



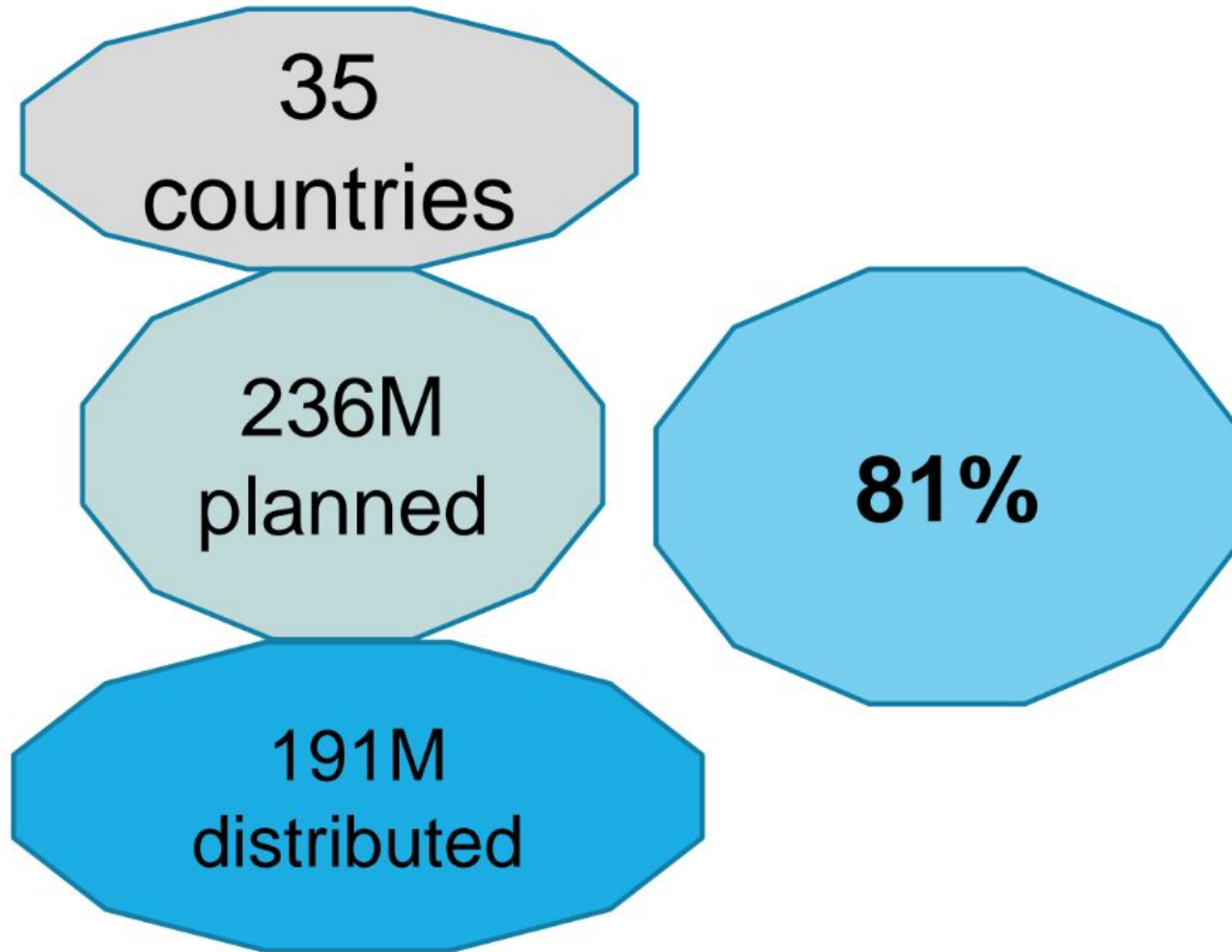
The Alliance for
Malaria Prevention

Planning and execution of ITN mass campaigns

CRSPC SRN meetings
2023

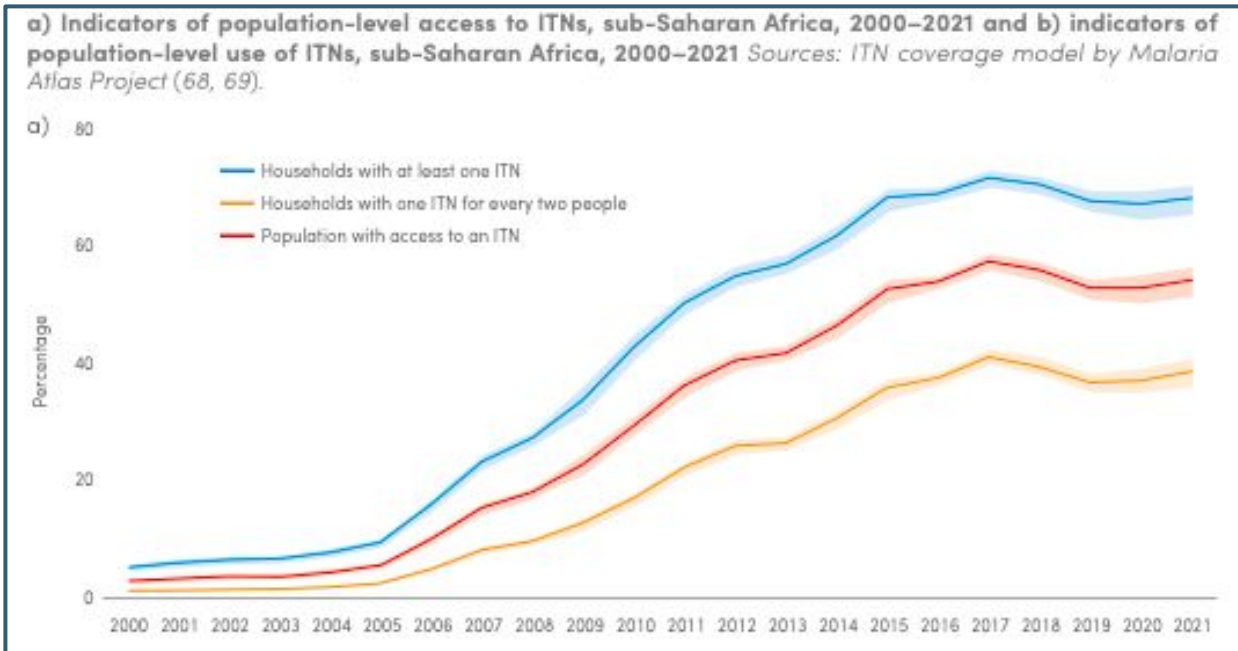


2022 summary – Planned campaigns

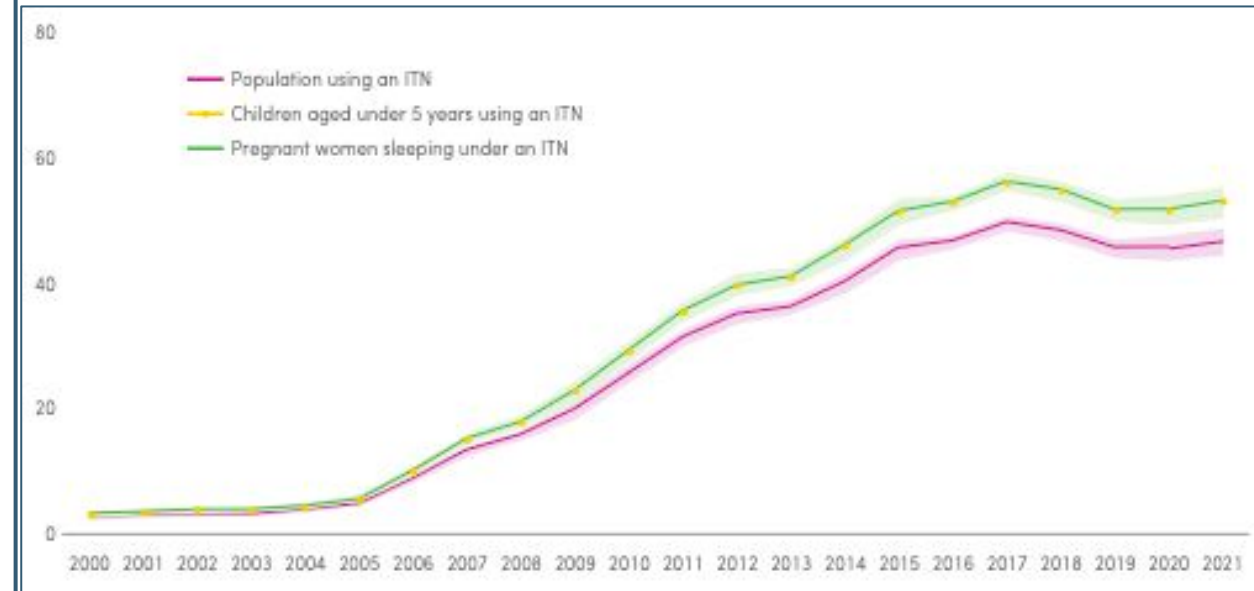


Overall, access to and use of ITNs remains below the levels observed in 2017 (WMR 2022)

ITN access



ITN use



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

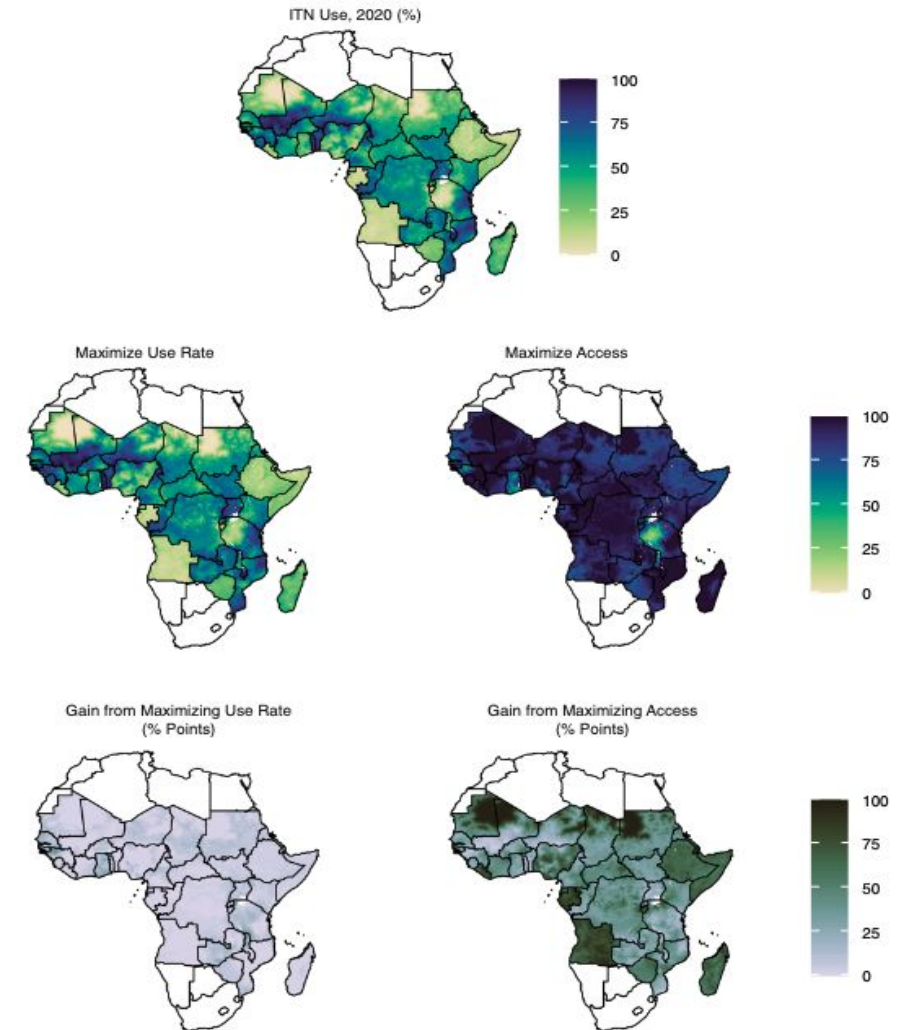


Fig. 6 Magnitude of change in insecticide-treated net (ITN) use possible from increasing use rate versus increasing access. The top row shows estimated ITN use in 2020. The second row shows what use could be if access remained unchanged and