amp | The Alliance for Malaria Prevention

Expanding the ownership and use of mosquito nets

TOOLKIT

INSECTICIDE-TREATED NET (ITN) DISTRIBUTION OPERATIONS: CONSIDERATIONS FOR OPTIMIZING LIMITED RESOURCES

NOVEMBER 2025

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Introduction

This toolkit contains guidance for national malaria programmes (NMPs) making decisions about future ITN distribution efforts in resource-constrained environments. Cost-saving options for ITN campaign planning and operations are presented, organized by campaign themes, for NMPs to consider.

Delivering nets cost-effectively helps maximize impact, freeing up budgets to buy more nets or support other key programme areas. The options included in this toolkit are non-exhaustive and will need to be adapted to each country context. Programmes will also continue to develop other approaches, which will be documented by AMP.

Note that this toolkit does not cover strategic decisions like channel mix, ITN types, target populations or coverage targets. For those decisions, refer to WHO guidance and to the Global Fund's operational, grant-focused guidance in Section 1 below.

The toolkit covers the following themed areas:

SECTION 1: GLOBAL GUIDANCE

Summary of and links to both the WHO's current technical guidance and the Global Fund's operational, grant-focused, guidance.

SECTION 2: MACROPLANNING

Setting the stage: big picture questions to consider:

- **I.** ITN campaign distribution strategies: A review of the advantages and challenges of different distribution approaches
- **II.** Quantification parameters: Considerations for balancing quantification and cost
- **III.** ITN allocation: A review of the advantages and challenges of different allocation options
- **IV.** Risk assessment and mitigation: making a plan

SECTION 3: MICROPLANNING

Suggestions to streamline microplanning to realize cost savings without sacrificing quality

SECTION 4: LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Options that may result in increased efficiencies, save time, and/or reduce costs

SECTION 5: TRAINING

Options that may help streamline training needs while continuing to ensure that adequate instruction and guidance remain available to campaign workers at all levels

SECTION 6: DATA, SUPERVISION AND MONITORING

Options for collecting essential data for decision-making and potential low-cost monitoring methods

SECTION 7: DIGITALIZATION

Reviews the role that digitalization may play to streamline and help distribution campaigns become cost-effective

SECTION 8: SOCIAL AND BEHAVIOUR CHANGE (SBC)

Options for making SBC investments as cost-effective as possible and maximizing return on investment

Section 1: Global guidance

World Health Organization

WHO provides global technical guidance on use of ITNs for malaria control:

WHO malaria guidelines with recommendations on large scale deployment of ITNS and good practice statements for optimal coverage and channel options.

WHO guiding principles for prioritizing malaria interventions, in situations where resources are limited.

Optimal coverage refers to providing populations at risk of malaria with access to ITNs at a level that provides the best value for money while reflecting programmatic realities. Optimal coverage will depend on site-specific factors such as past and present transmission intensity, past and present intervention coverage, acceptability, and equity of access/use.

Key messages include:

- For areas where deployment of ITNs is the most appropriate choice, the priority will be to ensure **access of pregnant women and children under five years** of age through routine ITN distribution in all malaria risk areas.
- If resources are constrained, all areas with very low current and historical malaria transmission (e.g. < 1% P. falciparum prevalence rate) **can be excluded from ITN campaigns**. This applies to most urban areas, except where *Anopheles stephensi* has been reported.
- In cases where vectors are resistant to pyrethroids: Pyrethroid-chlorfenapyr ITNs should be prioritized, followed by pyrethroid-piperonyl butoxide ITNs or pyrethroid-pyriproxyfen ITNs. The deployment of pyrethroid-only ITNs should be avoided. **Consider resistance status of malaria vectors, cost of ITNs and the durability of the ITNs.**

Prioritization of ITNs:

- ITNs are recommended for use at **any level of malaria endemicity** (>1% *P. falciparum* parasite prevalence).
- In some settings, such as in elimination areas or **humanitarian emergency situations**, ITNs may be targeted at a specific high risk population group where individual protection is the priority.
- In urban areas available data should be used to identify clusters of malaria transmission (**microstratification**) to decide if and where to distribute ITNs, if appropriate and acceptable to the community.
- **Programmes should not prioritize mass campaigns over routine distribution**.

Optimizing ITN access in resource constrained settings:

- It is advisable to target **areas of highest need (high transmission intensity) with ITNs**. For example, countries may increase the threshold for targeting ITNs to exclude areas of very low pre-intervention transmission, especially if such areas have adequate access to effective case management.
- Ensuring that **underserved populations** with highest malaria mortality are protected first from malaria transmission is likely to lead to higher impact for resources invested.
- Special attention should be paid to **displaced populations** and other groups suffering humanitarian emergencies, as they are highly vulnerable and may be a source of onward transmission.
- Where a decision is needed on **targeting of more efficacious and expensive ITNs**, the highest burden areas, especially those with highest risk of transmission and mortality due to malaria, should be prioritized. Such decisions should be supported, with information on insecticide resistance.
- Adapt **distribution strategies** to maximize coverage while minimizing costs (community participation).

Global Fund

The Global Fund has recently produced operational, grant-focused, guidance including suggested prioritization approaches and options for finding efficiencies, when grant funds are insufficient. The Global Fund's information note for Grant Cycle 8 also includes some recommendations.

Key messages for prioritization of grant funds *(please review source documents for completeness):*

- **Vector control saves lives.** Reducing coverage in areas with current transmission or receptivity risks more cases, deaths and higher treatment costs. Balance between prevention and treatment must reflect this risk.
- **Ensure routine channels (ANC/EPI) are stocked in all at risk areas.**
- Routine ANC/EPI alone will not achieve sufficient coverage. In high and moderate burden areas expand beyond these to campaigns or high throughput continuous (e.g. schools). If net volumes required for full coverage are not affordable, consider reducing allocations (e.g. fewer nets per person/household or more targeted, e.g. under fives).
- Due to differences in transmission, use and socio-economic factors, **major urban areas should generally be excluded from mass ITN campaigns**, with alternative strategies used to ensure access to malaria services. If included—for example to support contexts such as urban slums or higher transmission/receptivity areas, where there are strong reasons to believe ITN distribution and use may be efficient and feasible—a strong justification is required.
- Differentiate channel selection as appropriate to context, likely varied sub-nationally.
- **Activities should be integrated wherever possible with other malaria or public sector activities,** particularly continuous distribution approaches where integrating the respective ITN deliveries and associated support into the relevant in-country programmes will improve efficiency – e.g. maternal and child health programmes and EPI programmes.
- The Global Fund encourages an **integrated, multi-purpose digital platform for malaria campaigns** as well as other campaigns and activities (e.g. SMC or vaccination), considering different levels of digital literacy (by gender, disability, socio-economic status).
- If technical assistance (TA) is needed for planning of ITN distribution or campaign digitalization (ex. AMP TA), programmes should include this TA in funding requests.
- **Social and behaviour change communication (SBCC) should be targeted where use given access is a concern**, based on most recent available data. Evidence-based SBCC promoting net care may be warranted.

Section 2: Macroplanning

This section gives guidance on responding to the following questions:

- Will you implement a full population campaign or a lower coverage campaign?
- What strategy or strategies for ITN distribution (fixed site, door-to-door, community-based) are feasible given the operational context of the targeted areas (e.g. peri-urban, rural, hard-to-reach, insecure, etc.)?
- Will the strategy involve household registration as a standalone phase or will ITNs be distributed to households simultaneously with the registration? Are there options for advance registration to be done (e.g. through community health worker (CHW) networks, recent census, etc.)?
- Will the strategy include identification of ITN recipients? If yes, how will ITN recipients be identified (e.g. vouchers, national ID or phone numbers, etc.)?
- How will ITNs be allocated to households? Will the same allocation method be used throughout the targeted areas or will allocation be adjusted based on contextual and programmatic information (e.g. allocate one net to two people in high burden areas, allocate two nets per household in peri-urban areas, set a cap on nets per household or not, etc.)?
- Are there other health campaigns taking place in the same target areas/to the same target groups? Is it possible to integrate some activities/leverage data from those programmes to facilitate planning and implementation?
- What risks are associated with changes in operational strategies? How can these risks be mitigated?

Macroplanning is the stage at which operational distribution strategies, implementation arrangements, operations, roles and responsibilities, etc. are defined. For three-year campaign cycles, particularly if there is a need to change previous approaches, this phase cannot be missed (but does not need to cost anything). Old plans that were agreed with sub-national levels can be updated, sub-national levels can be engaged virtually on key strategy decisions, etc. For rolling campaigns (e.g. continuous campaign cycle – like Nigeria, DRC), there is no need for macroplanning for each campaign BUT there is maybe a need for sub-national levels to develop specific plans based on national guidelines, resource context and degree of change from existing guidelines.

2.1 Potential strategies

Recommended

***A. Single phase, door-to-door approach*, i.e. registration and distribution in a single visit to a household. This approach is suitable for complex operating environments (COE).**

Advantages

- Quick, reduces human resources/time for getting nets to households
- Registration can be done or fixed number of ITNs allocated
- Training is a one-off event
- Low risk of missed household (staff see people with ITNs)
- Reduces need for vouchers

Challenges

- Quantification of ITNs and human resources required ▸ reliance on microplanning data
- Security of door-to-door (D2D) teams
- Last mile transport and resupply to D2D teams
- Heavy workload for D2D teams (particularly if adjusting parameters such as households to reach per day)
- Determining which materials are needed and procuring on time + added costs (e.g. bags for carrying ITNs)

Recommended

B. Single-phase door-to-door registration/fixed site distribution. This approach is suitable for COE.

ITN collection at fixed sites immediately after registration.

Advantages

- Quick, reduces human resources/time for getting nets to households
- Assists with controlling flow of households to distribution points
- Training is a one-off event
- Low risk of missed households since staff see people moving with ITNs
- Removes stress of organizing D2D distribution
- May reduce need for vouchers depending on strategy

Challenges

- Many people required at once to run registration and distribution ▸ implications for training
- Quantification of ITN needs reliant on microplanning (no time between registration and distribution to position more nets)
- Households missed during the registration phase will need to be managed at distribution points (DPs)

Recommended where possible to cut time and cost as part of operationalization.

C. "Standard" campaign process, i.e. two-phase door-to-door registration/fixed site distribution . This approach may be less suitable for COE.

Advantages

- Allows for pre-positioning of ITNs based on data from household registration (actual needs)
- Generates lists of households and allows for allocation to be done either during or after the registration to align with ITNs available
- More accurate allocation of ITNs to households and distribution points

Challenges

- More time and more human resources needed
- More training required
- More supervision and monitoring required
- Households missed during the registration phase will need to be managed at DPs
- Requires a voucher or alternative for people to receive nets

Recommended where community structures/community health worker (CHW) systems are in place.

