Workstream 1: Enhancing the Impact of Core Interventions Workstream 2: Expanding the vector control toolbox

Workstream 3: Implementing the Global Vector Control Response

Transitioning from the past

Activities of previous workstreams are now integrated under new ones



Expanding the Vector Control Toolbox

Co-Leadership of workstream: Allison Tatarsky and Sheila Barasa

	Focus Output 1 Identify tool gaps or capacity needs & steer research priorities	Focus Output 2 Policy clarification & evaluation pathways	Focus Output 3 Implementation/Operational scale-up support/Training and capacity building initiatives
 Work stream 2: Expanding the Vector Control Toolbox Themes: Larval Source Management Innovations in vector control and surveillance Anthropology and human centred design in the context of vector control Co-Leads: Allison Tatarsky Sheila Barasa 	 Review technology for LSM e.g., GIS, satellite imagery, use of drones, new application technology, etc. Develop and maintain an inventory of new vector control tools and approaches including repellents, endectocides, ATSBs, SIT, genetic control, etc. 	 Gather evidence for environmental management including habitat modification and manipulation as priority interventions in LSM and promote within the Multi Sectoral Working Group (MSWG) Develop framework for, and actively track and share, updates on new vector control paradigm roadmaps Share VCAG updates on new paradigms as part of paradigm roadmap tracking 	 Review operational LSM in national malaria programmes and collate evidence of impact, as well as training and technical support needs Elevate national malaria program operational research questions for vector control beyond LLINs and IRS Highlight innovation and opportunities to incorporate anthropological methods and human centred design into the development, evaluation, and scale up of vector control tools

Highlights of key achievements of previous 2019-2020 workplans

NTNC Project #1: Identification of *Anopheles* vectors Resolving current challenges on identification of malaria vectors in residual transmission settings.

- Completed: Irish, S. R., Kyalo, D., Snow, R. W., & Coetzee, M. (2020). Updated list of Anopheles species (Diptera: Culicidae) by country in the Afrotropical Region and associated islands. Zootaxa, 4747(3), zootaxa.4747.3.1. <u>https://doi.org/10.11646/zootaxa.4747.3.1</u>
- Completed: Coetzee, M. (2020). Key to the females of Afrotropical Anopheles mosquitoes (Diptera: Culicidae). Malaria Journal, 19(70). <u>https://doi.org/10.1186/s12936-020-3144-9</u>
- Under consideration for the revised WHO practical ento guidelines: Development of protocols to ensure correct association of molecular identification with morphological identification of mosquito specimens.

Highlights of key achievements of previous 2019-2020 workplans

NTNC Project #2: Develop draft guidelines for measuring residual malaria transmission and its drivers

Completed: Monroe, A., Moore, S., Okumu, F., Kiware, S., Lobo, N. F., Koenker, H., Sherrard-Smith, E., Gimnig, J., & Killeen, G. F. (2020). Methods and indicators for measuring patterns of human exposure to malaria vectors. Malaria Journal, 19(1). https://doi.org/10.1186/s12936-020-03271-z

LSM Project #3: Review operational LSM in national malaria programs and identify evidence of impact

Ghana, Niger, Rwanda, and Uganda incorporate LSM and mapping in their vector control programs and Botswana, Namibia, and Swaziland launch LSM operational research with WHO-AFRO and ICIPE

New themes as a result of feedback from workstream members

- Reviewing existing tools/approaches but with improved methods or innovation around delivery, program implementation, and evaluation; examples include:
 - LSM (integrated during restructuring)
 - Space spray and targeted swarm spraying
 - Outdoor residual spraying
- Emphasizing human behavior research in vector control research and incorporating human centered design in the development of new vector control tools
- Understanding urban malaria
 - Including invasive species in urban settings (e.g. *Anopheles stephensi*)

Transition from previous workplan to new workplan Former workplan elements are maintained under new structure

Larval Source Management

- Review technology for LSM e.g., GIS, satellite imagery, use of drones for mapping and larviciding, new larvicide-application technology, aerial application, etc.
- Gather evidence for environmental management including habitat modification and manipulation as priority interventions in LSM and promote within the MSWG
- Review operational LSM in national malaria programmes and collate evidence of impact, as well as training and support needs

Innovations in vector control and surveillance

- Maintain a live inventory of publicly available information on new vector control tools such as ATSBs, endectocides, spatial repellents, genetic control, etc.
- Develop a framework for actively tracking and sharing updates on new vector control paradigm roadmaps
- Tracking and sharing knowledge on mosquito ecology, vector control, malaria transmission and epidemiology through series of MasterClass virtual classes with experts from our community
- > Share VCAG updates on the vector control product policy pipeline

Anthropology and human centered design in the context of vector control

Highlight innovation and opportunities to incorporate anthropological research and human centered design into the development, evaluation, and scale up of new vector control tools

Status of Task Force recruitment

- We will be following the criteria as described by the VCWG Co-Chairs and Secretariat
- Task Force members will be identified by their contributions to the workstream workplan i.e. point people for the workplan activities
- Task Force membership is activity-specific and will therefore be dynamic based on activities and priorities of the workstream
- We expect to have a preliminary list of Task Force members to share during the session on April 29th

Preliminary agenda for April 29th EVCT workstream session

Larval Source Management

Presentations and discussion on evidence for environmental management including habitat modification and manipulation as priority interventions in LSM

Innovations in vector control and surveillance

- > Presentations and discussion on roadmaps for vector control paradigms:
 - > Bite prevention
 - > Attractive targeted sugar baits (ATSB)
 - Endectocides
 - Genetic control

Anthropology and human centered design in the context of vector control

Presentations and discussion on integrating human centered approaches to enhance efficacy of vector control interventions



Vector Control Working Group

18 March 2021

Discussion

Dr Allison Tatarsky – University of California Dr Sheila Ogoma – Clinton Health Access Initiative

RBM Partnership to End Malaria