



The Alliance for  
Malaria Prevention

# Looking forward: Key issues and AMP priorities for 2023 – 2024

**AMP Annual Partners Meeting  
May 2023**



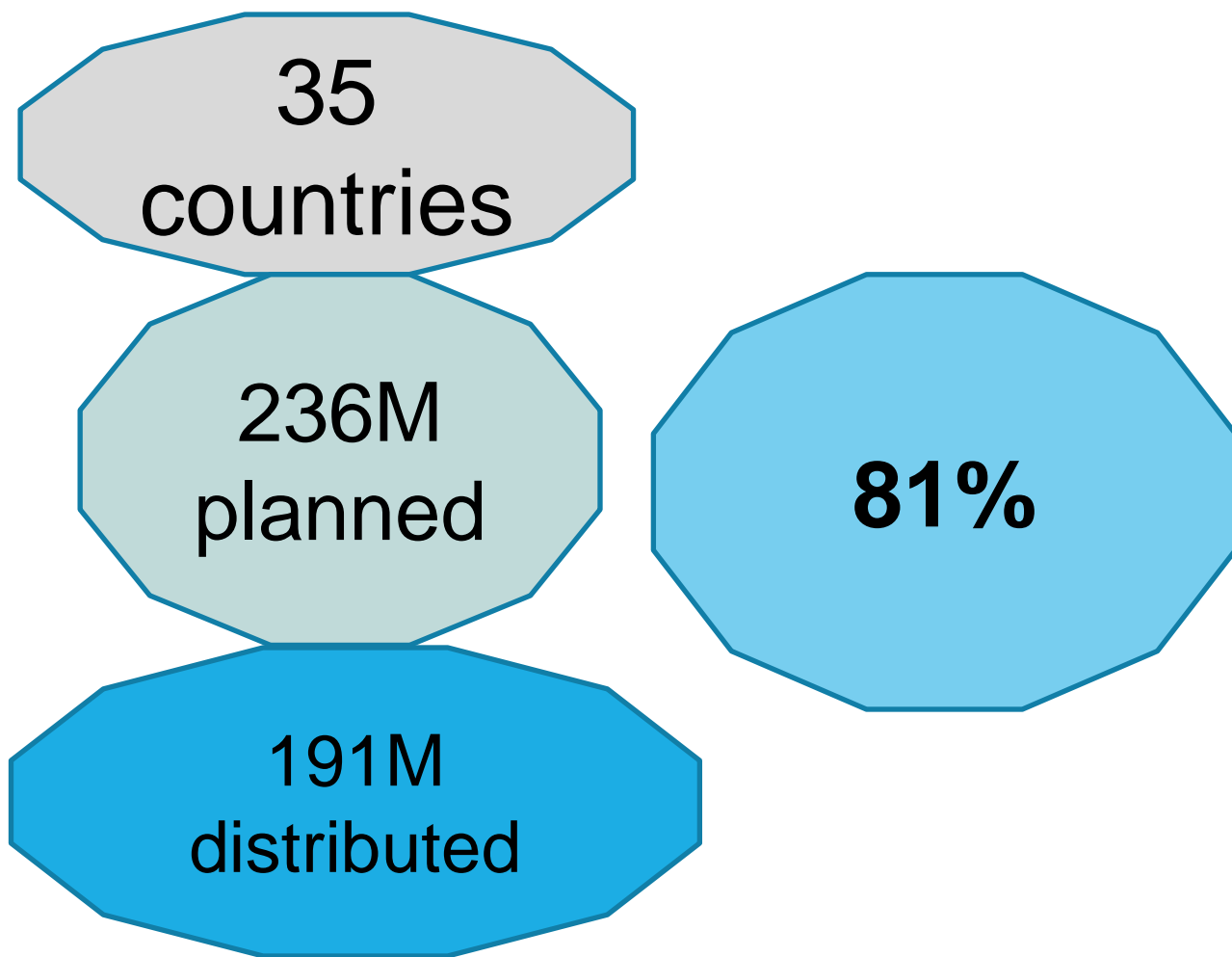
# 2022 summary nets shipped – Net mapping

- **259,459,521** ITNs shipped to SSA countries
- **23,264,300** ITNs shipped to rest of world
- 2023 will surpass **3B** ITNs shipped to for malaria prevention from suppliers

