



Considerations for distribution of insecticide-treated nets (ITNs) in COVID-19 affected countries

NOTE: The WHO policies and technical guidance around COVID-19 must be followed (https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance).

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Background

This document relates to considerations that National Malaria Control/Elimination Programmes (NMCP/NMEPs) and partners involved in distribution of insecticide-treated nets (ITNs) should take into account in the context of the COVID-19 pandemic. It will be regularly updated as more information becomes available.

While flexible and innovative approaches will be required to distribute ITNs in the context of the COVID-19 pandemic, it is important that national malaria programmes and partners do not suspend the planning or implementation of vector control activities, including ITN campaigns, while ensuring that these services are delivered using best practices to protect health workers and communities from COVID-19¹. At the same time, national malaria programmes should maintain to the greatest extent possible all recommendations in place prior to COVID-19 relating to best practices for logistics and supply chain management and accountability for ITNs, including those related to multi-product campaigns².

NMCP/NMEPs must ensure that national regulations and policies concerned with the reduction of COVID-19 are strictly followed, recognizing that these may affect planned ITN distributions for 2020 and 2021. Whatever strategy is selected, NMCP/NMEPs must ensure the safety of people involved in ITN campaign distribution in the context of COVID-19. A precautionary approach in line with WHO^{3,4} technical guidance should be applied everywhere immediately, even if no cases have been detected. NMCP/NMEPs should work with all government stakeholders and technical partners, as well as in coordination with the national COVID-19 emergency task force, to take decisions and agree on the best and safest way to distribute ITNs.

Countries should work on changing their implementation strategies immediately for areas targeted for ITN mass campaign distribution. The modifications needed should be based on the epidemiological context of the targeted area, the number of ITNs available for distribution and the national regulations and policies around containment and reduction of COVID-19 transmission.

All considerations must be within the context of the existing WHO COVID-19 guidance around preventing transmission. Preventive and mitigation measures are key. The most effective preventive measures in the community include:

- Maintain physical distance of at least one metre from all others, except immediate members of the family or people with whom you share accommodation
- Regularly and thoroughly clean your hands with an alcohol-based sanitizer or wash them with soap and water. WHO recommends washing hands often with soap and water for at least 20 seconds. If soap or hand sanitizer are not available, rub hands vigorously with wood ashes.
- Avoid touching your eyes, nose and mouth
- Practise respiratory hygiene by coughing or sneezing into a bent elbow or tissue and then immediately dispose of the tissue and wash your hands

¹ https://www.who.int/news-room/q-a-detail/malaria-and-the-covid-19-pandemic

² https://allianceformalariaprevention.com/amp-tools/

³ https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public

⁴ https://www.who.int/news-room/q-a-detail/malaria-and-the-covid-19-pandemic

• If you have respiratory symptoms, you should stay home and not continue to work. If that is not possible, you should wear a medical mask⁵ (if available) and clean your hands frequently. If medical masks are unavailable, wear a cloth mask or scarf over your nose and mouth and ensure that you maintain at least one metre distance from other people. If you do use a mask, perform hand hygiene after properly disposing of the mask⁶

It will be important to ensure that any staff, volunteer or health worker experiencing respiratory symptoms, diagnosed with COVID-19, or reporting coming into contact with someone diagnosed with COVID-19 or sick with respiratory symptoms (including members of their household) stops working immediately, does not engage with other staff/communities, and if symptomatic, is referred to the appropriate authority (medical centre, dedicated telephone line, etc.).

It <u>is</u> possible to undertake distribution of ITNs while maintaining physical distance of at least one metre between all individuals. The first priority of NMCP/NMEPs should be to ensure physical distance of at least one metre between staff engaged in ITN distribution and members of the community. Training⁷ should engage staff in practising all actions related to ITN distribution to demonstrate how physical distance will be maintained.

In addition to maintaining at least one metre distance, personal protective measures should be employed. This means that people should respect the respiratory hygiene rules and wash their hands regularly, so soap or hand sanitizer must be priorities for safety of personnel involved in the ITN distribution.

If physical distance and personal protective measures can be maintained, there is generally no need for personal protective equipment (PPE). Therefore, soap and hand sanitizer should be prioritized over PPE, particularly because PPE works best when combined with hand hygiene. However, recognizing that it can be challenging to maintain physical distance in crowded places or moving through a community, and that hand hygiene options may be limited, the second level of protection could include PPE such as medical or cloth masks. When considering whether PPE is necessary for personnel involved in the ITN distribution, the following should be taken into account:

- Availability of masks and gloves is severely limited at this time and the COVID-19 emergency task force in each country, in collaboration with the national government, will need to take decisions around allocation of potentially limited PPE based on the needs for health facility and hospital personnel
- Where commercially produced masks are not available, personnel could be advised, with correct information, to cover their mouth and nose with a cloth mask, while ensuring that they maintain physical distancing and regular handwashing to prevent infection⁸

 $^{^{5} \, \}underline{\text{https://apps.who.int/iris/bitstream/handle/10665/331693/WHO-2019-nCov-IPC} \,\, \underline{\text{Masks-2020.3-eng.pdf?sequence=1\&isAllowed=y}} \\$

⁶ Ibid.

⁷ The organization of training will need to be considered country by country since there may be national guidelines on people gathering in groups. See the Training section for suggestions on virtual training or other means of training. Whenever this document refers to training, this does not imply face-to-face training as has been organized prior to COVID-19.

⁸ https://apps.who.int/iris/bitstream/handle/10665/331693/WHO-2019-nCov-IPC Masks-2020.3-eng.pdf?sequence=1&isAllowed=y

 Where ITNs will be distributed door-to-door without individual packaging, the purchase of gloves could be considered in light of the possible skin irritation from touching the insecticide used to treat the ITN

Ensuring that ITNs reach households is the first priority, so where strategies adopted to minimize transmission (e.g. a national recommendation of maintaining more than two metres physical distance in the absence of PPE) will mean reduced data or accountability procedures (e.g. no signatures for the ITNs received by the household if this has been standard practice), the reduced accountability should be accepted in order to continue activities.