D. Community-led distribution. Suitable for COE.

Advantages

- Leverages on investments made to strengthen community health system
- If people previously trained or community leaders are well engaged, may improve data collection and reporting
- May provide data in advance (through routine activities) to replace the registration phase
- Reduces the need for vouchers
- Decisions about what to do if too few ITNs are made locally
- Overall process is managed locally, using guidance from the NMP
- May also support e-payments where systems for routine incentives are employed

Challenges

- Accountability and data requirements for ITNs may need to be adapted to strategy/personnel involved and level of oversight possible
- Not a good option where community systems or CHWs are not in place (costly to establish)
- Insufficient trained CHWs (may increase time or cost for distribution)
- Use of local transport options in the context of finance and procurement procedures in place
- Decentralizing funds for payments, if needed

Recommended where appropriate, based on available funding

E. Under five campaigns – standalone

Advantages

- Easily identifiable target group ▸ no registration needed
- High priority target group (understandable from a social and political level)
- ITNs are a valued commodity for children under five, so fixed site distribution will likely still achieve high participation of target group with limited social and behaviour change (SBC)

Challenges

- Will miss households with no children under five
- Higher cost per net ratio for transport and management costs due to reduced economy of scale vs. campaigns targeting full population accessMay provide data in advance (through routine activities) to replace the registration phase

Recommended within/across programmes

F. Integration (e.g. with Expanded Programme on Immunization [EPI])

Advantages

- When well planned, optimizes time and resources to achieve high coverage of interventions for target groups
- Allows for limited resources to be used to support different health programmes/services
- Combines tasks and reduces human resource requirements vs. separate standalone interventions
- Potential for cost-savings where reuse of information and data are prioritized
- Does not need to be complete integration but could include components or activities or data

Challenges

- High-quality integration takes time – quality risks where there is last-minute integration of interventions
- Timing of service delivery for different interventions (rainy vs. dry season)
- Coordination needs to be established early where integration is between health programmes (e.g. malaria and EPI) ▸ requires very early alignment and planning, and many programmes may not be working closely together

Not recommended as difficult to cut time and operational cost.

G. Two phase door-to-door registration followed by door-to-door distribution. Not appropriate for COE contexts with population movement

Advantages

- Allows for pre-positioning of ITNs based on data/actual needs
- Generates lists of households and allows for allocation to be done either during or after the household registration to align with ITNs available
- More accurate allocation of ITNs to households and pre-positioning sites
- Direct delivery of ITNs to households

Challenges

- More time is needed as the number of days for registration and distribution will generally be equal to ensure all households are reached, although more days may be needed for distribution to keep teams supplied
- More human resources may be required, particularly depending on arrangement for supply teams
- More training required
- More supervision and monitoring required
- Households missed during the household registration phase will need to be managed by door-to-door distribution teams (possible insufficient nets)

Additional integration opportunities include:

- *Coordination, training, supervision and monitoring:* use routine activities for on-the-job training, develop joint training platforms for virtual learning and virtual supervision and monitoring, merge coordination structures for similar campaign delivery interventions to leverage experience and resources
- *Joint microplanning and reuse of microplanning data:* support improved quantification and allocation of resources across interventions
- *Complex operating environments:* maximize the efforts to reach last-mile populations by providing multiple services; consider that ITNs are reaching marginalized and hard-to-reach populations through any channels and strategies possible (e.g. bundling with kits of non-food items, etc.)
- *Shared data collection tools/platforms:* maximize the use of digital tools and platforms by using the same systems, establishing geo-repositories, building geospatial maps, etc., reuse household registration data and make it available to support other health interventions

2.2 Quantification parameters

The challenge with population-focused (e.g. "universal coverage") campaigns is the need for many personnel, particularly at community level:

- Campaign costs are, in part, driven by the human resources needed to reach and register households in targeted areas and ensure that they receive ITNs. It is very difficult to reduce this expense (but could use existing CHW registers, reuse previous registration data, integrate registration with national census, etc.)
- Be realistic about how much additional work campaign staff and local volunteers can take on before it starts to impact morale and quality of service. Asking workers to do more can threaten the quality of the campaign and the risk to the campaign outweighs the benefits particularly in contexts where payment rates have not kept up with inflation

See: Trends in ITN campaign per diems.

- If available resources are severely constrained, a different approach may be needed that either (1) leverages existing systems or (2) drops the registration as a separate phase for the campaign (e.g. combines it with distribution in a single household visit)

A. Household registration

- Increase the average number of households registered per day: **Caution:** context dependent, will vary by location (densely vs. sparsely populated areas) ▸ **assess risk**
- Reduce the number of days for registration: **Caution:** risks missing some households particularly if reduced SBC, could reduce quality of registration ▸ **assess risk**
- Reduce the ratio of teams to supervisors:
  - ↘ Prioritize high quality community supervision (e.g. one supervisor to ten teams (20 people) or more for densely populated areas) and provide funds for transport if possible
  - ↘ Rely on community leaders, teachers, etc. for quality community supervision, particularly if training is limited
- Reduce upper-level supervision and monitoring:
  - ↘ Same type/level of supervision is not needed everywhere ▸ use data, previous campaign information to target in-person supervision and monitoring
  - ↘ Leverage digital systems for follow-up and provision of feedback where possible (virtual supervision)
  - ↘ Identify local partners working in the area that may be able to provide feedback independently of the campaign structure
- Do not plan/budget for blanket mop-up ▸ use data to determine if/where it is needed

B. ITN distribution

- Increase the number of people to be served (or ITNs to be distributed) per day (context-specific)
  - ↘ **Caution:** context dependent, will vary by location (densely vs. sparsely populated areas) ▸ **assess risk**
  - ↘ **Caution :** may lead to reducing the number of DPs, which may affect access ▸ **assess risk**
- Decrease the number of people per distribution team - need to have vs. nice to have roles – and rely on community leaders to support crowd control, community members to support waste management: **Caution:** may risk quality of distribution ▸ **assess risk**
- Reduce the number of days for distribution: **Caution:** risks missing some households particularly if SBC reduced ▸ **assess risk**
- Reduce the ratio of supervisors to teams with a focus on ensuring high quality community supervision
  - ↘ Consider one supervisor to ten or more (densely populated areas) and provide funds for transport if possible
  - ↘ Rely on community leaders or others for quality supervision in the context of limited training
- Reduce upper-level supervision and monitoring:
  - ↘ Same type/level of supervision is not needed everywhere – use data and previous campaign information to target in-person supervision and monitoring
  - ↘ Leverage digital systems for follow-up and providing feedback where possible
  - ↘ Identify local partners working in the area that may be able to provide feedback independently of the campaign structure
- **Do not plan/budget** for blanket mop-up (use data) and **do not budget for hang-up**

C. Other adjustments

- Storage and transport of ITNs:
  - ↘ Consider options and costs for last mile logistics (e.g. vehicles vs. motorbikes vs. bicycles vs. porters) and the quantification used (e.g. one resupply person for three teams vs. one resupply person for six teams)
  - ↘ Renting/hiring vs. mobilizing existing vehicles (Ministry of Health, partners)
  - ↘ Community engagement for provision of transport options for last mile logistics
  - ↘ Leverage existing government warehouse space

See also Section 4:
Logistics and supply chain management

- Training:
  - E-learning for ToT at central and district levels
  - Online meetings
  - Harmonize and use same digital platform
  - Careful selection of training venues

See also Section 5: Training

2.3 ITN allocation

- ITN allocation should be aligned to your targets
- Allocation decisions should be taken within the context of maximizing impact on malaria with available ITNs
- If there are insufficient nets to allocate one for every two people, adjust the allocation to align with the nets available
- ITN allocation may vary throughout the targeted area for the campaign – for example:
  - Peri-urban areas – fixed at two nets per household
  - Rural low burden areas – one net to three people, capping at three per household
  - Rural high burden areas – one net to two people rounding down, no cap

A. Allocation by people

Advantages

- Will come closer to achieving intra-household access if strictly applied (no caps)
- System that people are used to
- Can be adjusted from one to two
  - One to three?
  - One to four?
  - At some point, becomes one per household (depending on average household size) and better to consider fixed number of nets per household

Challenges

- Caps are typically set (three or four per household) that mean intra-household access is not achieved; caps often set for entire target area without considering average household size data
- Errors in allocation, particularly with paper-based systems
- Inflation of household size to receive more nets
- Splitting of households to receive more nets

B. Allocation by sleeping spaces

Advantages

- Will come closer to achieving intra-household access if strictly applied
- Reflects actual sleeping patterns in a household

Challenges

- Standardizing definitions of sleeping spaces, ensuring quality training and clear and consistent understanding by teams
- Over allocation to households in the least poor quintile (more sleeping spaces)
- May require more nets/not be scalable depending on nets available
- Subjective understanding of sleeping spaces, acceptance of household information

C. Allocation by household

Advantages

- Reduces time for registration if all households receive same number of nets
- Reduced data collection needs
- Where vouchers are used, can be simple (do not need to be linked to household data to see how many nets the voucher represents, no scanning to pull up household information/ITNs allocated)
- Less potential for errors in the allocation

Challenges

- Will not achieve intra-household coverage in most households
- Will over/under supply to household – need to use/triangulate data to decide on number of ITNs per household

D. Allocation for special groups (boarding schools, prisons, etc.) as per National Malaria Strategic Plan (NMSP):

Considerations

- ITNs are typically allocated at one net per person/sleeping space
- Ensures all at-risk groups are covered

Challenges

- Requires significant quantities of nets in some cases depending on groups included as “special groups”

E. Allocation to key populations (internally displaced people, refugees, etc.) as per NMSP:

Considerations

- High risk and vulnerable populations must be reached through appropriate (and possibly integrated) approaches ▸ requires adjustments to channels and strategies
- ITN allocation can be determined in partnership with local government and non-government personnel (fixed number per family to ensure equity in formal camps, allocate same as per non-key populations to standardize across operational area, etc.)
- Formal vs. informal camps, resettlement in households and communities should be assessed to adjust strategies for ITN allocation accordingly

Challenges

- Strategy adjustments may incur additional costs
- Strategy adjustments need to be well understood (e.g. the need to register displaced families living in households as separate households to ensure they receive ITNs) in the context of limited training

See: ITN quantifications for different campaign allocation strategies
This tool has been developed by Tropical Health, in partnership with AMP, to support NMPs with decision-making about ITN allocation and to better understand implications for ITN quantification when adjustments need to be made. For any support using this tool, please contact AMP.

