

Liberia Ministry of Health

National Malaria Control Program

Social and Behavior Change Strategy

2021-2025



A satisfied client and health service provider

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Foreword

The Liberia National Malaria Strategic Plan (NSP) 2021–2025¹ redefines the strategic direction and focus of the malaria program, including strengthening of management and coordination structures, health systems, and capacities to achieve greater equity, coverage, quality, and more effective delivery of the interventions. In addition, the malaria NSP includes plans for preparedness and timely response during emergencies to ensure malaria control activities continue with minimal disruptions in an emergency (e.g., Ebola Virus Disease or coronavirus).

As the first National Malaria Social and Behavior Change Strategy for Liberia, this document is intended to guide all social and behavior change efforts supporting the objectives outlined in the NSP.

The participatory strategy development process involved partners of the Ministry of Health (National Health Promotion Unit (NHPU), the National Community Health Services Program (NCHP), the NMCP, Family Health Program (FHP) at the national and subnational levels, donors, non-governmental organizations, and international partners.

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¹ National Malaria Control Program, 2020; Malaria National Strategic Plan 2021-2025; Ministry of Health, Liberia

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Acronyms

ACT	Artemisinin-Based Combination Therapy
CHA	Community Health Assistant
CHT	County Health Team
CHV	Community Health Volunteer
DHT	District Health Team
FARA	Fixed Amount Reimbursement Agreement
GTS	Global Technical Strategy
iCCM	Integrated Community Case Management
IPTp	Intermittent Preventive Treatment for Malaria in Pregnancy
IRS	Indoor residual Spray
ITN	Insecticide-Treated Net
IVM	Integrated Vector Management
LDHS	Liberia Demographic and Health Survey
LMIS	Liberia Malaria Indicator Survey
MBS	Malaria Behavioral Survey
MOH	Ministry of Health
mRDT	Malaria Rapid Diagnostic Test
NCHP	National Community Health Services Program
NMCP	National Malaria Control Program
NSP	National Malaria Strategic Plan
PBC	Provider Behavior Change
PMI	U.S. President’s Malaria Initiative
RBM	Roll Back Malaria
SBC	Social and Behavior Change
SMS	Short Messaging Service
S.P.	Sulphadoxine pyrimethamine
STAIP	Strategic Technical Assistance for Improved Health System Performance and Health Outcome
TTM	Trained Traditional Midwife
WHO	World Health Organization

Vision

The vision of the National Malaria Control Program is a malaria-free and healthy Liberian population. The National Malaria SBC Strategy (2021-2025) outlines social and behavior change approaches that focus on improving critical areas of malaria prevention and treatment to support the vision of the National Malaria Control Program. No person should die or suffer from malaria, a preventable disease.

The Role of Social and Behavior Change in Malaria Prevention, Treatment, and Elimination

Social and Behavior Change (SBC) is a strategic design-thinking process that integrates different methodologies (e.g., advanced audience segmentation, behavioral science, strategic communication, and community mobilization) and develops solutions tailored to each unique behavioral challenge. SBC approaches seek to understand individual, social, environmental, and structural determinants that drive audiences to achieve positive health and development outcomes. Interventions are cross-cutting and are applied across all domains of malaria control programs to support desired outcomes. As such, the integration of SBC interventions into strategic malaria plans is crucial for eliminating the disease².

There are many social and behavioral barriers to the acceptance and use of malaria preventive measures. More effective strategies can be developed through an improved understanding of these behavioral factors and how they influence exposure to malaria. This strategy outlines evidence-based, theory-driven approaches that can positively influence malaria prevention and treatment behaviors. Further, by taking a systems-based approach, including advocating for improved coordination and policy change, this strategy aims to contribute towards Liberia's malaria elimination efforts.

SBC encompasses more than communication. Human behavior is influenced by several subconscious biases, contextual factors, and psychological or mental "shortcuts" that do not always represent a rational, logical pathway. SBC must evolve and change to meet the complexities presented by human behavior. This strategy will draw on advances in the field, such as human-centered design and behavioral economics, to design messages and interventions that reflect the behavioral nuances of a target population. Enhanced audience segmentation through audience profiles (personas), empathetic engagement of end-users, and critical review of the behavioral patterns that emerge from data on current malaria behavior will strengthen the SBC approaches outlined by NMCP to achieve stated malaria goals.

Hence, this strategy takes into consideration several important factors which influence individual as well as interpersonal (provider-client) and community-level behaviors (for example, local perceptions of malaria and its causes; household-decision making; patterns of treatment-seeking behavior during episodes of malaria; the role of the community in implementing malaria prevention and treatment measures; resource and time constraints; gender norms; religious and traditional beliefs; and social

²The Strategic Framework for Malaria SBCC: 2018-2030

norms). All these factors play a significant role in determining commitment to consistent practice malaria preventative behaviors at the individual, household, and community levels.

Behavioral models are critical to developing informed, relevant, and effective SBC interventions to eliminate malaria. Liberia's National Malaria Communication Strategy (2016-2020) drew upon the Pathways Framework³ and included elements of several theories of behavior change. This strategy updates the Pathways Model, which is an integrated model of behavior change. The updated model reflects current realities related to individual attitudes, beliefs, practices, social structures, the environment, and gender. For more details, see appendix A: Pathways Framework.

Priority Areas for SBC

This strategy focuses on applying SBC approaches to influence knowledge, attitudes, practices, and outcomes in three areas known to contribute towards malaria prevention, treatment, and elimination effectively:

Malaria Case Management

- SBC will focus on care-seeking behaviors, as well as communication gaps among clients and service providers before, during, and after care, especially those related to parasitological testing of all suspected malaria cases before treatment, and adherence to treatment in line with NMCP technical guidelines, based on the World Health Organization (WHO) 3-T's (Test, Treat, and Track).
- SBC can support awareness among individuals, providers, and communities on the availability and risks posed by substandard and counterfeit antimalarial medicines.

Integrated Vector Management

- SBC will focus on the demand for ITNs to increase the acquisition of nets during mass distribution and continuous distribution efforts.
- SBC will address communication gaps related to care, misuse, and beneficial net repurposing while establishing a culture of consistent, year-round use by all Liberians.
- SBC will focus on knowledge and acceptance of Indoor Residual Spraying (IRS) and larvicides.

Malaria in Pregnancy

- SBC will support Liberia's updated technical guidelines for malaria case management and malaria in Pregnancy (2020), which follows WHO recommendations on timing, frequency, and dosage protocol for intermittent preventive therapy for malaria in pregnancy (IPTp), to promote a minimum of 3 doses of IPTp.

³ Kincaid DL, Figueroa ME, Underwood C. Pathways

Situation Analysis

Malaria is endemic in Liberia. It poses a risk to the entire population year-round, especially pregnant women and children under five (the 2019-2020 DHS lists as particularly vulnerable).

Knowledge and perceptions of malaria prevention are high in Liberia. According to the Liberia 2016 Malaria Indicator Survey (MIS)⁴, 58% of women surveyed had seen or heard a malaria message in the past few months; among them, the most common messages are those about bed nets, such as 'use your mosquito net' (98%), 'everywhere, every night, sleep under the net' (96%), and 'hang up, keep up' (57%). Other messages were also reported by a large majority of women exposed to the malaria message: 'if you have fever, go to the health facility' (93%), and 'pregnant women should take drugs to prevent malaria' (91%).

According to the 2019-20 Liberia Demographic and Health Survey (LDHS), 55% of households possess at least one Insecticide Treated Net (ITN). However, according to the 2019-20 DHS, only 40% of the population had access to nets. In fact, 45% of households did not have any net, and another 30% did not have enough nets to cover at least one net for two people.⁵

ITN access, use, seasonal temperature variations, and rainfall can lead to shifts in net use over a year. Among those who have access to a net in the 2019 DHS, use is 98% (78% for pregnant women). However, pregnant women and most children under five are not regularly sleeping under ITNs. Over half of all pregnant women surveyed (53%) did not report sleeping under an ITN. This trend held in children under five (56%). Given that 98% of people with access to a net use them, access to nets must be increased.

Fever is a primary clinical manifestation of malaria, although it is also a symptom of other illnesses. According to the 2019 LDHS, a quarter of children (25%) under five had a fever during the two weeks preceding the survey. The percentage of children with a fever was slightly higher among rural areas than in urban areas (27% and 24%, respectively). Advice or treatment was sought for 81% of children with a fever, and almost half (49%) had blood taken from a finger or heel for testing.

