during ANC • % of pregnant women who are aware they are entitled to receive an LLIN at their first ANC visit, and at institutional delivery • % of pregnant women who were encouraged by their family and friends to sleep under a net during their pregnancy • % of pregnant women who express prompt care seeking for fever during pregnancy is normal in their community 	<p style="text-align: center;">Behavioral Objectives</p> <ul style="list-style-type: none"> • % of pregnant women who attend ANC early and once a month thereafter • % of pregnant women who demand IPTp every month beginning in their second trimester, up through institutional delivery • % of pregnant women who demand an LLIN at their first ANC visit, and at institutional delivery • % of pregnant women who sleep under an LLIN • % of pregnant women who seek prompt care for fever • % of service providers who encourage early and regular ANC attendance 	<p style="text-align: center;">NMSP Objectives</p> <ul style="list-style-type: none"> • % of children under five years of age sleeping under an LLIN the previous night • % of pregnant women sleeping under an LLIN the previous night • % of households with at least two LLINs • % of households with at least one LLIN for every two people

EVALUATION: Malaria in Pregnancy		
INTERMEDIATE	OUTCOME	IMPACT
<ul style="list-style-type: none"> • % of service providers who express confidence in their ability to take the time to encourage early and regular ANC attendance • % of service providers who express that patient counseling is an essential responsibility • % of pregnant women who state that IPTp (medicine) prevents malaria during pregnancy 	<ul style="list-style-type: none"> • % of service providers who provide adequate counseling to pregnant women during ANC 	<ul style="list-style-type: none"> • % of children under five years of age sleeping under an LLIN the previous night • % of pregnant women sleeping under an LLIN the previous night • % of households with at least two LLINs • % of households with at least one LLIN for every two people

Strategy 3: Malaria Case Management

National Malaria Strategic Plan Objectives:

- Increase access to prompt diagnosis and effective treatment targeting 85% of the population by 2020.
- Ensure that 80% of the population are protected by malaria preventive measures by the end of 2020.
- To increase the proportion of the population who practice malaria preventive measures from 40% to 85% and sustain knowledge at 98% by the end of 2020.

National malaria case management policy:

The National Community Health Services Strategic Plan lays out the structure within which case management of malaria efforts operate. At the central level, the CHSD coordinates and supervises all community health interventions. In the context of case management of malaria, this involves liaising with the NMCP, NHPD, and NFHD, to develop an integrated and standardized training curriculum for CHVs.

The core package of services offered by CHVs includes household visits, SBCC activities, and community engagement. Liberia's NMCP provides integrated community case management in communities located outside five km from a health facility. CHVs with iCCM responsibilities provide testing and treatment for simple malaria (among other duties) to children under five, and refer those with severe malaria to health facilities.

Private sector focus:

Liberia's Guidelines on Malaria Case Management indicate Artesunate+Amodiaquine Fixed Dose Combination is Liberia's first-line treatment for uncomplicated malaria. The Guidelines also state this medicine should only be administered to those who test positive using microscopy or an mRDT. As part of an effort to ensure ACTs are widely available, the NMCP has developed a strategy to distribute mRDTs and ACTs in all pharmacies and medicine stores. The goal of this strategy is to ensure 80% of Liberia's urban communities are aware that malaria testing and treatment is available in private medicine shops and pharmacies, and that 50% of the communities aware of this will demand malaria testing before buying malaria drugs.

Roles and responsibilities: Malaria Case Management

At the facility level, service providers are responsible for counseling patients on the importance of prompt test

seeking for fever. Service providers are expected to test every fever, and counsel patients who test positive with malaria on how to complete the full course of ACT. At the community level, effective case management of malaria requires, first and foremost, prompt care-seeking behavior among those with fever, particularly for pregnant women and children under five years of age. Before this happens, correct information about the cause of malaria, and ways to prevent its spread must be communicated to community members by CHVs. Both service providers and CHVs are responsible for communicating the importance of receiving an mRDT to determine appropriate treatment for fever. Close collaboration between service providers, the private sector, and CHVs ensures creating demand for testing is accompanied by availability of mRDTs and ACTs, as well as improved adherence to testing and treatment guidelines.

