

# Incorporating Net Care into Malaria Social and Behavior Change Communication Strategies: A Step-by-step Guide



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Scaling Up Vector Control for Malaria Prevention

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## Abbreviations

HC3	Health Communication Capacity Collaborative
CCP	Johns Hopkins Bloomberg School of Public Health, Center for Communication Programs
LLIN	long-lasting insecticidal nets
ITN	insecticide-treated nets
RBM	Roll Back Malaria
SBCC	Social and behavior change communication



# Introduction

## Purpose

This guide is intended for use by entities involved in distribution of insecticide-treated nets (ITNs) or organizations that conduct communication activities related to ITN distribution and use.

The purpose of this guide is to describe how to integrate activities to promote net care behaviors as a component of overall net use messaging in existing ITN social and behavior change communication (SBCC) strategies or other platforms.

Incorporating net care into a malaria SBCC strategy typically requires minimal effort. It can be done in a systematic and informed way to ensure that communication activities align with intended program objectives and outcomes, that the resulting work is effective, and that monitoring and evaluation activities are planned early and considered throughout the program process. The P-Process™—developed by Johns Hopkins Center for Communication Programs—is a systematic and step-by-step framework that guides the development, implementation, and monitoring of SBCC programs. Following the steps of the P-Process™ will guide an organization in developing net care promotion activities within a comprehensive malaria SBCC strategy. This guide covers each of the five steps of the P-Process™ and highlights key considerations to keep in mind for ITN care SBCC at each step.

## How to use this guide

Organizations are encouraged to form a small working group to implement the steps in this guide.

Organizations that are **in the process of developing a new malaria SBCC strategy** can incorporate the steps in this guide into their ongoing SBCC strategy development process.

Organizations that **already have a malaria SBCC strategy in place** can consider following these steps to update or enhance their existing SBCC strategy by including or further developing a section on ITN care. This may not require a full revision of the

strategy document—for example, an organization may choose to develop a “net care addendum” to their SBCC strategy or guidelines. Eventually, when the strategy is updated, the addendum can be incorporated into the body of the strategy document.

## Organization of this guide

This guide is organized according to the five steps outlined in the P-Process™, which is a systematic and iterative process to strategic communication (Figure 1).

- Step 1:** Inquiry (conduct audience research, communication platform analysis)
- Step 2:** Design strategy (plan the objectives, strategies, audiences, actions, messages, media to be used)
- Step 3:** Create and test (create the materials, media, interpersonal communication (IPC), trainings, community activities to be implemented, and pre-test them with the audience, adjusting as needed)
- Step 4:** Mobilize and monitor (launch interventions, monitor input, process, and initial outcomes)
- Step 5:** Evaluate and evolve (conduct evaluation, re-assess, re-plan, refine strategy and implementation)

Figure 1: P-Process™



# Why is net care important for malaria SBCC?

ITNs are one of the most effective tools to prevent malaria worldwide. In regions at risk of malaria, many countries have adopted policies for universal coverage of ITNs (usually defined as one net for every two people). Universal coverage strategies are often based on the assumption that the useful lifespan of an ITN is approximately three years.<sup>1</sup> However, once ITNs are actually in use in households, they suffer wear and tear from daily use, which may shorten their lifespan. By caring for ITNs, the rate of deterioration can be delayed, thus ensuring that ITNs last as long as possible, which is important to sustaining universal coverage and preventing malaria.

Universal ITN coverage, coupled with consistent and correct use, ensures that ITNs are effective barriers to malaria transmission at scale. Therefore, to complement universal coverage, most malaria programs use SBCC to promote nightly net use by the entire family, all year round. Significant cost-savings are possible if ITNs last longer. Studies in Nigeria and Uganda (see below) found that holes and damage to nets were most often caused by:

- **Rough handling or children playing with the net during the day (when not in use)**
- **Rubbing against rough surfaces**
- **Rodents**
- **Washing too frequently or too vigorously**

Many drivers of net damage can be mitigated within the household; SBCC is an important tool to empower households in caring for nets. Longer life of nets leads to better protection of families and supports universal coverage.

