Durability Monitoring of LLIN in [Country]

Baseline Report

[Date]

*Logos*

Points of Emphasis (Please delete this prior to submission of report)

* Please use specific numbers to one decimal throughout the report, please do not say nearly 30% if the value is 29.7%.
* Please introduce each paragraph or section briefly to ensure that people reading the document unfamiliar with durability monitoring and the methods used would still be able to understand the content of the report.
* Please summarize all tables and graphs in the report with 3-5 supporting sentences, highlighting key findings.
* Please include p-values in the report where applicable, but do not include confidence intervals in graphs or narrative account.
* Please use paragraphs, not bullets.

# Executive Summary

~ ½ page for baseline, ½-1 page for later reports

The executive summary should include and address:

* Why durability monitoring is necessary or beneficial in this context, what is being followed (ITN brands and numbers) and where ITNs are being followed (sites).
* Summarize most recent round of data collection with dates and specific numbers
* Summarize the key durability determinants that are being researched
* Discuss challenges associated with this round of data collection
* Summarize the major results with specific numbers and sites
* Concluding paragraph

# Table of Contents

# Acknowledgements

Partners, funding, NMCP/MOH, technical assistance, etc.

# Background

* Why is durability monitoring important/necessary in the context of the country
* Past LLIN campaigns (start with first campaign and work toward the most recent campaign) – a few sentences on when they occurred, targeted population (U5s vs. universal coverage), geographic scope (national vs. subnational)
* Describe the ITN distribution strategy moving forward (routine and campaign)
* Latest coverage/use estimates – one sentence (data from DHS or MIS if possible)
* Details on latest campaign (for the cohort being monitored): when it occurred (month/year), # of nets distributed, nationwide vs. subnational, etc.
* Any previous durability monitoring or OR (operational research) that occurred in this country: 2-3 sentence summary of results with citations if available.

## Preshipment testing

* Please introduce the concept of Preshipment testing, including what parameters are tested and who mandates preshipment testing
* Indicate results of pre-shipment bioassays; obtain from procurement partner (if not available state so).

# Methods

* Introduce this section by including a few sentences on who conducted the research and a brief timeline of research

## Sites

* Province/district/village for each site: Please provide the rationale for site selection including any differences in behavior, climate, previous durability monitoring, or type of ITN that influenced site selection.
* Description: rural/urban, endemicity, net use (if known), other factors (for each site).
* Please introduce table 1 at this point with a sentence

**Table 1:** Socio-demographic and malaria situation in the study areas (state year of data collection)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Province or State** | **HH\* with any mobile phone** | **HH with access to safe water** | **Children 6-59m blood slide positive for malaria** | **Febrile children treated with antimalarial** | **HH with at least one LLIN** | **Population using LLIN the night before survey** |
| *Site 1* | % | % | % | % | % | % |
| *Site 2* | % | % | % | % | % | % |
| *Site 3* | % | % | % | % | % | % |

\* HH = household

## Brands monitored

* What brand of net was monitored (at what site) and when was the corresponding distribution?
* Please provide the technical specifications of the ITN (material, textile specifics, insecticide with concentration)
* Please indicate WHOPES status of ITNs being monitored (interim of full recommendation and when it was achieved [see WHOPES reports on WHO web-site])

## Design summary

Please address all of the following:

* What type of study is being conducted (here prospective, longitudinal)
* Please indicate study timeline, the sample size and power of the study, sampling methods (each component should be at least one sentence). [you can find this in the proposal or the docs on the “www.durabilitymonitoring.org” web-site]
* Note any differences between this study’s methodology and the PMI guidelines and state why the decision was taken to deviate from the guideline.
* Discuss how initial community mobilization and sensitization were conducted
* How are nets marked for follow-up?
* How are insecticidal and physical integrity assessed in this study?
* Please indicate when baseline took place

## Field work

* The field work section should discuss all of the following:
* Team composition
* Training (include training components, dates of training and participants); Are there plans for future trainings as well, and if so who will attend?
* Supervision (composition and methods)
* Community mobilization procedures
* Challenges encountered in this round of field work, or potential challenges that could create an issue in the future

## Data management

* What devices/tools are used to collect data? Electronic or paper-based?
* What data was collected?
* How was data collected and transferred?
* What was the process for verifying data, and how were inconsistencies addressed?

## Analysis

* How was data transferred for analysis, and what software/version was used for analysis?
* What tests/analytical methods were used to analyze the data?
* Explain the various analysis sections like
  + Wealth index and tertiles
  + Likert score analysis

## Ethical Clearance

Please indicate IRB approval from all boards who reviewed the protocol, providing reference numbers

# Results

Overall guidance for results section: Highlight key or interesting points in results section, or summarize overall findings—do not just reiterate data that is already displayed in the table. ~3-5sentences per sub-section. Please use specific numbers to one decimal.

## Sample

* Was the target number of households and campaign nets achieved at each site?
* If not, what was the problem?