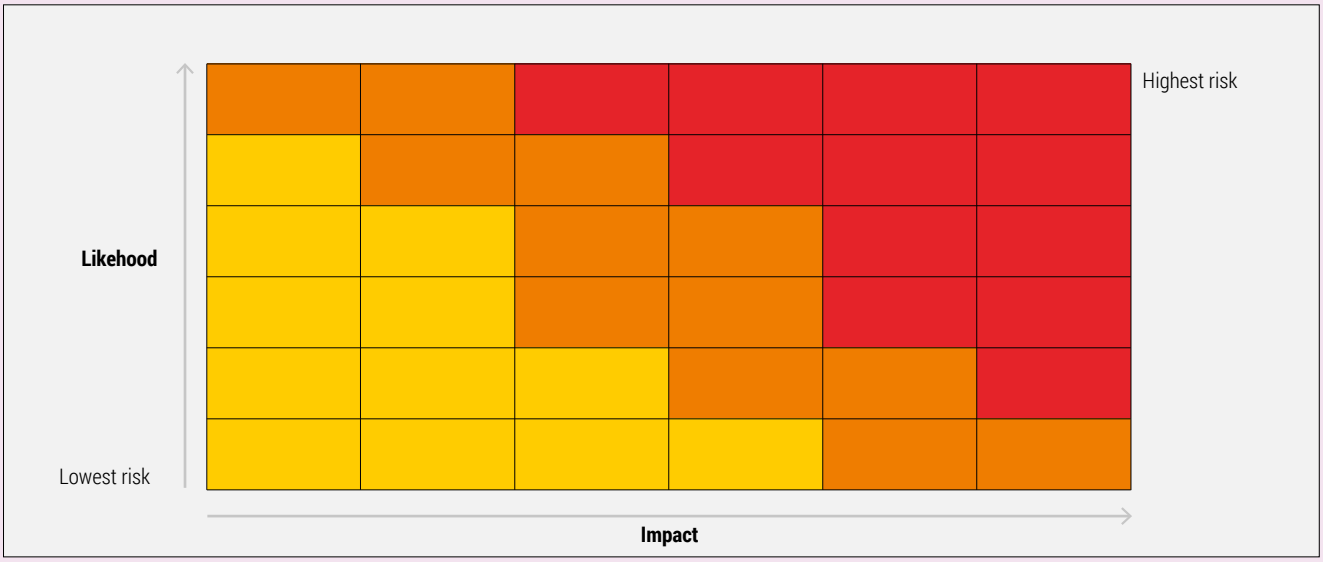
F. Challenges when adjusting ITN allocation

- Raises trust issues
  - ↘ Households may not understand changes if they are not well communicated through different SBC activities
  - ↘ Households may feel cheated by the distributors ▸ potential security concerns for campaign personnel
  - ↘ Risk of increased refusal rates
  - ↘ Affects community acceptance and perceptions ▸ rumour generation
- Negative effect on other health interventions
  - ↘ Households may feel that the government is not providing services as expected
  - ↘ Rejection over anger on ITN distribution
  - ↘ Risk of increased refusal rates
  - ↘ Rumour generation
- Misses universal ITN access and use goals
  - ↘ Households will need to decide who uses nets (raising social and cultural issues)
  - ↘ Lower prevention coverage, risks higher malaria burden
- Changes SBC messaging
  - ↘ Require increased/intensified, effective communication to explain changes in the context of reduced SBC funding

2.4 Managing risk in a resource-constrained environment

Risk assessment and mitigation planning is more important than ever with changes in operational strategies. Risk can be defined as Likelihood x Impact. Mitigation seeks to reduce the likelihood that a risk will occur, and/or to reduce the effect of a risk if it does occur.

Figure 1: Heat map of results



Changes in operational strategies that may incur increased risk include:

- Procurement and payment procedures vis-à-vis strategy shifts
- Accountability vis-à-vis reduced training and oversight
- Rumours related to shifts in targeting
- Security of teams related to shifts in targeting

Critical campaign risk areas linked to cost optimization include:

- Operational strategies and population targeting
- Microplanning
- Household registration (including training, SBC, data collection and analysis, supervision, monitoring)
- Logistics and supply chain (including training, tracking, supervision, waste management)
- ITN distribution (including training, SBC, data collection and analysis, supervision, monitoring)
- Post distribution activities (SBC, end process data collection, waste management, reverse logistics)

See: Risk assessment and mitigation planning for an ITN mass distribution campaign

See: Adaptable tool, Excel file, giving examples of entries in a risk assessment and mitigation plan for an ITN mass distribution campaign

See: Guidance on risk assessment and mitigation planning for school-based distribution.

See: Adaptable tool, Excel file giving examples of entries in a risk assessment and mitigation plan for school-based distribution.

Section 3: Microplanning

This section gives guidance on responding to the following questions:

- Are there microplans (Excel files, maps – paper or geospatial, other data) from the previous campaign that could be updated rather than implementing a full microplanning process?
- Are there different data sources that can be used to support decision-making about population and that allow a population to be "proposed" to minimize time and effort around population adjustments?
- Are there other health campaigns taking place in the same target areas/to the same target groups before the ITN campaign that will implement microplanning that could be used for the ITN campaign? Is it possible to integrate microplanning to split resources?
- Are there activities that were previously included as part of microplanning (such as warehouse assessments) that can be done virtually or digitally to reduce the need for people to be in the field?
- Is there connectivity in the target areas to support the completing of the microplanning templates virtually vs. in-person?

Microplanning is one of the most important activities for the success of a mass ITN distribution campaign. Efficiencies may be possible. Microplanning is a bottom-up process to gather critical operational and financial information from the lowest possible levels. It is carried out at the implementation level and uses more concrete, detailed and up-to-date information provided by local health facility staff and other relevant actors at community level.

Microplanning has two main objectives:

1. To refine the macroplan into a detailed operational plan that reflects the local context and specific issues that may affect campaign activities at the implementation level.
2. To develop an operational budget for activities taking place at the implementation level and thus ensure sufficient resources for the campaign.

Microplanning should take place early – four to six months before the planned ITN distribution dates.

This:

1. Allows the final budgets to be communicated to the donor(s) and other partners and stakeholders, and to ensure no delays in disbursement of operational costs.
2. Allows for resource mobilization where gaps in ITNs or funds arise based on updated population figures, context-specific planning and matters that may have been overlooked at the national level during the macroplanning and budgeting.

The current microplanning approach for ITN campaign distribution is based on EPI's approach with relatively minor modifications over time. There is little to no reuse of previous data or information in countries with a three-year campaign cycle and limited use of geospatial maps, or establishment/use of geo-repositories. Moreover, there is limited coordination with other health programmes (EPI, NTDs) that may have information that could support more efficient microplanning, and little use of CHW systems and data.

Consider a simplified microplanning process.
For example:

- Microplanning is generally bottom-up, but the outputs can be highly variable across target areas and make it difficult to take decisions and rationally determine what is "right"
  - Ajustments according to context possible, but must align with budget
  - Forgotten settlements, poor estimates of distances can skew results
  - Population and agreeing on denominators can be difficult, but drives much of the campaign quantification (household registration, materials, etc.)
- Transitioning to a simplified and more top-down process is possible now in many countries given data available to back up decisions, but will require:
  - More work at the central level to prepare for the microplanning
  - Formal engagement with statistics/census departments (and/or other partners depending on context)
  - Consensus among partners on the population figures to present and their justification
  - Alignment on processes for adjustments to figures to speak with one voice to sub-national levels
  - Risk assessment and mitigation plan

Note that NMPs (and Ministries of Health) are not at the same starting point for adjusting microplanning – some have more experience/resources to leverage than others (e.g. previous campaign used paper vs. digital tools) – nor are they working in the same contexts. Microplanning may look different in different parts of a country based on areas targeted and information available. Many NMPs are doing independent/standalone microplanning for each campaign intervention without reusing data and with limited coordination (e.g. ITN campaign, SMC campaign and EPI campaign). This is a lost opportunity for reducing resource requirements for microplanning. Requirement is for **options/scenarios** depending on **country-specific context** (status of previous microplanning, connectivity, data availability from previous ITN or other campaigns, etc.).

3.1 Potential adaptation of microplanning in line with reduced resources

1. Central level develops microplanning materials: templates, training of trainers (ToT) and workshop agendas, roll-out plan, etc.
   - Simplifies templates to "need" versus "nice" to have and adjusts to strategy adopted for campaign
   - Develops package of materials, prioritizes standard operating procedures (SOPs) in case of limited oversight (reduced in-person training, supervision)
     - Option: Pre-populate the templates with existing data (previous household registration (HHR) data, census projections, EPI/SMC/other campaign data, etc.), provide parameters and justification for adjusting population data and for adding new settlements, etc.
     - Option: Print maps for updating at sub-national levels (or send electronically for printing at district level)
2. Put focus on role of district and sub-district actors for filling in templates and updating or developing maps:
   - Districts will need to ensure data and adjustments will be provided from the lowest level possible
   - Focus on:
     - Population updates (review of proposed population if filled centrally or filling in template)
     - Identification of special populations/groups at higher risk, those with less access to health facilities
     - Transport and storage planning to reach all targeted areas
     - Planning for digitalization, SBC, etc. as applicable
3. Organize virtual introduction and follow-up sessions in line with timing for completing the microplans:
   - Central level (national team) should conduct the ToT for microplanning (if needed)
   - Central level (national team) + regional/provincial/district teams (as applicable) organize working sessions to follow up on progress and resolve bottlenecks

4. District level pre-validates microplans and submits to central level (e.g. one month in advance of planned starting dates)
5. Central validates microplans and returns to districts as final version (e.g. minimum two weeks in advance of planned starting dates)
6. District level starts recruitment of campaign actors based on validated microplans:
   - Virtual follow up from central level to ensure completed (e.g. minimum one week before planned starting dates)
7. Central (or other) level starts transport of ITNs based on validated microplans to pre-positioning sites (PPS) or distribution points
   - Ensure timelines work for planned start dates (e.g. final positioning at least 48 hours before planned starting dates)

Pros and risks

Pros:

- Will likely be faster and save money
- Will rely more on existing population data, push reuse of data to support decision-making
- Base is on previous performance in the campaign, more difficult to argue about figures unless there were documented issues with registration

Risks:

- Possible reduced oversight and poorer quality control – need for teams to set up check-ins, ensure they happen
- Information collection not done to quality required, not grounded on local field conditions
- Needs reconciliation meeting(s) with central specialists of specific districts/provinces
- Requires work up front, including triangulation between previous campaigns and other sources

3.2 COE contexts

- Need simple tools and SOPs to collect the very basic data (e.g. identification of pre-positioning sites (PPS), with list of villages in the catchment area, along with their population, road conditions, etc.)
  - ↘ Align tools to the oversight and support that can be provided, either in-person or virtually
  - ↘ Tools may be paper-based and where this is the case, they will need to be transmitted upwards to the level that the data could be entered into a simplified Excel microplanning template to generate the microplans
- Population will be a challenge to address
  - ↘ Multiple sources of information for triangulation but difficult to determine a number where population movement has and/or is taking place

See, for example
The Humanitarian Data Exchange

  - ↘ Where significant population movement has taken place consider combining the microplanning and registration

Section 4: Logistics and supply chain management

This section gives guidance on responding to the following questions:

- Is the in-country supply chain as efficient as possible (e.g., number of levels of storage, number of levels of responsibility transfer within the supply chain, etc.)?
- Are there logistics processes currently taking place in-person (such as warehouse assessments) that could transition to digital or virtual processes?
- Is the supply chain building on the existing human resources within the Ministry of Health and reinforcing those rather than building a parallel structure?
- Can micro-positioning and transport plans from previous campaigns be updated and adjusted for the current campaign versus starting them from the beginning?
- Are there partners who have capacity and willingness to support the logistics operations through in-kind contributions, particularly for last-mile logistics?