SBCC to promote proper net care behavior has

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1 Guidelines for monitoring the durability of long-lasting insecticidal mosquito nets under operational conditions. Geneva: World Health Organization; 2011.

proven successful in extending the median lifespan of ITNs by as much as 12 months.<sup>2</sup> In Nigeria and Uganda, SBCC was used to promote positive attitudes toward behaviors that can increase net longevity. In these studies, both net care and net repair behaviors were promoted as part of these campaigns; however, the research findings indicated that preventive net care behaviors played a bigger role in maintaining ITNs in usable condition than net repair behaviors, which seemed to have no impact on net condition.<sup>3,4</sup> In other words, preventing damage to nets in the first place may do more to extend net longevity than repairing holes. However, the findings have only provided a partial picture of that relationship and some gaps still remain, including the exact role that repairs to ITNs play in the overall extension of the life of a net (see Areas for Further Research discussion, below, for more about net repair). Despite this, both studies found that **an overall positive attitude towards both net care and net repair** was significantly associated with better condition of ITNs. Fostering a positive attitude requires promoting the value of nets as household goods that merit care and attention. In promoting both net care and repair behaviors, SBCC activities in Nigeria and Uganda were able to build positive overall net care attitudes, resulting in longer net lifespan. Therefore, net care messages should be included in SBCC activities, with a greater emphasis placed on preventive care messages than on repair messages.

Since malaria SBCC strategies and platforms already exist in most contexts, this is a great opportunity to include the topic of net care into SBCC programs in a way that is complementary and at relatively little cost. Information about net care is an important aspect of net use; as families use ITNs in their homes, they must simultaneously care for those nets to support the greater goal of malaria prevention. In this vein, messaging to promote net care behavior

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2 Koenker H, et al. Impact of a behaviour change intervention on long-lasting insecticidal net care and repair behaviour and net condition in Nasarawa State, Nigeria. *Malaria Journal* 2015 14: 18.

3 Ibid.

4 Helinsky MH, et al. Impact of a behaviour change communication programme on net durability in eastern Uganda. *Malaria Journal* 2015 14: 366.

can be seen as a component of overall net use messaging. Indeed, in many cases, the incorporation of net care messaging into existing SBCC strategies is a “low-hanging fruit.” The effort requires minimal investment and in fact, some net care messaging is already routinely used during ITN mass distributions, when instructions about hanging and washing nets are shared at the time an ITN is distributed.

**The challenge addressed by this guide is to ensure that net users care for their nets routinely throughout the year after distribution.**

## Key behaviors for net care

What exactly is meant by “net care,” and what behaviors are implied? In this guide, “net care” is used to refer to actions that can be done at home to maintain an ITN in good condition so that it can continue to be used for malaria prevention. This

includes both preventive and repair behaviors, although preventive behaviors are emphasized more. Two definitions are helpful:

- **Caring for nets:** Refers to actions intended to prevent damage to nets—for example, by handling nets carefully, keeping them away from sources of damage, and washing nets gently and not too often.
- **Repairing nets:** Refers to closing holes and tears by stitching, patching, tying knots, or any other method.

The **behaviors to promote should be directly related to the “dangers” to nets** in that context. Several research studies have been conducted in Nigeria, Uganda, and Senegal to identify specific key behaviors for both net care and net repair; these are listed in Table 1.

**Table 1: Key behaviors for net care and repair identified in Nigeria, Uganda, and Senegal research**

Net care behaviors	Net repair behaviors
Hang and handle nets carefully	Inspect nets regularly for holes
Fold or tie a net out of the way during the day	Repair small holes immediately
Keep the net away from sources of damage, including: <ul style="list-style-type: none"> <li>• Keep the net out of reach of children</li> <li>• Do not let children play with nets</li> <li>• Keep food away from nets</li> <li>• Do not soil a net with food</li> </ul>	Tie, patch, or stitch holes in nets
Wash nets with care, including: <ul style="list-style-type: none"> <li>• Wash nets with gentle motions</li> <li>• Wash nets in a basin or bucket</li> <li>• Wash nets with mild soap, not detergent</li> <li>• Wash nets only at the appropriate frequency (generally no more than once every 3 months)</li> <li>• Hang nets to dry in the shade only, not the sun</li> </ul>	

It is recommended that these specific behaviors be incorporated in SBCC strategies. However, organizations using this guide are also encouraged to conduct formative research to better adapt this list to the local context and ensure that the behaviors are relevant and appropriate. The formative research process is described under Step 1.



## When is the right time to implement net care SBCC?

ITN care behaviors should become part of daily household routines and should be practiced on all nets in use in the home. Therefore, net care messaging should be included in communication at the time of ITN distribution; however, more importantly, net care messaging should be reinforced continuously over time following distribution. The reason for this is that net care messaging may be “lost” among the many messages that are shared during ITN distribution. Net care behaviors should be promoted regularly over time in much the same way that net use messaging is typically communicated. In addition, net care messaging need not stand alone; it can be easily incorporated into existing malaria prevention SBCC and coupled with messages to promote net use. Depending on the SBCC program resources and schedule, messaging supporting net use and net care can be issued at the same time or in alternating instances. Alternating messages is a way to keep SBCC for ITNs “fresh” and avoid message fatigue, and may be especially appropriate for mass media. On the other hand, social mobilization activities and inter-personal communication platforms have longer interactions with audiences and can promote both net use and net care together. In general, the selection of timing should **prioritize providing net users with periodic cues to action** to remind them about the everyday maintenance and routine care behaviors that will ensure their nets last long. Cues to action should be culturally relevant and address the main causes of damage to nets (see Step 1). The frequency of messages will depend on cultural and contextual factors, malaria epidemiology, net longevity data from durability monitoring, and program resources, among other factors.