Key messages from the Alliance for Malaria Prevention (AMP)⁹

If ITNs are already in the country and distribution is planned in the coming four to six months, national malaria programmes and partners should:

- 1. **Map out how COVID-19 response strategies**, including regulations to reduce transmission, will affect ongoing malaria prevention efforts and how to balance efforts to prevent the spread of COVID-19 with those to prevent malaria morbidity and mortality.
- 2. **Consider all options for ITN distribution** and the most practical combination of these campaign, routine, community-based, etc.
- 3. **Continue routine and continuous distribution of ITNs** where these are in place. Where a mass campaign is not possible or may be delayed in areas due to COVID-19 transmission and national guidelines in place to mitigate the spread of the disease, community channels¹⁰ should be expanded or explored to ensure that nets are available in households for malaria prevention.
- 4. **Prioritize areas with the highest malaria burden** for ITN distribution if this is not already the planned strategy and accelerate the timeline for implementation as much as possible.
- 5. **Shift planning and budgeting to a single phase door-to-door ITN distribution** if this is not already the planned strategy and accelerate the timeline for implementation as much as possible. This is the best option to ensure ITNs are in households before the rainy season, before COVID-19 cases increase significantly and to reduce the amount of contact necessary between distribution personnel and recipients.
- 6. Use existing data sources from the implementation level¹¹ that can be updated or projected to an estimated population to be covered with ITNs if microplanning has not taken place. Where these data are not available, health facility staff should be asked to provide population data for every community in their catchment area. Contingency stock can be added to estimated ITN needs to ensure sufficient nets are available to reach all households.
- 7. **Immediately procure materials for handwashing,** including for handwashing stations at warehouses and stores, as well as soap and/or alcohol-based hand sanitizer for all campaign personnel.
- 8. Where available, optimize use of digital tools for data collection/supervision and monitoring and to accelerate campaign activities (for example through use of existing data from previous campaigns that can be pre-programmed on phones to facilitate rapid data collection without a

⁹ The key messages have been reviewed and endorsed by WHO.

¹⁰ For example, integrating ITNs in community health worker packages, particularly where integrated community case management (iCCM) is taking place.

¹¹ Community health worker registers, previous registration data from ITN or seasonal malaria chemoprophylaxis (SMC) campaigns, neglected tropical disease (NTD) community registers, etc.

- microplanning or household registration exercise). All options for maximizing the benefits of the technology, including through training videos delivered directly to users on an electronic device, should be explored.
- 9. **Replace face-to-face training** with other means of ensuring that all personnel have the necessary information and skills to implement ITN distribution (see Training section for more detail).
- 10. Consider the need to assign monitors to ensure that people respect the guidance around limitations for gatherings of groups of people and physical distancing of at least one metre. Determine the appropriate role for police, military or other uniformed personnel in helping to control crowds and ensuring compliance with COVID-19 national regulations.

If ITNs are not yet in country and planned distribution is six months or more ahead:

- 1. Place orders for the personal protection equipment needed¹² (e.g. commodities for health checks in accordance with country guidelines, alcohol-based hand sanitizer, water, soap and other items, based on national or WHO guidelines) from the appropriate suppliers, based on delivery timeline estimates for ITNs.
- 2. **Consider all options for ITN distribution** and the most practical combination of these campaign, routine, community-based, etc.
- 3. Consider a shift to a single phase door-to-door ITN distribution or a modified/adapted fixed site distribution if this is not already the planned strategy. Given the uncertainty of the COVID-19 transmission in malaria-endemic countries, budgets should be developed to ensure that no major changes would be required in the event of a shift in strategy to avoid implementation delays.
- 4. **Prioritize areas with the highest malaria burden** for ITN distribution¹³.
- 5. Use existing data sources from the implementation level¹⁴ that can be updated or projected to an estimated population to be covered with ITNs. Where these data are not available, health facility staff should be asked to provide population data for every community in their catchment area. Contingency stock can be added to estimated ITN needs to ensure sufficient nets are available to reach all households.

Context

With the emergence and spread of COVID-19, national malaria programmes and partners need to adapt planning and implementation of ITN distributions through all channels (mass campaign and continuous distribution, including through routine health service delivery). Many countries are entering into a prolonged period of restrictive social and economic activities in order to slow the predicted increase in COVID-19 infections. At the same time, there is ongoing malaria transmission within households and communities and there is a risk of the incidence of malaria rapidly increasing if distribution of ITNs (and implementation of other malaria-related campaign interventions, such as seasonal malaria chemoprevention [SMC] and indoor residual spraying [IRS]) are carried out significantly later than planned.

¹² https://apps.who.int/iris/bitstream/handle/10665/331498/WHO-2019-nCoV-IPCPPE_use-2020.2-eng.pdf

¹³ Where a strategy to get ITNs out increases the need for ITNs, a staggered distribution by prioritized areas will provide time to source additional nets.

¹⁴ Community health worker registers, previous registration data from ITN or seasonal malaria chemoprevention (SMC) campaigns, neglected tropical disease (NTD) community registers, etc.

Since ITNs may be available for distribution while COVID-19 transmission is ongoing, it is important to find safe and efficient ways to distribute ITNs in order to protect the population from malaria, as well as reduce the number of febrile (suspect) malaria cases seeking diagnosis and treatment at health facilities or through community health providers. It is important to note that all options to maintain health services, including malaria prevention by means of ITNs, should be considered within the context of government decisions and regulations put in place over the course of the COVID-19 pandemic¹⁵.

For ITN distribution, particularly mass campaigns, modified strategies will have a significant effect on how activities are planned and implemented. These activities include registration, training, social and behaviour change (SBC), ITN distribution, supervision, monitoring and evaluation. All ITN distribution activities should be organized in such a way as to avoid large congregations of people and ensure best personal protection and physical distancing as well as practice of good hygiene. Plans for ITN distribution must ensure that the provision of soap and water or hand sanitizer¹⁶ for personnel has been taken into consideration and that correct information is communicated to personnel about good hygiene practices for reducing COVID-19 transmission.

During the planning for mass campaign ITN distribution, all possible options should be considered and aligned to the different operational and epidemiological realities – in terms of COVID-19 and malaria – of the country. The situation is changing quickly over time so options, risks and mitigation strategies need to be looked at for each activity of each strategy. Where mass campaign distribution of ITNs is not possible due to national restrictions related to COVID-19 transmission, national malaria programmes should identify opportunities for ITN distribution through community structures, as well as strengthen routine distribution to the most vulnerable populations, in order to ensure as many people as possible are protected with vector control.