Nearly 90% of women with a live birth in the two years preceding the survey reported taking at least one dose of sulphadoxine-pyrimethamine (S.P.) for intermittent preventive treatment in pregnant women (IPTp), 70% received two or more doses, and 40% reported taking three or more doses. In

⁴ Liberia 2016 Malaria Indicator Survey (MIS)

⁵ Liberia Institute of Statistics and Geo-Information Services (LISGIS), Ministry of Health and Social Welfare [Liberia], and ICF. 2020. Liberia Demographic and Health Survey 2019-20: Key Indicators. Monrovia, Liberia, and Rockville, Maryland, USA: Liberia Institute of Statistics and Geo-Information Services (LISGIS), Ministry of Health and Social Welfare, and ICF.

addition, the IPTp3 trend indicates an increase from 11% in 2011 to 23% in 2016 and 40% in 2019 (2019-20 DHS). Thus, despite the increase in IPTp uptake, there is room for improvement.

SBC Strategy Objectives

The National Malaria SBC Strategy (2021-2025) contributes towards goals and objectives outlined in the National Strategic Plan 2021–2025. In addition, the strategic objectives are informed by the National Health Promotion Policy and Plan and the National Communication Strategy (2016-2021). This malaria SBC strategy also reflects the goals of the WHO High Burden to High Impact strategy and WHO’s Global Technical Strategy (GTS) 2016-2030, the Roll Back Malaria Partnership to End Malaria (RBM), and the U.S. President’s Malaria Initiative (PMI). The RBM Social and Behavior Change (SBC) working group’s strategic framework and PMI’s global strategy also served as important guidance documents.

The National Malaria SBC Strategy (2021-2025) contributes towards goals and objectives outlined in the National Strategic Plan 2021–2025. The SBC-specific strategy objectives include:

At the Individual Level:

- To maintain high levels of knowledge (98%) related to malaria, including prevention behaviors
- To increase nightly net use to 65%
- To increase the proportion of individuals who adhere to treatment based on test results (quality medicines prescribed by recognized medical providers) to 70%

At the Household Level:

- To maintain the proportion of the general population who correctly and consistently use the net (once accessed), currently at 98%
- To increase household acceptance of IRS to 85%

At the Community Level:

- To increase the proportion of children and pregnant women who seek quality malaria preventative services, specifically, access to nets, to 75%
- To increase the proportion of pregnant women who seek quality malaria preventative services at least three times (IPTp3+) during ANC visits to 70%

At the Service Level:

- To increase the proportion of the population who seek prompt care for a fever to 75%
- To increase the proportion of people who demand a test to 80%
- To increase the proportion of caregivers for children under five with recent fever who receive anti-malarial drugs to 90%
- To increase IPTp rates and net access among pregnant women by ensuring providers adhere to clinical guidelines

Strengthening Coordination for Effective SBC Implementation

Each of the stated SBC priority areas involves a range of actors within the Government of Liberia and external partners. SBC efforts can only realize their full potential for improving results with improved coordination at the national and sub-national levels. A shared agenda for SBC and clarity on the roles and responsibilities are critical to effectively implementing this strategy and fully achieving the objectives.

While the NMCP is responsible for providing leadership, coordination, and strategic direction for operationalization of the strategy, effective collaboration with other multi-sectoral stakeholders at all levels will ensure strategy implementation and scale-up results in high-quality malaria prevention, care, and treatment efforts across Liberia. Through regular coordination meetings, message harmonization efforts, information sharing, joint monitoring, and other coordination efforts, the SBC efforts outlined in this strategy will reach the outlined objectives. Therefore, this strategy aligns with the coordination plan outlined and discussed in the National Malaria Strategic Plan 2021-2025. In addition, it is expected that all stakeholders, implementing partners, and donors will actively participate in providing technical and funding support as appropriate and support the implementation of the SBC interventions to support congruent thematic areas as outlined in the National Malaria Strategic Plan 2021-2025, the National Communication Strategy (2016-2021), the National Health Promotion Policy and Plan.

Ministry of Health “Healthy Life” Umbrella Brand

The Ministry of Health developed the “Healthy Life” brand as an overarching symbol and a unifying identity for Liberia’s revitalized health system for all health-promoting activities, materials, and messages. The MOH’s umbrella logo will be included in SBC media, materials, and messages to align with the MOH efforts to engage all units in promoting a Healthy Life. This brand approach effectively impacts social norms and emphasizes a community value about everyone’s responsibility in preventing malaria transmission for a “Healthy Life.”

Proposed SBC Channels

An array of SBC channels will be used to reach the primary audience, including:

- **Umbrella “Healthy Life” campaign** (see above MOH Healthy Life Umbrella campaign).
- **Health talks** are facility-based short presentations that are often health-focused. Talking points and visual aids should guide the talks.
- **Radio** is a top source of information on malaria in Liberia; before airing audio content, there should be a clear strategy including the type of content, proposed frequency/timing, anticipated timeline, monitoring plans, and, eventually, a mechanism for evaluating impact.

- **Print materials** that are understood by a broad audience, durable to withstand the elements, and relevant.
- **Real Stories** Use examples and testimonials of real people to highlight the benefits of the intended behavior.
- **SMS messages** with information and motivation can be blasted to mobile phones regularly, reinforcing practices using cues to action.
- **Social media platforms** refer to internet-based programs such as Facebook.
- **Community outreach**, including community drama, Video Clubs, advocacy and sensitization meetings, town halls, town criers, marketplaces, and dialogues.
- **Door-to-door mobilization** to deliver messages concerning IRS with social mobilizers who can disseminate information to communities on when and how households should prepare for IRS before, during, and after the spraying exercise.
- **Advocacy and town hall meetings** with communities and community leaders will disseminate information on SBC activities and address rumors and misconceptions around SBC activities.
- **Faith and community leaders**- Town chiefs, women's clubs, youth clubs, health committees, traditional leaders, school health clubs are potential behavior change agents that can promote malaria prevention and control.
- **Service providers** are trusted sources and can help disseminate information as part of routine care. In addition, they can engage in multiple forms of health promotion, including facility visits, health talks, home visits, and outreach by community health workers (CHAs, CHVs, TTMs, etc.)
- **Pre-service and in-service training** is an opportunity to integrate key malaria SBC messages focused on service provider attitudes, self-efficacy, perceived risk, and social norms.
- **Job aides** could clearly outline national guidelines in an easy-to-use format.
- **Cues to action** challenge SBC implementers to examine existing behaviors the key audience does well and identify potential avenues for leveraging those existing habits (as cues) to encourage the uptake of preventative malaria behaviors.
- **Schools** can incorporate malaria awareness and control as health education topics, including dangers associated with malaria and key preventative actions they should take, including ITN use and care.
- **School health teachers and nurses** can also raise awareness of malaria prevention and treatment through class educational activities.
- **Mass distribution** should encourage registration, raise awareness about the time and location of distribution points, encourage people to obtain and offer options for replacing nets either in the private sector or through routine distribution channels.

Gender Integration

SBC activities, including malaria SBC activities, should consider gender for effective programming. This strategy will prioritize the integration of gender across all priority areas of this activity. According to the LDHS 2019-2020, 69% of currently married women participate in all three specified household decisions either alone or jointly with their husbands, and 12% do not participate in any of the three decisions. SBC activities will improve household gender dynamics related to malaria through increased support during pregnancy (emotional support, accompaniment to health services, transportation, and domestic responsibilities), including seeking care and support for children under five.

In addition, this strategy will highlight areas for increased male involvement within the priority areas of malaria case management, integrated vector management, and malaria in pregnancy. For example, this strategy may materialize as a shared responsibility, joint decision-making during fever case seeking, advocating for ITN use every night, or male partners providing support for pregnant women.

The Malaria National Strategic Plan (2021-2025) cites a 2018 process evaluation report⁶ finding that adolescents face unique barriers, particularly pregnant girls. These barriers include:

- being frequently unable to access health facilities independently (as health staff requires the presence of an adult),
- shame related to their pregnancy,
- poor adherence and refusal to access resources often requiring extensive follow-up from healthcare workers,
- lack of social support due to absent fathers of their babies, and
- language barriers at the health facility. Considering the impact of gender in malaria, SBC can assist in overcoming these barriers.

Assumptions

This strategy is based on the following assumption:

- **Data:** An evidence-driven, theory-informed strategy requires comprehensive and recent behavioral data. This strategy focuses on SBC interventions based on available behavioral, demographic, and epidemiological data. The assumption is that newer data will become available over the next five-year period. Breakthrough ACTION in coordination with the NMCP plans to field a Malaria Behavior Survey in 2021, which will provide updated malaria behavioral data. As additional data becomes available from forthcoming formative assessments, ***NMCP will encourage widespread dissemination while continually reviewing all available evidence to inform the development of SBC interventions to reflect variations across counties, audiences, behavioral determinants, and other key factors.*** Regular data use activities at all levels (review meetings, bulletins, dashboard at least quarterly) should include an analysis of data relevant to SBC efforts.
- **Public Health Emergencies:** Public health emergencies, infectious disease outbreaks, and other public health risks are evolving situations that will continue to impact malaria SBC activities for the foreseeable future. SBC is critical to preserve the previous gains in malaria prevention and treatment and mitigate the impact of public health emergencies on the demand, utilization, and update of malaria interventions. The assumption is that public health emergencies (e.g., Ebola Viral Disease, COVID-19) will continue to rise in Liberia and may impact malaria SBC activities for the foreseeable future. For example, emergency preparedness did not change the importance of social mobilization, but it has impacted how mobilization efforts were operationalized during the COVID-19 outbreak. ***NMCP, in consultation with partners, will guide how the continuation of routine SBC malaria***

⁶ Process Evaluation Report, Plan International, 2018

activities during public health emergencies. NMCP will also support efforts to track, monitor, manage, and mitigate rumors that may emerge related to public health emergencies.