Key logistics activities

- Macroplanning:
  - Logistics plan of action, budget, timelines and risk analysis and mitigation plan
  - Macro positioning and transport plan
  - Waste management plan (includes the quantification of waste to be generated including the options for the disposal by recycling, incineration or other)
  - Quantification of logistics tracking tools

Definitions (Oxford reference)

- Efficiency: A measure of the ability of an organization to produce the maximum output of acceptable quality with the minimum of time, effort and other inputs (in this case, funding).
- Optimization: The process of finding the best possible solution to a problem.

Particularly important for logistics, we are looking for efficiency and optimization **WITHOUT COMPROMISING OR LOSING ACCOUNTABILITY**

- Coordination of stakeholders, particularly with multiple partners
- Training of logistics personnel for high accountability of ITNs
- Warehouse assessment to ensure adequate storage for ITNs at each point of storage
- ITN movement through the supply chain:
  - In-country reception of the nets (customs clearance, inspections, etc.)
  - Transport and warehousing of ITNs and other campaign materials
  - Micro-transport, including last-mile logistics
  - Reverse logistics (ITNs and waste)
- ITN reconciliation and reporting
- Digitalization of the supply chain:
  - Product scanning at different levels of the supply chain (training and human resources implications)
  - Logistics data management (during and post activity archiving and use)
- Waste management:
  - Recycling companies
  - Procurement and contracting

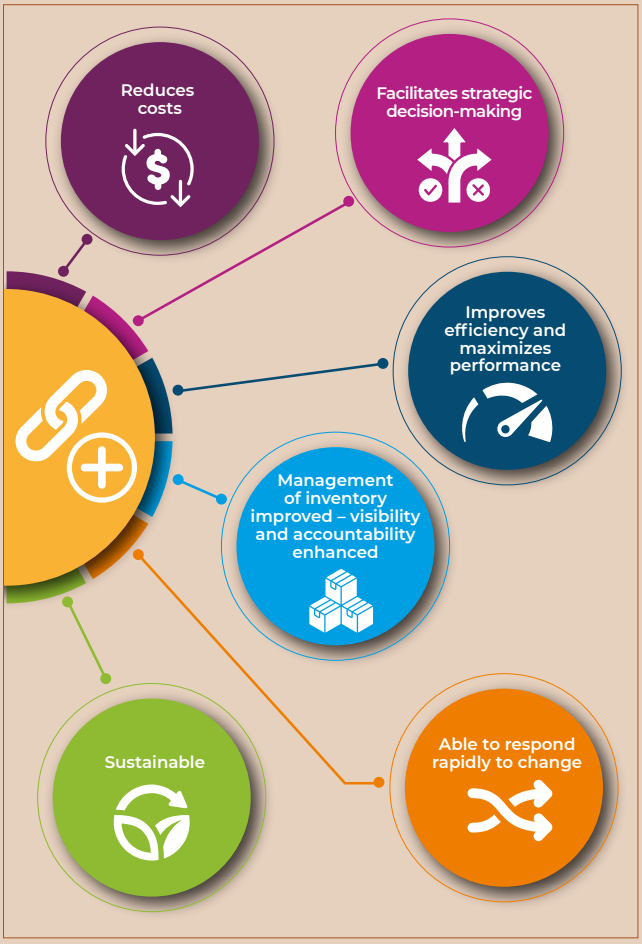
Logistics cost drivers (non-exhaustive list)

- Devices for the digitalization of the tracking system
- Printing of tracking tools
  - Goal: 10 per cent paper (maximum), only as a back-up with digital systems in place
- Human resources for the logistics operations and their training
- Warehousing and transport, including last mile logistics (and particularly where lateral movement takes place)
- Logistics supervision
- Waste management
- Reverse logistics

Review the current in-country supply chain

- Assess where there are potential efficiencies (e.g. e-training for use of tracking tools since these are standard at all levels in many cases)
- Opt for decentralized delivery if this is possible (review costs and time implications for adjusting delivery)
- Use fewer "levels" in the in-country supply chain (review costs and time implications for storing at different levels and which, if any, could be skipped)
- Ensure government support for warehousing at national and sub-national levels

Figure 2: Supply chain optimization



Essential tools to ensure accountability

- Over time, many NMPs have added more tools for ITN accountability, but these may be "nice" versus "need" to have tools
- To ensure accountability, there are essential plans – macro and micro-positioning and micro-transport plans, including for last mile logistics – and essential tools
- Essential tools (need to have) to be considered for proper tracking:
  - Waybills to serve as proof of delivery and reception at the destination. No need for GOODS RECEIVED NOTE as the information can be captured by the waybills
  - Stock cards (stock management sheet) to record daily transactions/stock in and stock out
  - Inventory control forms for periodic physical counting and reconciliations (as defined in standard procedures)

Note: Essential tools should be accompanied by SOPs describing "how to use" the tool correctly

- Taken together – plans and tools – the supply chain should be fully accountable if logistics personnel follow the guidance provided

TIP
Leverage existing tracking systems and tools used for other health commodities in your ITN campaign!

Considerations for cost cutting

Reduce the printing of tracking tools:

- Consider using the existing tracking systems and tools used for other health commodities for the ITN campaigns (both paper-based and digital systems)
- Consider digitalization of logistics tools where the campaigns are already technologically driven and consider paper-based as a back-up (small percentage based on risk assessment)
- Consider using and printing only the essential tools that will ensure proper tracking without losing or compromising accountability, e.g. waybills and stock cards (reduce the number of tools)
- Consider printing the stock cards two-sided (front and back) to allow more transactions to be covered by one stock card and reduce the number of stock cards to be printed

Build reuse and waste minimization of tools into your planning:

- Print generic waybills and stock cards with no dates or year of a specific campaign, allowing them to be recycled and used in subsequent campaigns
- Print booklets of waybills with a maximum number of 10 to 20 sets and never 50 to minimize the waste during the campaign
- Assess which other transactions can be covered by the stock card to avoid printing of additional tools (e.g. insert one column to be used/completed during the physical count)

Consider digitalization

Digitalization of the logistics tracking system is an approach for cost savings and efficiency without losing accountability but must be well planned.

Warehouse assessment

- Digital warehouse assessments are an option available in different digital platforms and can be explored as a way for cost savings:
  - Reduces the need for central teams to move to sub-national levels (reduced transport, per diem, etc.)
  - Can be physically done by local staff provided with the online guidance/checklist
  - Results are sent back to the central level through the online platform by email or other means of communication for review and feedback
  - Allows for rapid results (time saving)
  - Produces good quality results (optimization)

Note: For government owned warehouses or a known private warehouse property, the assessment data can be archived and used subsequently for future campaigns

Work with the private sector

- Private sector may have an important role to play:
  - Look to engage private sector partners and stakeholders not just as contractors but as participants in strategy development and execution
  - Private sector extensive experience may support optimization of the supply chain management
  - In-kind contributions can be requested from private sector partners and stakeholders who may have both logistics support AND logistics subject matter expertise

Transport and storage

Avoid duplicate costs through joint planning:

- Logistics planning and budgeting often focuses only on the transport/storage and logistics management of the ITNs
- To maximize human and financial resources, consider planning for the positioning of other campaign materials with the ITNs to avoid additional costs for their transport (particularly if being delivered to same location as the ITNs)
- Digital device/accessory movement through the supply chain should be planned by both teams (logistics and digitalization) to maximize funds as much as possible (recognizing the commodities have different transport and storage requirements)
- Quantification should be done by the logistics team for tracking of all supplies and materials (since the essential tools are not different)

Make last mile logistics (LML) as cost-efficient as possible

Review options for supplying the teams (DPs or door-to-door), especially if supplying daily:

- *Most costly option:* One pick-up truck for each DP that will take 16 bales, two bales dropped in each of the eight villages in the DP catchment area.
- *Less expensive:* Have four motorcycles that will do two villages (with two bales each) twice.
- *Even less expensive:* Have two cargo motorcycles with the capacity of eight bales each (each supplies four villages).
- *Cheapest option:* Eight bicycles that will take two bales each.

Example: Cost-efficient LML for door-to-door distribution

- Teams come to pick up their two bales with their own transport arrangements (they receive compensation, unless existing CHW network with bicycles already provided)
- Payment to the D2D teams for arranging their own transport could be a flat rate per bale
- Amount teams would receive for transport would probably be between paying for motorcycles and paying for bicycles
- Consider ownership of a bicycle as part of criteria for selection if ownership of bicycles is high (should not be a disadvantage for people to participate)

Advantages:

- Teams would have their two bales that they need to distribute during the day each morning and there would be no need for resupplying
- Transport is be organized locally vs. from a higher level (i.e. motorcycles and bicycles are common)

Additional LML options (fixed site or door-to-door):

- Consider using zonal or hub stores to position nets closer to communities/DPs and facilitate last mile transport planning and implementation
- Consider having DP teams handle their own logistics, for example organizing for transport of the ITNs for distribution and for the reverse logistics at micro level
- For COE contexts, relying on community leaders or other community stakeholders to manage the logistics and the distribution may be the most feasible option for ensuring people receive ITNs
- Consider support for transport as a high priority "community contribution" for discussion during engagement of leaders and request their assistance for mobilizing additional logistics resources (storage, transport, security, crowd control, etc.)