Problem statement:

According to a 2013 malaria SBCC survey, most Liberians surveyed understood mosquitoes spread malaria but many cited additional, incorrect methods of malaria transmission. Many of those surveyed could name at least one way to prevent malaria, but almost half could not. In addition, almost half of those surveyed doubted the accuracy of rapid diagnostic tests. DHS 2013 data indicates that while 71% of caretakers of children under 5 with fever sought advice or treatment from a health facility or provider, only 42% received a blood test, and only 17% took an ACT the same or next day after the fever began. Liberia’s private sector strategy to increase access to mRDTs and ACTs is based on evidence that community members tended to self diagnose for malaria without demanding a test. Frequent stock-outs, poor attitude of health workers, and time taken to receive treatment were causes cited to have contributed to this behavior. Taken together, the evidence suggests that prompt test seeking for fever at the community level, and testing and treatment according to national guidelines at the service provider level, must improve in order to meet 2020 objectives. Additionally, community demand for mRDTs must be increased as private sector vendors with affordable testing and treatment increase in number and accessibility.

SBCC emphasis:

Interventions should focus not only on awareness, but also seek to address response-efficacy in the reliability of testing among community members and service providers. Awareness building among the general public about the location of private medicine stores and pharmacies with subsidized tests and treatment should accompany the expansion of the initiative. It should be made clear that the only cause of malaria is mosquitoes, and that means of preventing malaria include sleeping under an LLIN and taking IPTp when pregnant.

BEHAVIORAL OBJECTIVES: Malaria Case Management	
Behavior	Communication
<p>Increase the proportion of caretakers of children under five who seek a blood test for malaria within 24 hours of their children’s onset of symptoms.</p>	<p>Communication Objectives:</p> <ul style="list-style-type: none"> • Increase the proportion of caretakers of children under five who perceive their children to be in danger if they do not seek a test within 24 hours of the onset of fever. <p>Key Promise: Children under five are at a great risk of getting malaria, but there are many other harmful illnesses that cause fever. Seeking a test within 24 hours of fever is a way of showing love and protecting children.</p>

BEHAVIORAL OBJECTIVES: Malaria Case Management	
Behavior	Communication
Increase the proportion of individuals who seek a blood test when they suspect they have malaria.	<p>Communication Objective:</p> <ul style="list-style-type: none"> Increase the proportion of individuals who perceive themselves to be in danger if treated without a blood test to confirm presence or absence of malaria. <p>Key Promise: Not every fever is malaria. The medicine to treat malaria is not effective against any other diseases, so the person may continue to get ill if not properly diagnosed. Save time and money by getting tested before seeking treatment.</p> <p>Supporting point: Malaria tests are available at hospitals and clinics throughout Liberia, and by community health assistants in hard-to-reach communities. Rapid diagnostic tests can be done at private medicine stores.</p>
Increase the proportion of those who have been prescribed ACT and complete full dosage.	<p>Communication Objectives:</p> <ul style="list-style-type: none"> Increase the proportion of individuals and caretakers of children under five who perceive themselves to be in danger if treated without a blood test to confirm presence or absence of malaria. <p>Key Promise: Taking the full course of ACT when prescribed ensures that malaria does not come back, and does not progress to severe malaria.</p> <p>Supporting point: Consider the time and money saved by curing malaria completely the first time, rather than only partially and then having to seek testing and treatment again.</p>
Increase the proportion of facility-level service providers, CHVs, and private sector vendors who do a blood test before prescribing malaria treatment.	<p>Communication Objectives:</p> <ul style="list-style-type: none"> Increase the proportion of service providers who express confidence in the accuracy of rapid diagnostic tests and microscopy. <p>Key Promise: Testing patients exclusively with microscopy or rapid diagnostic test ensures they do not suffer from another fever-related illness.</p> <p>Supporting point: Adherence to national guidelines for diagnosis demonstrates compassion for clients and builds trust between provider and patient.</p>
Increase the proportion of facility level service providers, CHVs, and private sector vendors who adhere to national guidelines regarding prescription procedures for positive and negative malaria blood tests.	<p>Communication Objectives:</p> <ul style="list-style-type: none"> Increase the proportion of service providers who express confidence in their ability to test and treat according to guidelines in every instance. <p>Key Promise: Following national guidance on correct treatment procedures for positive and negative malaria test results will ensure patients receive treatment for their disease.</p> <p>Supporting point: Correct prescription practices limit overuse of antibiotics and wastage of ACTs.</p>
Increase the proportion of individuals and caretakers of children under 5 who seek and obtain ACT within 24 hours of their children's onset of symptoms.	<p>Communication Objectives:</p> <ul style="list-style-type: none"> Increase the proportion of caregivers of children under five who are aware that ACT is the correct treatment for simple malaria. <p>Key Promise: ACT is an effective treatment for simple malaria.</p> <p>Supporting point: ACT is free at public health facilities throughout Liberia.</p>
Increase the proportion of caregivers of children under 5 who have accurate knowledge of malaria transmission.	<p>Communication Objectives:</p> <ul style="list-style-type: none"> Increase the proportion of caregivers of children under five who state only mosquitoes cause malaria.