- **SBC Capacity:** Successful implementation of this strategy depends on trained and experienced SBC practitioners to support such activities at the central, county, district, and community levels. The assumption is that **NMCP will identify opportunities to continue strengthening existing structures to contribute to the planning, design, development, implementation, monitoring, and evaluation of this National Malaria SBC strategy.** For example, capacity assessments to capture SBC knowledge and skills and develop future training opportunities or developing a detailed message guide that includes harmonized messages for malaria prevention and treatment.
- **Advocacy:** NMCP will continue to be a highly visible program within the Ministry of Health. The assumption is that **as NMCP leads malaria advocacy efforts, there will be requests for increased support and coordination necessary to carry out SBC activities.** NMCP will also engage other Ministries (e. g. Internal Affairs, Education, Agriculture, Gender, and Youth) to coordinate high-quality SBC activities for optimal results.

Behavior Specific SBC Strategies

Behavior specific SBC strategies will address the following key areas: Malaria Case Management, Integrated Vector Management, and Malaria in Pregnancy.

Malaria Case Management

At a glance: SBC efforts will support the service delivery continuum for both clients and providers in alignment with national guidelines and treatment protocols. For example, creating demand for testing, building trust in the results, supporting providers to align to national protocols, and ensuring clients take a complete regimen of quality Artemisinin-Based Combination Therapy (ACTs) if prescribed.

Current Situation

According to the WHO treatment guidelines (which NMCP adopted in 2011 and recently updated in 2020),⁷ every patient suspected with malaria should be assessed and tested with malaria rapid diagnostic tests (mRDT) or microscopy and treated based on the positive test results and classification. The NMCP adopted the WHO 3-Ts (Test, Treat, and Track) policy in 2010.

The percentage of suspected malaria cases that receive a parasitological test at public/private health facilities is high. According to the routine health management information system-2020, the testing rate stands at 95% for children under five. However, the population-based Malaria Indicator Survey 2016 result reported that 49% of children under five received tests for fever. Furthermore, the LDHS 2019-2020 shows little change since 2016, as advice or treatment from a facility/provider was sought for only 48% of children the same or the next day in 2019.⁸ These results are below the desired target of 95% as per the National Strategic Plan 2021-2025.

Since the introduction of mRDTs, confirmed malaria diagnosis has increased significantly in the public sector (currently 94%). According to the malaria case management barrier study⁹, the quantitative findings show that of the 83 patients interviewed, 52 patients acknowledged that there were no challenges during the course of the treatment at the facilities. However, 31 patients admitted facing different challenges ranging from health workers' attitudes to being given a prescription because of stock-outs. These challenges were similar to the challenges discussed by participants in the qualitative part of the report, which mentioned poor treatment-seeking attitudes were due to stock-outs of Malaria drugs and testing kits, unavailability of services, inaccessibility of healthcare, unaffordable services, and health worker attitudes. A patient receiving treatment without a confirmed diagnosis is contrary to the national guidance. In Liberia, artemisinin-based combination therapy (ACT) is the recommended first-

⁷ WHO's Guidelines for the Treatment of Malaria, Second Edition (2010)

⁸ LDHS, 2019-2020

⁹ Malaria Case management barrier study

line treatment for uncomplicated malaria. There are several challenges experienced at the health facility as they administer ACTs, including limited resources, staff turnover, stock-outs, and challenges related to compliance to treatment guidelines and adherence to treatment protocols. In line with the malaria case management technical guidelines, all patients who test positive for malaria must be treated with first-line ACTs. According to the recent HMIS data, 95% of patients received first-line treatment (ACTs).

Several studies show that service providers' attitudes – not only their level of knowledge or training – can affect the type and level of care they provide. Service provider care, specifically their interpersonal communication towards clients, can also affect the uptake of health services, which extends to malaria care-seeking practices. Though responsible for SBC implementation, service providers are not well-resourced, resulting in gaps in the consistency of SBC messages, quality of SBC implementation, and inconsistent provider behavior related to malaria testing and treatment.

Summary of gaps in case management

Nonadherence to treatment guidelines

- Health workers treating uncomplicated malaria with injectables, and treating when the test result is negative for malaria
- Provider-client communication challenges, provider attitudes towards the patient
- Community members may elect to disregard instructions from screeners/ dispensers

Non-compliance to the treatment regimen

- Misinterpretations, lack of adherence to the instructions provided for treatment dispensed at the health facility
- Decisions to stop treatment course pre-maturely (as soon as their health improves)
- Limited awareness and understanding of the benefits of completing treatment

Self-diagnosis and self-medication among community members

- Overall limited health-seeking behavior practices by the community
- Community members access treatment from pharmacy and medicine stores without demanding tests
- Community members use traditional practices and monotherapy that are not recommended (Artemeter tablet, herbs, etc.)
- Community members' primary preference for health-seeking is usually the medicine store (MIS 2011) due to long waiting hours, stock-outs, health worker attitude.

A holistic approach to SBC for service delivery would incorporate SBC approaches for malaria case management to address gaps as they arise across the service delivery continuum. This may include:

Table 1: SBC to address service delivery gaps

Client-side	Provider-side
<ul style="list-style-type: none"> • Seek prompt care with a health provider within 24 hours of first signs and symptoms • Be aware of a malaria test result before receiving treatment; and build trust in malaria test results, as necessary • Complete course of quality malaria medications • Have access to affordable quality-assured treatment, be able to identify and buy recommended treatment according to National Malaria control guideline • Understand that not every fever is malaria • Know that treatment of uncomplicated malaria is free at public health centers 	<ul style="list-style-type: none"> • Educate the client on the importance of testing before treatment and disclose test results • Provide clear instructions and benefits of completing the full course of treatment to patients • Test all suspected malaria cases before treating • Treat only parasitological confirmed malaria cases • Treat confirmed cases based on classification • Track malaria testing and treatment to gauge progress; ensure the use of quality malaria medications • Stock and prescribe/ sell recommended anti-malarial according to NMCP guideline

Audience Analysis

Clients: Family and community members that assist in decision-making regarding care-seeking, especially for children under five years of age, regardless of gender (mothers, fathers, grandmothers, older children, and parents and guardians) must be able to observe the child's mood regularly to detect or identify changes in the child's behavior (feeling sick, loss of appetite, etc.) and seek immediate care when changes occur. Heads of households should serve as the support arm to the caregivers and are usually responsible for providing resources (money) to cover/facilitate treatment for the child at the health facility. Couples should discuss care-seeking in advance of a child's illness so that there is a plan, including finances and logistics, to seek care promptly when a fever presents to encourage male involvement.

Providers: The primary audience to be considered will include health facilities, pharmacies, medicine stores, and community-based service providers who provide services for clients experiencing fever (e.g., Registered Nurses, Medical Doctors, Physician Assistants, laboratory technicians, certified midwives, and CHAs/ CHVs, dispensers). At the facility level, health workers are trained to use of NMCP national guidelines and are provided job aids to identify and manage uncomplicated and complicated malaria cases appropriately.

At community level: Community Health Assistants (CHAs) are trained in integrated community case management of childhood illnesses and are provided job aids to appropriately identify and manage uncomplicated malaria cases according to NMCP guidelines and make appropriate referrals for Complicated cases. The CHA role is critical for the timely management of uncomplicated malaria cases, reducing the chance of progression to complicated malaria in communities beyond 5kms of healthcare facilities.

However, when complicated cases are identified CHA will administer appropriate pre-referral treatment, properly complete referral processes, and follow the referral pathways (Community- Health Facility). When complicated cases are identified, at health facilities where management is not possible, screeners will be able to administer appropriate pre-referral treatment, properly complete referral processes, and follow the referral pathways) for prompt and effective malaria case management.

Gaps identified during supportive supervision visits are expected to be addressed through onsite coaching and mentoring. Dispensers are also critical in providing information on treatment dispensed or prescribed at health facilities, pharmacies, and medicine stores. At facilities, they are mostly the last to have contact with patients. In contrast, they are the first line –and often only line- of contact with patients at pharmacies and medicine stores. Therefore, it is essential to ensure they are adequately trained to explain instructions and benefits to patients for full compliance.

Government: MOH is an important audience for advocacy efforts as they allocate resources, commodities, and support for malaria case management.

