Vector Control Working Group
1st New Challenges, New Tools Workstream Meeting

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Geneva, 11th Annual Meeting 3-5 February 2016
Key objectives

1. Consolidate evidence on new challenges, new tools
2. Though, we have no decision making role, we can support by providing recommendations, consensus statements, position statements on key issues
3. LSM will stay as a separate work stream
Presentations

Allison Tatarsky (UCSF Malaria Elimination Initiative):
Parker Foundation Initiative: An opportunity to accelerate towards malaria elimination and eradication with innovative and aggressive vector control with emphasis on aerial application methods. The four project aims are: (i) to develop partnerships, (ii) elevate evidence, (iii) inform decision making in country, (iv) demonstrate impact of new tools on the ground.

Carlos Chaccour (IS Global):
Ivermectin as a potential tool for mass drug administration to complement current vector control interventions. An overview of the mode of action and different possible implementation strategies and formulations was given.

Silas Majambere (IVCC) & Eve Worrall (LSTM):
Overview of historical evidence for LSM and costing analyses. It is important to understand how LSM is financed and the cost justification for such programs. There is an opportunity to gather evidence for/against LSM and to support LSM implementation.
Presentations

Abdoulaye Diabate (IRSS-Muraz, BURKINA FASO):
New approaches to vector control can exploit alternative behaviours. Mating behaviour currently remains underexploited. Swarm collection has been conducted in Sudan, The Gambia and Mali which indicates that swarming behaviour is relatively consistent across different settings and that male swarming behaviour can be manipulated. Targeting swarms is being investigated as a potential means to reduce overall mosquito population density.

Matt Thomas (Penn State University, USA)
Genetic analyses of species complexes and blood meal analyses indicate a shift to a more zoophilic subspecies which helps to explain the loss of the classic malaria peak in November to January. This species shift mirrors the shift from An. gambiae to An. arabiensis in parts of Africa. Products other than IRS in cattle sheds could be used to control more zoophilic mosquitoes. The extension of IRS to attack the zoophilic cycle could more transmission towards the tipping point.
Presentations

Gunter Muller: (Hebrew University, Israel):
Ongoing field trials in southern Mali funded by IVCC and Grand Challenge projects are testing commercially viable bait stations for indoor and outdoor control of *Anopheles*. Products for the US market that target container-breeding *Aedes* have been developed.
The Way Forward:

1. Not only important to develop new tools but also new methods to measure transmission.

2. The IVCC published a framework for the rapid assessment of new VCTs (Vontas et al) and we should question how the WS can disseminate information to innovators on the pathways to approval.

3. It is critical to have a route to market that is clear and concise, with recognised hurdles that can be anticipated.

4. We should be clear where and when new tools are appropriate.

5. The work stream should serve as a forum to develop enquiries for guidance on the I2I process.
The Way Forward (cont.)

6. It would be helpful to document previous and ongoing experiences of product developers – what works, what doesn’t. description of the pathway to approval.

7. An element of ‘learning by doing’ could be valuable and perhaps we could guide countries in Phase IV evaluations.

8. Does the workstream have a position on spatial repellents – too early to discuss

9. It would be great to consider costing, cost-effectiveness and to help put figures together, and to consider how to finance new/supplementary interventions.

10. Position statements on new paradigms, suggest WHO provide further guidance on new tools