Early in the planning period, national malaria programmes should prioritize where they need to get ITNs out first, focusing on areas with the highest malaria transmission, areas that are the hardest-to-reach, where health facility access is poor, or where there are marginalized and key vulnerable populations (such as internally displaced persons [IDPs], refugees, immunocompromised people¹⁷, etc.). National data should be used to identify priority areas/target groups, namely those at highest risk of malaria, and channels to reach them with ITNs. National malaria programmes should work on contingency plans for the specific regions and update them to include national COVID-19 regulations and policies. In an effort to limit risks related to COVID-19 transmission, countries may need to deprioritize areas for ITN mass campaign distribution. This may apply, for instance, in urban areas where evidence indicates that urban malaria transmission (prevalence and incidence) is low due to improved housing, or it may apply to areas with active outbreaks of COVID-19, if distribution cannot be conducted safely. Flexibility is required to ensure that sufficient ITNs are available to reach those in greatest need. Countries should rely on malaria burden data and stratification of malaria transmission, where these data are available, in order to prioritize areas for ITN distribution.

 $^{^{15} \} https://www.who.int/publications-detail/covid-19-operational-guidance-for-maintaining-essential-health-services-during-anoutbreak$

¹⁶ It would be ideal to provide personal protective equipment (PPE), i.e. masks, gloves, to all workers involved in the distribution of ITNs. However, campaigns should not be halted in the absence of PPE. In these cases, good hygiene practices and physical distancing must be strongly emphasized and maintained.

¹⁷ This may include areas with high HIV and TB prevalence, high rates of malnutrition, areas identified based on any comorbidity analysis available, where the highest ageing population resides, etc.

Distribution of ITNs through all channels – mass campaign, continuous and routine distribution – may expose workers and the public to COVID-19 and countries should think through what is possible and feasible, what innovative approaches may be needed, where critical partners need to be engaged (e.g. mobile phone providers) and how activities can take place with a minimum level of risk and exposure. National malaria programmes and partners need to consider the possible options for the safe implementation of different activities (such as registration, SBC, ITN distribution, supervision and monitoring). Where an activity will be difficult to implement, increase risk of COVID-19 infection and is not essential, it should be removed. It is acknowledged that accountability procedures (e.g. correct use of data collection forms, daily data verification, physical spot-checking of stocks of ITNs remaining in warehouses or implementation quality, etc.) normally carried out during campaigns may need to be relaxed so as to allow physical distancing with the aim of protecting health workers and ITN recipients.

Prevention and mitigation measures for all personnel (workers and recipients) involved with ITN distribution

No matter what strategy or channel, or combination of channels, for ITN distribution will be used, all personnel should receive clear guidance and training on minimizing COVID-19 transmission and protecting themselves. The key to minimizing transmission are the WHO-approved preventive and mitigation measures with which all personnel must comply **AT ALL TIMES**. Personnel should be informed not to come to work if they begin to feel unwell (fever or coughing, and even mild symptoms such as headache and slight runny nose), and should ensure good hygiene practices, physical distancing and reporting to their supervisor immediately any signs of illness. As well as receiving information (either through modified training or through "how to" documents) on good handwashing, use of hand sanitizers and surface disinfection practices, they should be provided with easy access to handwashing/disinfectant materials while in the field. Information provided to personnel must stress that they should not continue working if they develop COVID-19 symptoms or if they have been exposed to someone with suspected or confirmed COVID-19.

Maintaining the health and welfare of staff is of primary importance. When ITN distribution is taking place – through whatever strategy or channel – it is important to assess on a daily basis whether any of the campaign personnel (distributors, supervisory staff, others) are sick and, if they are sick with symptoms of COVID-19, they should be replaced. If people become sick, they should be advised not to come to work and to follow the national guidelines in terms of self-isolating or seeking treatment depending on what their symptoms are.

All health workers that stopped working because they showed symptoms should receive payment for days worked AND for days sick to avoid people not reporting illness. The worker that is sick should be replaced with another worker, who will receive payment for days worked. Budgeting should include some contingency around replacing people who fall ill with COVID-19 during the course of implementing activities.

Wherever groups of people will interact (e.g. warehouses, modified or adapted fixed site distribution points) it is essential that they respect physical space and restrictions on groups of people and have access to water, soap and/or hand sanitizer and are trained to use these correctly. This includes both the people involved in the handling and management of the ITNs throughout the entire supply chain, and also recipients of ITNs.

Where handwashing stations will be established (typically in the absence of available hand sanitizer or in high traffic areas, such as at storage or modified or adapted fixed distribution points), national malaria programmes should ensure that they have budgeted for what will be required (e.g. a barrel for holding water, soap, someone to ensure that the area remains clean and supplied with water and soap, etc.). Door-to-door teams should not enter people's homes during their visits and as with other personnel should maintain a distance of at least a one metre from household members. As much as possible, door-to-door teams should avoid touching household items (plates, cups, utensils etc.) during the distribution of the ITNs. They should not touch or attempt to provide care to sick people, but should report these people to their supervisor for follow-up.

Household representatives should be advised that upon receipt of ITNs — either with or without individual packaging — they should wash their hands after handling the ITN and/or packaging.

In summary:

- Wash hands frequently with water and soap (or equivalent) or clean hands with hand sanitizer
- Do not shake hands
- Avoid touching your eyes, nose, or mouth with unwashed hands
- Report any illness of self or others immediately
- Maintain at least one metre distance when interacting with people

Macroplanning and coordination

All of the activities related to macroplanning and development of the core planning documents¹⁸ can be done remotely and with support from both in-country and external partners, such as the Alliance for Malaria Prevention (AMP), to review and discuss adaptations for getting ITNs to households during the COVID-19 pandemic.

National coordination meetings, which should include members of the national COVID-19 emergency task force, and the theme-specific sub-committees (SBC, logistics, M&E, etc.), will need to be organized by Skype, telephone, WhatsApp, Zoom or other virtual connection options. The membership of coordination structures should be reviewed to ensure that there are representatives of partners familiar with emergency response, including United Nations (UN) agencies, national and international non-governmental organizations, as well as community-based organizations, such as Caritas and National Red Cross or Red Crescent Societies.

Where national COVID-19 outbreak guidance allows small groups of people to meet, a restricted core team of key technical focal points for the campaign can be identified to keep the activities on track, review and update the national strategy with appropriate risk and mitigation planning. National malaria programmes should begin preparing for remote work, including for the operational levels (e.g. district, health facility staff) and ensure that plans and budgets include purchase of airtime, internet access and data packages. E-mail, SMS, WhatsApp and other communication methodologies could be used to keep larger groups up to date through daily summaries of decisions, etc.