ITN shipments by type to SSA

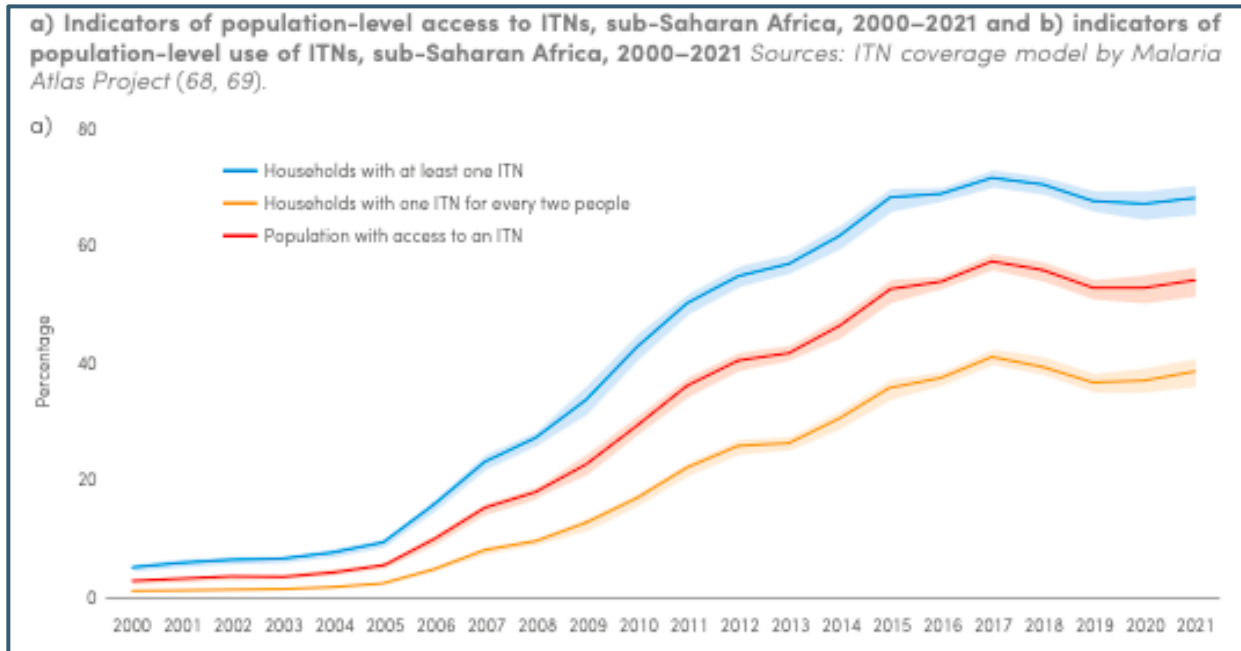
Sub Saharan Africa							
<i>in ITNs</i>	Standard		PBO		Dual		Total
Year	ITNs	% Of total	ITNs	% Of total	ITNs	% Of total	ITNs
2004	5,617,184	100%					5,617,184
2005	16,944,713	100%					16,944,713
2006	46,842,964	100%					46,842,964
2007	43,805,000	100%					43,805,000
2008	60,151,197	100%					60,151,197
2009	88,476,937	100%					88,476,937
2010	145,209,800	100%					145,209,800
2011	88,003,106	100%					88,003,106
2012	70,272,798	100%					70,272,798
2013	142,976,486	100%					142,976,486
2014	189,205,502	100%					189,205,502
2015	177,876,883	100%					177,876,883
2016	137,724,562	100%					137,724,562
2017	202,908,557	100%					202,908,557
2018	167,488,684	97%	4,917,174	3%			172,405,858
2019	190,893,959	90%	17,808,637	8%	4,145,100	2%	212,847,696
2020	153,758,109	73%	43,439,801	21%	12,012,401	6%	209,210,311
2021	92,753,263	45%	94,009,812	46%	18,819,331	9%	205,582,406
2022	106,402,017	41%	131,685,470	51%	21,372,034	8%	259,459,521
Total	2,127,311,721		291,860,894		56,348,866		2,475,521,481