AUDIENCE SEGMENTATION: Malaria Case Management	
Primary Audiences	Secondary Audiences
Mothers, grandmothers, and other caregivers of children under five years in rural and peri-urban areas	Husbands, in-laws, service providers at the facility and community level of all cadres, pharmacists and private medicine store owners
MESSAGES AND MESSAGE DELIVERY AGENTS	
Agents: service providers, CHVs, trained traditional midwives, caretakers, community leaders, teachers	Message: Not all fever/hot body is malaria, get tested for malaria to make sure you are treated for the sickness you have.
Agents: service providers, CHVs, trained traditional midwives	Message: The medicine to treat malaria will not work against any other sicknesses; You may become sick again or even find yourself with serious malaria if you are not tested.
Agents: service providers, CHVs, trained traditional midwives, teachers	Message: Children under five with malaria should receive ACTs on the same day they see malaria symptoms, don't delay seeking treatment for your child.
Agents: service providers, CHVs, trained traditional midwives, teachers	Message: mRDTs are very good; trust the results of your malaria test!
Agents: district-level Community Health Services Supervisors	Message: Follow national prescription guidelines, this will ensure ACT remains an effective tool to fight disease.

MONITORING: Malaria Case Management	
Measure exposure and reach of the following activities	
CHANNELS	OUTPUTS
<p>Community</p> <ul style="list-style-type: none"> • Interpersonal communication • Community dialogues • Radio magazine shows • Radio talk spots and shows (quarterly) • Television spots and shows (quarterly) • Community drama/theater groups (quarterly) • Print materials • Information communication technology (SMS, IVR) • National level media campaign to empower parents regarding home-based management of malaria, and treatment adherence <p>Service Provider</p> <ul style="list-style-type: none"> • Pre & In-service training • Supportive supervision, on-site coaching and mentoring • Regular forums for peer-to-peer sharing of data and data use • Print: job aids and treatment algorithm • Empower CHVs to educate target audiences through IPC and counseling skills 	<p>Process Monitoring Indicators</p> <ul style="list-style-type: none"> • # of house-to-house visits paid • # of community dialogues held • # of radio shows/spots aired • # of television shows/spots aired • # of community dramas organized • # of SMS broadcast • Coverage of national media campaign • # of pre- and in-service trainings held • # of supportive supervision, on-site coaching and mentoring sessions held • # of peer-to-peer sharing sessions held • # of treatment algorithms posted in health facilities • # of in-service trainings in IPC and counseling skills held

EVALUATION: Malaria Case Management		
INTERMEDIATE	OUTCOME	IMPACT
<p>Communication Objectives</p> <ul style="list-style-type: none"> • % of individuals who perceive themselves to be in danger if treated without a blood test to confirm presence or absence of malaria • % of caretakers of children under five who perceive their children to be in danger if they do not seek a test within 24 hours of the onset of fever • % of individuals and caretakers of children under 5 who perceive themselves to be in danger if treated without a blood test to confirm presence or absence of malaria • % of service providers who express confidence in the accuracy of rapid diagnostic tests • % of service providers who express confidence in their ability to test and treat according to guidelines in every instance • % of caregivers of children under five who state only mosquitoes cause malaria • Increase the proportion of caregivers of children under 5 who are aware that ACT is the correct treatment for simple malaria. 	<p>Behavioral Objectives</p> <ul style="list-style-type: none"> • % of individuals who seek a blood test when they suspect they have malaria • % of individuals and caretakers of children under 5 who request a blood test to confirm the presence or absence of malaria before treatment • % of those for whom ACT is prescribed who complete the full course • % of facility level service providers, community-based health workers, and private sector vendors who do a blood test before prescribing malaria treatment • % facility level service providers, CHVs, and private-sector vendors who adhere to national guidelines regarding prescription procedures for positive and negative blood tests • % of individuals and caretakers of children under 5 who seek and obtain ACT within 24 hours of their children's onset of symptoms 	<p>NMSP Objectives</p> <ul style="list-style-type: none"> • # of confirmed malaria cases per 1,000 per year • % of children under five years old with fever in the last two weeks who received antimalarial treatment according to national policy within 24 hours of onset of fever