¹⁸ Campaign plan of action, logistics plan of action, communication plan of action, M&E framework, timeline, risk assessment and mitigation plan, and budget.

It is critical that national malaria programmes and partners develop detailed contingency and/or risk assessment and mitigation plans¹⁹ during the initial planning period, that one or more "owners" of the risk plan are identified and that arrangements are made for updating the plan given that the situation is likely to change rapidly and frequently for a number of months.

Key areas that national programmes and partners will need to agree with donors and funding partners are:

- How to best present a budget that has multiple scenarios and receives timely approval, as well
 as what procedures and approvals would be required if changes to the budgets are needed
 during implementation.
- What level of accountability is required (by donors and others) within the supply chain given
 that some distribution options may reduce the ability to track ITNs at the last-mile level and
 reverse logistics may be challenging (or not the best option in remote communities with poor
 health facility access where additional ITNs may be needed to cover new sleeping spaces, to
 provide to people with COVID-19 symptoms that need to sleep alone or to replace worn out
 ITNs).
- What level of accountability is required for data collection and reporting. If the decision is taken
 to remove household registration entirely as a campaign activity, which data are expected for
 reporting purposes, etc.

Limited training and reduced physical supervision due to physical space and movement restrictions means implementation and data collection need to be as simple as possible. Some strategies that may be considered are found below, and national programmes will have other options based on their contextual understanding of the country, which they should feel free to propose.

For all options for distribution of ITNs, ensure that methods for protecting high-risk households, such as those containing persons who are elderly, those at higher risk for COVID-19 infection, or those who are showing signs of infection are determined and are able to be implemented. This may involve door-to-door distribution or allowing people to send someone on their behalf to receive their ITN.

Some options for ITN distribution include the following. Each one should be contextualized and adaptations appropriate to the local context made. Other options that are feasible within a specific country context should be proposed if they can ensure that ITNs can safely reach households.

- Single-phase door-to-door ITN distribution campaign In order to distribute available ITNs in a
 safe and efficient manner, with limited contact between campaign personnel and households,
 national malaria programmes may consider moving to a single-phase door-to-door distribution
 of ITNs.
 - A single-phase ITN distribution may involve registration and distribution simultaneously, determining the number of ITNs to be allocated during the visit, or may allocate a fixed number of ITNs (see below) to limit time required at each household.
 - Teams moving door-to-door should be trained about COVID-19 prevention using WHO guidance, as well as on SBC for malaria. Decisions should be taken as to whether or not to integrate COVID-19 messages with the malaria and ITN messages (see Appendix 1) and where COVID-19 messages will be included, these should be aligned with the

¹⁹ See AMP toolkit, Chapter 5, Brief 3: *Risk mitigation planning*. https://allianceformalariaprevention.com/wp-content/uploads/2017/08/AMP-Toolkit-report-2015 Chapter 5 EN LR.pdf

national COVID-19 emergency task force guidance. Where COVID-19 messages will not be included, it is still recommended to train teams about COVID-19 transmission and to provide them with standard national messaging in case they are asked questions during their visits.

- Community-led registration and distribution In order to minimize movement of people during ITN distribution, national malaria programmes should consider community-led distribution, particularly in areas with a high malaria burden and ongoing COVID-19 transmission. Note that this approach will be difficult in urban areas unless there are defined geographical and social areas that can be targeted (e.g. a group of people in a defined area such as an apartment tower block or other high density housing) where the people trust someone to be responsible for ensuring the data are correct and to undertake the ITN pick up and distribution.
 - A person could be identified at the community (e.g. village) level to be responsible for determining how many people live in that community (number of households, number of people). Where there are active Community Health Worker (CHW) programmes, CHWs could be used to provide this information, and where they do not exist or are not active, other people could be used (e.g. mayors, treasurers, chiefs, other community or religious leaders depending on country context). It will be important to ensure that the person selected to be responsible for the updated population, as well as for the reception and distribution of ITNs, is bipartisan so that an equitable distribution of ITNs occurs without prejudice towards geographically or socially marginalized populations.
 - Based on the community population data (or household registration data, if feasible), the quantity of ITNs required to reach all households in the community should be determined. Once ITNs have been received by the community member responsible for the distribution (see logistics below), the person can organize the ITNs into piles by household, limiting the number of households that can come to pick up their nets at any time.
 - Alternatively, the ITNs can be distributed door-to-door by CHWs or other community members responsible for the distribution as described above or distributed through a modified or adapted fixed site distribution, as described below.
 - Where ITNs are allocated by household size or number of sleeping spaces, registration and allocation can be done simultaneously to limit the overall time for the distribution.
 - o Where registration data exist for communities (from whatever source, such as neglected tropical disease [NTD] programmes or registration data from previous campaigns), a list of households and the number of ITNs to be received by them could be printed, laminated (where possible)²⁰ and posted so people can individually verify what they are supposed to receive when they pick up their ITNs. Any SBC materials, as well as the list of ITNs allocated by household, can be delivered at the same time as the ITNs, including key message pamphlets that households can take home.
 - In the case of a fixed number of ITNs per household, the printed lists with the allocation or any type of registration by name/household size/number of sleeping spaces would not be required.
 - In areas where mobile device ownership is high and connectivity is good, CHWs or community leaders could be used to report aggregate community-level registration and

²⁰ If lamination is not readily possible, use paper materials so as not to delay the campaign. Paper in the hands of campaign personnel does not pose a large COVID-19 risk.

