PMI Long-lasting insecticidal nets (LLINs) Durability Monitoring Package

# Background

Data on long-lasting insecticidal net (LLIN) durability in the field are crucial to understanding the effective life (physical and insecticidal) of a net, in addition to identifying the causes of LLIN failure. To this end, PMI is committed to scaling up LLIN durability monitoring in each of its focus countries.

PMI has recently issued general guidance to all PMI countries recommending that they begin supporting LLIN durability monitoring in their countries. This is not a required activity, but a recommended one. In the “PMI Technical Guidance for Routine Durability Monitoring,” PMI recommends prospective studies of LLINs distributed through mass campaigns, so these activities are time sensitive and linked to the campaign schedules of each country. There may be exceptions where, once approved by PMI leadership, countries will support retrospective monitoring studies.

# Goal

PMI seeks to operationalize its LLIN durability monitoring guidance “PMI Technical Guidance for Routine Durability Monitoring” in a way that will allow multiple partners, at different time periods, to collect and report on durability data in a routine, standardized way that will allow additional analysis across countries to enable PMI to possibly identify and understand performance trends over time. This entails collecting high quality, comparable data, with methodologies, the data collection, and the analysis is standardized across all countries.

# Contents of the Package

The package is comprised of two parts. Part 1 includes materials and tools related to study design, study implementation, data collection, up through the data entry stage. Part 2 includes materials and tools for data cleaning, preparation, analysis, and interpretation, including reporting.

## Part 1: Introduction and Data Collection

1. Introduction and methods
	1. PMI Durability Monitoring (DM) Package Contents (this file)
	2. PMI Durability Monitoring Guidelines
	3. DM Background and FAQ
	4. Budget Template & Notes
	5. Durability Monitoring Timeline
	6. Durability Monitoring Activity Manual
	7. DM Design, Sample Size, and Cluster Sampling PowerPoint
	8. Link to Innovation to Impact SOPs for Cone Bioassay and Tunnel Tests
2. Data Collection Instruments
	1. Template Durability Monitoring Protocol
	2. Survey Questionnaires
		1. Baseline Survey Questionnaire
		2. 12/24 Month Survey Questionnaire
		3. 36 Month Survey Questionnaire
		4. One-page Questionnaire for ITNs selected for Bioassay at 12 and 24 months
	3. Consent Scripts
		1. Sample Oral Consent Script for Participants
		2. Sample Oral Consent Script for Bioassay Net Households
	4. Sample Recruitment Script for Local Authorities and Chiefs
	5. Sample DM Data Entry Screen
	6. Household Selection Tools
		1. Household Sampling Instructions
		2. Random List for Selecting Sections within Settlement
		3. Random Number List for Household Selection
		4. Form – Household Listing and Selection
		5. Example Final Sampled Settlements List
		6. Example household list at 12-, 24-, and 36-months
	7. Sample DM Supervisor Cluster Monitoring Sheet
	8. DM Sample Size Calculator
	9. Cluster sampling
		1. PPS Cluster Sampling Tool
		2. PPS Cluster Sampling Tool Example
		3. Sampling Fame Data Example
	10. Tablet Data Collection
		1. Introduction to using ODK for durability monitoring
		2. ODK bioassay net questionnaire
		3. Generic ODK Forms and List Preparation
3. Fieldworker Training Materials
	1. Training Workshop planning
		1. Sample Training Workshop Agenda
		2. Sample Training Attendance Register
	2. Training PowerPoints and Materials
		1. Background on Durability Monitoring
		2. Monitoring Design
		3. Household Selection for Baseline
		4. Overview of Questionnaire
		5. LLIN Hole Assessment Training Manual – Facilitator’s Guide
		6. LLIN Hole Assessment Slides
		7. Test – Hole Counting Exercise
		8. Guidelines for Conducting Interviews (word doc)
		9. Roles and Responsibilities
		10. Finding households at 12-24-36 months with GPS
	3. Visual Aids
		1. Two-Page Field Tool for Tallying and Hole Size Measurement
		2. Visual Aid for LLIN Brands and Tags
		3. Visual Aid for Types of Holes
		4. Net Location Prompt Card
	4. Post Test and Selection of Fieldworkers
		1. Post Test with Answer Key
4. Materials and Supplies for Fieldwork
	1. Net ID Barcode files for facilitating read-in of net IDs at baseline
	2. List of materials/supplies required for training and fieldwork
	3. Fieldwork monitoring dashboard for Stata do-files

## Part 2: Data Analysis and Reporting

5. Stata Do-Files (zip files include prep, cleaning, labeling, analysis and results files)

1. Baseline Stata do-files
2. 12-month Stata do-files
3. 24 month Stata do-files
4. 36 month Stata do-files

6. Baseline Report

1. [Baseline data dictionaries](https://www.durabilitymonitoring.org/wp-content/uploads/2015/03/DM-baseline-data-dictionaries.docx)
2. [DM baseline report template 2017-1-26](https://www.durabilitymonitoring.org/wp-content/uploads/2015/03/6b.-DM-baseline-report-template-2017-1-26.docx)
3. [Baseline report figures template](https://www.durabilitymonitoring.org/wp-content/uploads/2015/03/DM-baseline-report-figures-template.xlsx) (excel file for producing figures)

7. 12- and 24-month reports

1. [Narrative 12/24 month report template with dummy tables](https://www.durabilitymonitoring.org/wp-content/uploads/2015/03/7b.-DM-m12_24-report-template-2017_04_24.docx)
2. [12/24 month report figures template](https://www.durabilitymonitoring.org/wp-content/uploads/2015/03/7c.-DM-m12_24-figures-template.xlsx)
3. [Tool for calculating and graphing median net survival for multiple sites or brands](https://www.durabilitymonitoring.org/wp-content/uploads/2015/03/7d.-Tool-survival-graph-and-median-for-multiple-sites-or-brands.xlsm)
4. [Households and nets follow-up figure templates](https://www.durabilitymonitoring.org/wp-content/uploads/2015/03/7e.-DM_households_and_nets_followup_graphs_template.pptx)

8. Final (36 month) report

1. Narrative final report template with dummy tables
2. Final report figures template

9. Bioassay SOPs

10. Data Submission and Use

* 1. [Reporting timelines and how to submit copies of data to PMI](https://www.durabilitymonitoring.org/wp-content/uploads/2015/03/Instructions-for-durability-monitoring-data-submission-to-PMI.docx)
	2. Publication guidance, including clearance

11. Interpretation of Results

1. Guidance on how to interpret the data for programmatic action

[12. Transitioning durability monitoring to a new implementing partner](https://www.durabilitymonitoring.org/wp-content/uploads/2015/03/Transitioning-Durability-Monitoring-to-a-new-Implementing-Partner.docx)

## Part 3: Archive

Archived Materials