the use rate were set to 100% (left), compared to if the use 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

Over 3 billion ITNs will have been shipped to malaria-endemic countries as of Q3 2024

- Identify options for plastic waste management (private/public) for ITN baling/packaging
- Ensure appropriate waste management at the point of distribution (all channels)
- Establish policies or guidelines for net care and repair



Over 3 billion ITNs will have been shipped to malaria-endemic countries as of Q3 202

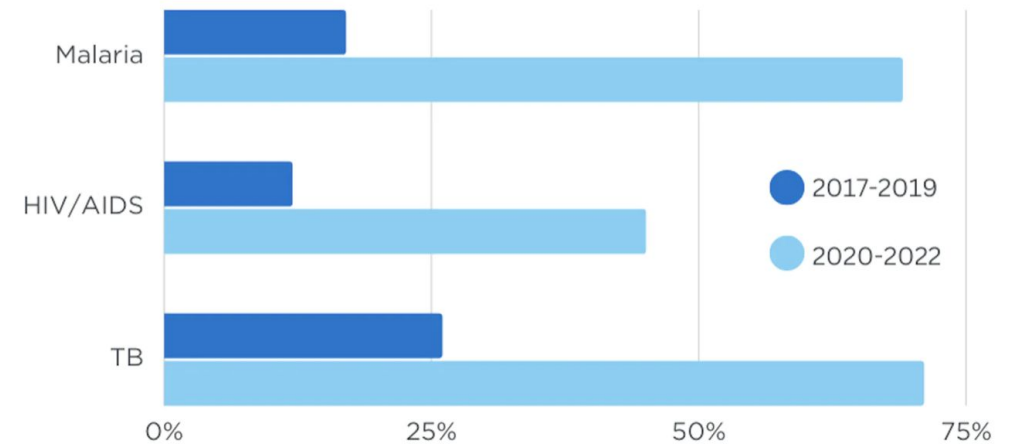
- Management of end-of-life nets needs to be assessed in terms of priority vis-à-vis funding and other issues (willingness to return nets, estimated volumes)