# 2022 summary – Planned campaigns

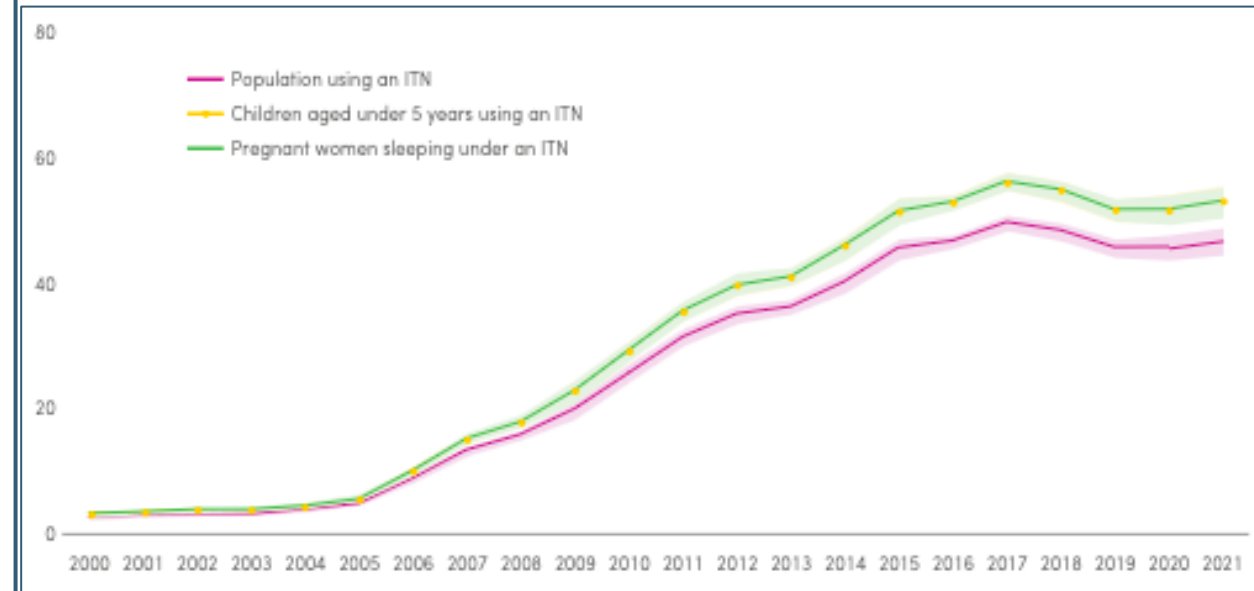


# Overall, access to and use of ITNs remains below the levels observed in 2017 (WMR 2022)

## ITN access



## ITN use



# Key issues and priority areas 2023 – 2024

# MENTI

<https://www.menti.com>  
**1766 2985**

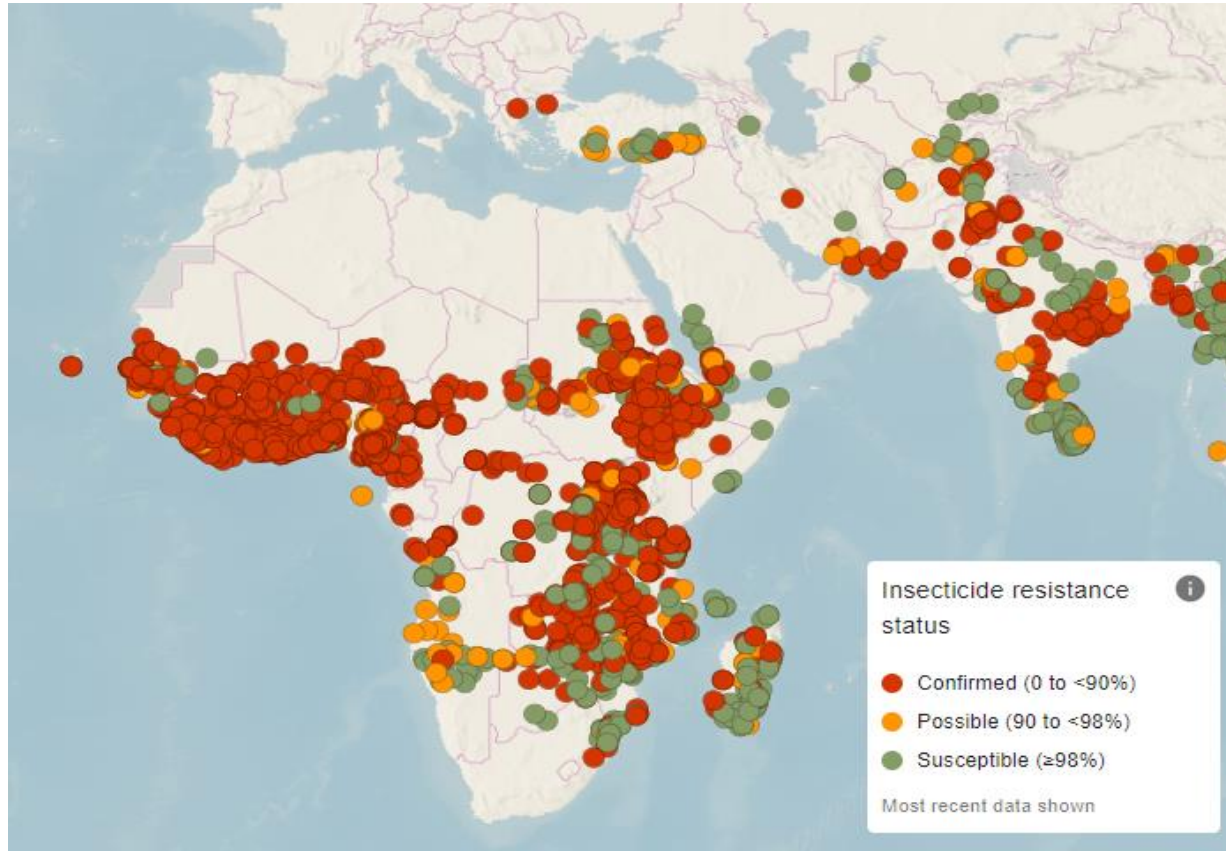




# Find new photos!!!



# The challenges are many...



## Insecticide resistance



## Funding



# Maintaining focus on the core mandate

- I. **Coordination of partners** – weekly call/annual meeting
- II. Development and dissemination of **operational guidance** – identified gaps/iterative learning
- III. Provision of **technical assistance** – on request



## HOW WE WORK

### SUPPORT AND CAPACITY-BUILDING

Based on requests from national malaria programmes, AMP provides globally-recognized expert technical assistance through distance and in-country missions to help countries successfully plan and execute complex ITN distribution campaigns. Since 