**Table 2:** Targeted and achieved sample size

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Site** | **Clusters** | | **Households** | | **Campaign Nets** | |
|  | **Target** | **Achieved** | **Target** | **Achieved** | **Target** | **Achieved** |
| *Site 1 N=* | *15* | n (%) | *150* | n (%) | *345* | n (%) |
| *Site 2*  *N=* | *15* | n (%) | *150* | n (%) | *345* | n (%) |
| *Site 3*  *N=* | *15* | n (%) | *150* | n (%) | *345* | n (%) |
| **Total**  **N=** | ***45*** | **n (%)** | ***450*** | n (%) | ***1035*** | n (%) |

Figure 1: Site map with GPS points (clusters)



## Demographic and House Characteristics

Please summarize key findings for each table, do not present back to back tables without summarizing results (3-5 sentences). Please note all significant differences between sites or study areas.

**Table 3:** Demographic characteristics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site** | **Mean people per household**  **(95% CI)** | **Mean age of head in years**  **(95% CI)** | **Female headed households** | **Children under five in population** |
| *Site 1 N=* |  |  | % | % |
| *Site 2*  *N=* |  |  | % | % |
| *Site 3*  *N=* |  |  | % | % |
| **Total**  **N=** |  |  | **%** | **%** |

**Table 4:** House characteristics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site** | **Roof**  **(sheets/tile)** | **Cooking fuel (firewood)** | **Access to safe water** | **Access to latrine** |
| *Site 1 N=* | % | % | % | % |
| *Site 2*  *N=* | % | % | % | % |
| *Site 3*  *N=* | % | % | % | % |
| **Total**  **N=** | **%** | **%** | **%** | **%** |

Summarize results, noting any large differences by site

**Table 5:** Household assets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site** | **Radio** | **Mobile phone** | **Any transport** | **Any husbandry** |
| *Site 1 N=* | % | % | % | % |
| *Site 2*  *N=* | % | % | % | % |
| *Site 3*  *N=* | % | % | % | % |
| **Total**  **N=** | **%** | **%** | **%** | **%** |

Figure 2: Mobile phone ownership by wealth tertiles and site



## Determinants of Durability

Please introduce and summarize the results for ALL tables, being specific and using numbers and include possible explanations for differences. To improve ease of reading, do not include confidence intervals, but do state statistical significance (with p-values) where relevant.

**Table 6:** Household risk factors

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Site** | **Ever store food in sleeping room** | **Cook in sleeping room** | | | **Observed rodents (last 6 months)** |
| **Never** | **Sometimes** | **Always** |
| *Site 1 N=* | % | % | % | % | % |
| *Site 2*  *N=* | % | % | % | % | % |
| *Site 3*  *N=* | % | % | % | % | % |
| **Total**  **N=** | **%** | **%** | **%** | **%** | **%** |

**Table 7:** Handling of campaign nets

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Site** | **Hanging nets folded/tied**  **(if hanging)** | **Nets dried on bush/fence** | **Ever washed** | **Median washes\***  **(6 months)** | **Used detergent or bleach for washing** |
| *Site 1 N=* | % | % | % |  | % |
| *Site 2*  *N=* | % | % | % |  | % |
| *Site 3*  *N=* | % | % | % |  | % |
| **Total**  **N=** | **%** | **%** | **%** |  | **%** |

\* if ever washed

**Table 8:** Exposure to messages on nets last 6 months

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site** | **Any Exposure** | **Exposure by wealth tertile** | | |
| **Lowest** | **Middle** | **Highest** |
| *Site 1 N=* | % | % | % | % |
| *Site 2*  *N=* | % | % | % | % |
| *Site 3*  *N=* | % | % | % | % |
| **Total**  **N=** | **%** | **%** | **%** | **%** |

Figure 3: Types of information sources if any exposure (vertical bar chart per site)



Figure 4: Messages remembered if any exposure (vertical bar chart per site)



Briefly reintroduce the Likert scoring system and what an attitude score of greater than 1 indicates (very positive attitude). These methods/tables are not necessarily self-explanatory and need to be described in some detail**.**

**Table 9:** Attitudes towards nets and care & repair

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site** | **Attitude score nets** | | **Attitude score care & repair** | |
|  | **mean (95% CI)** | **% with score >1** | **mean (95% CI)** | **% with score >1** |
| *Site 1 N=* |  | % |  | % |
| *Site 2*  *N=* |  | % |  | % |
| *Site 3*  *N=* |  | % |  | % |
| **Total**  **N=** |  | **%** |  | **%** |

**Table 10:** Household experience with care and repair of any nets

|  |  |  |  |
| --- | --- | --- | --- |
| **Site** | **Ever had holes in nets** | **Ever discussed care & repair** | **Ever repaired**  **(if had nets with holes)** |
| *Site 1 N=* | % | % | % |
| *Site 2*  *N=* | % | % | % |
| *Site 3*  *N=* | % | % | % |
| **Total**  **N=** | **%** | **%** | **%** |

Figure 5: Main reported causes of damage among households reporting ever having nets with holes (vertical bar chart per site)



## Nets and Net Use

Summarize all tables and graphs, please do not use confidence intervals in graphs.