Waste management

Ways to reduce costs:

- Source reduction
- Use bulk packing for ITNs instead of individual plastic packs to reduce the volume of packaging waste generated, lower waste management costs and reduce environmental impact at source
- Leverage existing infrastructure and resources
- Utilize existing health facility transport systems which include fuelling, vehicle hire and labour to manage ITN waste and minimize the need for new, cost-intensive contractual processes
- Integrate waste collection into distribution workflow
- Integrate the transport of ITN waste from the prepositioning site or distribution points with the reverse logistics of leftover ITNs during mass campaigns
- Establish or utilize existing structures for short-term storage solutions (e.g. designated rooms at local health facilities)
- Consider renting sections or carved-out spaces within larger warehouses as temporary storage spaces before disposal or recycling ITN waste, which may be more cost-effective than renting the entire warehouse
- Plan and budget for waste management early
- Incorporate ITN waste management planning into the macroplanning and budgeting for the campaign to avoid costly last-minute arrangements
- Do not budget for additional plastic materials (e.g. bags) to manage the waste – reuse baling, straps, etc. to package the waste in the materials it came in
- Identify key stakeholders and establish critical partnerships
- Partner with recycling companies or private sector players to explore innovative options for management of ITN waste (e.g. for agriculture, construction)
- Digitalize waste tracking
- Deploy mobile tools or digital forms to track and monitor ITN waste collection, cutting down on paper-based systems and improving efficiency

Waste management challenges

- Limited existing companies/limited knowledge of existing companies that manage plastic waste or use plastic waste as raw material. Work with the government entity (or entities) responsible for waste management to review companies managing plastic waste against the needs for the ITN campaign; establish a database and start discussions early to determine roles and responsibilities, timelines and costs. **Caution:** A limited number of waste management companies may lead to higher costs and delayed implementation depending on capacity
- Existing operational incinerators that meet the WHO requirements are not mapped (or do not exist). Work with the government entity (or entities) responsible for waste management, as well as the Ministry of Health to access existing information; create a database of existing operational incinerators (government or private properties) during the macroplanning stage for assessment before implementation
- Poor planning and funding gaps for waste management. Integrate waste management plan and budget development with the logistics macroplan

Reverse logistics

Plan well to reduce lateral movement and reduce reverse logistics costs:

- Avoid lateral logistics - improve quantification and quality of registration, work within the limits of nets available in each area (district, locality, DP/PPS, community, etc.) → adjust allocation or capping to avoid additional costs for unplanned ITN movement
- Reverse leftover ITNs to the nearest health facility and use local transport to move remaining nets/bales (e.g. CHW bicycles or health facility staff bicycles) given small quantities

Section 5: Training

This section gives guidance on responding to the following questions:

- What trainings typically delivered in-person can be delivered virtually?
- Are there options to use digital platforms and build in training videos, reminders for campaign personnel and other prompts to ensure access to information on a continuous basis?
- Are the campaign structure and personnel building on the existing human resources within the Ministry of Health and reinforcing those rather than building a parallel structure?
- Are there existing CHW databases that can be leveraged to ensure personnel with capacity and to facilitate payments?
- Do all operational personnel need to be trained? Can the trained operational personnel be responsible for briefing and oversight of non-technical personnel in the field?
- Are there partners who have capacity and willingness to support training through in-kind contributions (e.g. venues, etc.) to reduce costs?

5.1 Personnel selection

Community level

- Use workers previously engaged (where possible) or leverage existing structures (community health workers or other structures/organizations) already engaged in health service delivery
- People with previous experience may perform better in a context of limited training/oversight
- May facilitate payment planning and implementation where systems are already in place for routine activities
- Assess the implications of Bring Your Own Device (BYOD) strategies in terms of who will be able to participate in the campaign (gender, age, etc.)

Supervisors

- Combine roles and adjust criteria for selection (e.g. ensure that supervisors have skills to cover all areas, including digitalization) to avoid multiple supervisors covering different technical areas working at the same level
- In all communities, find the people who have campaign-relevant skills - communication, mathematics, inventory or leadership experience - that can be used to improve the quality of implementation
- Leveraging existing skills of teachers, treasurers of religious organizations, small business owners, community and religious leaders, etc. could help mitigate risks linked to less training or limited supervision
- Identify (an) individual(s) in each community to support data verification prior to it being sent for further compilation and analysis

Training requirements

- Training is necessary AND it is expensive and time/labour-intensive
- Training needs to be aligned to a resource constrained environment: there is no one size fits all in terms of what is possible/feasible, etc.
- Training needs to be aligned with adopted strategies and accelerating ITN distribution timelines
- Increased emphasis on community-level actors
- Shorter periods of time for training
- Anticipate the need for detailed SOPs and/or job aids due to insufficient or inadequate training (can be electronic where digital systems in use) to:
  - ↘ Remind personnel of the definition of a household and how ITNs should be allocated
  - ↘ Describe steps for filling in data collection forms
  - ↘ Remind personnel of key messages to communicate to households
- Consider combining with other planned training if appropriate, e.g. combine with SMC campaigns if scheduled to be held around the same time, even if the two campaigns are not integrated

5.2 Consider virtual learning or e-training

- Use digital technologies (e-learning platforms, interactive webinars, virtual classrooms and mobile apps) to build knowledge and develop skills
- NMPs digitalizing campaign data collection are not fully exploiting the potential for e-learning to reduce the need for in-person presence at training sessions
- When considering e-training, it may be necessary to budget for data/internet access, learning management system, authoring tool and hosting

e-learning

- Tracking engagement/participation, completeness and effectiveness may be more challenging. This aspect should be considered in building the system/approach to be used.
- Participant engagement and concentration may be reduced if there is content or time overload. This needs to be considered in development of agenda (breaks, interactive sessions, etc.)
- Participants may need time to process all modules in an online platform – learning needs to be timed for the learner, with pauses possible

Option: boost uptake via Certified Professional Development Certificates and light incentives (e.g. internet data)

- Harder to use active training techniques (role playing): Work with different tools and options to develop ways for ensuring interactive learning (simple tools such as Miro or Mural, simple Google docs set up for participant inputs, pop quizzes, etc.)
- Internet and platform considerations:
  - Consider bandwidth for users in the design, particularly for areas with known connectivity challenges
  - Needs IT support to deal with potential issues faced by participants, as well as regular updates
  - Likely to become more complex at lower levels - may be best for national, regional and district trainings, while community level trainings may be most effective/efficient in person
  - Free platforms may limit the number of participants or the amount of time per session, so use with care.

Option: Deploy an offline learning management system to address connectivity issues.

Option: Build the learning platform/system using in-house capacity as much as possible (system aligned to capacity) to ensure that maintenance and use do not exceed expertise available/require external support for adjustments.

5.3 Cost saving areas in training

- **Venues:** Use religious/community structures, etc.; advocate with public and private partners for use of venues for trainings
- **Methods:** Consider which trainings are critical for in-person participation (vs. virtual)
- **Days:** If content is focused on the specific roles and responsibilities of the campaign personnel, consider how long is needed for training
- **Participants:** Prioritize people with previous experience, decide who needs to be trained versus those who can be "briefed" by people trained and/or provided with an SOP
- **Quality control:** Consider how to put in place measures to address potential issues linked to "insufficient" training
- **Training materials:**
  - Print only essential training materials – use electronic materials as much as possible
  - Repurpose existing training materials to save time and efforts
  - Develop materials in local languages where possible and, where not possible, ensure that facilitators are comfortable with translating to local languages during training
  - Time and resources are required to develop good e-learning modules, especially to keep them interesting and interactive
  - Use pre-recorded video tutorials/refreshers
- **Additional ideas:**
  - Combine training topics (e.g. registration and distribution)
  - Reduce number of training days
  - Integrate trainings with other programmes (maximize full day of training)
  - Reduce number of participants or levels of people who are included (e.g. crowd control people)

5.4 Training agendas – key suggestions

Focus

- Keep the agenda tight and focused on the roles for which the person being trained is responsible
- Avoid providing extra information

Timing

- For virtual/online trainings (facilitated), set an early start time to allow people to get online and familiarized with the platform but adjust the agenda for sessions starting to ensure people are ready to participate
- For virtual/online trainings, build in breaks to avoid people dropping out at critical points

Practical exercises

- Maintain focus on practical exercises whether virtual or in-person
- For e-learning/virtual training, develop practical exercises that can be done online to ensure familiarity with content. Consider using virtual meeting tools (Miro, Zoom polling, Menti, etc.)

Payments

- Ensure that training agendas include information on who, how, how much, when, etc. to avoid problems during implementation

Pre-recorded training sessions

- Pre-recorded training sessions can (examples only):
  - Have one facilitator
  - Have facilitators from each thematic group – implementation, logistics, digitalization, SBC, finance, etc. – according to the agenda sessions
  - Have no facilitators – just slides with a scripted voice-over
- Considerations:
  - Participant access to way of viewing pre-recorded sessions – if no phones, no internet, expensive data, etc., may not be ideal choice
  - Level of existing knowledge and learning motivation of participants
  - Establishing built-in means to ensure that participants have watched/followed the videos and have attained the necessary skills and knowledge

Virtual training sessions

- PowerPoint presentations: screenshare on Zoom, Teams, Google Meet and other applications
- Considerations:
  - Use pre-recorded training materials before the virtual trainings to cover some key topics
  - Familiarity with different IT tools will vary:
    - Identify people with existing knowledge/ experience
    - Share clear instructions on how people can join calls days before the trainings
  - Varying levels of IT support will be needed/will be available:
    - Use the audio only option instead of video to maintain communication when connectivity is poor
  - Online workshop facilitation differs from in-person training; new challenges that have to be considered in developing agendas and materials
  - The establishment of built-in means to ensure that participants have followed and have attained the necessary skills and knowledge

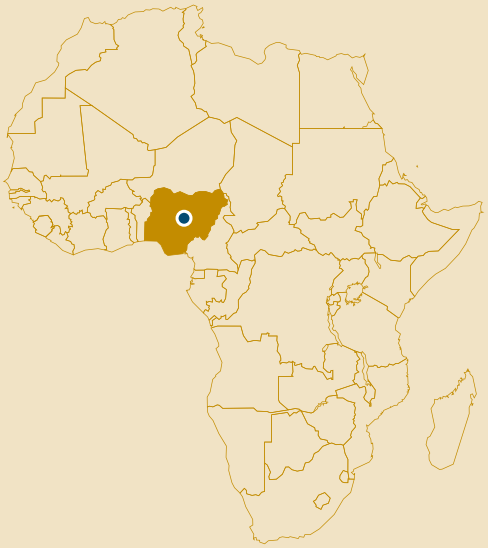
Face-to-face training/orientation

- Sometimes face-to-face trainings and orientations are the only options, particularly true as you go down towards the community level
- Considerations
  - Use schools, religious structures and other venues with sufficient space that could be offered free of charge
  - Limit facilitation to one person, even considering that you may have larger groups of participants (ensure materials are detailed and clear for participants due to lower number of facilitators, etc.)
  - Use pre-recorded training materials before the in-person trainings to cover some key topics, allowing for focus for in-person trainings to be on the content that requires in-person engagement

Examples of transition to virtual/e-training

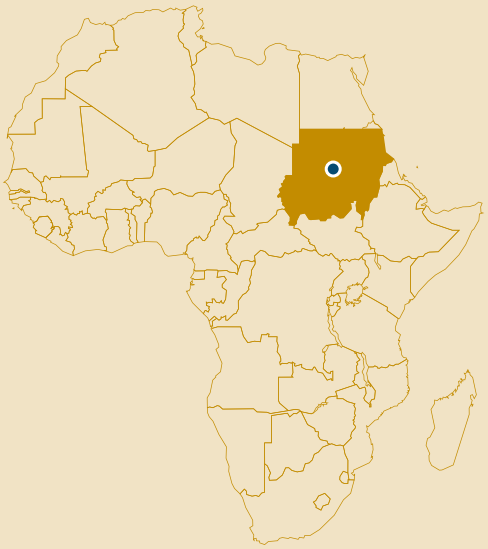
Nigeria

- Uses interactive learning tools like real-time polls (Menti), quizzes and interactive breakout sessions to keep participants engaged and provide instant feedback on comprehension
- Conducts randomized spot checks and verifications by calling on participants during sessions for hands-on demonstrations or quick exercises to verify active participation and understanding
- Introduces mandatory feedback forms that participants must complete or reflection logs that include questions on content understanding and training experience
- Develops and shares short instructional videos demonstrating key hands-on processes for participants to use as reference materials