# Steps to develop an SBCC strategy for ITN care

It is feasible for a small working group to follow the five steps described in this guide within a brief period. For example, the design and planning process to develop key messages, content, and activities can be accomplished in as little as one to three months. There are many practical ways to incorporate the resulting products into an SBCC strategy, followed by implementation, monitoring, and evaluation, according to the program's existing timeline. For example, messages can be included into existing malaria SBCC strategies simply by adding a radio spot, updating content within job aids, and including net care messages during trainings with community health workers already working on malaria. Adding activities such as these typically carries little cost, but great value, to a program.

## Resources and tools for formative research

The following resources may be helpful in formulating net care formative research:

- Module 2 of the [Online Training on Evidence-based Malaria SBCC](#) provides a brief online training on conducting formative research for malaria SBCC
- The [formative research page of the Care of Mosquito Nets Toolkit](#) features an example formative research protocol for net care, including interview and focus group guides
- The summary publication, [ITN Care and Repair: Improving Net Lifespan through Behavior Change Communication](#) from the NetWorks project compiles formative research findings

## Step 1: Inquiry

Effective SBCC is based on research about the audience and the factors that determine behavior. Although ITNs may be fairly uniform across the globe, the contexts in which they are used and cared for are not. This first step involves conducting formative research on the audience, net users, to understand the determinants that affect their willingness and ability to care for ITNs. Formative research can include literature reviews (published and unpublished), secondary data analysis, and quantitative and qualitative data collection. In the case of net care, formative research can explore topics such as:

- Perceptions, beliefs, attitudes, and norms about care behavior;
- Net care behaviors currently practiced, including washing practices;
- How, when, and with what frequency behaviors are practiced;
- Reasons why behaviors are or are not practiced;
- Benefits and motivators to net care, including non-health motivations, such as aesthetics;
- Role of net care in everyday household chores and routines;
- How nets are categorized along with other household items, and attitudes about the care of other household items;
- Effect of seasonality on net care;
- Family member and gender roles in net care;
- Terms and language used to discuss net care and related concepts like net longevity;
- Value placed on an ITN, and how its value may vary according to its condition; and
- Other topics important to the local context.

These topics can be integrated into planned formative research activities. Formative research is also an opportunity to learn about the most effective communication platforms to reach the audience with malaria SBCC. A program may also choose to use formative research as an opportunity to establish a baseline metric of net care behavior and the factors that determine that behavior, so that follow-up studies can measure progress.

Formative research can be done with a small budget, by working with existing malaria community mobilizers. However, if time and resources are prohibitive to conducting formative research in communities, existing research findings will provide a useful evidence base. Table 2 highlights key research findings that may be relevant to net care SBCC and links to the full publications for more detailed results. Conducting a brief online search for any new literature is also recommended.

These topics can be integrated into planned formative research activities. Formative research is also an opportunity to learn about the most effective communication platforms to reach the audience with malaria SBCC. A program may also choose to use formative research as an opportunity to establish a baseline metric of net care behavior and the factors that determine that behavior, so that follow-up studies can measure progress. If available, net durability monitoring data can also help understand how nets may deteriorate in the specific contexts and what behaviors are practiced to care for them.

### **The importance of probing in formative research**

Net care may not be a topic that will generate much unsolicited discussion. Therefore, when conducting formative research, it is important that the data collectors probe thoroughly. They may need to dig a little deeper to identify the factors that motivate or hinder the behavior and the groups in the community who may have a stake in net care. Participatory exercises, when accompanied by probes, can help stimulate discussion.