**Table 11:** Campaign nets from cohort (A) and non-cohort nets (B)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site** | **Hanging** | **In package** | **Used last night** | **Used every night (last week)** |
| A Cohort nets |  |  |  |  |
| *Site 1 N=* | % | % | % | % |
| *Site 2*  *N=* | % | % | % | % |
| *Site 3*  *N=* | % | % | % | % |
| **Total**  **N=** | **%** | **%** | **%** | **%** |
| B Non-cohort nets |  |  |  |  |
| *Site 1 N=* | % | % | % | % |
| *Site 2*  *N=* | % | % | % | % |
| *Site 3*  *N=* | % | % | % | % |
| **Total**  **N=** | **%** | **%** | **%** | **%** |

Figure 6: Main type of sleeping place for campaign nets if used (vertical bar chart per site)



**Table 12:** Net users

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Site** | **Campaign net cohort** | | | **Non-cohort nets** | | |
| **Child(ren)\* only** | **Child(ren)\* sharing with adult(s)\*\*** | **Adult(s)\*\* only** | **Child(ren)\* only** | **Child(ren)\* sharing with adult(s)\*\*** | **Adult(s)\*\* only** |
| *Site 1 N=* | % | % | % | % | % | % |
| *Site 2*  *N=* | % | % | % | % | % | % |
| *Site 3*  *N=* | % | % | % | % | % | % |
| **Total**  **N=** | **%** | **%** | **%** | **%** | **%** | **%** |

\* age 0-9 years; \*\* includes adolescents 10-19

**Table 13:** Ownership of non-campaign nets and where households obtain them

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site** | **Households with any other nets** | **Households with any nets from public sector** | **Households with any nets from private sector** | **Households with any nets from family, friends, NGO etc.** |
| *Site 1 N=* | % | % | % | % |
| *Site 2*  *N=* | % | % | % | % |
| *Site 3*  *N=* | % | % | % | % |
| **Total**  **N=** | **%** | **%** | **%** | **%** |

**Table 14:** Overall household net ownership and population access

|  |  |  |
| --- | --- | --- |
| **Site** | **HH with one ITN for every 2 people** | **Population access to ITN** |
| *Site 1 N=* | % | % |
| *Site 2*  *N=* | % | % |
| *Site 3*  *N=* | % | % |
| **Total**  **N=** | **%** | **%** |

## Durability of campaign nets

Summarize all tables and graphs in detail with specific numbers. Identify what classifies as attrition and how this was determined/measured in the field.

**Table 15:** Attrition

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site** | **Time since distribution (months)** | **Overall attrition** | **Given away to others** | **Discarded (Attrition wear & tear)** |
|
| *Site 1 N=* |  | % | % | % |
| *Site 2*  *N=* |  | % | % | % |
| *Site 3*  *N=* |  | % | % | % |
| **Total**  **N=** |  | **%** | **%** | **%** |

Note in the text what other purposes are.

Describe the pHI and the categories and what they mean for practical purposes. Example: Overall, XX% of nets had a pHI of 0-64 and were in good condition, XX% had a pHI of 65-642 and were damaged but still usable, whilst XX% had a pHI of more than 642 and were considered too torn. Altogether, XX% of campaign nets were serviceable (pHI <642) at baseline.

**Table 16:** Integrity of surviving nets

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Site** | **Any holes** | **Median PHI**  **(if any hole)** | **Good** | **Too torn** | **Serviceable** |
| *Site 1 N=* | % |  | % | % | % |
| *Site 2*  *N=* | % |  | % | % | % |
| *Site 3*  *N=* | % |  | % | % | % |
| **Total**  **N=** | **%** |  | **%** | **%** | **%** |

**Table 17:** Nets surviving in serviceable condition

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site** | **All cohort nets** | | **Only cohort nets ever-used** | |
| **Estimate** | **95% CI** | **Estimate** | **95% CI** |
| *Site 1 N=* | % |  | % |  |
| *Site 2*  *N=* | % |  | % |  |
| *Site 3*  *N=* | % |  | % |  |
| **Total**  **N=** | **%** |  | **%** |  |

# Summary and Conclusion

Synthesize results across sections

Discuss interesting, striking, or noteworthy results; 1.5-2 pages.

Recommended paragraphs

1. Summarize # of households and nets achieved against targets; describe household characteristics and any major differences
2. Summarize % nets with holes, reasons for damage, main factors associated with net durability, and any differences between sites.
3. Continue describing repair behaviors, message exposure, attitudes, implications of these.
4. Net use messaging and proportions of nets in use, in packaging, possible explanations or implications of these. Frequency of net use.
5. Net condition and differences between sites; attrition and reasons for attrition; lost nets.
6. ITN universal coverage and population access as indicators of campaign success; proportion of nets serviceable at baseline, and estimate of campaign nets surviving in serviceable condition.

* Include challenges and potential future issues that need to be addressed prior to future rounds of data collection