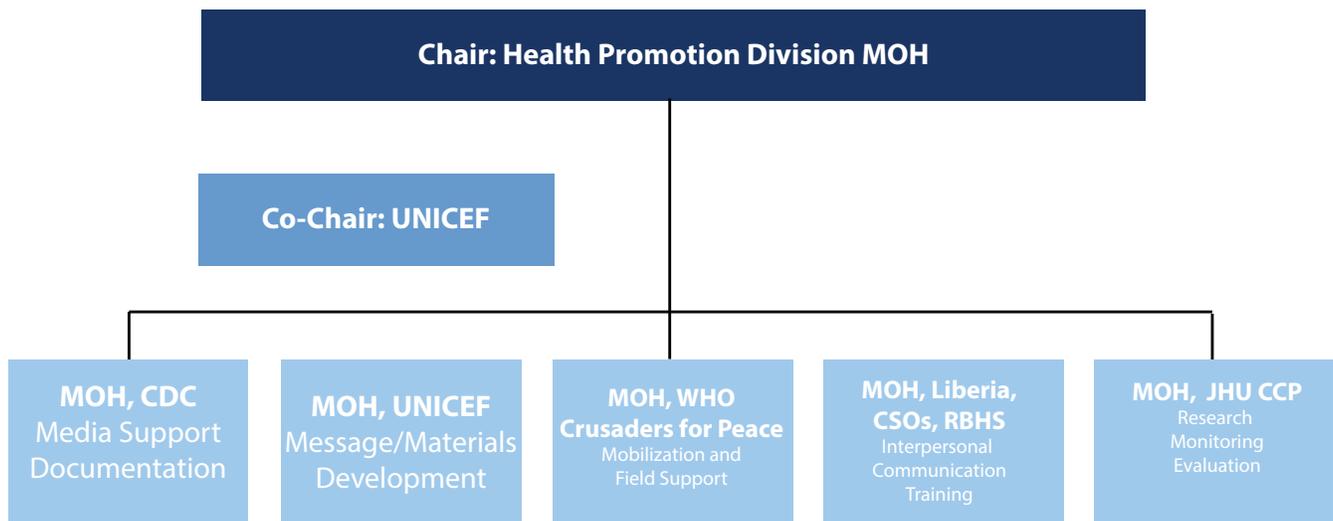
Emergency preparedness focus:

Emergency preparedness should be integrated across health services and be an integral part of every one of Liberia's divisions within the Ministry of Health. Crises evolve in stages, and patterns discovered as they occur may help anticipate problems before they happen. It is important to carefully study crises as they occur, and adapt specific methods of communicating to more effectively reach target audiences and affect their behavior. The process of pattern discovery and subsequent tailoring of communication will be similar whether responding to an Ebola outbreak, Lhasa fever resurgence, or an outbreak of malaria in a pre-elimination setting. What will differ are the contexts within which these crises occur, and specific means of using data and social mobilization to address fears and concerns.

Roles and responsibilities: Coordinating Mechanisms for Emergency Communication in Liberia
Central level:

The responsibility of Liberia’s central level will be to link local-level command centers to the national command center, located within the emergency operation center. In the malaria context, this will involve setting up a number of decentralized case management centers to trace malaria cases and coordinate reactive case detection and treatment efforts. In a non-malaria context it would mean working support the emergency response while maintaining those malaria activities that remain possible. The Ministry of Health, NHPD, and the NMCP are responsible for the design, implementation, monitoring, and evaluation of both media and social mobilization activities during crisis. At the county and district levels, county health teams and district health teams are responsible. The figure below shows how this structure was employed during the EVD response. If CHVs working on malaria activities are drawn to support an emergency, the means of recruiting additional volunteers to sustain malaria social mobilization are included below.

Liberia Social Mobilization Structure
National-Level Coordination Structure for EVD Response



Elements of social mobilization during crisis:

- Implementing partners must be registered with the Community Health Team and Community Mobilization and Community Engagement chair.
- The Chair of the Social Mobilization Working Group within the County Health Team will lead activity planning and ensure implementing partner activities are coordinated.
- Implementing partners will consult paramount chiefs, clan chiefs, general town chiefs, town chiefs, and quarter chiefs before initiating activities at the community level. In municipal areas counselors will be primary point of contact. In addition, religious leaders and local stakeholders should be included in planning and decision making. All activities must comply with local by-laws.

Support and supervision of community mobilization activities during crisis:

- Selection and recruitment of community mobilizers (whether for emergency response or malaria activities)

Support and Supervision of Community Mobilization Activities During Crisis:

- Selection and recruitment of community mobilizers (whether for emergency response or malaria activities) should be done in collaboration with local leaders. Preference is to be given existing trained CHVs. Recruitment of social mobilizers from outside communities where activities are taking place should be avoided.