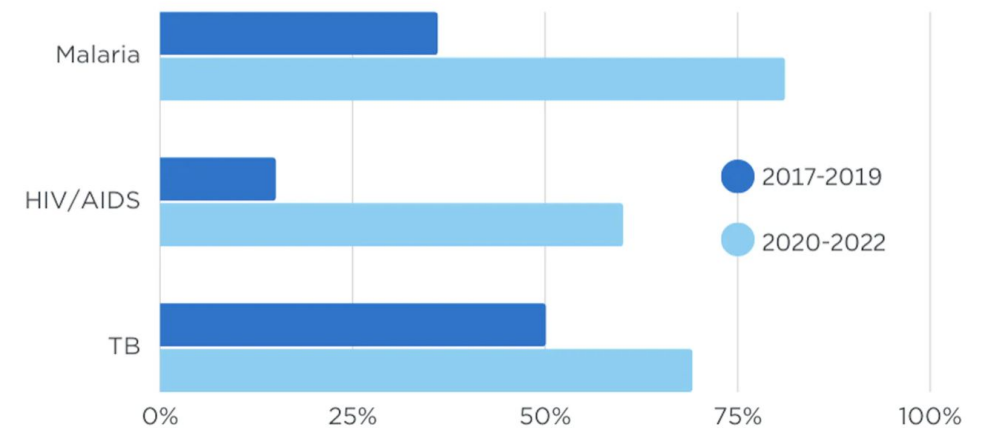
Reaching everyone

- 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, as well as humanitarian actors

IDPs Included in Global Fund Grant Applications



Refugees Included in Global Fund Grant Applications



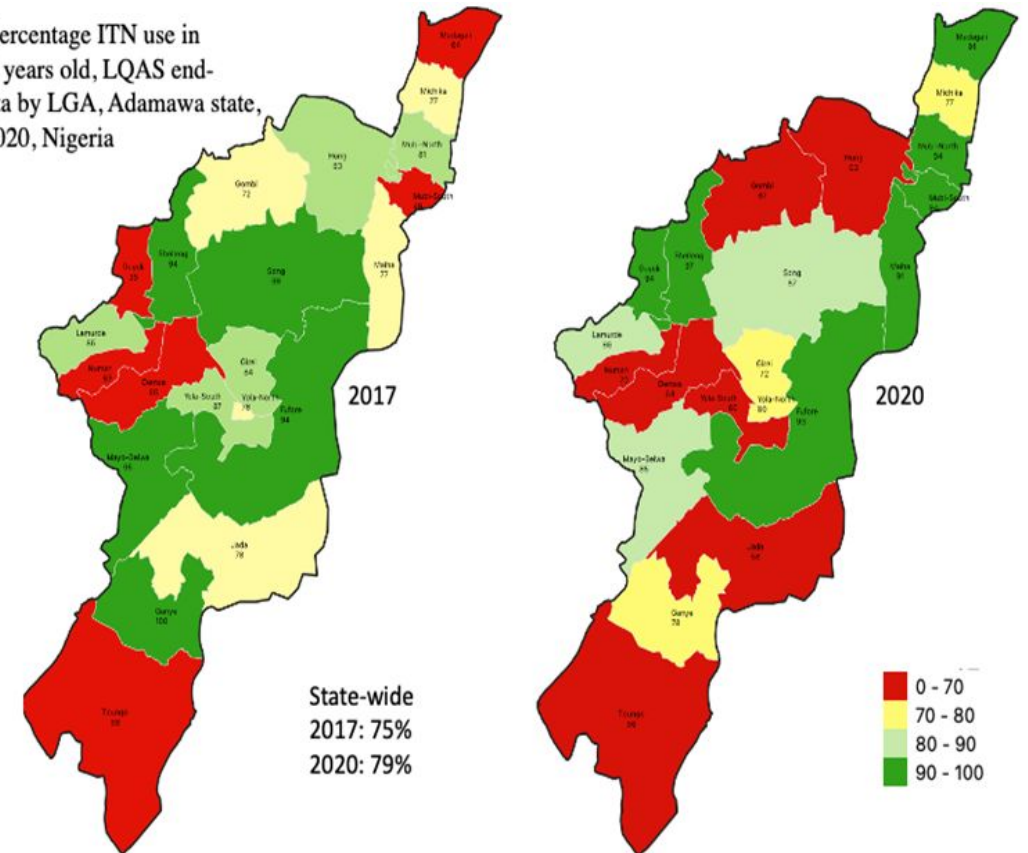
Assessment of HHR and ITN distribution outcomes

Include cost effective and easy to use methodologies in campaign plans and budgets to assess coverage and quality of HHR and/or coverage and use of ITNs (cLQAS and small sample surveys)

- Generate and use data for decision-making

[Assessment procedures](#) using cLQAS

Figure 4. Percentage ITN use in children <5 years old, LQAS end-process, data by LGA, Adamawa state, 2017 and 2020, Nigeria



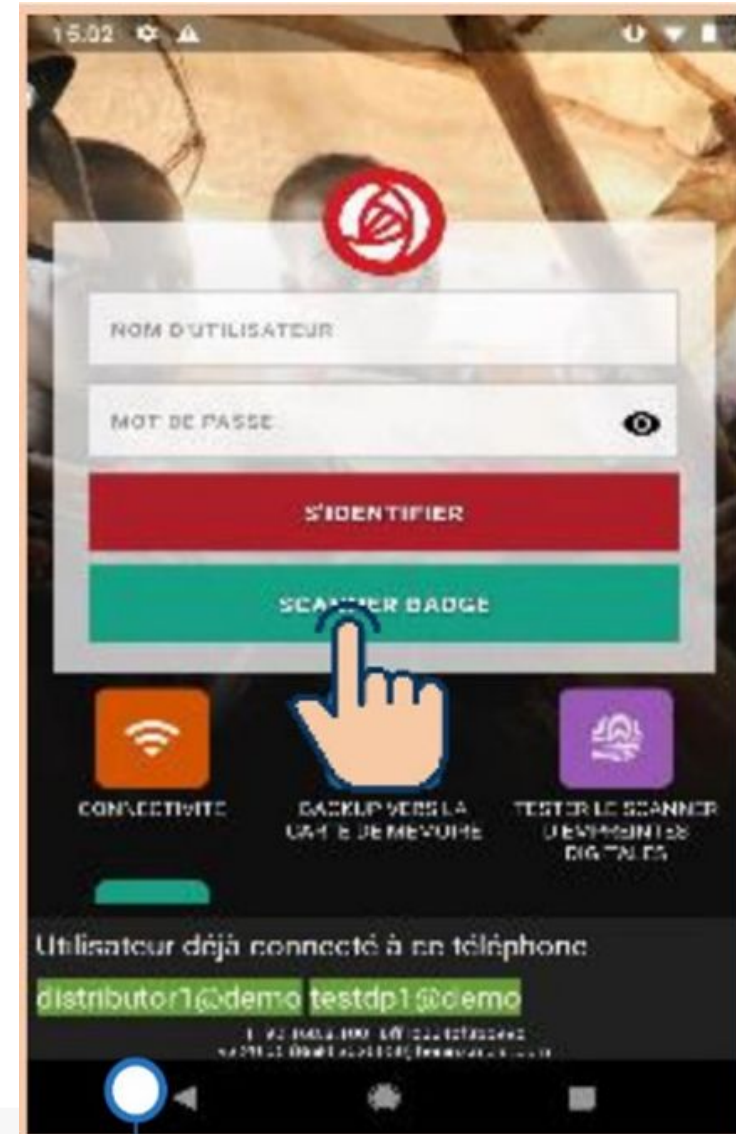
Digitalization – Addressing some of the challenges with quantification, coverage and efficiency

Improving data collected during household registration to improve quantification

- Use of digital tools allows for improved quality of data collection, availability of data, use of data for decision-making and feedback to campaign actors
- Integration of geospatial maps in platforms for HHR allows for identification of missed settlements for full coverage
- GPS locators for HH and information about number of people provides new information for improving quantification, both for future ITN campaigns and for other health campaign service delivery

