Vector Control Advisory Group (VCAG) – an update

MPAC meeting
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Function of VCAG

1. To review and assess the public health value, “proof of principle” (epidemiological impact) of new tools, approaches and technologies; and

2. To make recommendations on their use for vector control within the context of integrated vector management in multi-disease settings.
**Attributable benefit: VCAG will provide a clear path for the introduction of forms of vector control**

### Context

Until now, WHO has not had a comprehensive process for the assessment of new tools, technologies and approaches for vector control
- Policy process historically focused on new products within existing categories of technology (e.g. long-lasting insecticidal nets)
- No defined "entry point" or process for new forms of vector control to receive "proof of principle"

Stakeholders have indicated that the absence of a defined process has, in the past, delayed the adoption and implementation of new forms of vector control

### Value-add of VCAG

VCAG will benefit vector-borne disease control by
- Providing a predictable process by which new forms of vector control can be introduced into public health practice (gaining an initial "proof of principle" recommendation)
- Reducing uncertainty for innovators through this clarification
- Accelerating the process of public health implementation of new forms of vector control
- Providing a forum for dialogue and guidance to innovators on evidence requirements early in the process to reduce risks; and
- Providing WHO with evidence-based advice on the epidemiological mode of action and the public health value of new forms of vector control
Structure: VCAG is a standing group providing technical advice to STAG\(^1\) and MPAC\(^2\) on new forms of vector control

WHO department on Neglected Tropical Diseases (Vector Ecology Management)

WHO Global Malaria Programme (Vector Control Unit)

STAG\(^1\)

MPAC\(^2\)

WG

Exp. C

VCAG

TEGs

ERGs

JTEG\(^3\)

SAGE\(^4\)

Could tackle specific vector control topics on existing interventions

VCAG

- It is important to note that VCAG will be assessing new classes of technology but will not be involved in considering individual commercial products or the specifications of those products.
Activities: VCAG could be involved very early in the development of new forms of vector control
Step 1: Notification of intervention to VCAG

**Key activities**

- The VCAG secretariat accepts and logs notifications of new ideas and intervention concepts being drafted in confidential log, only available to VCAG Members
  - Logs all new projects notified by innovators to create overview of early innovation pipeline, "horizon scanning"

- Based on "horizon scanning", VCAG can comprehend future requirements on process
  - Identify needs for relevant expertise
  - Identify any issues with a new idea early in the process, e.g. develop methods to confirm epidemiological mode of action

- The VCAG secretariat is available to respond to any general inquiries around the VCAG review process
  - E.g. procedures, average timelines etc.

**Output**

- VCAG Secretariat runs a confidential list of projects early in the pipeline, communicated on a regular basis to VCAG members

**Interaction with other groups**

- Innovators have the possibility to notify VCAG that a new intervention concept is being drafted / worked on
Step 2: First interaction on data needs for review

Key activities

- If the product developer wishes, the VCAG committee can advise on the type and depth of evidence that will likely be used for its review
  - Provides opportunity for product developer to align with VCAG on overall data requirements before launch of resource-intensive trials
  - Advice provided in individual discussions between innovator and VCAG at the committee meetings
  - May cover need for epidemiological and entomological evidence and mode of action, economic data (to assess intervention feasibility) and data on user acceptability

- To support its deliberations, VCAG may consider the results of tests and studies carried out by product developer
  - E.g. entomological tests and evidence concerning the epidemiological mode of action

Output

- VCAG provides advice to innovators on the type of evidence that will likely be used in the review in step 3

Interaction with other groups

- VCAG receives a request from proposer to get advice on evidence requirements, including a data package with the evidence to date (e.g. results of entomological trials)

- VCAG and IVCC ESAC 3 may also align on what type of evidence will be necessary
  - If IVCC ESAC 3 is involved in the design of trials or other data collection

Source: Interviews
### Key activities

- When a dossier has been submitted by the product developer, the VCAG committee consolidates all evidence, and assesses if additional data is needed
  - All sources are consolidated (dossier submitted and other relevant data)

- Based on the evidence, VCAG evaluates the public health value of the new paradigm, by answering:
  - "Is it efficacious, for some defined public health purpose and in some defined circumstances, and will it be useful to and feasible for intended users?"