While specific partners and partnerships may differ, depending on the type of crisis, the coordinating mechanism, media support, message development approval system, mobilization of communities, interpersonal communicating training, and research, monitoring, and evaluation processes will not change.

Community Engagement through Social Mobilization:

While central level responses to crisis shape community engagement efforts a lesson learned during the EVD crisis was that communities will take matters into their own hands as well. Engagement with unplanned, organic community responses is crucial. Key considerations for community engagement include:

- Existence of well-trained social mobilizers at the community level who understand the importance of consulting with local leaders, civic-based organizations, faith-based organizations etc.
- Existence of clearly delineated roles and responsibilities for service providers and community health workers. Community health workers should act in an intermediary role between service providers and the community, but take care not to engage in service provision activities.

References

Ajzen I, Fishbein M. Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ; Prentice-Hall: Englewood Cliffs; 1980.

Allen D R, Shuford K. A Qualitative Assessment of the Ownership and Use of Mass Distribution Campaign Nets in Liberia: A Report of Assessment Activities and Findings. February 2014. Atlanta, GA: Centers for Disease Control and Prevention; 2014.

Bandura A. Bandura A. Social foundations of thought and action: A social cognitive theory. NJ; Prentice-Hall: Englewood Cliffs; 1986.

Johns Hopkins Center for Communication Programs. Attitudes, Beliefs and Practices Relevant to Malaria Prevention and Treatment in Liberia, 2013. Final Report. Baltimore, MD: Johns Hopkins Center for Communication Programs; 2014.

Liberia Institute of Statistics and Geo-Information Services. Liberia Demographic Health Survey 2014: Final Report. Monrovia, Liberia: Ministry of Health and National AIDS Control Program; Rockville, MD: ICF International Inc.; 2014.

Liberia Institute of Statistics and Geo-Information Services. Liberia Malaria Indicator Survey 2011: Final Report. Monrovia, Liberia: Ministry of Health; Calverton, MD: ICF International Inc.; 2012.

Liberia National Malaria Control Program. National Malaria Control Program Monitoring and Evaluation Plan, 2016–2020. Monrovia, Liberia: Liberia National Malaria Control Program; 2015.

Liberia National Malaria Control Program. National Malaria Strategic Plan, 2016–2020. Monrovia, Liberia: Liberia

National Malaria Control Program; 2015.

Liberia National Malaria Control Program. National Policy and Strategic Plan on Indoor Residual Spraying (IRS) for Liberia 2012–2017. Monrovia, Liberia: Liberia National Malaria Control Program; 2012.

Liberia National Malaria Control Program. National Policy and Strategic Plan on Integrated Vector Management (IVM) for Liberia, 2012–2017. Monrovia, Liberia: Liberia National Malaria Control Program; 2012.

Liberia National Malaria Control Program. Strategic Plan and Operational Guidelines on Long-Lasting Insecticidal Nets (LLINs) for Liberia, 2012–2017. Monrovia, Liberia: Liberia National Malaria Control Program; 2012.

Liberia National Malaria Control Program. Technical Guidelines for Malaria in Pregnancy, 2015. Monrovia, Liberia: Liberia National Malaria Control Program; 2015.

Partnership for Advancing Community-based Services. Knowledge, Attitudes and Practices Survey. 2015.

President's Malaria Initiative. President's Malaria Initiative Strategic Plan, 2015–2020. Washington D.C.: President's Malaria Initiative; 2015.

Rogers RW. Cognitive and physiological processes in fear appeals and attitude change: A revised theory of protection motivation. In J. T. Cacioppo & R. E. Petty (Eds.), *Social psychology: A source book* (pp. 153–176). New York: Guilford Press. 1983.

Roll Back Malaria Partnership. Action and Investment to Defeat Malaria, 2016–2030. Geneva: World Health Organization; 2015.

Roll Back Malaria Partnership. Malaria behavior change communication (BCC) indicator reference guide. 2014. Geneva: World Health Organization; 2014.

Sustainable Development Goals. Accessible at: <https://sustainabledevelopment.un.org/>

World Health Organization. Global Technical Strategy to Defeat Malaria, 2016–2030. Geneva: World Health Organization; 2015.

World Health Organization. WHO Policy Brief for the Implementation of Intermittent Preventive Treatment of Malaria in Pregnancy Using Sulfadoxine-Pyrimethamine (IPTp-SP), April 2013. Geneva: World Health Organization; revised 2014.



President's Malaria Initiative