**Table 2: Formative research findings common to Nigeria, Senegal, Uganda, and Mali**

<p><b>How do nets become damaged?</b></p>	<ul style="list-style-type: none"> <li>• <b>Daily use:</b> Net damage was common and reported as being caused by behaviors related to daily use.</li> <li>• <b>Children, rodents, and rough handling:</b> The most cited causes of damage to nets were children and rodents. Improper handling and rough surfaces were also mentioned.</li> <li>• <b>Washing:</b> Nets were washed more frequently than recommended, were rubbed vigorously, and often dried in the sun, putting them at risk for accelerated damage.</li> </ul>
<p><b>What motivates net care?</b></p>	<ul style="list-style-type: none"> <li>• Rationales for cleaning and repairing nets were cleanliness and aesthetics of the net after care.</li> <li>• Motivations for taking care of and repairing nets centered around caring for one’s family, avoiding mosquito bites, saving money, and maintaining the positive opinion of others by keeping a clean and intact net.</li> <li>• Strong social norms were related to net hygiene and appearance; dirty nets are considered unhealthy and socially unacceptable, while clean nets were associated with being a responsible person who cares about the health of their family.</li> </ul>
<p><b>What inhibits net care?</b></p>	<ul style="list-style-type: none"> <li>• Barriers to net care and repair related to lack of time.</li> <li>• Barriers to net repair related to lack of time or not knowing how to repair.</li> <li>• Most users would prefer purchasing a new net to repairing an old one, but finances limit their ability to do so.</li> <li>• Net users do not consider nets to be worthy of repair when they are overly damaged or when holes are too large or too numerous.</li> <li>• Because of the value placed on net cleanliness, some people may not find it acceptable to reduce the frequency with which they wash their nets.</li> <li>• Some confusion exists about the proper way to wash long-lasting ITN, including the need to re-treat with insecticide after several washes.</li> </ul>
<p><b>Publications of formative research on net care</b></p>	<ul style="list-style-type: none"> <li>• <a href="#">“We are supposed to take care of it”: a qualitative examination of care and repair behaviour of long-lasting, insecticide-treated nets in Nasarawa State, Nigeria</a></li> <li>• <a href="#">“You need to take care of it like you take care of your soul”: perceptions and behaviours related to mosquito net damage, care, and repair in Senegal</a></li> <li>• <a href="#">“It is about how the net looks”: a qualitative study of perceptions and practices related to mosquito net care and repair in two districts in eastern Uganda</a></li> <li>• <a href="#">Net use, care and repair practices following a universal distribution campaign in Mali</a></li> </ul>



## Step 2: Strategic design



In this step, the working group will use the formative research findings to develop the strategic elements of net care SBCC. The strategic design process is best accomplished by holding a short design workshop; a [sample workshop agenda](#) to develop a net care SBCC strategy can be found in the [net care online toolkit](#). If a malaria SBCC strategy already exists, the working group can simply hold a brief workshop to update the strategy to include net care in the relevant sections.

Two important resources to use during the strategic design process are the [Strategic Framework for Malaria Communication](#) by Roll Back Malaria (RBM) and the [How to Develop a Communication Strategy](#) guide by the USAID-funded Health Communication Capacity Collaborative (HC3) project. Below are some key points specific to net care to consider during the design, to ensure that the SBCC is strategic:

- Define the **objective** of the net care communication. An example objective is:

*“By the end of the campaign, 80% of ITN users in the project area have the knowledge and skills to care for their nets, understand the importance of caring for their nets, and practice net care behaviors regularly.”*

