Raising the Floor on Nets
Convening on ITN Quality and Performance

May 17 - 19, 2022
Liverpool, United Kingdom
Overview of the second convening

• The convening was a three-day, in-person workshop hosted by I2I and CHAI in Liverpool, UK.

• It was the second such meeting, following the first convening (December 2021). The primary aim of the meeting was to outline a framework approach to ITN quality and performance, discuss major challenges around net quality and performance and opportunities to resolve these challenges, and to chart a way forward.

• The objectives of the second meeting were:
  1. Provide an update on the activities prioritized following the first convening in December 2021.
  2. To present an overview of factors that influence and drive net quality and performance, with a focus on post-shipment issues.
  3. To discuss potential solutions and pathways to fundamentally improve ITN quality and performance while addressing program country concerns.
  4. To build consensus and buy-in for these solutions among key stakeholders.
Second convening focused on country management aspects

**Manufacturing**
- R&D
- PQ Evaluation
- Production Line
- Quality Control

**Global Policy Guidelines**
- Minimum Standards
- PQ Evaluation
- QA/QC (Global)
- Tendering
- QC (Pre-Delivery)

**Procurement**
- Post-shipment QC (In-Country)
- Storage & Distribution
- Household Use and M&E

**Country Management**
- Post-Shipment (to be covered in this convening)

**Pre-Shipment**
(covered in first convening)
Outline for the three days of the convening

**Convening Daily Objectives:**

**Day 1**
- **Update** on progress since the first convening & consensus on next steps
- **Understand** issues experienced during the delivery, distribution and post-distribution phases of ITN life

**Day 2**
- Engage in collaborative discussion to **agree on issues**, **discuss tangible solutions** and **develop a vision of success** for post shipment ITN quality & performance

**Day 3**
- **Learn** about the latest thinking on measuring surface availability and bioavailability of AIs on ITNs
- **Gain consensus key activities** and agree timelines for implementation

**And Beyond**
- **Establish working groups** to lead the way forward on key priorities identified
- **Continue to foster collaboration** for timely delivery of activities in the theory of change
Participants included representatives from across normative bodies, industry, procurement, supporting non-profits, and country malaria programs

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| Researchers         | CREC             |
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|                     | IRSS             |
|                     | KCMUCO           |
|                     | LSHTM            |
|                     | LSTM             |
|                     | PNG- IMR         |
|                     | STPH             |
|                     | Facilitators     |
|                     | I2I              |
|                     | CHAI             |

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Defining the Issue
- What is(are) the issues?
- Do we understand the cause(s)?
- What decisions are affected?

Understanding the Issue
- What data do we have to inform on these issues?
- What information do we need?
- How do we go about getting this information, sharing it, and making decisions on it?

Resolving the Issue
- What would a ‘vision of success’ look like?
- What needs to be in place for these solutions to be implemented?
- Who should be responsible and who can play a role?
- What are realistic timelines for solutions?
Save more lives: Better access to high quality, efficacious VC

**OUTCOMES**
- Quality management system drives continual improvement in ITN quality
- Improved communication and trust among stakeholders
- Countries supported to make informed decisions on quality
- Producers use data to make value-based decisions
- Quality and innovation are incentivized
- Product specifications represent attributes that correlate with performance
- Methods are standardized and results more consistent

**OUTPUTS**
- Revised physical and chemical specification requirements
- Fit for purpose methods validated
- Revised product change guidance
- Reports on wash resistance, AL/bioefficacy relationship
- New editions of product testing guidelines
- ISO 9001+ specific for ITN manufacturing
- Data landscaping report
- Database/data sharing platform
- Blueprint for external quality assurance scheme for ITN testing facilities
- ITN testing facility capacity assessments and action plans
- ITN market analysis report
- Manufacturer quality management system risk stratification
- Context-relevant procurement model
- ITN quality guidance for regulators and NMCs
- Post distribution data toolkit
- Case studies providing examples success and challenges of QA system

**ACTIVITIES**
- Quality and Performance Metrics
  - Link product specifications with performance
  - Revise product testing guidelines

- Robust QA process
  - Develop quality management system standards specific to ITN manufacturing
  - Improve consistency of ITN lab testing results
  - Improve transparency of data and process

- Incentives for Quality and Innovation
  - ITN market analysis to identify drivers of quality and value
  - Enhance procurement model and shape market to reward quality and innovation

- Country Stewardship
  - Harmonize in-country approach to quality & performance management
  - Improve regulatory preparedness for quality changes

**Communication, Clarity, Trust, Transparency**
Key focus areas for post-shipment ITN quality issues

Post-manufacturing quality assurance

1. Definition of terms for post-market surveillance, what this includes, what data is available and what is needed

2. **Building trust in pre-shipment inspection:** Standardization of tests, Stipulation of best practices for third party inspectors, Data sharing for pre-shipment assessments, Advocacy brief on QMS and auditing the implementation of ISO-9001

3. Data on user preferences and ITN usage to inform product updates, including to fix identified problems, and to support innovation

User-centered Design

1. Increase focus on and better understand causes of ITN attrition and retention

2. Clarify value of increased lifetimes [work ongoing] and translate that to flexible processes that can be informed by data [donors, procurers, countries]

3. Review design factors, labelling and packaging to support appropriate handling for users

Cross-cutting issues

1. **Broader glossary of terms** covering pre and post shipment quality processes

2. **Performance standards**: what can reasonably be expected from performance standards and how can user data be incorporated?

3. Guidelines for in-country storage and transportation of nets, including for inspections of storage facilities and response for non-conformity
Ongoing work following both convenings

- Raising the floor of nets (CHAI/ I2I)
  - Update the theory of change based on feedback from country malaria programs and other partner organizations
  - Develop a roadmap to clarify key activities, timelines, roles and responsibilities, outputs, and indicators of success
  - Develop a communication and engagement strategy including a glossary of terms
    - Work with key partners to identify the list of priority terms to be included in the glossary
    - Collate key resources and industry standards at a centrally available point

- Continue to push forward with activities already under way and identified as priorities
  - Establish a working group to identify strategies to strengthen QMS standards (I2I, LQAG)
  - Harmonize quality testing guidelines for pre-shipment sampling and testing (LQAG)
  - Investigate links between product specifications and eventual performance; particularly physical characteristics (PQ/NIRI/I2I)
  - Review product testing and evaluation methods for potential updating (I2I)
  - Develop a case for Return on Investment for improved performance of ITNs and identify potential procurement incentives (I2I)

- Priority activities identified following the second convening
  - Develop vision for Post Market Monitoring of ITNs (I2I/CHAI/LQAG/PQ/manufacturers)
    - Investigate possibilities for climatic monitoring of ITNs during transport
    - What can reasonably be expected from performance standards and how can user data be incorporated?
    - Identify new ways to capture ITN usage in households and re-look at durability monitoring
  - Outline activities to build trust in the pre-shipment testing processes
    - Consolidate glossary of terms for ITN QA
    - Develop a roles and responsibilities document of the QA process
    - Identify opportunities to share appropriate QA data throughout the ITN lifecycle
Thank You

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