Sudan

- Budgets included funding for either (1) data purchase or (2) participants to move to a more connected location for the training
- Personnel were selected from those with previous experience in ITN campaigns
- Training materials and sessions focused on only the information that was required for the trainees
- Training materials and lectures were sent in advance to allow participants to review before sessions and in case of connectivity problems
- Practical training, exercises and group work remained priorities
- Ensuring participant exchange of experiences and presenting the problems that occurred previously and how participants dealt with them was effective for engagement in the online sessions



Section 6: Data, supervision and monitoring

This section gives guidance on responding to the following questions:

- Are the indicators proposed to measure progress against targets realistic?
- Can data be collected as part of campaign processes to measure progress or are additional activities (e.g. in- or end-process monitoring) required?
- Are there options to use digital platforms more effectively in support of virtual supervision and monitoring, using the data and dashboards to guide virtual daily review meetings with field teams?
- Are the campaign supervision and monitoring structure and personnel building on the existing human resources within the Ministry of Health and reinforcing those rather than building a parallel structure?
- Are there existing CHW databases that can be leveraged to ensure strong community supervision where supervision and monitoring from higher level personnel are reduced?
- Are there lists of teachers or educators or other personnel with capacity for supervision and monitoring that could be leveraged to support high-quality operations at community level?
- Are there partners who have capacity and willingness to support campaign monitoring (as independent observers or other) to reduce costs?

Prioritize collection of data for decision-making and not for reporting

- Ensure that the indicators you are measuring and the methods for data collection will allow you to take programmatic action (not just write a report)
- Consider whether you need to collect the data based on whether you have the resources (human, time, funding) to take an action

Data needs and use of data

- **Focus on need to know** versus nice to know data and simplify the registration process (in line with an increased number of households to reach per day where parameters are being adjusted)

Note: In a context where large-scale surveys may not be taking place, there may be interest in using ITN campaigns (particularly digitalized) to collect additional programmatic data – NMP should define needs for the campaign and beyond in advance to facilitate collection.

- Simplify data collection tools as much as possible given training time and supervision may be limited
- Develop SOPs and/or job aids for community level campaign personnel to:
  - Remind them of the definition of a household and how ITNs should be allocated
  - Describe steps for filling in data collection forms
  - Remind them of key messages to communicate to households
- Use of Standard Operating Procedures (SOPs). Given potential challenges to delivering quality training and/or limited higher level supervision and monitoring, community supervisors should be provided with SOPs on:
  - Integrated checklists for all activities (logistics, SBC, M&E, digitalization)
  - Data verification procedures
  - Communication and contacts for different purposes (e.g. number to which to send data,
  - number to call in case of serious incident, etc.)
- Community supervisors should collect daily data from teams, not just to verify numbers of ITNs distributed against the plan, but to feed back **immediately** regarding areas where campaign workers need to adapt or improve implementation. This should avoid prolonging days due to missed areas, poor quality work, etc.

Need to have versus nice to have data

- Household registration **"need to have"** data:
  - Household size (head of household name, location, number of persons in household)
  - Geolocation of household; household identifier number
- Household registration **"nice to have"** data:
  - Age, gender, contact information of household members
  - Number of people by risk group (under fives, pregnant women)
  - Mobile phone numbers (unless for e-tokens or for SMS messaging post campaign)
  - People eligible for other interventions (e.g. SMC or EPI unless will be used in near term)
  - Number of sleeping spaces (unless allocation is based on this – then need to have)

Note: NMPs should think about other potential uses for the data that will be collected to determine what are "need to have" vs. "nice to have" data

Supervision

- Review/revise roles and responsibilities for supervisors at different levels and align to programmatic needs:
  - Combine roles/tasks/focus per supervisor, avoid multiple supervisors at same level
  - Quantify supervisors for each level using clear parameters (vs. being fixed by level)
  - Consider having in- or end-process monitoring an integrated part of TORs/roles and responsibilities for supervisors at certain levels vs. paying for independent monitoring
- Planned supervision vs. blanket supervision:
  - Everyone does not have to be everywhere
  - **Prioritize community supervisors** and involve local leaders for support on data verification
  - Limit upper-level supervision and monitoring (rely on technology where possible)
  - Improve in-person supervision quality (e.g. feedback mechanisms, action follow-up)
  - Plan supervision coverage, focus on known problem areas

Supervision and monitoring

- Use digital technologies to support supervision and monitoring vs. people having to be in the field. Photos can be important for demonstrating in/correct practice in the field
- Dashboards (like the one above) allow for rapid visualization of data, identification of issues (progress, inconsistencies in data, etc.)
- Use AI to generate reports for actions by supervisor based on the data and allow targeted improvements

Use technology for coordination and review meetings

- Establish WhatsApp, Telegram, etc. groups (or other established platform) to ensure regular and timely sharing of information between supervisors at different levels:
  - Designate a group moderator and group rules and limit non-essential communication to avoid people missing more important information being communicated, such as a serious incident
  - Use moderated messaging groups for quick updates, microtraining links, and troubleshooting tips
  - Data and feedback can be sent to everyone in the group, common issues identified and resolved, and rumours and mis/disinformation reported and tracked
  - Quick sharing of information, including training updates that can be sent out as links to address challenges
- Consider options for daily review meetings that are not face-to-face:
  - In many countries, Google Meet provides a low bandwidth option for meeting with sub-national field teams to discuss daily progress
  - Where virtual daily review meetings are organized, ensure a standing agenda, focus on data and try to keep to time recognizing the work to come the following day
  - Data bundles may need to be provided

Assess what is being monitored and consider alternative approaches

Monitoring activities vary by programme; blanket recommendations are not possible.

- Review which monitoring activities are being implemented and why
- Determine if the "need to have" monitoring tasks and outputs can be:
  - Integrated in the roles of other personnel (supervisors)
  - Performed by personnel at sub-national level (e.g. end process monitoring implemented by teachers who have capacity to manage with limited, virtual training and can collect and transmit data using their own devices)
  - Implemented virtually (or in a hybrid approach)
  - For process monitoring, consider using online questionnaires that can be sent by email, SMS, WhatsApp or other means to campaign workers
- Organize virtual key informant interviews for additional information

Potential lower cost monitoring approaches

- If phone numbers of household representatives are collected during registration, they can be randomly sampled to collect monitoring data based on a standard questionnaire:
  - Data can be compiled by community, sub-district and district
  - Areas not meeting the set thresholds for quality can be flagged for follow-up with community supervisors
- Community, religious and traditional leaders, as well as representatives of civil society or non-governmental organizations, can be called and interviewed about the campaign implementation and management to identify challenges and areas for improvement
- A hotline can be set up for people to call to ask questions, make complaints, report problems, etc. and to relay information to the community and other supervisors working in the area
- Establish exit interviews at distribution points:
  - May be administered by community leaders or others to gather information from people as they are leaving from picking up their nets
  - Make questionnaires short and focused, taking little time from people after they have waited for their ITNs

Section 7: Digitalization

This section gives guidance on responding to the following questions:

- Is the digital platform being used optimized to ensure that all processes are captured and can be tracked from the database/ dashboard?
- Has an analysis been done to assess the feasibility of a Bring Your Own Device (BYOD) strategy at sub-national levels to identify areas where the strategy is not possible and facilitate quantification and work within the MoH and partners to source additional tablets?
- Are the campaign digitalization structure and personnel building on the existing human resources within the MoH and reinforcing those rather than building a parallel structure?
- What options exist for hosting of data during and after the campaign to minimize additional investment?
- What alternatives to vouchers exist for ITN recipient identification? Are there more cost-effective options for identification?
- Are there partners who have capacity and willingness to support campaign monitoring (as independent observers or other) to reduce costs?

Digitalization as a process

Digitalization is an ongoing process of redesigning business processes using digital technologies, rather than a simple conversion of paper to digital forms (Kubrak et al., 2023). **Digitalization is NOT a one-off conversion of paper forms; it is an ongoing process of redesigning how work gets done.**

- Digitalization aims for long-term cost efficiency , not just "going paperless"
- Upfront digital costs (devices, set-up) are recouped over time as platforms, devices and data are reused driving down cost per campaign and increasing accountability
- Treat every campaign cycle as a chance to refine processes, trim costs and reuse assets—not to "start over"
- Build the digital architecture to serve multiple use cases (ITNs, IRS, SMC, etc.) so infrastructure, integrations and training assets are shared and costs are spread across programmes

Sustaining digitalization as a strategic priority

- Many countries' digital health landscapes are fragmented—multiple partners and disease programmes deploy overlapping tools and platforms
- NMPs are expected to "do more with less," yet they often lack visibility into what actually drives digital costs
- Budget reductions put digital investments at risk because digitalization is still perceived as a "nice to have" rather than a "need to have"
- Cutting digitalization risks poor data quality and weakened accountability
- Digitalization adds unique value: built-in validations prevent household inflation and georeferenced data repositories can serve multiple programmes, streamlining planning, budgeting and implementation

Top cost drivers

- Software/platform costs (customization, hosting, licences)
- Devices and peripherals (phones/tablets, power banks)
- Connectivity and Internet (SIM cards, data bundles)
- Technical support and maintenance (digital partners/IT teams)
- Human resources/per diems for digital data collection and training
- Digital payments and financial reconciliation fees (mobile money charges)

Campaign components and cost drivers for digitalization

Macroplanning/microplanning

- Platform and maintenance cost (campaign and mobile device management) + hosting or server cost
- GIS microplanning: GIS software fees, imagery licence, data collection fees, training

Household registration
- Mobile devices, vouchers, internet access, SIM/data subscription, BYOD incentives

Logistics and supply chain
- Provision of devices, IT equipment to support devices
- Device warehousing, forward and reverse logistics, buffer stock, setup/configuration, insurance, misplace/missing or faulty devices

Training and supervision
- ICT4D officers, technical support, digital partners, extra in-person training days, additional staff for configuration

ITN distribution
- SMS, batteries/power banks, SIM/data bundles

Monitoring and supervision
- Data synchronization
- Mobile data, mobile devices, analyst labour, etc.