- distribution numbers through SMS, phone call or other means (e.g. WhatsApp or email).
- In countries or regions within a country with strong community-level health structures in place and CHWs trained and active, the community level distribution option can be implemented without compromising quality of implementation. In countries or areas within a country where community systems are not strong, but may be the only option for ITN distribution, compromised implementation quality, particularly around data and accountability, will need to be accepted.
- Self-registration and modified fixed site distribution In areas with high cell phone coverage, good literacy rates and good connectivity (e.g. 75 per cent or more based on most recent and robust data), a digital form that includes a mechanism to verify the existence of the household (national identity card or other identity number, such as health insurance registration number, phone number, etc.) could be developed to be filled out by households targeted for ITNs,
 - Ensure that radio and social media messaging is implemented to explain how nets will reach people and the need to access the digital registration form. Make the registration form available online for download to devices. Household representatives should self-register (e-mail, SMS, WhatsApp) and submit the form online where the data will be aggregated into a registration database available to the national malaria programme. For households without access to the digital registration form, the national malaria programme would need to provide guidance about whether and how they could be registered by a neighbour, providing the information to verify the existence of a separate household (e.g. identity card or other identification).
 - Once the registration is complete, allocate the available ITNs by household size OR allocate a fixed number of ITNs per household.
 - Send a barcode or just a numerical code to the household via SMS/WhatsApp/e-mail that is only usable on a specific day at a specific time to control flow of people into distribution areas. Ideally, people registering their neighbours for ITNs would be able to pick up both their own and their neighbour's ITNs at a similar time. Ensure SBC messaging is clear that the household can only get their ITNs during the specified time to limit people congregating at the distribution area.
 - Careful planning for the number of distribution areas should be done, limiting the total number of people that would be served from each one (e.g. 50—100 households over a number of days). Distribution may take place over an extended number of days to limit households to be served per day in line with national guidance around regulating numbers of people gathering together and to ensure that a space of at least one metre between people is maintained. This can be done by marking the required physical spacing out with chalk or wood or other materials. Assign a person to be responsible to set up and manage handwashing stations and ensure that people are directed to the handwashing station prior to leaving the distribution area.
 - SBC messages communicated in advance of the ITN distribution should reinforce that only one person per household will be admitted to the distribution area, no children (whether with a parent or alone) will be admitted to the distribution area and this should be reinforced through security at the entrance to the site.
 - If feasible, an area for health screening should be set up before entrance to the main distribution area and SBC materials displayed communicating relevant health messages, as available.

- When people come to the site, their barcode should be scanned, or their numerical code read by the distributor and they should be provided with the number of nets they have been allocated. In the case of a household being registered by a neighbour due to lack of access to the digital registration form, the barcode or numerical code will be received on the device that was specified during the online registration, so neighbours will need to pick up the ITNs and provide them to households as per the registration and allocation information. Where possible, a table-top scanner should be used. As per the ITN distribution, this should be done respecting physical distancing of at least one metre.
- There should be a table between the distributors and the household representatives. ITNs should be placed on the table and removed from there. Recipients of ITNs should be reminded to wash their hands at the handwashing station before leaving the distribution areas, as well as when they get home after hanging the ITNs in the shade to air.
- O In the event of an individual attending a distribution area to receive ITNs being identified with signs and symptoms of COVID-19, the national protocol should be followed, but a contingency plan should be made to ensure they still receive their allocation of ITNs, plus an additional one as the person should be isolated and not share the ITN while they are experiencing symptoms of COVID-19.
- SBC messaging can be done verbally during the distribution and post-distribution through SMS, WhatsApp, radio and other communication channels (push messages to people after they collect their nets).
- Adapted fixed site distribution If national or local guidelines on COVID-19 transmission mitigation allow, some countries or parts of countries may be able to do a more or less standard campaign. This includes household registration, provision of vouchers where this is deemed safe at the national level, followed by an adapted fixed site distribution. In this case, a household would provide a voucher to a distribution point team in exchange for ITNs. Where vouchers will be used, it will be important that people handling them (campaign personnel and household members) are reminded of the importance of handwashing on a regular basis.
 - National malaria programmes should provide guidance on the management of vouchers, including for the household to tear it in front of the distributor once the ITNs have been received and to either put it in a box for later destruction by the distribution team or provide information for the household representative on its destruction at home.
 - O Where countries have planned for fixed site distribution, the parameters will need to be adapted to take into account the COVID-19 precautions, which may increase the budget and/or time required to distribute the ITNs. This may include increasing the number of distribution points and/or extending the number of days of distribution to limit the number of people served per day, as described above, setting up multiple distribution points by neighbourhood in larger communities and/or staggering distributions (giving people from each neighbourhood a different time of day to receive nets if using one main distribution site).
 - Programmes should also consider reducing the time from household registration to distribution, for example allowing people to go to distribution points immediately after registration, to avoid the typical influx of people coming on the first days of distribution, which will not be possible to manage through SBC alone.

- Additional security personnel should be considered that could be stationed at entry points to the distribution site to verify that people arriving are there on the right day and that they are at the right distribution site. These personnel should receive the same briefing or information about COVID-19 transmission prevention as all campaign personnel and should instruct people arriving at the site to wash their hands at the handwashing stations while ensuring that people do not congregate there and respect the physical distancing guidance in place.
- Any fixed site distribution should follow national guidance, as well as the guidance above, keeping a table or more distance between the household representative and the distributor and avoiding physical contact between them.
- If feasible an area for health screening should be set up before entrance to the main distribution area and SBC materials displayed communicating relevant health messages, as available.
- o In the event of an individual attending a distribution area to receive ITNs being identified with signs and symptoms of COVID-19, the national protocol should be followed, but a contingency plan should be made to ensure they still receive their allocation of ITNs, plus an additional one as the person should be isolated and not share the ITN while they are experiencing symptoms of COVID-19.
- **Fixed number of ITNs allocated per household** For any of the ITN distribution strategies identified above, in order to minimize the need for contact between registration teams and households, consider removing the registration and allocating a fixed number of ITNs per household in a single-phase distribution.
 - When deciding on the number of ITNs to allocate per household, use previous campaign and new data (such as from CHW registers, updated figures for catchment area populations from health facility staff, information from ongoing community level programmes, etc.), as well as national data related to the average household size in different parts of the country, to determine the number of ITNs per household that should be provided to achieve sufficient ITN access accounting for the potential need for a different number of ITNs per household in different parts of the country.
 - Where quantification for a fixed ITN allocation per household leads to gaps based on ITNs available, countries should consider how to prioritize the available ITNs so as to ensure maximum coverage in areas with high transmission and leave gaps in other less vulnerable areas to be filled at a later time.

Where any type of ITN distribution, particularly fixed site, is being considered in COVID-19 affected countries, it should be discussed and decisions made at the highest levels of the Ministry of Health, as well as with other ministries engaged in the COVID-19 response and the national COVID-19 emergency task force. Clear standard operating procedures should be developed for door-to-door visits, site set-up, management, safety and hygiene, including daily procedures for waste management and cleaning and disinfection of materials used during the day (e.g. tables, chairs, handwashing stations).