Behavior-specific Plan

Table 2: SBC Behavioral Objective 1- By the end of 2025, 75% of caregivers of children under five years old with fever seek treatment with a provider within 24 hours

SBC Behavioral Objective 1
By the end of 2025, 75% of caregivers of children under five years old with fever seek treatment with a provider within 24 hours
Primary audience: Primary caregivers (e.g., mothers, fathers, grandmothers)
Secondary audience: Aunts, Uncles, Screeners, Dispensers, CHVs/ CHAs
Communication Objective 1: Increase the proportion of caregivers of children under five who know when to seek care upon observing danger signs for malaria
Communication Objective 2: Increase the proportion of caregivers who feel confident in seeking care within 24 hours for children under five, immediately after recognizing signs and symptoms of malaria.
Key benefit: If caregivers seek care for children with fever within 24 hours, the children will receive treatment early and will recover quickly, be healthy and happy. Early care-seeking will also prevent uncomplicated malaria from progress to complicated malaria and death.
Supporting points: Prompt and effective care and treatment for malaria brings economic benefits such as reduced economic burden on household health care spending. It also prevents the child from missing school and helps early detection of other infectious diseases that might mimic malaria symptoms. Effective testing and treatment for malaria are free and mostly available in all public health facilities and communities. Private facilities also have the capacity to effectively test and treat malaria at a cost once they are trained.
Channels/ Activities:
Mass Media: Umbrella Media Campaign; Health Talks; Radio
Testimonials: Print materials; Social Media
Community: Faith and community leaders; Community Outreach including community drama, Video Clubs, advocacy and sensitization meetings, town halls, town criers, marketplaces, and dialogues.
Service: Service providers; Job Aids
Cues to action

Gender: All patients, irrespective of their sex, will have equal access to care and treatment for malaria. Therefore, couple communication will be crucial to improving joint decision-making for their child's health. This approach will be enhanced if partners dialogue before the child gets sick. Then, by agreeing on the action required in taking their child/children for health care services, they can save time and focus on seeking care. Patients will also be told that malaria care provided at public facilities is free.

Table 3: SBC Behavioral Objective 2- By 2025, 95% of suspected malaria cases adhere to national treatment guidance following a parasitological test at public/private health facilities and community

SBC Behavioral Objective 2
By 2025, 95% of suspected malaria cases adhere to national treatment guidance following a parasitological test at public/private health facilities and community level
Primary audience: Caregivers (e.g., mothers, fathers, grandmothers, older school-age children)
Secondary audience: Service Providers (Screeners, CHAs, CHVs)
Communication Objective 1: Increase the proportion of community members (especially caregivers) who believe it is important to complete anti-malarial treatment (administered following a confirmatory diagnosis).
Communication Objective 2: Increase the proportion of health workers who prioritize the use of diagnosis guidelines, protocols, and reference materials at the various screening/laboratory rooms.
Key benefit: If malaria cases are identified correctly, they will receive proper treatment. For service providers, clients will have faith in the health system, which will be a point of pride and satisfaction.
Supporting points: Clients will feel empowered and satisfied that the diagnosis was first confirmed with a malaria test before treatment. Providers are satisfied when the caretakers demand a malaria test before treatment. This improves the quality of services delivered in the health facility.
Channels/ Activities: <ul style="list-style-type: none"> • Community: Community outreach, including community drama, Video Clubs, advocacy and sensitization meetings, town halls, town criers, marketplaces, and dialogues; Faith and community leaders • Service: Health talks; Service providers; Job aids; Pre-service and in-service training • Mass media: Umbrella media campaign; Radio; Print; Testimonials; SMS; Social media platforms • Cues to action

Gender: Service providers should treat caretakers with respect regardless of age or gender (a young unaccompanied mother should be treated the same as other couples). A woman's requests and feelings should be given the same importance as a man's. Service providers should feel empowered to conduct testing, regardless of gender dynamics between them and their supervisors and patients. All patients, irrespective of their gender and geographical location should be tested once suspected of malaria. Patients should also be informed that malaria tests are free at public facilities and provided at a cost at private facilities.

Table 4: SBC Behavioral Objective 3- By 2025, 90% of caregivers of children under five are accessing approved anti-malarials from accredited health facilities (public/ private/ medicine stores).

SBC Behavioral Objective 3
By 2025, 90% of caregivers of children under five are accessing approved anti-malarials from accredited health facilities (public/ private/ medicine stores).
Primary audience: Caregivers of young children who receive a parasitological confirmation for malaria (specifically, mothers, fathers, grandmothers, school-age children)
Secondary audience: Screeners, Dispensers, CHAs/ CHVs, CHSS
Communication Objective 1: Increased percentage of community members who know the importance of taking quality first-line anti-malarials
Communication Objective 2: Increased percentage of caregivers who access approved anti-malarials from accredited health facilities (hospitals, health centers, clinics, pharmacy, and medicine stores)
Key benefit: Children will receive the appropriate treatment for malaria, increasing outcomes like child survival. Clients will be happy as the medications will have the desired outcome. These benefits will lead to increased satisfaction, trust in health facilities and the health system.
Supporting points: Caregivers want to provide their families with the best treatment available. Using quality medications will help their family members regain their health.
Channels/ Activities: <ul style="list-style-type: none"> • Community: Community outreach, including community drama, Video Clubs, advocacy and sensitization meetings, town halls, town criers, marketplaces, and dialogues; Faith and community leaders • Service: Health talks; Service providers; Job aids; Pre-service and in-service training • Mass media: Umbrella media campaign; Radio; Print; Testimonials; SMS; Social media platforms

- **Cues to action**

Gender: Caregivers should feel empowered to access appropriate treatment, regardless of gender. Caregivers should follow the full course of appropriate treatment and be linked to recognized health facilities, pharmacies, and medicine stores that stock quality assured anti-malaria drugs. All patients, irrespective of their sex and geographical location, will have access to treatment. Patients will also be told that malaria treatment provided at public facilities is free and at a cost at private facilities. Providers should treat all caregivers and patients the same regardless of gender or age.

Integrated Vector Management

At a glance: To achieve universal coverage of malaria preventive interventions, the NMCP will increase household access, coverage, and use of ITNs, and maintain adequate ITNs stock at health facilities through mass distribution campaigns every three years, routine distribution at ANC facilities, and institutional distribution through health facilities, schools, orphanages, barracks, and other strategic locations. In addition, the program will seek inter-sectoral collaboration with relevant actors to achieve impact.

Subject to the availability of funds and in line with the National Policy and Strategic Plan on IVM 2019 - 2025, indoor residual spraying (IRS) will be implemented in targeted areas with high prevalence as per the malaria epidemiological profile. The NMCP will advocate and collaborate with local and international partners and mobilize funds for IRS. IRS will use only insecticides on the WHO prequalified list that shows acceptable susceptibility for malaria vectors in Liberia.

ITNs can kill night-biting mosquitoes. In addition, IRS can provide extended protection against malaria. SBC approaches will focus on increasing demand for integrated vector control interventions while addressing gaps in the use and care of ITNs.

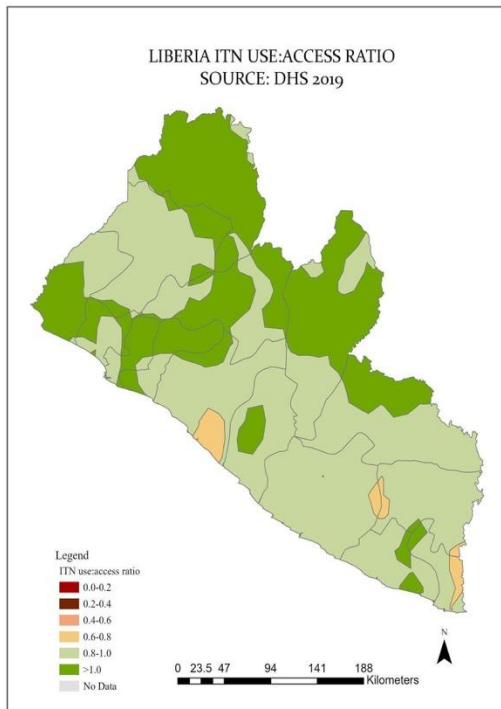
Insecticide-Treated Nets (ITNS)

Current Situation

As a preventive measure, the use of insecticide-treated nets is the core intervention in Liberia. The LMIS 2016 found that among women who have heard of malaria and who say there are ways to avoid getting malaria, 88.2% cited bed nets as a specific way to avoid malaria. Notwithstanding the high awareness of the importance of net use, there is room to increase net access and ownership.

Since 2015, the country has conducted three mass distribution campaigns of over 5 million nets nationwide. In Liberia, net use among those with access to a net is high (98%, LDHS 2019-2020). According to the Liberia Demographic and Health Survey (LDHS-2019) household, ITN ownership is 55%, dropping 62% in the 2016 Liberia Malaria Indicator Survey (LMIS). ITN coverage of a net for every two persons is currently estimated at 25% following the 2018 mass distribution campaign (LDHS 2019). Access, which dropped from 42% in 2016 to 40% in 2019, is likely to have improved due to the 2021 mass distribution campaign (which ended in July 2021).

