9th Outdoor/Residual Transmission Workstream Meeting

Conclusions and future directions

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Residual Malaria transmission

- Residual is generally a quantity left over at the end of a process.
- Residual Transmission = transmission that persists AFTER having achieved universal coverage with effective LLIN and/or IRS interventions.

Residual Transmission due to:
- Outdoor biting/resting vectors
- Early evening/morning biting vectors
  - (indoors & outdoors)
- Human behavior and activity outside the protection of indoor-based interventions.
Key messages:

• **Universal coverage of LLINs (or IRS)** remain an absolute priority, all other methods are **supplementary** to reducing malaria and achieving elimination.

• Need to generate local evidence on the **magnitude of the outdoor/residual transmission**
  – BOTH human and vector behaviour

• Industry and their partners are encouraged to develop **new vector control tools** to address residual transmission
  – Role of IVCC & VCAG

• Recommendation **NOT** to evaluate individual products, but a **class of products** that has an effect.

• Recommendation to **partner with local economically-vested stakeholders** (i.e extractive industries) as these companies are financially autonomous and often willing to provide support towards public health product evaluations as this also contributes to labor workforce benefit.
**Activities:**

- Establish Regional Networks, Mekong, Africa and Amazonia
- Develop guidelines /estimate the importance of residual transmission
- Develop guidelines /estimate malaria risk in specific populations exposed to outdoor transmission (soldiers, forest workers, migrants, mobile populations)
- Outline strategic plan for R&D of new tools
- Establish network of communications and mutual technical support amongst stakeholders including an effective 'feedback system' to inform on operational impact of any new tools being developed/evaluated specific for RT

**Approach:**

- Establish and/or strengthen regional hubs
- Multidisciplinary approach: entomology, epidemiology, social science, surveillance, R&D
- Partnership: NMCP, academia, private industry, donor institutions
- Strategic Plan Development
- Mobilize stakeholders
R&D: A real need for new tools

- **BMGF Grand Challenges Explorations Round 14:** New Approaches for Addressing Outdoor/Residual Malaria Transmission:
  - 1st round: Sept 2014
  - 2nd round Q3 2015
- **IVCC call for expression:** Responding to the challenge of Outdoor Transmission of Malaria (Sept 2014)
- **WHO Vector Control Advisory Group (VCAG) on new tools:** To review and assess the public health value of new paradigms, tools

**Promising Technologies:**
- Spatial/ topical repellents
- Attractive sugar baits +killing (e.g. ATSB)
- Genetic manipulated vectors (e.g. HEGs)
- Other emerging approaches