Additional country-specific considerations

Where community-led registration and distribution are adopted, and where feasible based on
quantities procured and available in the country, a contingency stock (5—10 per cent) should be
considered since the delivery is likely to be one time only. Contingency stock could come from
redirecting ITNs planned for areas with lower malaria burden (for example, some parts of urban

areas). Contingency stock should not be taken from routine stock unless the situation with COVID-19 has significantly reduced routine health facility visits by pregnant women and children under one/five years of age. The contingency stock will allow households in high burden areas to be covered to the maximum extent possible. Any remaining ITNs at the end of the distribution may be provided to allow households with individuals displaying COVID-19 symptoms and/or having been tested positive for COVID-19 to be provided with a separate ITN to sleep under while they are sick and recovering, as well as to cover new sleeping spaces or replace worn out ITNs.

- Ensure that payment or compensation of people supporting the ITN distribution has been considered well in advance and that funds can be transferred or managed so that payments are received in a timely manner in order to reduce frustration and stress among people implementing activities.
- If the opportunity arises, ITNs can be included in the distribution of non-food items (NFI), such as household hygiene or infection control kits, and/or in combination with other disease prevention and control services, such as integrated with SMC campaigns targeting children under five. If this opportunity exists or comes up during the time of the COVID-19 pandemic, national malaria programmes should take national guidelines and regulations and the principles outlined in this document into consideration, as well as any additional logistics, costs and demands on staff. Communication approaches should clearly link ITNs to malaria prevention, in order to avoid the perception that they protect against COVID-19 or other diseases being addressed by the other services.

Microplanning

National malaria programmes and partners will need to work remotely for the microplanning exercises to avoid bringing groups of people together. In the context of a modified strategy for the ITN distribution, the microplanning should be scaled back to focus on three main areas:

- 1. Population size updates (as described above, from CHWs, health facility staff or other reliable sources)
- 2. Identification of special populations and groups at higher risk for malaria with less access to facilities (IDPs, refugees, communities that are marginalized geographically or socially, etc.)
- 3. Planning for the ITN transport to reach all targeted areas

The population updates and identification of special populations and groups at higher risk for malaria can be sent electronically or communicated by phone. The national malaria programme will need to determine the template or format in which data should be presented.

For ITN transport, the main items needed, in addition to the quantity of nets based on population, are maps of the area and information on route conditions and transport options. For developing the microtransport plans, extensive communication will be needed between the district logistics personnel, those in charge of health facilities and the national level, and budgets should account for increased communication by telephone or computer (e.g. air time and internet access). National malaria programmes should consider options for detailed topographic and route maps, including:

 Accessing previous microplans, micro-transport plans and maps from the last campaign or more recent expanded programme for immunization (EPI) or mother-child health (MCH) campaigns

- National census bureau maps for enumeration areas where a census has taken place recently
- A digital health area map
- Any maps generated through community health activities or through surveys that have taken place
- Maps from Google Maps/Google Earth, Grid3, Open Street Map, Maps.Me, Ministry of Transport and Land, etc.

Any of these, or a combination, can assist with planning for transport of ITNs and updating and triangulating population data.

Training

Training will need to be restructured to ensure safety. Options for this may include, among others, using Smartphones to record master trainers (i.e. people that understand the content thoroughly and have past experience) facilitating the training for each of the modules. Recording may be done, based on national regulations around COVID-19 prevention, with a limited number of national-level technical staff in the room (e.g. one person for logistics, one for SBC, one for M&E) or simply one facilitator. If the recording will include people in the training room, pre-identify the frequently asked questions (FAQs) and focus on addressing them in the training session. If people will be physically present for the video sessions, ensure that the national regulations around physical space and hygiene are followed, including washing hands with soap and water or alcohol-based hand sanitizer at key times. Handwashing stations should be set up at the entry to the room where the recording will take place and this should be shown on the recording to remind people of the set-up required for safe training space. Where there are no people in the classroom, consider including a few slides at the end of the training module where the facilitator presents some of the FAQs and the responses. A reminder of the measures to take for personal protection during COVID-19, according to the national COVID-19 emergency task force regulations in force, can form part of the recording. Videos of different training modules can be sent via WhatsApp or e-mail and can be housed on an online platform for regular access.

If using digital tools for data collection, the national malaria programme and partners can include videos on the mobile device to access any pre-recorded videos. Note that although video is best since presentations and visuals can be leveraged, audio can also be used (especially if recorded with references to printed documents).

Where a digital solution is not possible, particularly at the community level, simple tools and "how to use" documents should be developed, printed and, where possible, laminated if they will be used repeatedly over the course of the distribution period, and sent with the ITNs and other campaign materials. Laminated materials that can be washed off and disinfected for ongoing use include job aids with SBC messages and reminders about appropriate hygiene and physical distancing behaviour during all interactions, as well as documents describing how to manage the ITN distribution safely and fill in any required data for transmission to data managers. Health facility senior staff can be responsible for briefing small groups of registration or distribution personnel for two to three hours (this may need to take place over a number of days to keep groups aligned with national regulations on limits to people together and physical distancing) and ensuring that they have understood the tools and key messages. Other alternatives for training may include the use of megaphones provided to health facility staff, CHWs or other community volunteers or leaders, radio and town announcers providing information based on materials received from the national programme. Where laminated materials will be used,

they must be procured in a timely manner and where their procurement will delay the ITN distribution, paper tools should be used. For laminated materials, instructions should be provided for their daily washing.

Social and behaviour change (SBC)

Mass campaigns typically include advocacy, social mobilization and social and behaviour change communication as part of the package of SBC activities, some of which will require adaptations in line with national regulations around prevention of COVID-19 transmission. National malaria programmes should:

- Ensure that messages are disseminated to households highlighting the importance of malaria prevention, diagnosis and treatment, especially among the most vulnerable and at risk. Messages should continue to provide information about how and where people can receive ITNs, their nightly use by everyone in the household and how they can minimize COVID-19 transmission when seeking ITNs or care at community or health facility level.
- Keep informed about community concerns and attitudes towards COVID-19 so as to target messages appropriately.
- Ensure that communities are informed about specific changes to ITN distribution that will be implemented in COVID-19 affected areas to minimize the possibility of transmission. In a time of uncertainty, clear and concise information that addresses the stress points i.e. COVID-19 transmission will be critical to ensure that people access and use the ITNs being distributed and that rumours are not started because of an information vacuum²¹.
- Minimize or avoid in-person SBC, including advocacy, social mobilization and social and behaviour change communication activities and adjust plans and budgets for these activities to be carried out in a way that respects the national COVID-19 guidelines in place.
- Prioritize mass and social media, such as SMS, WhatsApp, Instagram and Facebook for advocacy, social mobilization and SBC activities.
- Develop robust advocacy packages that include information about the campaign, FAQs, key messages and "what you can do to support" information. Packages can be sent by e-mail or through web-based platforms where this is feasible or can be printed and sent to the homes and offices of targeted influencers. Packages may include posters or other visibility materials that can be put up in key locations (such as where people are buying food or at pharmacies) to provide information about the ITN distribution. Virtual advocacy meetings can be organized where possible, in particular at the national level, to ensure that all government departments and key stakeholders are informed of the campaign.
- Decide whether to link messages about COVID-19 and malaria during ITN distribution (see Appendix 1). If messages about COVID-19 will be disseminated at the same time, ensure that they are aligned with national guidance and communication materials that have been developed by the national COVID emergency task force.
- Monitor radio and social media for any information about the ITNs, malaria and COVID-19 that is untrue or false and ensure that positive and accurate messages are disseminated through both channels to counter relevant and consequential misinformation being communicated²².

