RBM Vector Control Working Group

Work Stream: Durability of LLIN in the Field
Update on textile lab study

Albert Kilian

8th Annual Meeting
28-30th January 2013
IFRC Geneva
Causes and Mode of Deterioration of LN

- Building on results of 2012 textile meeting
- Project proposal submitted and approved by Bill & Melinda Gates Foundation Oct 2012
  - Research For Development Institute (lead)
  - Nonwovens Innovation & Research Institute (textile)
  - Tropical Health LLP (net collection, epidemiology)
Rationale

- Guidance on expected performance of LN products is desirable and needed for Value for Money procurement.
- Current textile test results do not correlate well with field data on performance.
- To develop a test battery that can predict expected performance better, understanding of “modes of failure” is needed.
- Random samples of netting materials from well-defined environments will allow textile analysis of causes and modes of failure and deterioration.
- Based on these findings, a series of tests can be put together (weighted) which will better reflect expected LN performance (existing and new brands).
Project Outline

**Phase 1**
- Collect LN samples 1-2 years old
- Determine modes of failure in lab
- Analyse all data

**Phase 2**
- Develop test suite
- Final Report

**Thereafter lead by WHO (GMP & WHOPES)**
- Consultative process to suggest final test(s) and cut-off for performance bands
- Issue LN performance guidance
Activities

• Sampling of nets (500-600 LN total)
  - From existing CDC/PMI studies (Kenya, Malawi, Mozambique)
  - From active sampling (Nigeria - NetWorks study; Cambodia)
  - From ongoing WHOPES phase III studies

• Laboratory examination
  - Visual inspection
  - Microscopy
  - Others
Activities (2)

• Data analysis
  - Textile testing data
  - Net use and handling data (household)
  - Environmental data

• Dissemination and Report
  - Make data base available online
  - Submit full report
Expected Timing

• Grant and sub-contracts signed end 2012
• First net collections (CDC/PMI) under way
• Filed work to start March
• Phase 1 completed Oct 2013
• Decision (external consultation) if evidence sufficient to move to Phase 2 Oct/Nov 2013