2004, AMP has supported countries in sub-Saharan Africa, Asia-Pacific and the Americas. In addition, countries have participated in AMP-organized workshops and trainings aimed at strengthening and sharing the skills of national malaria programmes and partner organization staff in ITN campaign planning, logistics, social and behaviour change, implementation, monitoring and evaluation and continuous distribution.

# Technical assistance – Expanded options

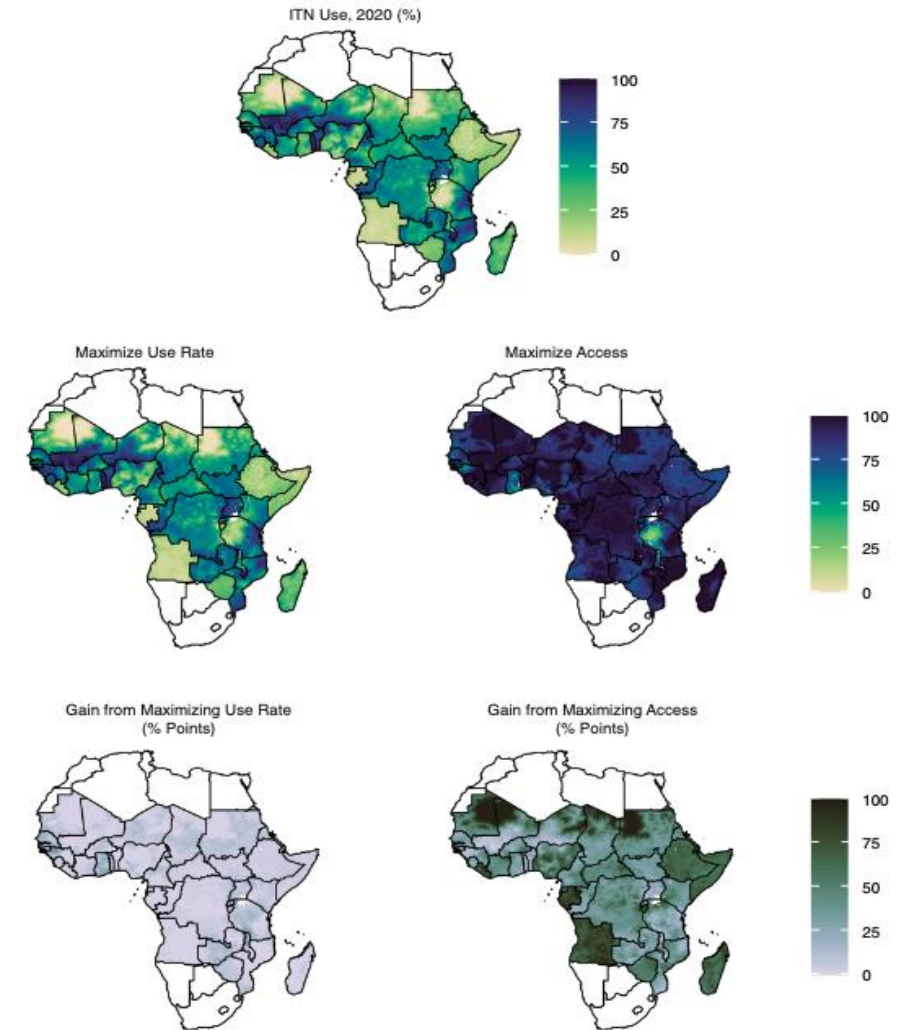
- **Full TA:** “typical” model of TA
  - Requested for key campaign processes
  - Generally a hybrid model (distance +in-country)
  - Funded by RBM and/or through service provider agreements with GF PRs
- **“Light-touch” TA:** distance support for short-term, time-bound requests
  - Funded by UNF and BMGF
  - Can include (but is not limited to) review of documents, participation in calls and meetings, quality control of templates or tools developed, etc...
  - Hours or days over months

