Defining malaria operational research priorities for sub-Saharan Africa

RBM Vector Control Working Group Meeting

May 3rd, 2022

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PMI Insights project overview

- Five-year cooperative agreement (October 2020 – September 2025)
- Centrally-funded mechanism with 3 key objectives
  1. Support country-driven research prioritization
  2. Design and implement modeling, OR, and PE studies
  3. Ensure utilization of study findings to inform program guidelines, strategies, and policies

Research prioritization objectives

1. Facilitate a process in collaboration with national malaria programs (NMPs), in-country research and implementing partners, and funding agencies to **identify a set of country-driven research priorities** that will address the most pressing evidence gaps and operational bottlenecks in malaria control and elimination implementation.

2. **Foster alignment between country priorities with those of funding agencies**, to support improved coordination, collaboration, efficiency and impact of research efforts.
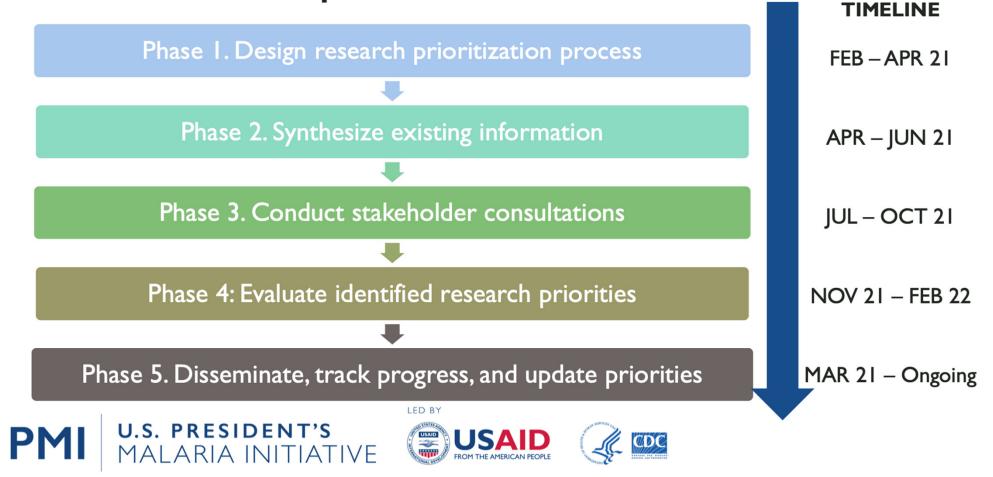
Research prioritization scope

- Operational research and program evaluation questions for malaria control and elimination interventions that have promising evidence demonstrating their safety and efficacy and for approaches and tools designed to improve the delivery and effectiveness of proven malaria control and elimination interventions.

- This activity aims to identify common research questions that may provide learning to inform multiple NMPs' strategies, policies or implementation, or the global malaria community more broadly.

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Prioritization process

	TIMELINE
Phase 1. Design research prioritization process	FEB – APR 21
Phase 2. Synthesize existing information	APR – JUN 21
Phase 3. Conduct stakeholder consultations	JUL – OCT 21
Phase 4: Evaluate identified research priorities	NOV 21 – FEB 22
Phase 5. Disseminate, track progress, and update priorities	MAR 21 – Ongoing

Vector control priorities

	Research priority	Overall Rank (out of 33)
1	Test and evaluate different delivery mechanisms to reach and sustain high coverage of ITNs among hard-to-reach and highest risk populations.	1
2	Evaluate and compare different insecticide management and/or rotation strategies on insecticide resistance prevalence and intensity.	5
3	Test and evaluate the effectiveness of different deployment and targeting approaches for IRS to maximize impact.	9
4	Assess the impact of IRS and focal/reactive IRS on malaria burden, transmission, and insecticide resistance.	10*
5	Test and evaluate the effectiveness of different approaches to improve routine/continuous distribution channels for ITNs to sustain coverage between mass campaigns.	10*

Vector control priorities

	Research priority	Overall Rank (out of 33)
6	Assess the effectiveness and cost-effectiveness of innovative approaches to reduce the cost and/or improve the efficiency of IRS implementation.	14
7	Compare or evaluate different strategies/packages of interventions to prevent malaria case resurgence following the withdrawal of IRS.	28*
8	Evaluate the effectiveness and cost-effectiveness of LSM on epidemiological and entomological outcomes in different transmission contexts and the duration of impact.	28*
9	Assess barriers and facilitators to ITN use in different settings where access to ITNs is high and evaluate the effectiveness of different SBC approaches/interventions to improve ITN use.	31

Key takeaways from prioritization

1. Research priorities reflect persistent challenges faced by NMPs in the implementation of core interventions; addressing the priorities can help support NMPs to reach high coverage and improve overall intervention effectiveness.

2. NMPs have insufficient evidence on effectiveness and cost-effectiveness of specific interventions and intervention packages, and how to tailor packages for maximum impact and resources efficiency.

3. Many of the research priorities speak to broader health systems issues that are contributing to gaps in malaria intervention coverage; these issues need to be addressed to improve effective coverage.

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Next steps in prioritization process

- Developing a mechanism to track progress against the research priorities and use of the list to inform investments.

- Defining a process to regularly reviewing priorities and updating the list to reflect progress and new emerging priorities.

Thank you!

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