Expanding digital platforms for data collection and use

- Rapid increase in number of countries rolling out digitalization for different campaign processes, most commonly:
 - HHR and ITN distribution
 - Supply chain
 - Supervision and monitoring
 - Training/HR management
 - Payment
- Different platforms and apps being used, but push for integration in existing systems
- End-to-end campaign systems not available, but under development



Expanding the ownership and use of mosquito nets

Use of geospatial maps for microplanning can improve campaign outcomes and future quantification

- EPI has seen the most use of geospatial maps for improving planning under RED/REC: Investment to strengthen RI and move away from campaigns
- Address challenges with defining administrative boundaries, missed communities
- Digital data collection during campaigns allows layering and continuous planning improvements for improved efficiency of campaigns in future
- Integration and reuse of different data points to develop geo-repositories across health campaigns
- [Resources for geo-spatial mapping:
https://allianceformalariaprevention.com/wp-content/uploads/2023/08/Geo-enabled_Microplanning_Resources_082023_EN-1.pdf](https://allianceformalariaprevention.com/wp-content/uploads/2023/08/Geo-enabled_Microplanning_Resources_082023_EN-1.pdf)

The denominator problem

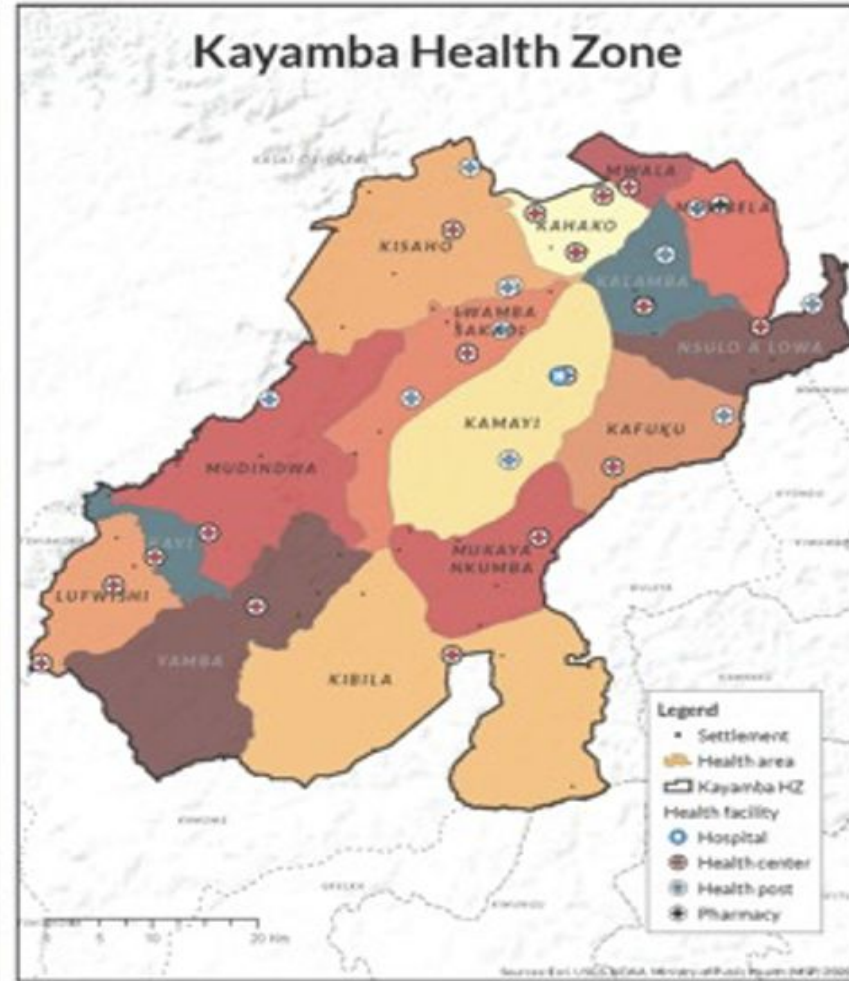
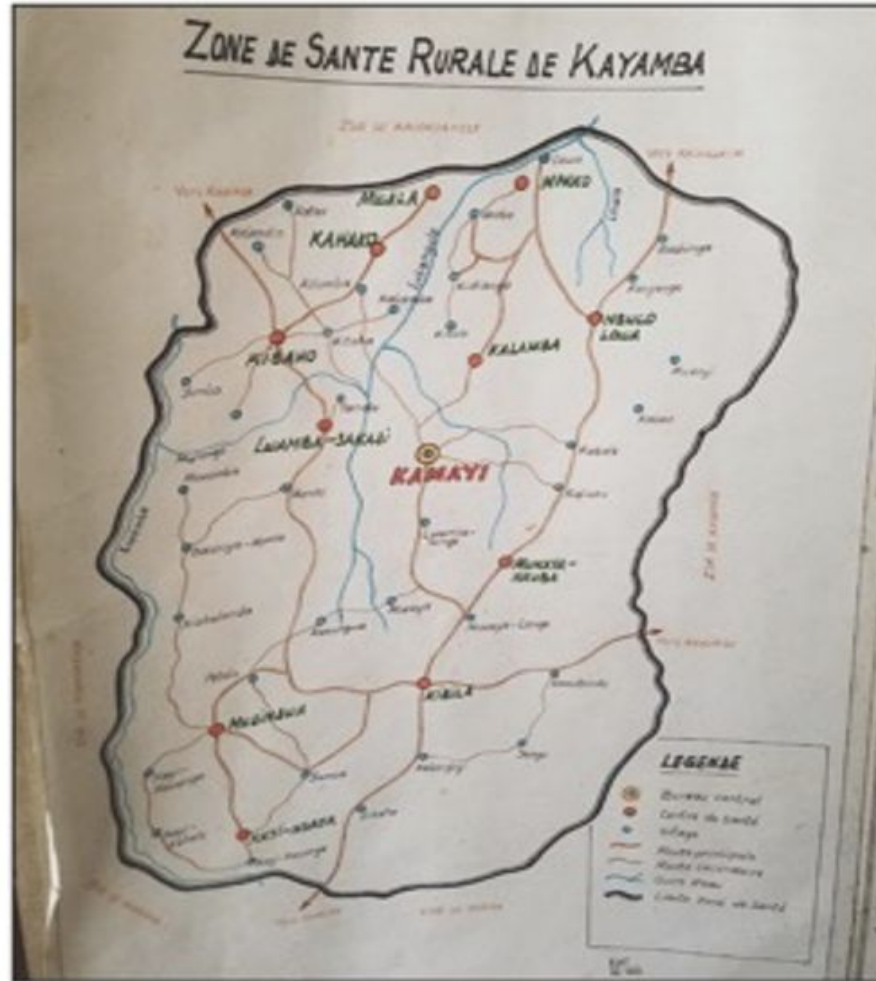
Quantification challenges:

- Census data affected by time since last census, quality of census, population movement, etc.
- Use of previous HH registration data assumes all settlements and HH reached and correctly registered
- Different data sources, different numbers: challenges with triangulation