# Technical assistance – Plans for 2023/24

- Identifying staff from national malaria programmes to support other countries with different processes or components
  - Typically paired with existing AMP TA providers
- Supporting country-to-country exchange missions for learning and sharing on specific aspects of ITN distribution
- Technical sessions, training and other learning opportunities

# Optimizing ITN distribution, operationalizing sub-national tailoring

- Getting the right net to the right people at the right time to **sustain access** and achieve targets (national and global)
- Shifting from blanket universal coverage approaches to more **tailored approaches** based on data → will require different operational strategies (CD) and SBC
- **Improving ITN access** = moving beyond status quo of three-year campaigns and routine distribution



**Fig. 6 Magnitude of change in insecticide-treated net (ITN) use possible from increasing use rate versus increasing access.** The top row shows estimated ITN use in 2020. The second row shows what use could be if access remained unchanged and the use rate were set to 100% (left), compared to if the use rate remained unchanged and access was set to 100% (right). The final row shows the magnitude gain in use from each of these two scenarios. With few exceptions, increasing access has a larger impact than increasing the use rate.

Expanding the ownership and use of mosquito nets





**Consider what is effective and efficient for vector control in urban areas to rationalize resources available – use data to determine where nets are needed and decide the channel for distribution**

# Support continuous distribution scale up.

More frequent campaign cycles don't solve our access problem and create additional challenges for national malaria programmes





RESEARCH

Open Access



# Correlation of textile ‘resistance to damage’ scores with actual physical survival of long-lasting insecticidal nets in the field

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## Abstract

**Background:** Attempts have been made to link procurement of long-lasting insecticidal nets (LLIN) not only to the price but also the expected performance of the product. However, to date it has not been possible to identify a specific textile characteristic that predicts physical durability in the field. The recently developed resistance to damage (RD) score could provide such a metric. This study uses pooled data from durability monitoring to explore the usefulness of the RD methodology.

**Methods:** Data from standardized, 3-year, prospective LLIN durability monitoring for six LLIN brands in 10 locations and four countries involving 4672 campaign LLIN were linked to the RD scores of the respective LLIN brands. The RD score is a single quantitative metric based on a suite of standardized textile tests which in turn build on the mechanisms of damage to a mosquito net. Potential RD values range from 0 to 100 where 100 represents optimal resistance to expected day-to-day stress during reasonable net use. Survival analysis was set so that risk of failure only started when nets were first hung. Cox regression was applied to explore RD effects on physical survival adjusting for known net use environment variables.

**Results:** In a bivariate analysis RD scores showed a linear relationship with physical integrity suggesting that the proportion of LLIN with moderate damage decreased by 3%-points for each 10-point increase of the RD score ( $p = 0.02$ ,  $R^2 = 0.65$ ). Full adjustment for net care and handling behaviours as well as other relevant determinants and the country of study showed that increasing RD score by 10 points resulted in a 36% reduction of risk of failure to survive in serviceable condition ( $p < 0.0001$ ). LLINs with RD scores above 50 had an additional useful life of 7 months.

**Conclusions:** This study provides proof of principle that the RD metric can predict physical durability of LLIN products in the field and could be used to assess new products and guide manufacturers in creating improved products. However, additional validation from other field data, particularly for next generation LLIN, will be required before the RD score can be included in procurement decisions for LLINs.