 $^{^{21}}$ See COVID-19 considerations for the development of rumour management plans related to ITN distribution. AMP.

²² Ibid.

People engaged through advocacy or other communication activities should be requested to share accurate information about the campaign with people in their networks. In/On all communication materials, contact information for the national malaria programme focal person, as well as the national COVID-19 emergency task force focal point or hotline, should be provided in case people have questions or concerns.

Key messages for the ITN distribution should include information about:

- Ensuring that ITNs are aired in the shade for 24 hours prior to utilization, particularly for nets
 with deltamethrin which have been associated with coughing in some people. In these areas,
 monitoring of the information around the ITNs and COVID-19 transmission (through community
 health workers or other trusted individuals) may be important in the days immediately following
 the distribution to ensure that associations are not drawn between the ITNs and transmission of
 COVID-19.
- Household-level materials that can be used to hang ITNs in order to minimize the movement of
 people to purchase materials after the ITNs have been received. Simple videos demonstrating
 ITN hanging with easily available materials can be produced and sent through digital channels.
 ITN hanging posters can be printed and laminated to be posted in public places (where people
 get food or at pharmacies) to remind people of the importance of correctly hanging and using
 the available ITNs every night.
- Ensuring, as much as possible, that anyone with symptoms of COVID-19 has access to an ITN for sleeping under while they are sick and recovering.
- What to do with ITNs that have been used by people who are suspected or confirmed to have COVID-19 or have died after suffering from symptoms of COVID-19. ITNs, once washed, are safe to be used again. Based on current evidence, soap (or equivalent) and water are sufficient for washing ITNs that have been exposed to COVID-19^{23,24}. Use cool water - not hot - to wash the ITNs and do not hang in direct sunlight to dry them. Discard the water away from clean water sources.

National malaria programmes and partners should be prepared to respond quickly with the right people and the right messages to any rumours arising²⁵. Mitigation of rumours must be done through a strong multi-channel strategy to ensure that clear, correct and actionable information is communicated. Response plans for rumour management must include the channels that will be used, the key spokespeople that will be used at all levels because they are trusted figures and draft key messages that can be quickly adapted to ensure that they address the specific information contained in the rumour. During the macroplanning for the ITN distribution, a risk assessment and mitigation plan should be developed for the overall process, including for SBC, and the communication sub-committee should engage fully in the risk planning process given the importance of managing the different situations that may arise.

There are three main types of rumours:

1. Reports of events and/or risky behaviours, (e.g. people in X province are becoming sick with COVID-19 when they get the new type of ITN. We'll refuse to use them.)

²³ https://www.sciencedirect.com/science/article/pii/S0195670120300463?via%3Dihub

²⁴ https://www.nejm.org/doi/10.1056/NEJMc2004973

²⁵ See: COVID-19 considerations for the development of rumour management plans related to ITN distribution. AMP.

- 2. Misunderstood or incomplete information, (e.g. there are increases in COVID-19 cases after using Chinese-produced ITNs)
- 3. Disinformation or false information, (e.g. mosquitoes spread COVID-19)

It is essential to push back against rumour and disinformation with frequent, fact-based communication. As learned during the Ebola epidemic in West Africa, certain communities may avoid presenting at health facilities out of fear of contracting COVID-19 and thus increase malaria-related cases and deaths²⁶. All efforts should be made to counter any such concerns, reminding communities, where national COVID-19 regulations allow, to continue presenting for routine services such as ANC and immunization that can include receiving ITNs. It is also important to follow national and WHO guidance about treatment-seeking behaviour for children under five and pregnant women who develop fever.

Procurement and logistics

National malaria programmes should expect longer lead times for commodities^{27,28} and should anticipate potential delays at ports or other restrictions on imported goods given the effect that COVID-19 has had on the global market, as well as new or modified procedures that may be introduced as a response to containing the disease²⁹. This must be taken into account in the ITN distribution plan and timeline, as well as the risk assessment and mitigation planning.

Logistics planning may need to be revised in line with shorter or longer ITN distribution periods and contingency plans should be made around storage of ITNs, which may be for longer periods of time than planned in case of delays related to COVID-19. Where timelines for ITN distribution are significantly shortened in an effort to get ITNs to households as quickly as possible, the logistics, human resources and transport requirements should be reviewed to ensure that they are aligned with an accelerated distribution schedule. In cases where a decision is taken to move to door-to-door distribution, national malaria programmes will need to determine the best way to ensure accountability and access to ITNs for door-to-door teams (such as mobile warehouses or delivering ITNs on motorcycles or other transport means³⁰), while minimizing risk of exposure and transmission of COVID-19.

The main points of exposure for COVID-19 transmission are related to the handling of the bales. Therefore, it will be important to plan and budget for the required handwashing stations, soap or hand sanitizer for warehouse managers, loaders and off loaders, conveyors (where used, and to reduce risks, conveyors should be reconsidered for ITN distribution in COVID-19 affected countries as physical distancing will be difficult to maintain) and logistics personnel at all levels. On and offloading of bales typically involve bringing workers together in groups to move bales from trucks/containers to warehouses and vice versa, so the approach may need to be revised to fewer people for loading and offloading (in line with restrictions on groups of people and being able to maintain physical distance of at least one metre between people), which may increase the amount of time required for the operation and should be accounted for in the timeline of activities.