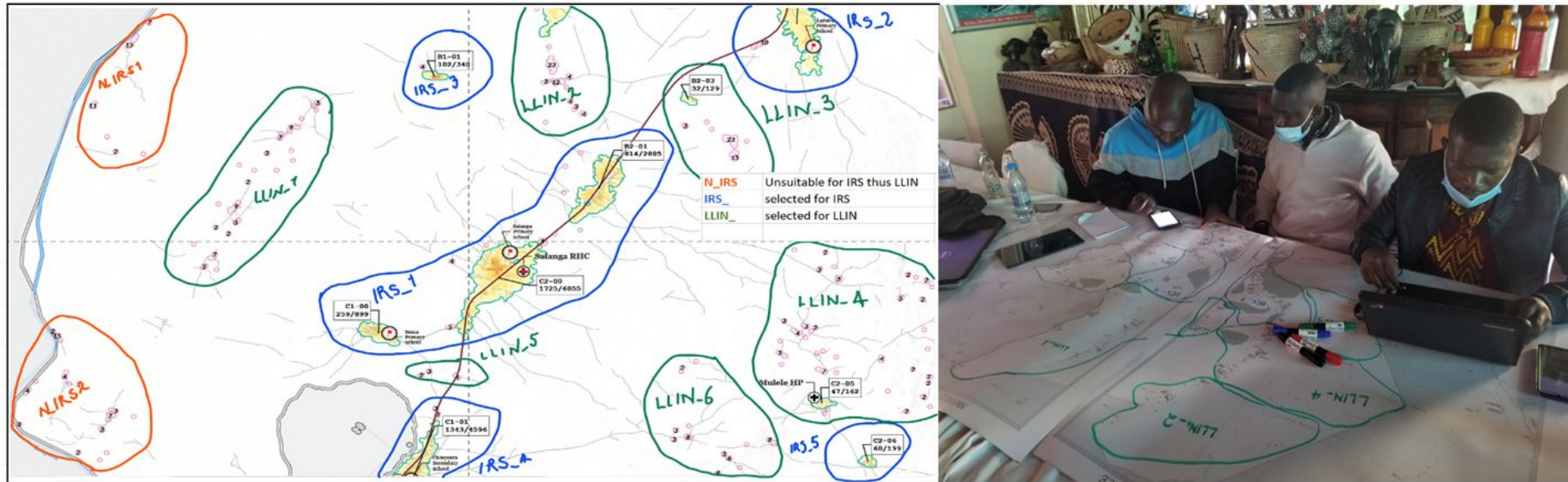
Possible solutions:

- Use of digital data collection for HH registration (GPS points), integration with geospatial maps (settlements, building footprints) could support improving quantification over time
- Improved data-sharing within MOH and beyond (integrated campaign digitalization)

Learning from EPI, establishing shared platforms



Maps for IRS/ITN Campaign Microplanning in Zambia



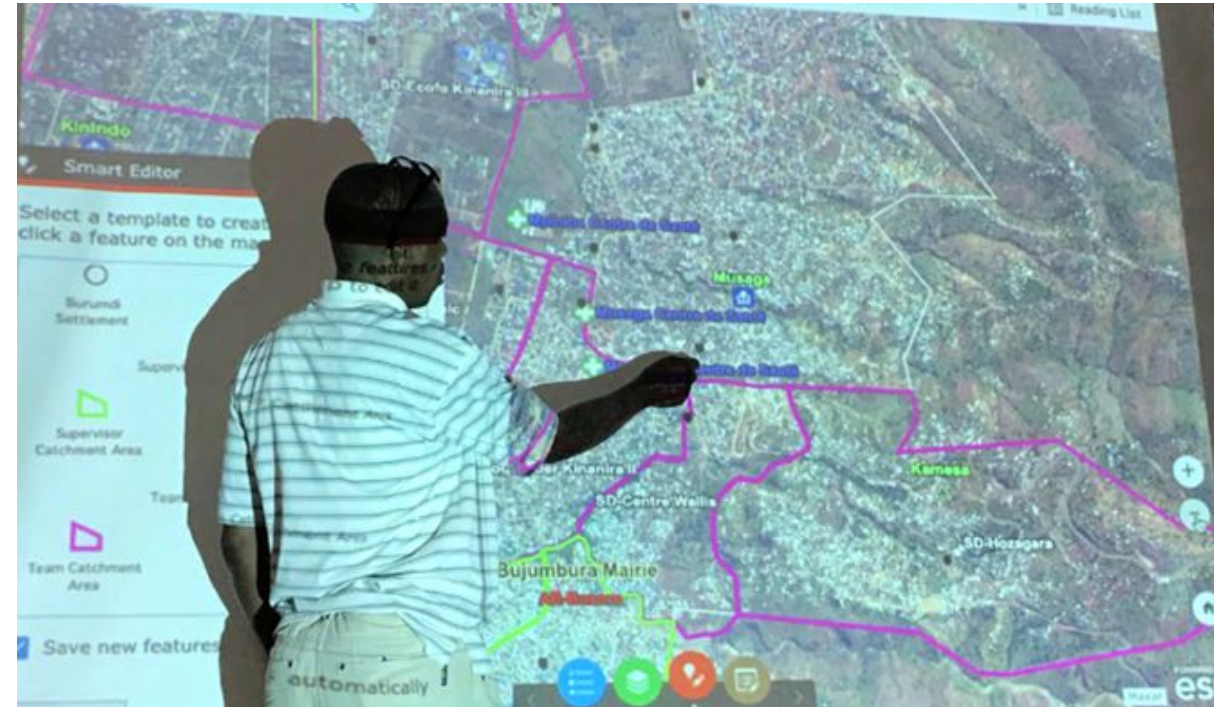
Population and structure count maps were created for all 116 districts in Zambia. During microplanning, District teams demarcated where they will implement IRS versus ITN interventions on these maps, ensuring sufficient resource allocation and ensuring no settlements are missed.



<https://akros.com/reveal-and-grid3-bring-geospatial-data-to-the-ground/>

Burundi: Comparing paper-based and GIS microplans

- Paper-based microplanning throughout the country and geospatial microplanning piloted in two districts
- Comparison between outcomes of the two approaches
- Geospatial microplanning with campaign parameters applied (e.g. distance from distribution point) increased the number of DPs from 34 to 44 (with associated increase in personnel needed to reach the target population)



Case study:

https://allianceformalariaprevention.com/wp-content/uploads/2022/12/Burundi_CS_Using-geospatial-tools-and-data-for-microplanning_EN_20221116.pdf

Challenges to address



- Rapid change to digitalization and approaches differ (e.g. off the shelf platforms focused on specific components vs a program-driven analysis of needs and capacities)
- “Digitalization” may not be understood in the same way across stakeholders
- Lack of IT capacity within many malaria programs, insufficient outreach to where capacity sits, late decision-making and campaign delays
- Poor data and information sharing between MOH departments and more broadly, establishment of archived geo-repositories

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?