Payments/incentives
- Payments for all participants
- Transaction fees

Macro- and microplanning

- Plan for digitalization with a long-term vision by creating a central data repository for future campaigns and cross-programme use
- Reuse data from previous digital campaigns to support microplanning
- Prioritize open source/low cost tools and shared infrastructure instead of buying or building anew, e.g. free Sentinel imagery, and collaborations with universities or GIS partners for microplanning

Macroplanning and budgeting

- Host data on an existing, secure Ministry of Health (MoH) cloud tenant or another low cost, compliant cloud option rather than setting up a new environment
- Reuse and integrate open access digital platforms: only fund new systems when no suitable solution exists
- Minimize use of multiple platforms: use one platform (or a small, interoperable set) to streamline coordination and ensure consistent data
- Procure only the devices and accessories truly needed (power banks, solar chargers, etc.); share and rotate government owned tablets/phones across malaria, NTD, EPI and other programmes instead of purchasing new devices each campaign
- Use a BYOD strategy for campaign workers, supervisors and monitors where feasible; supplement with a small pool of MoH/programme devices in areas where BYOD is not practical
- Negotiate zero-rated data/SMS or bulk data bundles with telecoms, including through their corporate social responsibility (CSR) programmes. Other compensation options: airtime, internet access, reimbursement for data use
- Build the app offline first and schedule batch synchronizations at nightly/weekly hubs to cut data costs

Household registration (HHR)

- Consider alternatives to vouchers: Replace paper vouchers with cheaper digital options (QR/SMS/USSD tokens, household IDs) to cut printing and management costs
- Integrate HHR with other disease interventions:
  - Examples: NTD household listing of members, gender and age to support routine or mass drug administration planning; SMC registration of eligible children
  - Phase HHR to align with other disease activities and available resources, maximizing shared assets and staff
- Explore updating HHR data from previous campaigns. Only capture new or changed households to avoid full reregistration each time
- Use CHW registers as applicable. Where these are already digital, leverage them instead of conducting a separate HHR
- Establish mechanisms (routine updates, integration and cross reference with other activities) to keep household data current and avoid full reregistration each campaign

BYOD feasibility: analyse and plan

- Examine context (regulations, workforce profiles, connectivity, security posture) before deciding on whether the BYOD strategy is feasible
- Compare total cost of using BYOD (stipends, data bundles, support) vs. procuring new devices
- Map device compatibility (OS, RAM/storage, battery health) and device coverage (to identify existing gaps)
- Set minimum specifications, pre-test common handset models, and keep apps lightweight and offline-capable
- Share a simple checklist/template personnel can use to self-assess their personal device's suitability
- Identify high risk roles or areas (e.g. HHR campaign staff) that still require dedicated, managed devices
- Determine if incentives will be provided (e.g. airtime, data top-ups, cash stipends) for use of personal devices
- Define replacement/repair coverage for any damage sustained during programme work

Considerations for BYOD

- Enforce end-to-end encryption, strong authentication, and the ability to remotely lock/wipe lost devices. **Caution:** Risk of data loss may increase with BYOD approach (variable quality, security)
- Align with national data-protection rules; capture consent/agreements and secure any required approvals
- Provide a tiered help desk, quick-start guides, and a small pool of spare devices for swaps. **Caution:** Quality and age of personal devices may complicate IT support
- Enable offline capture with scheduled synchronizations; negotiate zero-rated or bulk data packages with telecoms
- Specify how often and where data must be synchronized in no-network zones
- Disable or restrict app access right after each major exercise (HHR, distribution) to prevent unauthorized use and data drift

Alternative to vouchers

- Vouchers remain a key component of both digital and non-digital ITN campaigns, but lower or no-cost alternatives could be considered. Assess how and why vouchers are being used and whether their function can be replaced through alternatives
- Where widely available, use existing national identification systems (e.g. ID cards, voter IDs) and telephone numbers in place of vouchers
- Explore digital alternatives such as e-vouchers, e-tokens, or SMS-based solutions
- Where vouchers are necessary, limit to one per household versus one per net
- Consider locally printed vouchers or coded cards instead of imported vouchers

Logistics and supply chain

- Distribute tablets (and SIMs/power banks) directly during sub-national level trainings, instead of arranging a separate delivery circuit
- Use decentralized drop-off points for last mile delivery and plan reverse logistics at the same time to bring devices back for the next phase
- Piggyback on existing ITN transport, warehousing and inventory systems and other health programmes whenever schedules align
- Label every device with an asset tag or QR code and record it in a live log so missing units can be quickly located to prevent losses
- Document and enforce a policy for lost or damaged devices that balances accountability with rapid replacement
- Keep equipment in secure, climate-controlled storage between phases to extend usable life
- Define when to maintain, redeploy, retire and recycle devices to prevent premature replacement and e-waste

Training and technical support

- Use mobile device management (MDM) to push updates remotely, lock/wipe lost units, and avoid costly in-person support
- Produce short (two to five minutes) video clips or interactive modules for most topics, and limit in-person sessions for hands on device/app set-up and troubleshooting
- Leverage existing ICT capacity to provide technical assistance during campaigns:
  - Train a core group of national, regional and district ICT/HIS staff (existing in positions) who can in turn train frontline users
  - Reduce dependence on external ICT4D consultants
- Replace nonessential field visits with virtual supervision groups (WhatsApp groups, etc.) and maintain only targeted field visits

SBC

NMPs should consider the following to more effectively leverage digital platforms to support SBC:

- Use SMS to disseminate key information to households: explore whether this would be feasible and effective in your target area (e.g. are mobile phone ownership and literacy sufficiently high)
- Incorporate SBC messages in the HHR and distribution modules in the apps to ensure that teams do not forget to pass on interpersonal communication (IPC) messages as per the campaign planning
- Use digitalized supervision and monitoring data to inform where SBC is needed. (e.g. ITN redemption rates at DP X and Y are very low)
- Share pre-recorded audio-visual materials on social media: to ensure effectiveness, it is important that messages are shared by “influencers” with a large following who may require a fee (assess return on investment using data about audiences)

Section 8: Social and behaviour change

This section gives guidance on responding to the following questions:

- Are data being effectively used to target SBC activities, accounting for high ITN use given access, low ITN use given access, etc.?
- Are previous campaign (ITN, SMC, other health intervention) reports available to better understand which activities, strategies and channels have or have not worked for reaching and mobilizing populations?
- Is advocacy well planned with clear outcomes defined in terms of the "ask" and the target groups? Has advocacy generated results previously and, if not, is it providing a return on investment?
- Can materials produced for campaigns be more durable to allow them to be used for post-distribution activities through community health workers, volunteers and community and faith-based partners?
- Are "need to have" vs. "nice to have" activities being prioritized, with a focus on achieving the required changes (social, behavioural)?

"Good to have" versus "need to have"

"Good to have" and "need to have" SBC activities will depend on what analysis of the data shows. The SBC strategy (including the activities, tools and materials, and communication channels through which they will be disseminated) must be backed up by evidence of effectiveness and their efficiency in terms of achieving desired outcomes for the behaviours targeted.

Cost cutting for SBC

1. Data need to be used to plan SBC to avoid everything being cut:

- **Invest in what works for your targeted population** – e.g. how do people in urban vs. rural areas get their information?
- **Assess the outcomes of previous ITN or other health campaigns** – e.g. did previous investments in the SBC strategy implemented lead to the desired return?
- **Target the actual behaviour that needs to change** – e.g. is net use a problem due to behaviour or due to ITN access?

Using the data

Some examples of how to use the data are shown in the tables.

Table 1 : Access to an insecticide-treated net (ITN)

Percentage of the de facto population with access to an ITN in the household

Administrative area	Percentage of the population with access to an ITN*	Number of persons
Area A	24.1	814
Area B	18.5	1,299
Area C	52.3	1,532
Area D	17.6	1,001
Area E	22.8	901
Total	**22.06 average**	**5,547**

*Percentage of the population that could sleep under an ITN if each ITN in the household were used by up to two people

Note in Area C that **52.3 per cent** of the population had access to an ITN

Table 2 : Use of ITNs by persons in the household

Percentage of the de facto population that slept under an ITN the night before the survey, and among the population in households with at least one ITN, percentage who slept under an ITN the night before

	Household population			Population in households with at least one ITN	
Administrative area	Percentage who slept under any net last night	Percentage who slept under an ITN last night	Number of persons	Percentage who slept under an ITN last night	Number of persons
Area A	15.4	15.4	814	47.9	260
Area B	10.3	10.3	1,299	36.4	368
Area C	48.1	48.1	1,532	66.0	1,117
Area D	9.8	9.8	1,001	36.1	272
Area E	7.4	7.4	901	23.9	279

Note in Area C, ITN use (**48.1 per cent**) given access (**52.3 per cent**) is high: **92 per cent**

PRIORITY FOCUS SHOULD BE ON INCREASING ACCESS TO ITNs

Table 3 : Attrition (including nets lost between campaign and baseline)

Variable	Campaign – baseline	Campaign – 12 months	Campaign – 24 months	Campaign – 36 months
Area A	N=145	N=390	N=377	N=366
Given away	10.6%	19.0%	27.1%	30.8%
Discarded (wear and tear)	0%	1.3%	10.1%	20.0%
Unknown	1.0%	1.5%	1.4%	1.4%
Total	**11.6%**	**21.8%**	**38.5%**	**52.5%**
Area B	N=373	N=373	N=361	N=341
Given away	**3.5%**	**4.7%**	**12.7%**	**19.4%**
Discarded (wear and tear)	**0.3%**	**0.3%**	**1.7%**	**8.5%**
Unknown	0.3%	0.3%	0%	0%
Total	**4.1%**	**5.3%**	**14.4%**	**27.9%**
Area C	N=410	N=318	N=316	–
Given away	9.0%	29.3%	33.9%	–
Discarded (wear and tear)	0.2%	2.8%	10.1%	–
Unknown	0%	0%	2.5%	–
Total	**9.2%**	**32.1%**	**46.5%**	**–**

ITN attrition rates in Area B are quite low – especially when it comes to "wear and tear": Do not spend a lot of resources messaging on ITN care and repair for this area.