Figure 1: ITN use in Liberia



Previously, reasons for not having access to an ITN included households not registered, limited access to ITN distribution locations (e.g long distances). The timing between household registration and net distribution also emerged as a contributing factor, as vouchers went missing or household members relocated. Additional challenges with net access include damage to the nets. They are at times lost or thrown out.

Studies have shown very high knowledge of malaria amongst the general population, particularly ITN as a key preventive measure. Knowledge of ITN as the most effective means of protection against malaria is high at 88% (LMIS-2016). However, despite high knowledge of the benefits of net use, several perceptions negatively impact ITN use, including:

- **Nets are too hot and skin burn/irritation:** Low utilization of net among the population is also attributed to the complaint by some that the net is too hot to sleep under, while others complain of skin burn/irritation when they sleep under the net.
- **Nets are stored away:** Importantly, some

households reported having more nets, some stored away for the future. This finding is an indication that some households have more nets than needed while others report having less than they need.

More information is needed on knowledge related to household care of ITNs. When households receive nets, the suggested actions each household should take include households should hang ITNs under the shade to air out for 24 hours, tie up or fold the ITN at daytime to keep it away from dirt, children, and rodents. When the net is in use, proper care includes washing the ITN with bath soap when dirty and preventing holes to extend the life of the ITN. Net care and beneficial repurposing of old nets can be integrated into SBC interventions that promote access to and consistent use of ITNs. Repurposing of old nets should include using old nets as curtains on windows to serve as physical barriers.

With low access to ITNs, utilization is well below desired coverage (39% for the general population compared to the 80% target). The 2019-2020 LDHS reports that about 56 percent of children under five years of age and 53 percent of pregnant women ages 15-49 did not sleep under an ITN the night before the survey. While evidence of a decline in net ownership and access among the general population is of concern, all efforts are being made to increase net ownership, access, and use in the population. The NMCP Strategic Plan (2021-2025) seeks to increase net ownership from 55% in 2019 to 90% by 2025 and use among children under five and pregnant women from 44% and 47% in 2019 to 80% respectively in 2025. Targets will be achieved through various net distribution channels and mass campaigns supported by a sustained SBC campaign. In addition, the routine campaign which targets pregnant women attending ANC visits and facility-based (institutional) deliveries will be expanded to school-based net distribution.

Audience Analysis

The entire population in Liberia is at risk of malaria. As such, everyone must use ITNs. However, children under five and pregnant women remain the primary audience for increasing net access, ownership, and use. Another benefit to increasing net access is that in households with sufficient ITNs, male and female use of nets is nearly identical. However, in households lacking sufficient nets, males are more likely to forgo sleeping under the net. Therefore, SBC approaches must target young children's parents (mother and fathers) to encourage having their children sleep under ITNs to achieve increased access.

Additionally, pregnant women and their spouses/partners must be targeted to ensure that every pregnant woman believes in the importance of sleeping under an ITN throughout their pregnancy and with their newborn babies after delivery. While there is no data on the knowledge of spouses/partners of pregnant women about the danger malaria poses to their pregnant wives/women and unborn child (this information will be included in the upcoming Malaria Behavior Survey (MBS)), they nonetheless can support ITN-use. With this knowledge, spouses must support their pregnant partner's desire to sleep under an ITN everywhere and every night and encourage them to do so.

Service providers (including facility and community-based providers) are often trusted sources of information and play a key role in educating clients on the importance of sleeping under an ITN everywhere and every night. They provide information on when, where, and how to use the ITN in their homes and other places where they sleep. Service providers must provide accurate information on the key benefits of using the ITN, thereby creating trust and enabling clients to see the benefits of sleeping under the ITN and promote continuous use amongst families and communities.

Behavior-specific plans

Table 5: SBC Behavioral Objective 4- Increase proportion of the general population with access to ITN to 80% by 2025

SBC Behavioral Objective 4	
Increase proportion of the general population with access to ITN to 80% by 2025	
Priority Audience: General population	
Secondary Audience: Policy Makers (as they need to ensure adequate supplies of ITNs are available at front-line facilities and in the community), Parents, and Community Leaders.	
Communication Objective 1: Increase the proportion of the population who know the steps necessary to obtain a net	
Communication Objective 2: Increased self-efficacy to obtain ITNs (at mass campaigns, ANC appointments, facility delivery, private sector, or other channels)	
Key Benefit: People cannot use a net they do not have access to. Increasing net access should increase net use, especially in areas where use is high, and access is low. If everyone has access to a net they can use every night, there will be a reduction in the number of times members of the	

household, especially children and pregnant women, will get sick due to illness from malaria. Less sickness will enable student household members to remain in school and adults to miss work less

The general population will also benefit as they will spend less on malaria-related expenses. In addition, fewer missed days from work due to illness might have a more significant economic impact on the entire household.

Supporting Points: Spending less on child health care saves money to be used for other purposes. With fewer health facility visits, caregivers have more time to invest in other economic activities. With healthier children, the caregivers will be viewed favorably by those in their social networks. Healthy children will regularly attend school and have better focus.

Channels/ Activities:

- **Mass Media:** Umbrella Media Campaign; Radio, Print, Testimonial, SMS, Social Media
- **Schools:** School health teachers and/or nurses can also raise awareness of malaria prevention and treatment issues through class educational activities.
- **Mass Campaign:** Before distribution efforts, SBC should encourage county engagement meetings, household registration, raise awareness about the time and location of distribution points, encourage people to obtain and offer options for replacement of nets either in the private sector or through routine distribution channels.
- **Service: Health talks; Service Providers**
- **Community:** Community outreach, including community drama, Video Clubs, advocacy and sensitization meetings, town halls, town criers, marketplaces, and dialogues; **Faith and community leaders**
- **Cues to action**

Gender: Specific programs will be developed targeting heads of households to help promote efforts to secure nets for their households. SBC interventions should consider modeling examples of men and women making decisions together or discussing decisions. Examples include showing images of men and women involved in proper net use and care; radio spots of men and women discussing the importance of using nets; images of a family sleeping under a net can depict a man, woman, and child sleeping under the net; men can be shown helping to hang the net.

Table 6: SBC Behavioral Objective 5- Increase the number of children under five who sleep under ITNS to 80% by 2025

SBC Behavioral Objective 5	
Increase the number of children under five who sleep under ITNS to 80% by 2025	
Primary Audience:	Caregivers (mothers, fathers, grandmothers, older school-age children)
Secondary Audience:	Older Children, CHAs/ CHVs
Communication Objective 1:	Increase the proportion of heads of households (and the general population) who perceive their children as at risk of malaria if they do not sleep under an ITN year-round.
Communication Objective 2:	Increase perceived response-efficacy of ITNs among caregivers of children under five
Key Benefit:	Children under-five who sleep under an ITN can avoid complications due to malaria. The burden of malaria among children under five will reduce, avoiding preventable disease and death.
Supporting Points:	Preventing malaria in young children reduces the burden on an overburdened health system.
Channel/ Activities:	<ul style="list-style-type: none"> • Mass Media: Umbrella Media Campaign; Radio, Print, Testimonial, SMS, Social Media • Schools: School health teachers and/or nurses can also raise awareness of malaria prevention and treatment issues through class educational activities. • Mass Campaign: Before distribution efforts, SBC should encourage county engagement meetings, household registration, raise awareness about the time and location of distribution points, encourage people to obtain and/or offer options for replacing nets either in the private sector or through routine distribution channels. • Service: Health talks; Service Providers; Pre-service and in-service training • Community: Community outreach, including community drama, Video Clubs, advocacy and sensitization meetings, town halls, town criers, marketplaces, and dialogues; Faith and community leaders • Cues to action
Gender:	Specific programs will be developed targeting men to support net use in their families. SBC interventions should consider modeling examples of men and women making decisions together or discussing decisions. Examples include showing images of men and women involved in proper net use and care; images of a family sleeping under a net can depict a man, woman, and child sleeping under the net; men can be shown helping to hang the net or attending ANC with their partners.