Previous

Next

Save and Continue Later

AMP digitalization tools and resources

- [Digitalization decision-making matrix](#)
- [Digitalization planning and budget checklist](#)
- [Digitalization risk and mitigation example](#)
- [Resources on improving ITN campaign efficiency through the use of digital tools](#)

WHO recommends use of pyrethroid-chlorfenapyr insecticide-treated nets to prevent malaria



<https://www.who.int/news/item/14-03-2023-who-publishes-recommendations-on-two-new-types-of-insecticide-treated-nets>

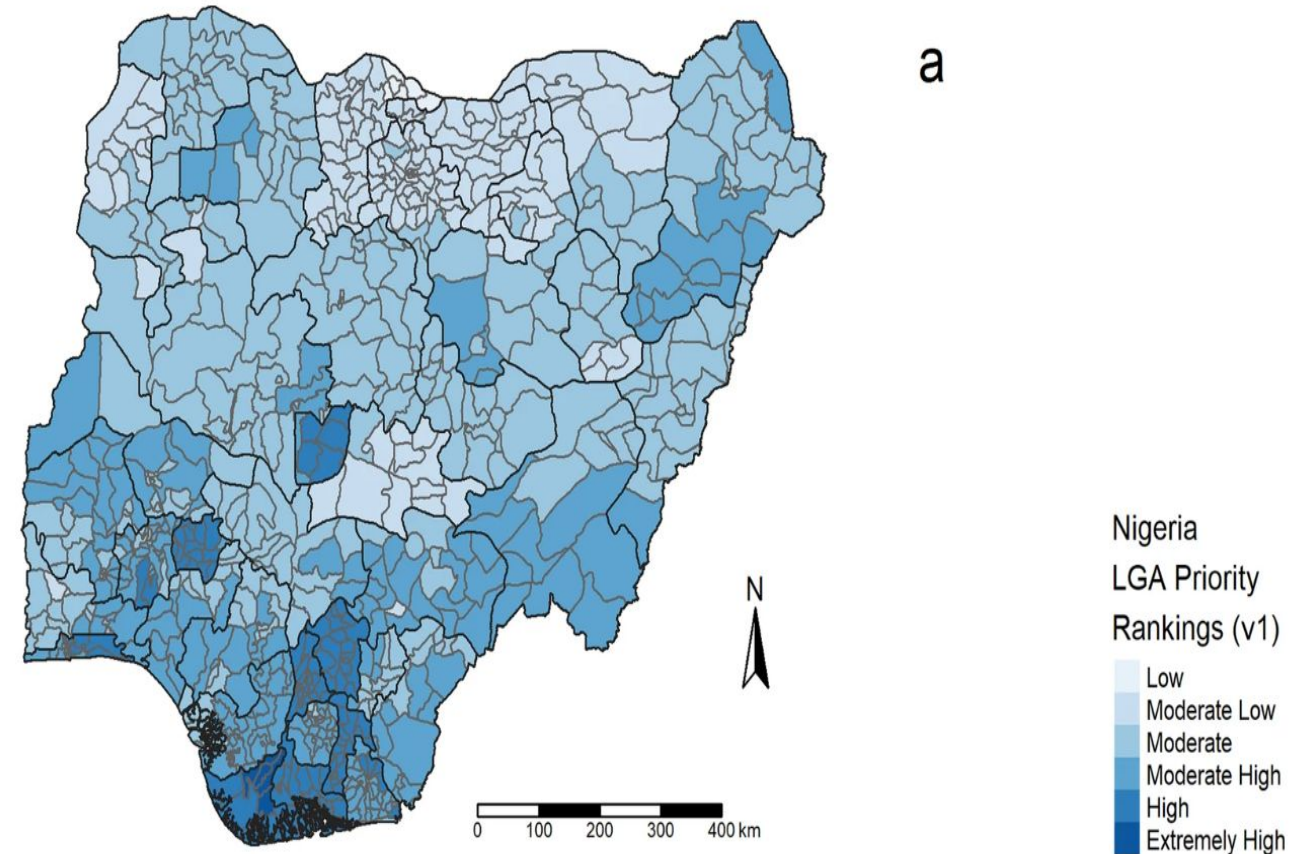
Key messages:

- *Strong recommendation* for the deployment of pyrethroid-chlorfenapyr ITNs vs pyrethroid-only nets to prevent malaria in adults and children in areas where mosquitoes have become resistant to pyrethroids
- *Conditional recommendation* for the deployment of pyrethroid-chlorfenapyr ITNs instead of pyrethroid-PBO nets to prevent malaria in adults and children in areas with pyrethroid resistance
- *Conditional recommendation* for the deployment of pyrethroid-pyriproxyfen nets instead of pyrethroid-only nets to prevent malaria in adults and children in areas with pyrethroid resistance
- *Conditional recommendation against* the deployment of pyrethroid-pyriproxyfen nets instead of pyrethroid-PBO nets

Guidance on the prioritization of insecticide-treated nets in situations where resources are limited

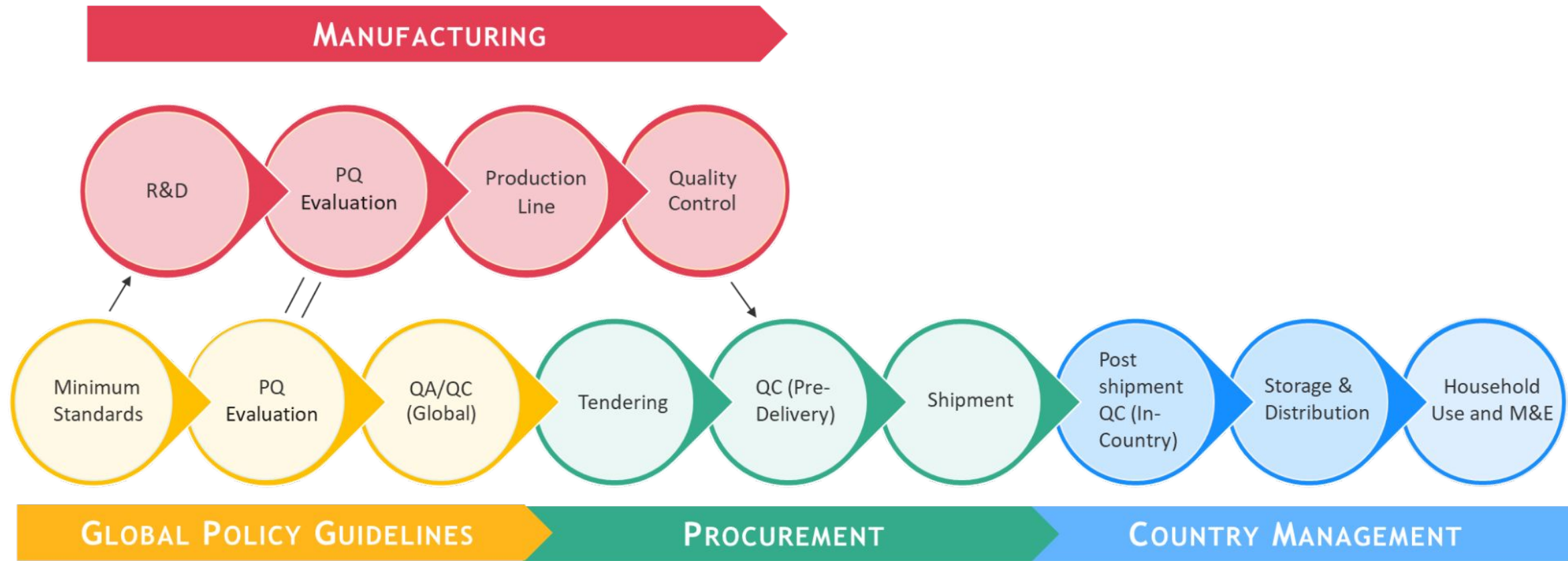
Six detailed steps to aid NMPs in implementing WHO's recommendations on the different types of ITNs, most notably those on dual active ingredient ITNs, and is to be used specifically in conjunction with the WHO guidelines for malaria

<https://www.who.int/publications/i/item/9789240069428>



Raising the Floor on Nets - Overview & Updates

There are many points along the ITN lifecycle that affect net quality and performance