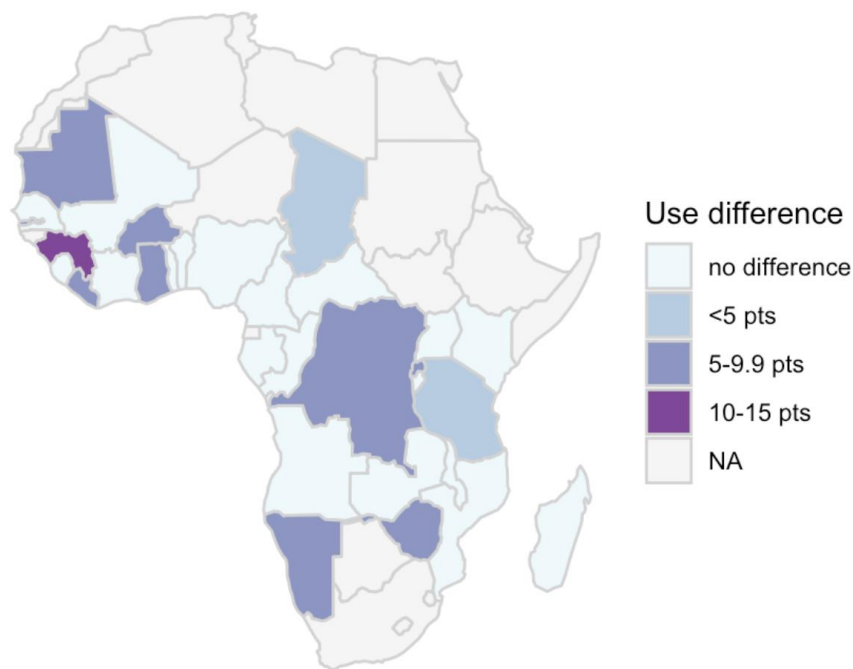
**Keywords:** LLIN physical durability, Textile resistance to damage

## ITN performance and quality need to be addressed to maintain trust in ITN efficacy

- Support post-distribution monitoring frameworks and operationalization

# ITN textile and ITN use

Figure 1: Crude difference in % of nets used between textiles



Programmes may wish to procure ITNs of a particular textile

Reports use large HH survey data to:

- Evaluate whether there are differences in use between polyester and polyethylene nets in a particular country
- Determine whether net textile is associated with these differences after controlling for other determinants of net use

<https://net-textile-use-reports.netlify.app>





**We need:**

**Feasible *waste management* (or environmentally friendly) solutions**

**Policies (?) for net care, repair & management of *end-of-life nets***

# Digitalization is not “one size fits all”

- **Identify and prioritize** what you are trying to improve (and make sure digitalization will be a way to improve it)
- **Assess** your context and see what you have and what is feasible
- Ensure **interoperability** with existing systems when adopting a separate platform to ensure data availability post campaign
- <https://allianceformalariaprevention.com/resources/digitalization-matrix/>

## Operational needs

The following questions will help national malaria programmes decide whether to digitalize their planned ITN mass campaign and, if so, to what levels and for which campaign components or activities. [The use of digital tools to improve the operational efficiency of ITN campaigns](#), which provides information about different campaign activities, their current challenges and possible digital solutions, should be used as a reference when completing this section.

The operational needs analysis is broken up into two sections:

- The first section has drop-down menus to select the answers. Considerations based on the selected answer will appear automatically.
- The second section is a combination of drop-down menus and text entry that requires input and descriptions from the user.

1a. Were there issues in previous ITN campaigns that might be resolved by digitalization?

2. Do you want to improve specific or all components of the ITN campaign using digitalization?

3. Why do you want to digitalize parts or all of your ITN campaign?

- ☐ Improve campaign efficiency
- ☐ Requirement from donors
- ☐ Requirement from Ministry of Health / Government
- ☐ Improve data quality and accountability
- ☐ Improve geographical targeting
- ☐ Other countries and programmes are digitalizing
- ☐ Cost savings
- ☐ Other (please specify)

4a. Is there government support for digitalization of data?

4b. Is there ITN campaign partner funding support for digitalization of data?