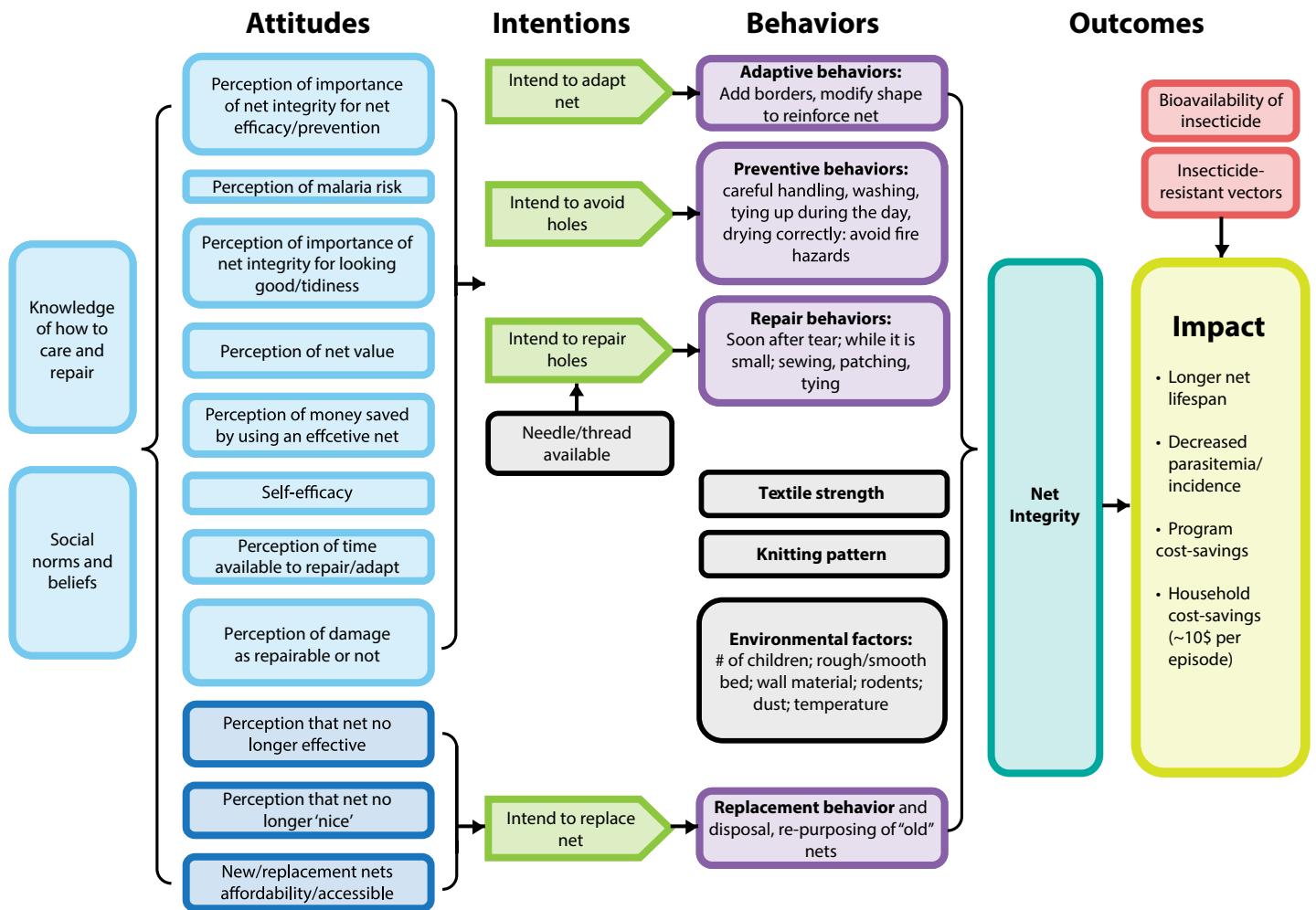
- Define a **conceptual model, framework, or behavior change theory** that indicates how net care messaging will lead to the intended objective of longer net lifespan. Figure 1 provides an example conceptual model of how net care attitudes, intentions and behaviors play a role in net integrity. In Nigeria and Uganda, the evaluation of the SBCC intervention indicated that **positive attitudes** were the most important drivers or predictors of nets being in good condition.<sup>5,6</sup> This research found that the most powerful predictors of nets in serviceable conditions were: a feeling of **self-efficacy** (i.e.: there are actions I can take to make my net last longer), a **perception that a repaired net is still effective against malaria**, and an attitude that **nets are valuable**.

5 Koenker H, et al. Impact of a behaviour change intervention on long-lasting insecticidal net care and repair behaviour and net condition in Nasarawa State, Nigeria. *Malaria Journal* 2015 14: 18.

6 Helinski MH, et al. Impact of a behaviour change communication programme on net durability in eastern Uganda. *Malaria Journal* 2015 14: 366.



**Figure 2: Conceptual model of net integrity**



- Define the **target audiences**. Primary audiences are those who will perform the key behaviors, while secondary audiences may be those who influence the primary audience.
  - **Primary audiences.** It is important for nets to be tied or rolled out of the way every morning and kept away from playing children and other sources of damage during the day. Therefore, the primary audience for net care SBCC will typically be those household members who do regular daily chores and maintain the home during the day. In many contexts, this will be women or girls. However, if messages only target women or girls because of existing gender roles, they may also serve to perpetuate such roles and may miss other primary users of nets. Therefore, SBCC activities should also include messages that reach men and boys. All those who use nets should have a role in net care, regardless of gender. This means that net care messaging can, and should, be easily integrated into a program's existing net use messaging by targeting the same audiences for net use. View an example of a [poster](#) promoting men to participate in net care.
  - **Secondary audiences.** For net care SBCC, consider individuals who may influence the attitudes and actions of the primary audiences, such as elder household members, religious leaders, community leaders, teachers, health workers, staff at ITN distribution points, as well as groups that may support net care like women's groups and tailors. Watch a [video](#) of tailors in Senegal who sew decorative borders along the bottom of nets to make them more "stylish" with the added advantage

of protecting the bottom of the net when tucking under a mattress or mat.