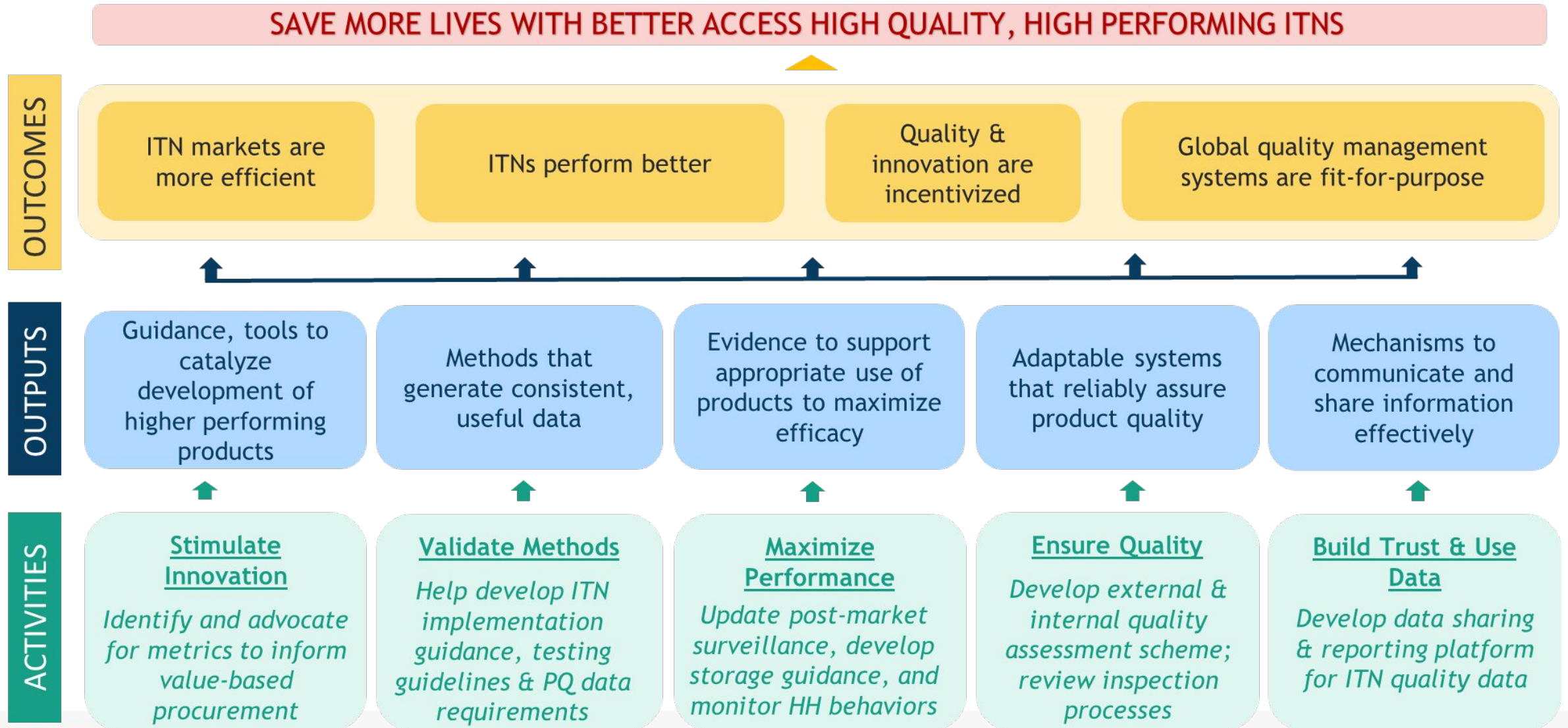
CHAI, I2I, BMGF, and partners have put together an initiative to strengthen ITN performance and quality across the life cycle

VISION: To create a system that incentivizes continuous innovation of higher quality, higher performing ITNs

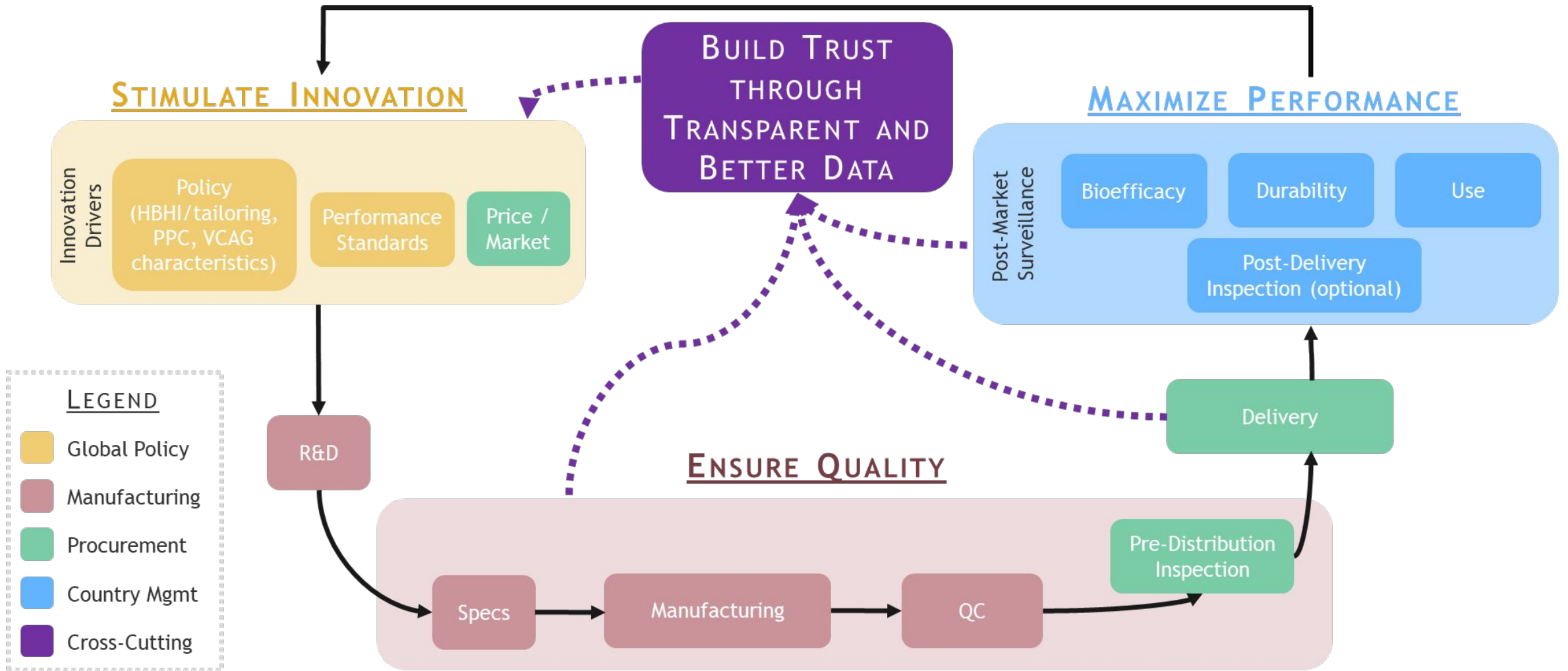


- 1 STIMULATE INNOVATION:** Incentivize improvements to ITN quality and performance
- 2 VALIDATE METHODS:** Generate consistent and useful data
- 3 MAXIMIZE PERFORMANCE:** Using lifecycle data to improve performance
- 4 ENSURE QUALITY:** Keeping products consistently in spec
- 5 BUILD TRUST & USE DATA:** Mechanisms to communicate information more effectively