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# Operationalizing GS1

- Objective is clear: improve accountability for commodities
- Operationalization not yet clear: people, devices, time (more/less), training, data visualization and access at different levels, etc.
- System interoperability to be considered

IDENTIFY			
ENTITY	REQUIREMENT		PHASE
Trade items	Assign and provide <sup>14</sup> GTINs for all levels of the trade item packaging hierarchy.		Phase 1
Locations and/or legal entities	Assign and provide <sup>15</sup> Global Location Numbers (GLNs) for sold-from, manufacture-from, and ship-from.		Phase 1

CAPTURE			
PACKAGING LEVEL	REQUIREMENT	HUMAN READABLE INTERPRETATION (HRI)	PHASE
Bale 	GS1-128 barcode symbology encoded with: <ul style="list-style-type: none"> <li>• (00) SSCC</li> <li>• (02) GTIN of contained items</li> <li>• (37) Count of contained items</li> <li>• (10) Batch/lot number</li> <li>• (11) Production date</li> </ul>	Information printed in human readable form: <ul style="list-style-type: none"> <li>• (00) SSCC</li> <li>• (02) GTIN of contained items</li> <li>• (37) Count of contained items</li> <li>• (10) Batch/lot number</li> <li>• (11) Production date</li> </ul>	As soon as possible but no later than Phase 3
Bag with LLIN 	GS1 DataMatrix symbology encoded with: <ul style="list-style-type: none"> <li>• (01) GTIN</li> <li>• (10) Batch/lot number</li> <li>• (11) Production date</li> </ul>	Information printed in human readable form: <ul style="list-style-type: none"> <li>• (01) GTIN</li> <li>• (10) Batch/lot number</li> <li>• (11) Production date</li> </ul>	Phase 2
Individual LLIN 	GS1 DataMatrix symbology encoded with: <ul style="list-style-type: none"> <li>• (01) GTIN</li> <li>• (10) Batch/lot number</li> <li>• (11) Production date</li> <li>• (21) Serial number</li> </ul>	Information printed in human readable form: <ul style="list-style-type: none"> <li>• (01) GTIN</li> <li>• (10) Batch/lot number</li> <li>• (11) Production date</li> <li>• (21) Serial number</li> </ul>	Phase 2 for GTIN, batch/lot number and production date Phase 3 for serial number

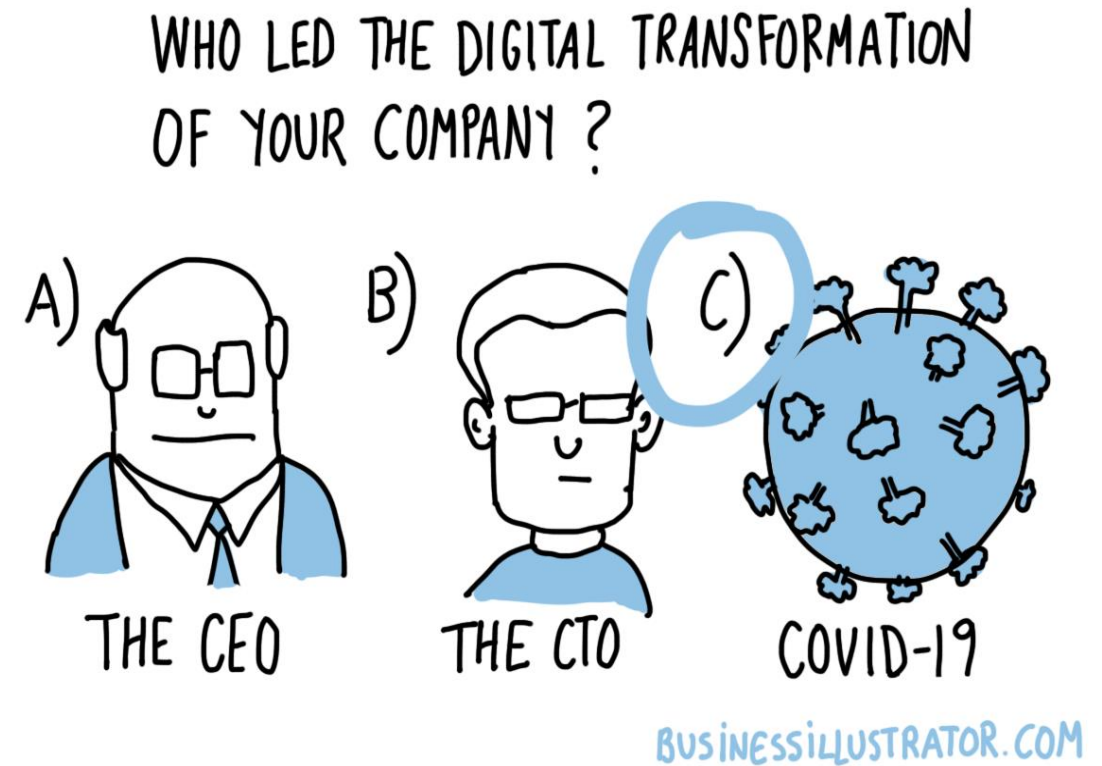
  

SHARE		
DATA TYPE	REQUIREMENT	PHASE
Master data	Provide mandatory and required trade item attribute data via the GS1 Global Data Synchronization Network™ (GDSN®)	Phase 2