Table 7: SBC Behavioral Objective 6- Increase practice of correct and consistent net use among the general population to 65% by 2025

SBC Behavioral Objective 6
Increase practice of correct and consistent net use among the general population to 65% by 2025
<p>Priority Audience: General population</p> <p>Service Providers (facility and community based)</p>
<p>Communication Objective 1: Increased proportion of the population who encourage their friends and family to sleep under an ITN</p> <p>Communication Objective 2: Increased proportion of the population who feel confident in their ability to sleep under an ITN every night</p>
<p>Key Benefit: Used consistently, you can sleep easy knowing you are protected from malaria and that your family is protected and healthy</p>
<p>Supporting Points: If the whole community uses nets consistently, mosquitos will have difficulty feeding and reproducing.</p>
<p>Channels/ Activities:</p> <ul style="list-style-type: none"> ● Mass media: Umbrella media campaign; Radio; Print; Testimonials; SMS; Social Media ● Community: Community outreach, including community drama, Video Clubs, advocacy and sensitization meetings, town halls, town criers, marketplaces, and dialogues; Faith and community leaders ● Mass Campaign: Before distribution efforts, SBC should encourage county engagement meetings, household registration before distributions, raise awareness about the time and location of distribution points, encourage people to obtain and/or replace nets either in the private sector or through routine distribution channels like ANC. ● Services: Health talks; Service providers ● Schools: School health teachers and/or nurses can also raise awareness of malaria prevention and treatment issues through class educational activities ● Cues to action
<p>Gender: Male engagement activities will be developed targeting men to help encourage their support of the use of ITNs. SBC interventions should consider modeling examples of men and women making decisions together or discussing decisions. Examples include showing images of men and women involved in proper net use and care; images of a family sleeping under a net can depict a man, woman, and child sleeping under the net; men can be shown helping to hang the net or attending an ANC with their partners.</p>

Indoor Residual Spraying (IRS)

Current Situation

Indoor residual spraying (IRS) is an effective intervention for malaria control and elimination efforts. IRS works by reducing the lifespan of adult mosquitoes that comes in contact with a sprayed surface. Regular IRS is shown to be effective when there is high coverage of at least > 85% of all structures that are potential resting places for mosquitoes.¹⁰ As a result, it is critical to apply IRS in a targeted manner within the broader context of the national malaria control efforts.

The reintroduction of IRS in Liberia was facilitated by PMI, which implemented the Africa Indoor Residual Spraying project from 2009-2013 in selected districts in five counties, namely: Margibi, Montserrado, Bong, Grand Bassa, and Nimba. The districts where IRS was conducted were selected based on Liberia's strategic approach to prioritize communities with high malaria burdens.

A lack of trust previously affected the IRS intervention when it was first introduced. Despite the hesitation from communities, IRS was conducted for three years, and communities have been inquiring about it in recent years and would like to see it return to Liberia. The National Strategic Plan 2021-2025 includes IRS as a critical strategic approach and aims to have at least 85% of the population in targeted districts protected by IRS by 2025. The WHO recommends targeted spraying of focal points with high malaria transmission as an effective vector control strategy to reduce malaria cases.

Acceptance among community members is a key factor in determining the success of IRS campaigns. In previous campaigns, the reluctance of the heads of households and others in the community to willingly participate or cooperate with an IRS exercise was influenced by misconceptions and /or poor understanding about the intervention.

Audience Analysis

The primary audience for SBC efforts related to IRS is heads of households and caregivers, as they are primarily responsible for the health of their households and are the primary decision-makers for the household. These groups need to be home to allow entry to sprayers and rearrange the household items for the IRS to take place. The heads of households would also need to ensure that no one washes, paints, or replasters the walls after spraying.

A secondary audience would be community leaders and influencers that are important for facilitating community support, which is essential for the overall success of IRS campaigns. Community Leaders and other household members can encourage relocation of household items and tolerance of side effects (e.g., spray odor). They can also help generate community trust and buy-in, thereby allowing heads of households and decision-makers to be more open and accepting of the intervention. Spray teams are also influential as they provide relevant information before, during and after spraying. If IRS moves

¹⁰ WHO 2015: Indoor residual spraying: an operational manual for indoor residual spraying (IRS) for malaria transmission control and elimination – 2nd ed.

forward in Liberia, additional research and focus on the interpersonal communication skills of the sprayers may be worthwhile.

Behavior-specific plan

Table 8: SBC Behavioral Objective 7- Increase the proportion of households that cooperate with spray operators and follow pre- and post- spray guidelines given by spray personnel to 80% by 2025.

SBC Behavioral Objective 7
Increase the proportion of households that cooperate with spray operators and follow pre-and post-spray guidelines given by spray personnel to 80% by 2025.
Primary Audience: Heads of Households, Caregivers
Secondary Audience: Community Leaders
<p>Communication Objective 1: Reduce the proportion of heads of households who express fear or misconceptions about chemicals used for the IRS.</p> <p>Communication Objective 2: Increase the proportion of heads of households that express acceptance and trust of IRS being used in their homes.</p>
Key Benefit: Malaria is prevented, and the family is healthy. If the family accepts IRS, they will save money by not spending out-of-pocket to buy insecticides or miss work due to illness from malaria.
Supporting Points: IRS spraying takes only a day and lasts for up to four months, depending on the efficacy of the insecticide used. It kills mosquitoes as well as other insects. The family has good social standing for being healthy in the community.
<p>Channels/ Activities:</p> <ul style="list-style-type: none"> ● Community: Advocacy and town hall meetings; Door-to-door mobilization; Faith and community leaders ● Mass Media: Mass media (radio) ● Cues to action
Gender: The decision to allow sprayers will likely be made by the head of the household. SBC interventions should encourage couple's communication about the decision-making about spraying the house. Sometimes, sprayers will come when the male head of the household is away, and a female may not feel empowered to let strangers into the house. Also, moving the furniture may be seen as a man's role, so his approval is important.

Malaria in Pregnancy

At a glance: Malaria in pregnancy is a cross-cutting issue involving coordination among various partners. SBC activities to support interventions focus on addressing gaps in obtaining three or more doses of intermittent preventive therapy (IPTp3), in line with Liberia's newly updated National Guidelines for Malaria in Pregnancy (2021).

Current situation

IPTp3 trends indicate an increase from 11% in 2011 to 23% in 2016 and now 40% in 2019 (2019-20 DHS), but progress is still needed to achieve the 80% target set by the Malaria National Strategic Plan 2021-2025.

According to results from the National Malaria Control Program health facility survey (2018), malaria was responsible for 57.3% of morbidity in pregnancy. However, most pregnant women are not receiving the recommended minimum 3+ doses for IPTp for malaria prevention, in part due to factors such as declines in ANC attendance from the first to the fourth visit. According to the LDHS 2019-2020, the percentage of women receiving one or more doses of IPTp increased from 58% in 2009 to 90% in 2019-20, while the percentage receiving two or more doses increased from 47% to 70%. The LDHS 2019-2020 also notes a decline in rates from 90% for IPTp 1 to 70% for IPTp 2 and 40% for IPTp3+. Therefore, the Malaria Strategic Plan aims for at least 80% of pregnant women (disaggregated by age) to use ANC services to be protected with appropriate IPTp3+ doses during pregnancy. However, a 2019 LDHS also showed that only 40% of pregnant women took at least three doses of IPTp. In 2016, 45% did not take IPTp at all because of its perceived side effects.

Given the very high ANC rates across Liberia, 3+ doses of IPTp should be higher if delivered consistently. However, the current low rates of IPTp3 coverage suggests that facility level challenges, failure to administer IPTp, and/or issues with ANC registration may have a role to play. Another factor potentially contributing to the gap between IPTp1 and IPTp 3 could be that service providers do not routinely provide comprehensive information (including purpose, timing, side effects, and benefits) about malaria at ANC due to heavy workloads. The limited available data on this topic requires further research to inform the strategy to address providing comprehensive information on IPTp during ANC visits.

The NMCP and its partners will liaise with the Family Health Division, National Health Promotion Unit, and Ministry of Gender, Youth and Sports to leverage existing gender-responsive and youth-friendly SBC activities. These activities will promote health services to benefit women and young girls. In addition, this strategy will focus on integrating SBC malaria activities into other health services delivery, particularly (1) mental health, sexual and reproductive health including malaria; (2) innovation and digital health interventions created with and for adolescent boys and girls.

Audience analysis

The primary audience in Liberia are females of reproductive age, particularly adolescent girls in their first and second pregnancies, who are vulnerable¹¹ and may face unique barriers. These barriers include being frequently unable to access health facilities independently (health worker requiring the presence of an adult), shame related to their pregnancy, poor adherence, and refusal to access resources often requiring extensive follow-up from healthcare workers, lack of social support due to the absence of the fathers of their babies and language barriers at the health facility. Additionally, adolescent girls face unique barriers in accessing health services that need to be addressed. For example, young pregnant women, especially first-time mothers, may have limited knowledge about the importance and benefits of early ANC, IPTp uptake, and consistent net use. According to the 2019-2020 LDHS, 71% of women in their first trimester of pregnancy attended the first ANC visit. Access for young pregnant girls (15-20 years old) may also have additional financial and social challenges, suggesting a need to encourage families to continue prioritizing these girls, especially those residing in rural areas.

The secondary audiences are the partner, head of household, and parent/guardian residing in urban and rural areas. They play a significant role in helping pregnant women make decisions about their health and provide financial support. Service Providers play an essential role in providing high-quality antenatal care, including IPTp. These secondary audiences may help ensure that pregnant adolescents attend all ANC visits, take at least three doses of IPTp, and adhere to sleeping under treated ITNs.