- **Select the key behaviors to promote.** Specifying the key net care behaviors to be promoted is a necessary step before messages can be developed. The key behaviors in the given context will be based on any formative research available; however, it is important to promote behaviors that directly **mitigate the common causes of damage to nets**. Refer back to Table 1 for a list of key behaviors that have been used in prior net care efforts.
- **Develop key message points.** The key message points are the main ideas that will be included in the final creative messages. The net care programs implemented in Nigeria and Uganda utilized the following key message points:
  - Nets are valuable and worth the time to care and repair.
  - Fold or tie net away every day when not in use.
  - Keep the net out of reach of children. Do not let children play with nets.
  - To avoid attracting rodents, do not soil a net with food—keep food away from nets.
  - Handle nets gently and with much care.
  - Wash nets only when dirty and no more than once every three months, wash gently with mild soap.
  - A torn net can still be effective if repaired.
  - Repair small holes immediately.
  - You can tie, patch, or stitch holes in nets.
  - Inspect the net regularly (everyday) for holes.
- **Define the activities and communication platforms that will be effective.** The selection of activities and communication platforms for net care SBCC can fit into the existing malaria SBCC platforms and leverage existing efforts. For example:
  - If the program uses community health workers to share messages about net use, a

## Resources for SBCC strategic design and creative development

- [How to Develop a Communication Strategy](#) by HC3
- [Communication Plan Template](#)
- [Strategic Framework for Malaria Communication](#) by Roll Back Malaria

section with additional messages on net care can be added to their manual and job aids.

- A new TV or radio spot on net care can be added to a current mass media program. This will have the added benefit of “refreshing” mass media messaging. Care messages can be aired at alternating intervals to keep ITN use “fresh,” to audiences—for example, care messages can be aired in some months and ITN use messages can be aired in other months.
- If the program uses SMS through mobile phones or social media to promote net use among households, a set of texts, tweets, or Facebook posts on net care can be added to the programmed release of messages to mobile phones or social media.
- A skit on net care can be added to the repertoire for drama groups, or a care message can be added to an existing skit. [Example drama skit from Uganda.](#)
- Schoolteachers can include net care in their malaria curriculum with students of all ages. Here are some guides, examples and materials that teachers can use for this:
  - [Example Lesson Plan from Uganda](#)
  - [Teacher’s Guide to Malaria Prevention from Nigeria](#)
  - [School Distribution Training Manual from Ghana](#)
  - Malaria Protection Pledge [Poster](#) & [Card](#) for Students from Nigeria
  - [Malaria Info Wall Chart for Classrooms from Nigeria](#)

- Hold a contest for musical groups or children to create and perform a song about malaria that includes net care. Local radio and the press can be involved in the activity. [Example music, drama and dance competition in schools from Uganda.](#)
- Hold net care demonstrations in schools in communities, engaging with local tailors.
- Add net care to any advocacy materials and add talking points for malaria champions and political leaders that include net care.
- Obtain testimonials from local leaders supporting net care for radio, TV, or other platforms.
- Develop a press release about net care for use by journalists.
- At the next opportunity to update any malaria SBCC print materials, ensure that net care messages are included.
- Include net care demonstrations, such as this example from the [Peace Corps Senegal Net Care and Repair Tour](#), at upcoming community events.



### Creative concepts used to promote net care and repair in Nigeria and Uganda

- Loss aversion approach: Holes in your net are like holes in your fence, they can allow thieves (mosquitoes) to enter and rob you of your money and health. A [radio spot](#) in Nigeria used this concept.
- Emotional approach: Like a newborn baby, nets need to be handled with care. A [radio spot](#) in Nigeria used this concept.
- Humorous approach: A Uganda [radio spot](#) used a humorous character named Thomas, a child whose mother catches him sticking his head through a hole in a net.

## Step 3: Create and test

In this step, a creative team should be convened to **develop the creative messages and materials** in accordance with the strategy designed in Step 2. Creativity is an important factor in this process, as formative research indicates that the strongest motivators for net care behaviors are not always related to health. Possible strong motivators may include saving money, being perceived as tidy, parents' responsibility to care for children, and keeping a net looking "nice." The group will need to develop key messages that will resonate with the selected audiences by using local concepts, language, and motivators. Some examples of creative messages used in previous campaigns are in the box below. See the [How to Design SBCC Messages](#) guide for guidance on creative design, as well as the [Audience Messages and Materials Worksheet](#), and a [Creative Brief Template for Net Care](#) used in Uganda.