- VCAG presents its findings to MPAC and STAG, expressing its opinion on the intervention
  - Details the epidemiological mode of action, and the value of the new paradigm in a given setting
  - Product developers informed of VCAG’s opinion

- If needed, VCAG may also submit a technical data package to MPAC, STAG and WHOPES for further use in policy and product standard setting

### Output

- VCAG advises MPAC, STAG (and WHOPES) on the public health value of the new paradigm, through the expression of opinion
  - Yes / No describing the specific considerations
  - Report and technical data package transmitted

- VCAG may advise product developers on need for additional evidence in some instances

### Interaction with other groups

- VCAG may advise the product developer on additional evidence required for a follow-up review
- VCAG presents the outcome of its review in the MPAC and STAG meetings
- VCAG provides input to WHOPES for the consequent definition of testing guidelines

Source: Interviews
Step 4: Policy development and WHOPES evaluation

Not part of VCAG activities

Key activities

- Once VCAG submits its report, MPAC and STAG advise WHO on the appropriate guidelines for implementation of the paradigm
  - Establish role of the new intervention for a specific disease, and in relation to other interventions
  - Initial recommendation small scale but incrementally broadened as experience and evidence accumulate
  - Building on VCAG’s opinion and technical data package, as well as other available sources

- In parallel, WHOPES convenes experts to develop testing guidelines for the new product category
  - VCAG’s technical package and evidence used as primary input for defining testing guidelines

- When a specific product within the product category is submitted for evaluation, WHOPES reviews its dossier and commissions any complementary trials necessary for the evaluation
  - If the product is "first-in-class" and data on the specific product was evaluated by VCAG, WHOPES will build on VCAG’s work, taking the evidence from VCAG fully into account to avoid duplication of efforts

Output

- GMP and NTD publish guidelines for implementation of the paradigm based on advice from MPAC and STAG, respectively
- WHOPES publishes product category testing guidelines, and product recommendations for specific products

Interaction with other groups

- MPAC and STAG request additional information from VCAG, if required for the policy development
- WHOPES communicates with VCAG around the definition of testing guidelines
- WHOPES may advise product developer that additional evidence is required for the product evaluation

Source: Interviews
Summary

- Providing a predictable and defined process by which new forms of vector control can be introduced into public health practice
- Reducing uncertainty for innovators through this clarification
- Accelerating the process of public health implementation of new forms of vector control
- Providing a forum for dialogue and guidance to innovators on evidence requirements early in the process to reduce risks.
VCAG submissions

1. Wolbachia 2
2. Spatial repellent 2
3. Attractive Lethal Ovitraps 2
4. PermaNet 3.0 3
5. Smart Patch 1
6. Electrostatic coating 1
7. Ovitraps 1
8. Mosquito free trap E
9. Non-chemical insecticidal fabrics E
VCAG engagement

- **Process to introduce new forms of vector control**
  - Intervention concept and draft TPPI
  - Initial studies of intervention concept
  - Validation of product category & associated Target Product Profile
  - Large-scale epidemiological trials
  - Implementation pilots
  - Validation of paradigm
  - Initial WHO reco’s for pilot impl.
  - Broad WHO public health policy
  - Country policy development
  - Development of testing guidelines
  - Product evaluation
  - WHOPES recommendation
  - Country registration
  - NRA approval

- **Activities of VCAG**
  - Early notification
  - Initial interaction on data requirements for VCAG’s review
  - Review of the public health value
  - Policy setting & product evaluation

1. Early notification
2. Initial interaction on data requirements for VCAG’s review
3. Review of the public health value
4. Policy setting & product evaluation

*Not part of VCAG activities – only with input from VCAG*
Thank you

WORLD HEALTH DAY APRIL 7TH 2014

"VECTOR BORNE DISEASES"
Articulation: proposed interaction between VCAG and MPAC/STAG in the development of public health policy

**Illustrative options to clarify the interactions between VCAG and MPAC/STAG**

[Propositions for consideration and modification by MPAC/STAG]

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**Option 0: Additional evidence required**
- Direct deliberations on data needs by MPAC/STAG and write-up of needs/pilots following VCAG's presentation

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**Option 1: Low complexity and/or narrow application**
- Direct deliberations and a policy statement write-up by the committee following VCAG's presentation

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**Option 2: Some complexity or broader application**
- Policy statement prepared overnight by "drafting committee", deliberations on next day

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**Option 3: Complex issue and/or broad application**
- MPAC/STAG secretariat asked to prepare draft statement, to be circulated post-meeting to committee members

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**Option 4: Highly complex issue and broad application**
- MPAC/STAG requests an Evidence Review Group, Expert Committee or Working Group to prepare a policy statement to be submitted at next meeting

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**Limited evidence**
- MPAC/STAG may advise on data needs

**Significant evidence**
- MPAC/STAG may develop policy recommendations

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VCAG presents findings to MPAC and/or STAG