Early planning and budgeting, including identification of technical support needs (internal/external), will improve the digital tools transition and minimize delays

Remember to train “beyond the device” to improve campaign outcomes





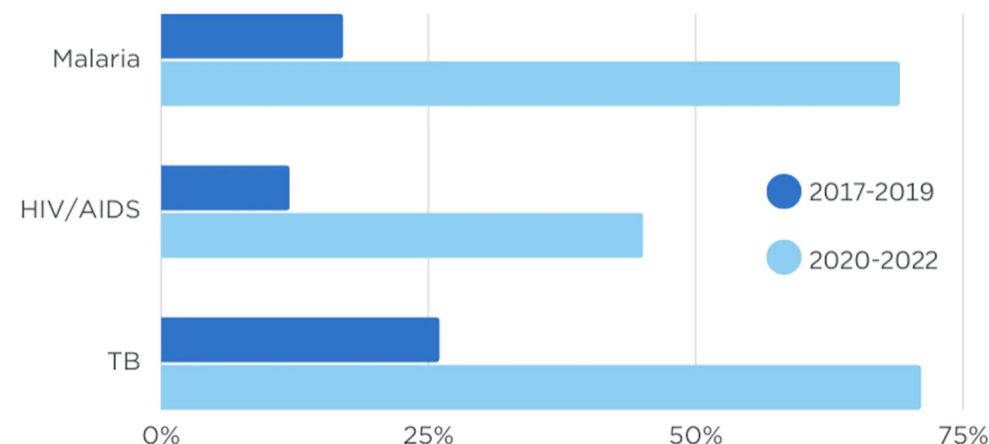


**Focus on use and reuse of data, information and resources within and across health programmes (microplanning, HHR)**

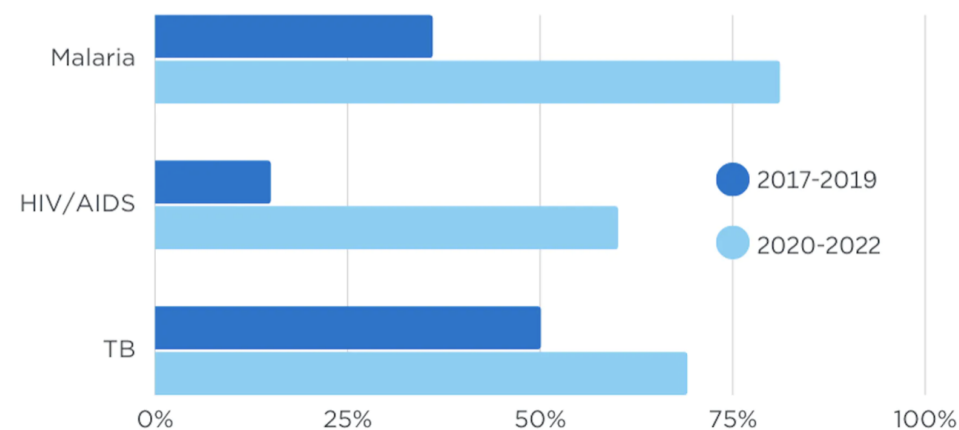
# Reaching everyone

- IDPs, refugees and last-mile populations have been increasingly included in funding applications
- Need improve operations to reach these populations
- Leverage on the community health system

## IDPs Included in Global Fund Grant Applications



## Refugees Included in Global Fund Grant Applications



# Persistent challenges



When they said we'd have a 'cashless society'  
I didn't think they meant we'd just have no money.

- Support efforts to “fix the denominator” and use data effectively
  - Use of geospatial maps within planning and implementation
- Resolve non-technical issues affecting delivery (payment, procurement)

## Menti results





**Let's ensure that every pregnant women, every child  
and every person at-risk is sleeping under an ITN**



Credit: PMI VectorWorld

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Malaria Prevention