### Resources for pretesting SBCC materials

- Module 3 of the [Online Training on Evidence-based Malaria SBCC](#) provides several helpful tips for pretesting
- [How to Conduct a Pretest](#) by HC3

After creating new material and messages, they should be **pretested before finalization**. Anytime a new element is introduced into an existing SBCC strategy, it should be pretested first to confirm effectiveness. For example, long-lasting insecticidal nets (LLINs) are a type of ITN that are specifically designed to withstand 20 washes with a mild soap before the potency of the insecticide is reduced. However, conveying appropriate washing frequency with the right type of soap available in the local context—to ensure an LLIN lasts several years—can be a complex concept. **Pretesting will help make sure that the messages on washing frequency and soap type are clear, simple, and can be easily understood.**

If a program already has SBCC activities underway, it may seem daunting to pretest new messages and materials. However, pretesting can easily be built into existing SBCC activities by taking advantage of opportunities to pretest when SBCC teams are in the field. For example, an upcoming supervision visit of community health workers may offer a chance to pretest new net care materials.

In this case, pretesting would be very cost-effective and could be done with a small number of groups quickly.



## Step 4: Mobilize and monitor

This step involves implementation and monitoring of the net care activities within the overarching malaria SBCC strategy. An implementation plan should be developed to describe how the net care SBCC will be rolled out; for each activity it should define roles, what work will be done, the timeline and location. If the organization has an existing malaria SBCC implementation plan, the working group can simply review it and add the net care activities in the relevant sections. Since this may involve small changes to the current work of some partners, do pay special attention to clearly planning and communicating **who** will be conducting the new activities and **with what resources**.

As described above, it is recommended that implementation of SBCC for net care be linked to net use messaging. This means that messaging on care should be shared at the time of ITN distribution and for a prolonged period after distribution. This

### Resources for monitoring and evaluating net care SBCC

- Module 4 of the [Online Training on Evidence-based Malaria SBCC](#) covers monitoring methods for SBCC
- Module 5 of the [Online Training on Evidence-based Malaria SBCC](#) covers evaluation methods for SBCC
- [How to Develop Monitoring Indicators](#) by HC3
- [How to Develop a Monitoring and Evaluation Plan](#) by HC3
- [Malaria BCC Indicators Reference Guide](#) by Roll Back Malaria
- Example [Monitoring Form for Net Care Community Events](#)
- [Household survey module](#) to measure exposure to care messages and the prevalence of net care and repair behaviors



also has implications for SBCC team roles: the people who share net use messaging—for example, community mobilizers or health facility staff—in many cases, should also share net care messaging. Like net use messaging, the nature of net care behaviors requires regular reminders and cues to action to ensure that the behaviors become part of everyday household routines.

Finally, plan the rollout of the net care SBCC activities in phases and collect monitoring data during phases in order to inform improvements to the next phase. Because of its similarity to net use SBCC monitoring, net care SBCC monitoring can be easily incorporated into these efforts. Monitoring can measure the reach and understandability of messaging, as well as changes in attitudes and perceptions about net care. If possible, it is helpful to establish a reference point on these variables before net care messaging rolls out. Previous research with net care and repair SBCC in Nigeria and Uganda indicate that positive attitudes towards both net care and net repair are important predictors of net care behavior change and net condition; therefore, monitoring efforts should aim to periodically capture changes in attitudes to gauge the SBCC efforts.



## Step 5: Evaluate and evolve

Evaluation will shed light on how well the program achieved the objectives. This step builds on the previous step, in which SBCC activities and outputs are monitored and implementation is phased. Evaluating the outcomes of net care SBCC should be included in the evaluation of the overarching malaria SBCC strategy. If a malaria SBCC monitoring and evaluation plan already exists, the net care working group should review it and update each section to capture changes and outcomes related to the net care SBCC activities. For the evaluation of net care SBCC activities, the group can consider the following points:

- Questions about net care message exposure, knowledge, attitudes, and behaviors can be incorporated into upcoming surveys, such as a KAP survey, an SBCC program evaluation survey or an omnibus survey. [Surveys used previously in Nigeria and Uganda](#) can be consulted for examples of questions to capture these variables.
- ITN durability monitoring is another opportunity to collect data on net care behaviors as well as the condition of ITNs, which is an important impact indicator of net care SBCC. A number of existing [tools for durability monitoring](#) can be consulted.



- Key indicators for evaluating net care SBCC include:
  - Message exposure
  - Knowledge about net care and repair
  - Attitudes about net care and repair
  - Discussion of net care and repair with peers
  - Reported net care and repair behaviors
  - Reported causes of damage to nets
  - Reported frequency of washing ITNs

*The additional indicators listed below are included in standard durability monitoring questionnaires linked above; if durability monitoring data is not available, consider adding these indicators to upcoming an KAP survey to evaluate net care SBCC.*

- Observed mode of storage of ITNs in homes
- Observed method of washing ITNs in homes
- Observed repairs or modifications on ITNs
- Observed physical condition of nets using the proportionate hole index
- Questions about net care message exposure, knowledge, attitudes, and behaviors can be incorporated into upcoming surveys, such as an SBCC program evaluation survey or an omnibus survey. [Surveys used previously in Nigeria and Uganda](#) can be consulted for examples of questions to capture these variables.
- ITN durability monitoring is another opportunity

to collect data on net care behaviors as well as the condition of ITNs, which is an important impact indicator of net care SBCC. A number of existing [tools for durability monitoring](#) can be consulted.