Behavior-specific plan

Table 9: SBC Behavioral Objective 8- Increase IPT3+ uptake by pregnant women to 80% by 2025.

SBC Behavioral Objective 8	
Increase IPT3+ uptake by pregnant women to 80% by 2025.	
Primary Audience:	Pregnant women and facility-based services providers
Secondary Audience:	Mothers, Grandmothers, Aunts, Community Members (TTM, CHAs/ CHVs, etc.).
Communication Objective 1:	Increase the proportion of service providers who feel well-equipped to provide comprehensive information to pregnant women on the importance of taking IPT3+
Communication Objective 2:	Increase the proportion of pregnant women who believe that S.P. safely prevents the adverse consequences of malaria
Communication Objective 3:	Increase self-efficacy of pregnant women to request S.P. during ANC appointments

¹¹ https://www.who.int/gender/documents/gender_health_malaria.pdf

Key Benefit: IPTp3+ uptake reduces the risk of malaria, thereby increasing the chances of a healthy pregnancy and a healthy baby.

Supporting Points: Pregnant women who attend all ANC services early and often take 3+ IPTp will prevent a malaria infection, complication, and intrauterine or maternal death. Fewer malaria cases will help an overburdened health system better care for pregnant women.

Channels/ Activities:

- **Umbrella media campaign;** Radio; Print; testimonials; SMS; Social Media
- **Community outreach,** including community drama, Video Clubs, advocacy and sensitization meetings, town halls, town criers, marketplaces, and dialogues; Faith and community leaders
- **Service providers:** Health talk; Job aids; Pre-service and in-service training
- **Cues to action**

Gender: Pregnant women should be supported by their parent/guardian or partner when visiting a facility for all ANC visits. Older parents/guardians should help with the financial costs of attending ANC and provide emotional support to the pregnant adolescent, and encourage her to seek care early, and where possible, accompany her on ANC visits. Providers should deliver high-quality care, regardless of the woman's age and relationship status

Table 10: SBC Behavioral Objective 9- Increase consistent and correct net use by pregnant women to 80% by 2025.

SBC Behavioral Objective 9	
Increase consistent and correct net use by pregnant women to 80% by 2025.	
Primary Audience: Pregnant women (especially those with high-risk pregnancies such as adolescent mothers and older mothers)	
Secondary Audience: Partner; Parents, Community Members (TTMs, CHAs/CHVs, and Community Structures), Service Providers	
Communication Objective 1: Increase the proportion of pregnant women who perceive themselves at risk if they do not sleep under an ITN all year round.	
Communication Objective 2: Increase the proportion of women who feel confident in their ability to discuss the benefits of ITN use and care with their spouse	
Communication Objective 3: Increase the proportion of providers who feel confident that they can provide information on the importance of ITNs care and use and distribute ITNs to pregnant women at ANC clinics and during delivery when ITNs are available at the facility.	

Key Benefit: If pregnant women know the importance of using ITN and are encouraged by their parent/guardian or spouse to sleep under ITN everywhere and every night, it will prevent malaria infection during pregnancy, and the mother will have a healthy baby.

Supporting Points: The parent/guardian or spouse would save time and money if they encouraged the pregnant women to sleep under treated ITN everywhere and every night. This will prevent a malaria infection, pregnancy complications, and intrauterine or maternal death.

Channels/ activities:

- **Community: Community outreach**, including community drama, Video Clubs, advocacy and sensitization meetings, town halls, town criers, marketplaces, and dialogues; **Faith and community leaders**
- **Services:** Health talks; Service providers; Job aids
- **Mass media:** Umbrella media campaign; Radio; Print; testimonials; SMS messages; Social Media
- **Cues to action**

Gender: The parent/guardian or partner should support pregnant women to sleep under treated ITN everywhere and every night.

All pregnant women should be provided information on the proper use of nets regardless of their age and relationship status.

Table 11: SBC Behavioral Objective 10- By 2025, increase the % of pregnant girls (aged 10-19) who utilized MIP services to 50%.

SBC Behavioral Objective 10
By 2025, increase the % of pregnant girls (aged 10-19) who utilized MIP services to 50%.
Primary Audience: Pregnant girls (aged 10-19)
Secondary Audience: Partner, Caregivers, Parents, Service Providers, Community Members (TTMs, CHAs/CHVs, and Community Structures)
Communication Objective 1: Increase the proportion of pregnant girls (10-19) with knowledge of malaria prevention methods, including MIP services
Communication Objective 2: Increase the proportion of partners/ caregivers who are supportive of pregnant girls (10-19) utilizing MIP services
Communication Objective 3: Increase the proportion of pregnant girls who believe it is important to attend ANC as soon as they know they are pregnant.

Key Benefit: If you utilize MIP services, you will prevent malaria and its complications and have a healthy pregnancy and healthy baby

Supporting Points: The partner/ caregiver would save time and money if they provided information to pregnant girls on the importance of utilizing MIP services.

Channels/ activities:

- **Mass:** Umbrella media campaign; Radio; Print; Testimonials; SMS; Social Media
- **Community: Outreach, Faith and Community leaders**
- **Services:** Health talks; Service providers
- **Schools: School health teachers / Health Clubs and/or nurses** can also raise awareness of issues related to malaria prevention and treatment through class educational activities.
- **Cues to action**

Gender: Partner/caregiver should provide information to pregnant girls (10-19) on the importance of utilizing MIP services and support the uptake of MIP services. This may be difficult due to social stigma around unwed young girls getting pregnant.

Monitoring and Evaluation

The design and scope of SBC activities will be informed by data from population-based surveys like LDHS, LMIS, and malaria behavior surveys; routine information systems like HMIS and CBIS; operational research, annual knowledge attitude, and practice surveys; and other surveys. Importantly, upcoming malaria-focused surveys present opportunities to explore gaps in current understanding or evidence related to malaria prevention and treatment.

Routine /Monthly Monitoring of SBC activities

Monthly monitoring of SBC activities will be tracked using more than one approach. Several malaria-related accelerator behaviors are currently tracked and reported monthly via the DHIS-2. These include early care seeking, IPTp3 uptake, and prompt ACT treatment.

There is a need to include other malaria-related SBC indicators to complement what is currently being tracked through the monthly DHIS-2 reporting. For example, exposure to malaria messages, knowledge and use of bed nets, and specific malaria-related behavior amongst households-self-efficacy. Based on the concentration of where these behaviors are triggered and practiced, routine quarterly monitoring will involve staff from the county health team, district health team, facilities, and community members who are caregivers and community health workers.

Measuring and reporting the exposure to malaria messages, knowledge, and self-efficacy amongst households quarterly, has a huge attribution to other health accelerator behaviors and will contribute to designing high-quality, data-informed SBC activities. Additionally, it will help to assess attitudes and norms towards using ITNs and other malaria preventive behaviors inclusive of gender.

The tables below outline the behavioral and communication objectives, as well as details on planned monitoring efforts:

Monitoring and Evaluation Plan

Table 12: M&E Plan - Malaria Case Management

Malaria Case Management							
Indicator and Definition	Indicator Type	Rationale	Data Source	Baseline	Baseline year	Target (2025)	Notes
Proportion of children under-five with fever and diagnosed with malaria for whom care is sought within 24 hours	Behavior objective	Priority Behavior	MIS, DHS	32%	2019-2020	75%	This can be tracked through the CBIS, HMIS.
Proportion of people who take malaria treatment only after testing positive for malaria	Behavior objective	Priority Behavior	MBS				To be added in other population-based survey (LDHS, MIS)
Proportion of service providers who support testing before treating	Communication objective	Priority Behavior	CBIS MBS	92%		100%	Track through DHIS-2

Malaria Case Management

Indicator and Definition	Indicator Type	Rationale	Data Source	Baseline	Baseline year	Target (2025)	Notes
Proportion of service providers who conduct testing before treating	Behavior objective	Priority Behavior	CBIS HMIS MBS	92% This is based on the current reduction of clinical malaria diagnosis 2021		100%	Track through DHIS-2 and MBS
Proportion of service providers who have a favorable attitude towards administering ACT only for confirmed malaria cases	Provider behavior objective	Ideational factor/ service providers	HMIS	68%	2020	93%	Continue tracking through DHIS-2.
Proportion of caregiver of children under five years old with fever and diagnosed with Malaria in the last two weeks for whom advice or treatment is sought	Behavior objective	Health seeking behavior	MIS, DHS	81%	2019-2020	91%	Track through MBS

Table 13: M&E Plan - Insecticide-Treated Nets (ITN)

