2\textsuperscript{nd} LLIN Priorities Work Stream Meeting

RBM VECTOR CONTROL WORKING GROUP (VCWG)
Co-leaders: Hannah Koenker & Lucy Paintain

Movenpick hotel, Geneva
9\textsuperscript{th} February 2017
LLIN Priorities Work Stream - Goal

Maintain high levels of ownership and use of serviceable LLINs in endemic countries

- Distribution approaches – evidence and policy aspects
  - CDtoolkit.org

- LLIN durability – coordination, evidence and policy aspects
  - Durabilitymonitoring.org

- New/next gen nets – coordination
Continuous Distribution Session

• Costing analysis from Tulane University
  • School, community, and ANC/EPI distributions in three settings
  • Much greater contributions from public sector in the CD channels vs mass campaigns
  • LLIN the main cost driver in all
  • Costs of CD are somewhat higher than campaigns, but margins are poorly quantified

• What did countries prioritize in 2014-2016 GF proposals
  • Funded ANC/EPI distribution first
  • Then prioritized geographically for universal coverage, to buy time to raise additional funds for remaining regions/areas – and were successful
Durability Session

• PMI Pooled Durability Studies 2008-2014
  • No major differences between brands
  • Major differences between countries/settings
  • Correlation between mosquito mortality and chemical content under investigation
  • Having different methodologies made data cleaning and analysis challenging

• ABCDR Study
  • Good durability of nets – 2 and 3 year median lifespans
  • Location of holes recorded; implications for mosquito entry; are lower holes less important when tucked under foam mattress
  • Net care and repair qualitative component
  • LLIN distribution towards the end of study; implications for household decisions to switch to new nets or not
Regulatory Processes

• I2I Update –
  • Many committees and meetings and processes ongoing to determine future of regulatory processes for LLINs and new products – stay tuned!

• Standardized Quality Assurance and Quality Control
  • Pre-shipment testing procedures
  • Factory inspections, ISO 9001
  • Donor agreement to adopt the standard procedures developed by UNICEF
  • Once PQ processes fully in place, will switch to random pre-delivery inspections
Ongoing questions

• Net Preferences – how much do they matter for ITN use?
• CD Costing – what is the cost/value of sustaining ITN access over time vs dropping between repeated campaigns?
• What is the impact of location of net holes on overall durability; impact of durability on ITN retention and use (or vice versa), and what drives household decisions to switch to a new net?
• Deployment of next-generation nets – monitoring and evaluation requirements, etc.
• Insecticide Resistance – it’s everybody’s problem
LLIN Distribution Decisions

• Implications of net cost for continuous distribution – how many NGN would be needed in various scenarios? How many needed for wholesale replacement? How many for targeting/mosaic?

• If richer quintiles have low malaria risk and are buying untreated nets, is that a bad thing? Do we need to reach them with free ITNs?

• If countries increase continuous distribution between campaigns to maintain coverage, then at successive campaigns, there will be more existing nets. Are these accounted for? Ignored? New ITNs stored by households until they are needed? Implications of storage for ITN durability/bioefficacy? Move to fully continuous strategy?
Communication

• Focus attention on key issues for country implementation during and after the Pre-Qualification transition process

• How can LLIN durability monitoring and post-spray monitoring feed into Post-Marketing Surveillance and the PQ process?

• All LLINs used to be the same; this will no longer be true – need for clear communication on which new products best suit which environments
Targets and Target Setting

• Reaching 80% of households with 1 ITN for 2 people is unreachable target; even right after mass campaigns this indicator only reaches 62% max.
  • What would be an appropriate target for this indicator based on transmission interruption.
  • Proposal to focus on “population access to an ITN” as the best indicator of universal coverage, instead of household ownership of 1 ITN for 2 people

• Is it possible/how best to measure community effect?

• Look for natural experiments where LLIN access has been low in lower transmission areas over time – what levels of access are sufficient

• What is the impact of reduced use in the low transmission season, if any
## Seasonal ITN use in Senegal 2014-2015

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MERG has a question for VCWG

• MERG has dropped the questions on dipping and retreating nets from the standard MIS module because all public sector nets are LLIN
• No longer a useful distinction between ITN (dipped nets + LLIN) and LLIN
• MERG proposes to drop the “LLIN” category and categorize nets into “ITN” and “other”
• Does VCWG concur? Are there other issues to consider?
• Implications for next-generation nets? (brand is still collected)
The glass is half empty

- Insecticide resistance threat
- Difficult innovation environment
- Challenging to maintain high levels of ITN access
- People’s preferences aren’t accommodated
- ITNs wear out
- Difficulty hanging and tucking
- “Use last night” may not be the entire night
- Seasonal use
The glass is half full

• Lots of evidence that ITNs still work even when:
  • Their physical condition isn’t perfect
  • Their insecticidal content isn’t perfect
  • Mosquito susceptibility isn’t perfect
  • They aren’t used perfectly
  • Household ownership isn’t perfect
  • Community coverage isn’t perfect

Bhatt et al 2015
Action Plan

• Conduit for issues arising and being flagged for action/research by partners
• Report back to partnership on progress
• Small(ish) doable actions in the next 12 months

• Join the workstream: hkoenker@jhu.edu ; lucy.paintain@lshtm.ac.uk