- Evaluating the relationship between net care SBCC and net condition can be complicated by factors such as net type, time since net distribution, extent of net use, type of sleeping space, climate, malaria seasonality, and others. The following published studies that have evaluated net care and repair SBCC provide some guidance on how to conduct these evaluations and should be consulted by the working group:
  - [Koenker H, et al. Impact of a behaviour change intervention on long-lasting insecticidal net care and repair behaviour and net condition in Nasarawa State, Nigeria. \*Malaria Journal\* 2015 14: 18](#)
  - [Helinski MH, et al. Impact of a behaviour change communication programme on net durability in eastern Uganda. \*Malaria Journal\* 2015 14: 366](#)
  - [Panter-Brick C, et al. Culturally compelling strategies for behaviour change: A social ecology model and case study in malaria prevention. \*Social Science & Medicine\* 2006 62: 11](#)

## Areas for further research

While the formative and operations research in Nigeria and Uganda cited above have generated knowledge on net care SBCC and its role in ITN longevity, the findings have only provided a partial picture of that relationship and some gaps in understanding still remain. For example, the role of repairing for net longevity is not clear. Research findings indicated that repairing nets seemed to have little effect on overall net condition. However, in these studies repair behaviors may have been initiated too late, when the net was already torn beyond repair. It is not known how net condition may be affected if repairs are done very early in the net lifespan, and as soon as holes appear. In addition, repair behaviors were strongly promoted in both the Nigeria and Uganda SBCC interventions, and the research findings show that a positive attitude towards both care and repair (for example, the belief that a torn net can still be effective if repaired) contributed significantly to better net condition. As such, the role of net repair is an area for further study.

Another area for further exploration is how household members who care for ITNs categorize them among other household items; for example, if ITNs are considered similar to bedding, clothes, or medicines. These perceptions may have implications for how care and repair of ITNs is promoted. In addition, if future research reveals that mosquito penetration of holes depends on the location of the hole on the ITN, this may also have implications for advising which holes should be prioritized for repairs. Finally, whether adaptations to ITNs, such as sewing a border around the bottom, contribute to increased net lifespan have also not been evaluated. However, future program experiences that incorporate net care and repair into malaria SBCC strategies may shed light on these and other outstanding questions.

## Related resources

### Guides and toolkits

- NetWorks Project Summary Series: [ITN Care and Repair: Improving Net Lifespan through Behavior Change Communication](#)
- [Care of Mosquito Nets Toolkit](#)
- [Online Training on Evidence-based Malaria SBCC](#)
- Roll Back Malaria [Strategic Framework for Malaria Communication](#)
- Alliance for Malaria Prevention Toolkit 2.0: [Chapter 6: Communication](#)
- HC3 How-to guide: [How to Adapt SBCC Materials](#)
- HC3 How-to guide: [How to Develop a Communication Strategy](#)
- [Malaria BCC Indicators Reference Guide](#)
- Tools and protocols for monitoring ITN durability: [www.DurabilityMonitoring.org](http://www.DurabilityMonitoring.org)

### Formative research

- [Hunter GC et al. "We are supposed to take care of it": a qualitative examination of care and repair behaviour of long-lasting, insecticide-treated nets in Nasarawa State, Nigeria. \*Malaria Journal\* 2014 13:320.](#)
- [Loll DK et al. "You need to take care of it like you take care of your soul": perceptions and behaviours related to mosquito net damage, care, and repair in Senegal. \*Malaria Journal\* 2014 12:322](#)
- [Scandurra et al. "It is about how the net looks": a qualitative study of perceptions and practices related to mosquito net care and repair in two districts in eastern Uganda. \*Malaria Journal\* 2014 13:504](#)
- [Leonard L et al. Net use, care and repair practices following a universal distribution campaign in Mali. \*Malaria Journal\* 2014 13:435](#)

## SBCC intervention evaluations

- [Koenker H, et al. Impact of a behaviour change intervention on long-lasting insecticidal net care and repair behaviour and net condition in Nasarawa State, Nigeria. \*Malaria Journal\* 2015 14: 18](#)
- [Helinski MH, et al. Impact of a behaviour change communication programme on net durability in eastern Uganda. \*Malaria Journal\* 2015 14: 366](#)



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