Insecticide-Treated Nets (ITN)							
Indicator and Definition	Indicator Type	Rationale	Data Source	Baseline	Baseline year	Target (2025)	Next steps
Proportion of people that believe the majority of their friends and community sleep under an ITN	Communication objective	Net use	DHS MIS, MICS, MBS			65%	Include this indicator in the MBS questionnaire. Currently, there is no baseline data for this indicator. However, there will be an MBS conducted by the end of this year and will provide baseline data.
Proportion of people who know the use of ITN as a preventive measure against malaria	Communication objective	Knowledge	MIS, MBS	88%	2016	95%	Include this indicator in the MBS questionnaire. This can also be found in the post distribution survey report of 2018
Proportion of the population that slept under an ITN the previous night before the survey	Behavior objective	Priority behavior	MIS, DHS	39%	2016	65%	This is included in the MBS
Proportion of the population with access to an ITN within their household the night before the survey.	Behavior objective	Priority behavior	DHS	25%	2019	100%	Breakthrough ACTION routinely tracks and reports on this indicator based on the latest demographic surveys: https://breakthroughactionandr

Insecticide-Treated Nets (ITN)							
Indicator and Definition	Indicator Type	Rationale	Data Source	Baseline	Baseline year	Target (2025)	Next steps
							eresearch.org/resources/itn-use-and-access-report/ This will be reported as well from the upcoming MIS
Proportion of people who believe that ITN use reduces their risk of getting malaria	Communication objective	Ideational factor	Attitudes, Beliefs and Practices Relevant to Malaria Prevention and Treatment in Liberia 2014 MBS	85%	2021	95%	This could be included in the MBS
Proportion of children under five who slept under an ITN the previous night before the survey	Behavior objective	Priority behavior	MIS, DHS, MICS	44%	2020	80%	This will be captured in the 2022 LMIS
Proportion of pregnant women who slept under an ITN the previous night before the survey	Behavior objective	Priority behavior	MIS, DHS, MICS	47%	2020	80%	This will be captured in the 2022 LMIS

Table 14: M&E Plan - Indoor Residual Spraying (IRS)

Indoor Residual Spraying							
Indicator and Definition	Indicator Type	Rationale	Data Source	Baseline	Baseline year	Target (2025)	Next steps
Proportion of people who understand the benefits of IRS	Communication objective	Knowledge	TBD	TBD	TBD		
Proportion of people with a favorable attitude towards IRS	Communication objective	Ideational factor	TBD	TBD	TBD		

Table 15: M&E Plan - Malaria in Pregnancy

Malaria in Pregnancy							
Indicator and Definition	Indicator Type	Rationale	Data Source	Baseline	Baseline year	Target (2025)	Next steps
Proportion of adolescents (10-19yrs) with knowledge of malaria prevention	Communication objective	Knowledge	MIS, LDHS	0	2021	50%	This can be tracked through the MIS and LDHS

Malaria in Pregnancy

Indicator and Definition	Indicator Type	Rationale	Data Source	Baseline	Baseline year	Target (2025)	Next steps
Proportion of adolescent girls (10-19 yrs) who sleep under ITN the night before the survey	Behavior objective	Priority behavior	MIS, LDHS	0	2021	50%	This can be tracked through the MIS and LDHS
Proportion of pregnant women at ANC that took 3+ doses of IPTp according to national guideline	Outcome	Priority Behavior	HMIS, MIS, DHS	49%	2020	74%	Continue to track through DHIS-2; Include in MBS
Proportion of pregnant girls (10-19 years) at ANC that took 3+ doses of IPTp according to the national guideline	Behavior objective	Priority behavior	HMIS, MIS, LDHS	0	2021	50%	This can be tracked through the HMIS, MIS, and LDHS
% Of pregnant women given nets during ANC1	Provider behavior objective	Priority Service Delivery Behavior	HMIS	71%	2020	96%	Include in LMIS Track in DHIS-2
Proportion of pregnant women with fever and diagnosed of Malaria in the last two weeks for whom advice or treatment is sought	Behavior objective	Priority Service Delivery Behavior	MIS, LDHS	81%	2019-2020	91%	Track through MBS

Table 16: M&E Plan - Cross Cutting Issues

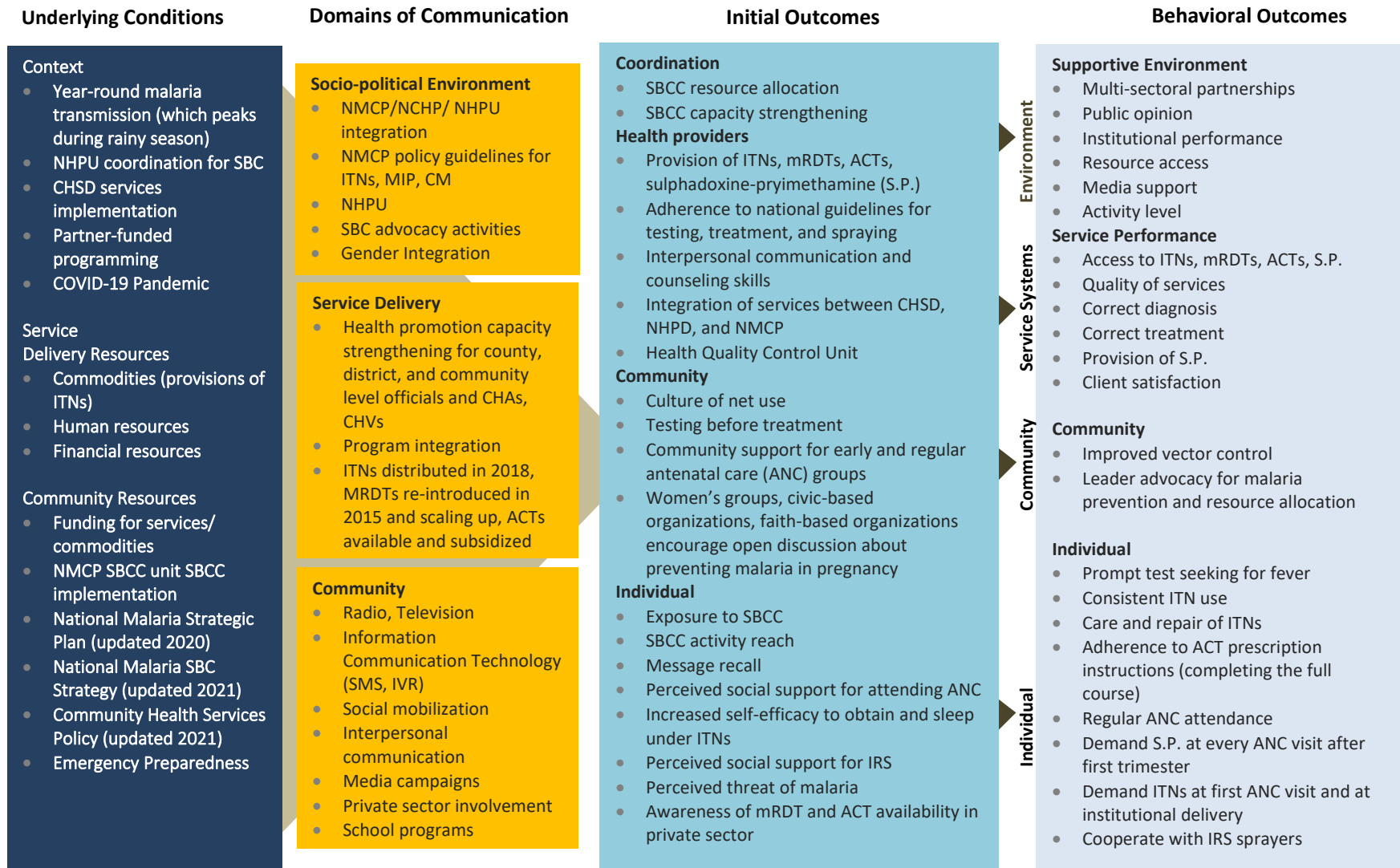
Cross-cutting							
Indicator and Definition	Indicator Type	Rationale	Data Source	Baseline	Baseline year	Target (2025)	Next steps
Proportion of males who are involved in their partners health decision making	Behavior objective	Priority behaviors/ Gender	MIS, LDHS	0	2021	50%	This will be included in the upcoming MIS and LDHS

Current Gaps in Existing SBC Data

Table 17: Current Gaps in Existing SBC Data

Topic	Data Gaps Observed	Future Opportunities to Obtain SBC Data
SSSFC	<ul style="list-style-type: none"> Prevalence of sub-standard, spurious, falsely labeled, falsified, and counterfeit (SSFFC) anti-malarial drugs 	
IRS	<ul style="list-style-type: none"> Percent of households that cooperate with IRS spray operators and had their houses sprayed Proportion of households reporting relatively low mosquito infestation after being sprayed Percent of community influencers who facilitated community support for the overall success of the IRS campaign. 	Gather all knowledge and perception data about IRS amongst households

Annex A: Pathways Model



Adapted from Kincaid, Figueroa and Underwood