²⁶ https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30561-4/fulltext

²⁷ https://www.theglobalfund.org/en/covid-19/health-product-supply/

²⁸ https://www.unicef.org/supply/reports/long-lasting-insecticidal-nets-market-and-supply-update

²⁹ https://www.theglobalfund.org/en/covid-19/

³⁰ Where motorcycles will be used to provide teams with ITNs, only one person should be on the motorcycle with the bales to be delivered to adhere to the physical distancing required to limit COVID-19 transmission.

Where digital systems are available, these should be considered for tracking the ITNs throughout the supply chain. Where these systems are not available, printed tools should be sent to the different levels (warehouses, storage locations) and training or "how to use" documents should specify how to manage the paperwork for tracking ITN stock. Each individual in the warehouse should be provided with their own materials related to ITN stock management so that materials are not exchanged between people (e.g. pens, gloves for loading and offloading or warehouse management, etc.).

Following quantification of ITN needs based on the strategy adopted for the distribution, the warehouse manager should prepare the delivery of the ITNs for each delivery point. Preferably, pre-positioning sites or distribution points should be the final destination for the ITNs (e.g. villages or health facilities). Avoid having multiple storage/transfer points that will involve more handling of the bales. Where it is not possible to deliver to the lower levels for any reason (e.g. insecurity, high COVID-19 transmission), an identified community member or health facility staff should come to the sub-district warehouse, sign off on their ITNs on the tracking tools (ideally a separate tool that is signed by only one person and not handled multiple times, such as a procurement voucher), and transport the nets to the community for distribution (observing appropriate hygiene and physical distancing protocols). Payment for the transport of the nets and the person's time can be done either through Mobile Money or through direct payment at the ITN pick-up point. Print/laminated SBC and other materials (such as posters to demonstrate correct ITN hanging) should be bundled with the bales of nets for distribution to households and for posting in visible locations in the community by the person responsible for the ITN distribution. Maintain to the greatest extent possible all recommendations in place prior to COVID-19 relating to best practices for logistics and supply chain management and accountability for ITNs, including those related to multi-product campaigns³¹.

Implementation

As soon as a strategy for ITN distribution has been determined that minimizes risks for increased transmission of COVID-19, and sufficient numbers of ITNs are available in-country to reach desired levels of preventive coverage in the priority target areas (those most affected by malaria), scheduled ITN distributions should proceed without delay.

Staff/health workers and all campaign personnel should frequently (every hour) clean/disinfect surfaces and equipment/materials they use, and wash/disinfect their hands before and after handling equipment/materials and distribution items. Disinfectant and cleaning materials should be supplied to all staff, and a guide developed to show campaign personnel how best to use them. Where Smartphones are used for data collection, specific standard operating procedures should be developed to ensure that they are handled by only one person and/or that they must be cleaned when exchanged, as well as at the end of the day's activities.

Supervision and monitoring activities are likely to be highly restricted and lighter touch monitoring/distance supervision should be put in place. National malaria programmes and partners should put in place communication channels for campaign actors at all levels, such as WhatsApp groups, to allow for issues arising to be discussed and resolved remotely. Supervision can take place through phone calls and daily data review (which can be sent either as a photo or summarized by SMS), while monitoring could include making phone calls to households in areas that should have received nets as a

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³¹ https://allianceformalariaprevention.com/amp-tools/

means of verification. Where supervision and monitoring activities will physically take place, the same precautions described above should be considered. Data on ITNs distributed can be reported daily through phone calls, SMS or electronic systems where these are in place. Supervisors and monitors should be instructed to pass on any reports from distribution teams of cases or clusters of cases of suspected COVID-19 through appropriate channels (e.g. through the COVID-19 hotline or to the COVID-19 emergency taskforce focal point).

Post-distribution

National malaria programmes should ensure that staff are provided with clear information (through whatever means takes the place of face-to-face training, e.g. "how-to" materials) about the importance of cleaning/disinfecting all equipment/materials (e.g. tables and chairs, phones/tablets, writing utensils, tarps, handwashing station equipment, etc.) before putting them away. The ITN distribution area should be cleaned up, including disinfection of surfaces/furniture used and correct disposal of all waste as per national guidelines.

After the ITN distribution, planning and budgeting should include follow-up with home deliveries for high risk households if they have not yet received their ITNs.

Continuous ITN distribution

In order to sustain access to ITNs in prioritized target areas, routine and continuous distribution of ITNs should continue both during and after the mass ITN distribution (if feasible and if already implemented per national policy). Where mass campaign distribution is not possible, continuous distribution should be accelerated and reinforced to protect the most vulnerable populations from malaria infection and death. Distribution through routine and continuous channels should be modified, as needed, to ensure that strategies adopted minimize risks for, and prevent unnecessary exposure to, increased transmission of COVID-19 for households and health workers.

School-based distribution will not be feasible in countries where school sessions have been placed on hold or cancelled due to COVID-19 prevention efforts. Community-based distribution of ITNs will need to weigh many of the same considerations discussed above around use or not of vouchers and the health and safety of community workers in providing ITNs directly to households. Self-registration and other adapted community-led processes can be considered for identification of households needing a replacement ITN or an ITN to cover a new sleeping space where households cannot or have not accessed routine health services.

For health facility-based distribution of ITNs, consider providing ITNs to individuals that test positive or are symptomatic for COVID-19, or are self-quarantined, to ensure that they are protected from malaria, particularly in areas with a high malaria burden. This could be done during general consultation visits and/or through routine health services that already provide ITNs per national strategy, such as antenatal and immunization clinics. Individuals presenting with COVID-19 symptoms or testing positive should also be able to access ITNs if routine stock is sufficient, as they should not be sharing their ITN with other people. Clear instructions will need to be provided about washing the ITN, as described above. Quantification estimates to ensure sufficient ITN stock levels to meet the demand from expanded beneficiary criteria will also need to be revised.

National malaria programmes should provide instructions to health facility staff around how the ITNs should be recorded in the monthly facility reports for ITNs distributed to people who are outside the routine ITN target group (most often pregnant women and children under the age of one, though this may be expanded to children under five or further, such as to people diagnosed with severe malaria, where mass campaign distribution is not taking place). National programmes should consider increasing the routine stock delivered to health facilities during the COVID-19 response to avoid ruptures in stock and ensure that as many people as possible, particularly the most vulnerable, are protected from malaria transmission.

Where quarantine facilities are established to manage people sick with COVID-19, each bed in the facility should be provided with an ITN to prevent malaria transmission, and ITNs that have been used to protect people that are ill should be washed between patients, using the procedure described above.