Examples of data sources for SBC

Population-based surveys

- Demographic and Health Survey (DHS)
- Malaria Indicator Survey (MIS)
- Multiple Indicator Cluster Survey (MICS)
- Malaria Behaviour Survey (MBS)

Health facility surveys

- Service provision assessment (SPA)
- Service Availability and Readiness Assessment (SARA)
- End User Verification (EUV) surveys

Other

- Health Management Information System (HMIS)
- Logistics Management Information System (LMIS)
- Previous campaign reports
- In and end-process evaluations
- Other health campaign reports, e.g. EPI
- Assessments from local NGOs/stakeholders
- Supervision and monitoring reports
- Knowledge, Attitudes, Practices (KAP)

If SBC data are limited or not available

- Sometimes SBC decisions for the strategy development are taken in the absence of good quality SBC data
- In the case of limited or no data to support SBC strategy development, consider:
  - Review of published literature for the country or for neighbouring countries/areas of countries where contexts may be similar
  - Media reports to assess positive and negative stories linked to health, malaria, ITNs, etc.
  - Online content, blogs, etc. that may offer informal information about community perceptions, needs, etc.
  - Reports from other health campaigns
- If low-cost primary data research is needed, consider virtual or in-person focus group discussions (FGDs), key informant interviews (KIIs), direct observations during routine activities or community mapping

Resource:
Rapid qualitative assessments for risk communication and community engagement

2. Set realistic communication and behaviour objectives (from Tables 4 and 5)

Table 4: Access to an insecticide-treated net

Administrative area	Percentage of the population with access to an ITN*	Number of persons
Area A	18.4	579
Area B	22.1	2,863
Area C	33.7	1,381
Area D	24.2	738
Area E	61.8	1,445
Area F	44.4	2,395
Total	**43.1 average**	**9,401**

*Percentage of the population that could sleep under an ITN if each ITN in the household were used by up to two people

Table 5 : Use of ITNs by persons in the household

	Household population			Population in households with at least one ITN	
Administrative area	**Percentage who slept under any net last night**	**Percentage who slept under an ITN last night**	**Number of persons**	**Percentage who slept under an ITN last night**	**Number of persons**
Area A	10.0	9.9	579	28.5	200
Area B	13.7	9.6	2,863	29.9	916
Area C	21.7	21.7	1,381	48.7	617
Area D	17.9	17.7	738	50.1	260
Area E	35.3	35.3	1,445	48.0	1,063
Area F	31.5	31.2	2,395	54.2	1,379
Total	**37.5**	**36.4**	–	**59.3**	–

ITN use given access is relatively low at 57 per cent. By how much can we realistically increase this ITN use:access ratio? Are there factors (such as hard-to-reach areas, decisions about targeting, etc.) that may affect communities' access to ITNs and SBC messaging?

3. Prioritize SBC activities for their effectiveness and efficiency (from Table 6)

- Based on the desired objective – determined through review of data and information – define activities that are most appropriate to achieve the objective:
  - ↘ If the objective is to let households know the dates of the HHR and distribution, then radio spots will be sufficient as it is a short message
  - ↘ If the objective is to explain and promote ITN repurposing, then radio "talk back" programmes are better as they allow people to call and ask questions
- Maximize SBC through activities that MUST be implemented – for example, communicate key messages and answer questions (IPC) when in direct contact with households during the HHR or distribution
  - ↘ Consider adding a prompt in digital systems to remind teams and ensure messages are passed as planned
- Invest in activities that ensure continuous SBC
  - ↘ If community stakeholders such as community leaders, CHWs and CSOs are provided with an orientation and communication tools, they can continue to pass on key malaria or ITN information well after the campaign

Table 6: Media exposure to malaria messages

Percentage of women age 15—49 who have seen or heard a malaria message in the last six months, and among those who have seen or heard a malaria message in the last six months, percentage who cite specific sources for the message(s)

Admin area	% seen/ heard message	Radio	TV	Poster/ billboard	Newspaper/ magazine	Leaflet / brochure	Healthcare provider	CHW	Social media	Town crier	Family/ friends	Other	Don't remember
Area A	54.5	73.6	17.5	2.1	1.1	1.1	12.8	4.4	9.5	11.1	7.5	1.5	0.3
Area B	47.2	15.1	42.5	2.6	0.9	1.5	30.7	10.0	24.8	1.3	4.3	0.6	0.0
Area C	73.6	21.2	25.5	0.0	1.2	0.9	47.8	32.5	13.4	2.3	1.4	0.0	0.0
Area D	47.9	36.1	12.8	1.0	0.9	0.4	15.3	12.8	16.1	0.8	16.6	0.5	3.1
Area E	46.4	51.6	20.9	0.7	2.5	0.0	7.8	26.9	13.1	4.3	14.4	0.3	0.0
Area F	77.3	**63.4**	**59.6**	22.4	**9.8**	**8.0**	23.3	**35.4**	28.3	6.5	1.1	0.0	0.0

Radio and TV are fairly good SBC channels, but radio is more "cost-effective" than TV.

Written communication channels are clearly not the preferred way for people to get their information.

Capitalize on existing community level structures.

Advocacy activities

Effective advocacy requires:

- Clear definition and understanding of the objectives of advocacy
- Sufficient resources to ensure complete planning and high-quality implementation of activities
- Focus on disseminating the correct information to participants, avoiding misinformation or misunderstandings
- Clear indicators for assessing the effectiveness of advocacy activities as per the defined objectives

Ensure that the right person/s are being targeted:

- Who is the target for the advocacy sessions to ensure the objectives of the advocacy are achieved?
- Target individuals and audiences will vary by level and the levels at which advocacy is needed should be clearly defined
- Community level advocacy is critical - focus on high-risk populations and areas, using strategic communication channels to inform and engage community leaders/stakeholders to promote ITN access and use

Set clear objectives:

- Set clear, measurable advocacy objectives
- Define what is being advocated for, why and the expected outcomes of advocacy activities
- Ensure that the objectives of the advocacy respond to a clear need and go beyond providing information. For example, Sierra Leone advocated for parliamentarians to ratify bi-laws regarding the use of ITNs for fishing
- Develop materials and messages based on evidence and data
- Ensure that advocacy efforts are tailored to the specific context of each target group/individual
- Focus on development partnerships through collaboration:
  - Prioritize partnerships with local organizations, health workers and both private and public sectors to enhance the effectiveness of advocacy campaigns
- Secure funding to ensure desired outcomes can be achieved:
  - Ensure sufficient funding for advocacy activities from the beginning to avoid costly last-minute gaps
- Integrate advocacy efforts:
  - Where possible, integrate advocacy efforts with other campaigns (as applicable), within planned campaign activities or meetings, etc.
- Plan for monitoring and follow-up:
  - Assess outcomes of advocacy through monitoring (integrated in the overall campaign M&E)

Advocacy targets in a resource-constrained environment: examples

- Government officials such as Ministry of Finance and political and administrative authorities:
  - Advocacy efforts targeting local government can help in securing support and resources for ITN distribution and other malaria control activities
- Community leaders such as local chiefs, religious leaders, influential community figures, etc.:
  - Engaging local leaders can help in gaining trust and ensuring community buy-in, influence community behaviour and encourage the use of ITNs
- Corporate/private sector such as mining, oil, rubber, telecommunications, etc., especially those whose employees are vulnerable to malaria:
  - Can help fill gaps in resources whether through financial or in-kind contributions
- Radio and TV hosts:
  - Radio and TV personalities who can disseminate health information effectively and may be able to do this at a reduced cost

4. Use of SBC tools and materials

- Use existing data/information to invest in materials that will work to achieve set objectives:
  - For example, if ITN use given access is high, but ITN access is low, invest in social mobilization (such as radio or community leaders) to ensure households access ITNs rather than post-distribution messages focused on use
- Use tools from previous campaigns ONLY if:
  - They were effective and achieved the desired results
  - They are still relevant in the current context

Where neither of these are true, new tools should be developed

- Invest in materials that can be used after the ITN distribution:
  - For example, laminated communication materials used by campaign personnel during HHR and distribution can be used by community level stakeholders after the ITN distribution and reduce the funds needed for post-distribution SBC
- Do not invest in "nice to have" materials and activities:
  - For example, t-shirts and caps for HHR and distribution personnel are nice, but can be replaced by "aprons" which are cheaper and easier to use (and can be reused)

Materials development workshops are important to ensure:

- Tools and materials respond to the context. For example:
  - Change in security context
  - ITN use (given access) may now be quite high/low (as compared to the last mass campaign)
  - Use of digitalization might have increased significantly
- Tools and materials are relevant. For example:
  - ITN use given access may no longer be the issue
  - The target population may now rely more on social media

Developing effective SBC tools outside a workshop

- Create an online network of relevant SBC stakeholders who can provide insights and review existing tools
- Identify a focal point for coordinating observations and contributions done remotely on documents, compiling information from working sessions and interviews, etc.
- Use lessons learned from previous campaigns to assess what was successful and what was not and ensure that virtual working sessions are well-organized and structured
- Conduct virtual working sessions with the network of key individuals, including focus group discussions and online interactive sessions to review, update and develop tools
- Organize key informant interviews to obtain feedback on existing tools and ideas for new tools

Consider the relevance of tools, materials and activities for achieving objectives:

- Pamphlets: Few people (respondents in surveys) refer to pamphlets as their main source of information on malaria; these can be a source of environmental waste
- Banners for distribution points: Distribution points are generally centrally located and well-known to target groups; banners, if used, should be generic for reuse for other activities
- Launches: A launch ceremony may create visibility, but it is for a select target audience and not the broader audience for the campaign; resources are better used for more effective activities

5. Integration of ITN SBC messages in other activities

Integration can help lower the costs of SBC for ITN campaigns; ITN messages can be integrated into other activities (examples, not exhaustive):

- Other health campaigns and activities that involve malaria or ITNs: Maternal, Neonatal and Child Health (MNCH) services such as ANC or SMC campaigns
- Other health campaigns and activities such as vaccination campaigns (routine immunization, supplementary immunization activities) and others (e.g. Vitamin A administration)
- Community health worker routine activities such as home visits, education at community events, etc.
- Community activities such as religious gatherings, school health days, youth or sports events, etc.
- Private sector such as unions of transport companies

Considerations for SBC integration (Senegal experience)

Training of CHWs or campaign workers in different health topics and the correct dissemination of different key messages to households can be challenging:

- Additional training time will be required to cover all topics
- M&E is needed to ensure that participants have correctly understood all topics covered

Message overload: Risk that households receive too many messages and cannot remember them:

- Ensure that key messages are clear and simple, and that CHWs have a communication guide to help them disseminate messages to households

Strong coordination from (and within) central to lower levels is needed.

- Ensure that one intervention is not given priority over another
- Ensure that all stakeholders are respecting timelines

Rumour management plan is critical as there is a greater risk of mis-information

SBC in targeted ITN campaigns

Targeted ITN campaigns use detailed, evidence-based data to develop tailored intervention strategies that address the actual context. Examples of targeted ITN campaigns include:

- Zambia 2020: some communities within the same district receiving ITNs and other communities receiving IRS
- Pakistan: only distribute ITNs to rural households

Targeted campaigns increase the scope of SBC because:

- SBC activities and messages should be "tailored" for targeted population:
  - ↘ Requires the development of different messages – for Zambia, IRS and ITN messages are different.
- Risk of confusion as people not targeted for the ITN campaign might not understand why they are excluded
- Greater risk of mis and dis-information and rumours, especially if non targeted households feel unjustly treated

AMP CONTACTS

To join the weekly AMP conference call each Wednesday at 10:00 AM Eastern time (16.00 PM CET) use the following Zoom meeting line:
https://us06web.zoom.us/j/88935481892?pwd=h3cuJ3x5LOsR58YXcEaub8ULqu5LMj.1

To find your local number to join the weekly call:
https://zoom.us/u/acyOjklJj4

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