The theory of change for Raising the Floor builds upon five main pillars: stimulating innovation, validating methods, maximizing performance, ensuring quality, and building trust

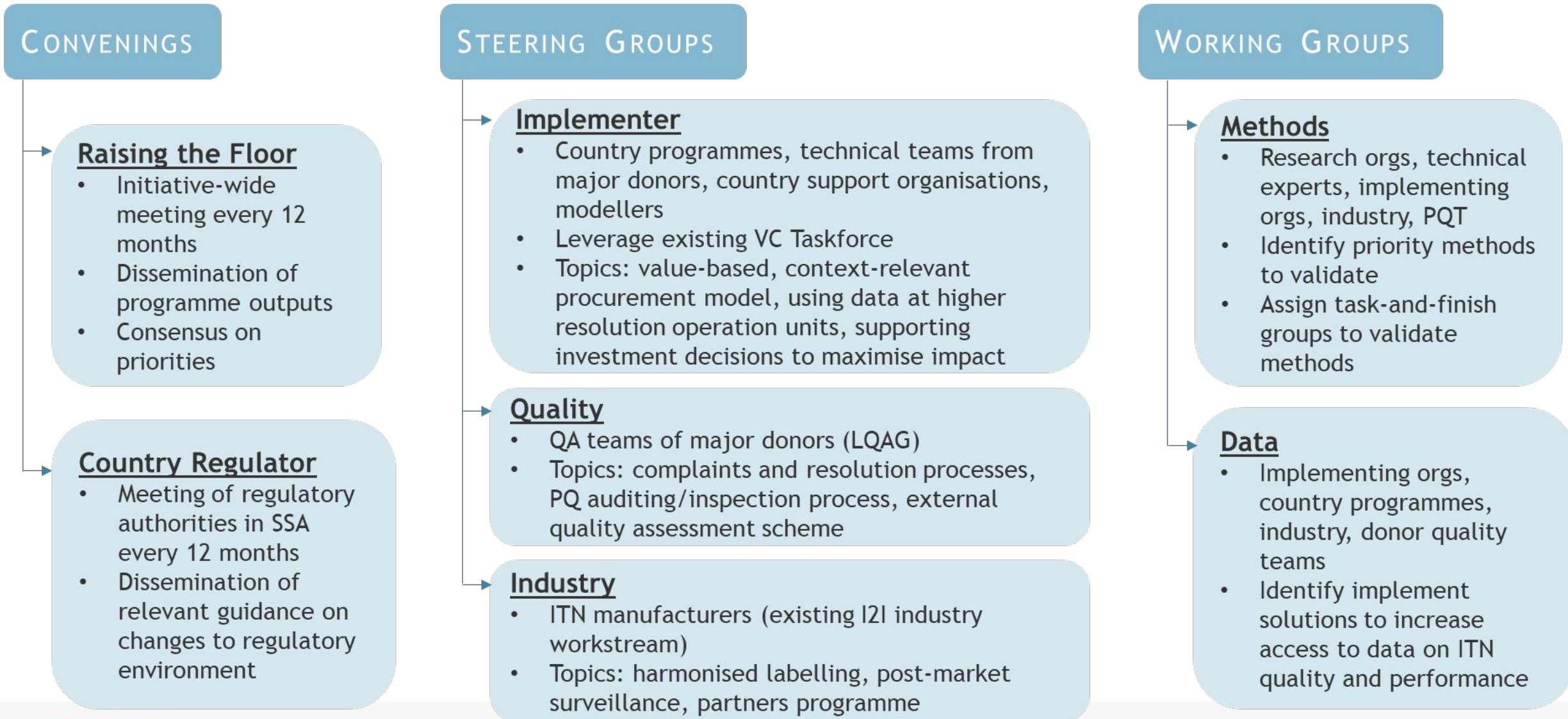


These pillars aim to create a reinforcing, continuous cycle of better quality, better performing bed nets



BUILDING HIGHER PERFORMING ITNS - PROCESS MAP

Raising the Floor activities are being carried forward principally by working groups and steering groups, with outputs disseminated through convenings



A key early area of focus is on post-market data collection (PMDC), where there are gaps in guidance, measurement, and implementation, affecting ability to use data for decisions

ITN post-market data collection (PMDC):

Activities to track the performance of net products in the field, including measuring *physical integrity*, *bioefficacy*, and *use*

UTILITY

PMDC data serves multiple purposes across stakeholders

- **Countries:** understand how different products perform in different entomological contexts, preferences for products, etc., which can inform decisions on product choice and placement
- **Manufacturers:** inform refinements or corrective adjustments to current products in response to field performance; feed into innovation for new products
- **Regulators:** inform prequalification of products and guidelines on appropriate use and deployment of different products
- **Procurers:** determine which products are best suited for various contexts

ISSUES

Lack of guidance and piecemeal implementation affects interpretation

- No formal, consolidated guidance detailing what should be collected for PMM
- Piecemeal collection: considerable resources being allocated by different stakeholders collecting different information, making it difficult to compare
- Challenges interpreting the data - i.e. how to discern between *signals* and *trends*
- Interpretation challenges make it difficult to respond appropriately

RESPONSE

In 2023, Raising the Floor has convened a post market monitoring working group

- Includes partners from different stakeholder groups to meet regularly to identify and execute a pathway forward to revamp PMDC

The PMDC working group has three main objectives to increase the value coming from post-market data

OBJECTIVES

1

Identify post-market data needs and decision points for major stakeholder groups (Countries, procurers, manufacturers, WHO PQ & GMP)

- Which decisions need to be made?
- Is the current data relevant to making those decisions?
- Would other data be more useful?
- Can this data be collected more flexibly and cheaply?

2

Discuss and recommend data sources and collection approaches for ITN field monitoring and funding sources

- Based on the landscape of data needed, how can we improve data collection and coordination?
- What data is appropriate to share with broader stakeholders, recognizing that greater transparency can lead to better products and implementation?

3

Identify data management and sharing tools, and discuss interpretation needs

- Given data needs and coordination opportunities, what data systems are needed to efficiently manage and share information?
- How can we improve data interpretation and use?

From March-May 2023, CHAI and I2I conducted listening exercises with key stakeholder groups to better understand post-market data needs and gaps

OBJECTIVE

Identify post-market data needs and decision points for major stakeholder groups (countries/country support, procurers, manufacturers, WHO)

- Which decisions need to be made?
- Is the current data relevant to making those decisions?
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RESULTS

Common Themes:

- The need for guidance on post-market data collection
- Need for data integration was referenced by two country partners and manufacturers
- Issue of cost and lack of resources for PMDC

Themes by Group:

- **QA/QC Group:** Would like standardization and alignment with PQ
- **Implementers:** Concerned with logistics of collecting DM data within constraints
- **Manufacturers:** Would like knowledge of how data will be used. Would like industry- and PQ-endorsed guidelines
- **Countries:** Ownership and involvement in post shipment testing and data collection. Calls for increased granularity of data and for guidance

RECOMMENDATIONS

1. A strategy to undertake optimized DM within the budgetary constraints
2. Integrated, data-shared approach
3. Greater country involvement (design, data collection and ownership)
4. Durability monitoring to include behavioral data

For more information or questions, please reach out to Angus, Anna, or Tara

Angus Spiers: angus.spiers@innovation2impact.org

Tara Seethaler: tseethaler@clintonhealthaccess.org

Anna Trett: atrett@clintonhealthaccess.org