Needs assessment of vector surveillance and control by NMCPs

Tanya Russell¹, Robert Farlow², Myo Min³, Effie Espino³, Abraham Mnzava⁴, Tom Burkot¹

¹Australian Institute of Tropical Health and Medicine, James Cook University, ²R. Farlow Consulting LLC, ³Asia-Pacific Malaria Elimination Network and ⁴African Leaders’ Malaria Alliance

INTRODUCTION

• Malaria control is at a crossroads. There is a need to preserve the effectiveness of our current vector control interventions while integrating new control strategies.

• One of the greatest challenges underpinning NMCPs is a lack of vector control capacity and capability.

• Surveillance including vector surveillance is regarded as a core intervention (WHO GTS for malaria)

OBJECTIVE

• To assess the needs and capability of National Malaria Control Programs (NMCPs) to conduct vector surveillance and control activities

METHODS

• Country metadata on vector surveillance and control activities was collected using an online survey completed by NMCPs or partner organization officials.

• The structure and needs of NMCP-led vector surveillance and control programs were classified into broad categories for analysis.

RESULTS

1. Vector surveillance

Vector surveillance was most commonly limited by shortages in capacity and the strategic plan

2. Vector control

Vector control activities were most commonly limited by shortages in capacity and funding

3. Data management

Data was most commonly stored in Excel or paper based. Data was usually analysed in Excel or with dashboards

4. Supporting organizations

Surveys to monitor coverage and usage of tools were most often supported by NGOs and U.S. Government agencies

CONCLUSIONS

• Not all limitations are equal. The most limiting factor is when activities aren’t supported in an up-to-date strategic framework.

• There is a need to strengthen capacity within the Ministry of Health and NMCP to facilitate programs to collect and utilize vector surveillance data and implement evidence-based vector control and elimination.

Proportion of countries with sufficient capacity to implement activities:

- LLINS: 63% sufficient capacity
- IRS: 56% sufficient capacity
- Larval control: 28% sufficient capacity
- Vector surveillance: 8% sufficient capacity

Strategic framework

- Vector surveillance
- Vector control
- Data management
- Supporting organizations

Funding

- LLINS
- IRS
- NMCP

Capacity

- Operational staff
- Professional staff
- Training
- Infrastructure
- Logistics

Techniques

- Data communication
- Data collection technique

Strategic framework

- Vector surveillance
- Vector control
- Data management
- Supporting organizations

Funding

- LLINS
- IRS
- NMCP

Capacity

- Operational staff
- Professional staff
- Training
- Infrastructure
- Logistics

Techniques

- Data communication
- Data collection technique

Surveys to monitor coverage and usage of tools were most often supported by NGOs and U.S. Government agencies

Non government organizations

U.S. Government agencies

Multilateral organizations

National research institutes

Universities

Strategic framework

Funding

Capacity

Techniques

There is a need to strengthen capacity within the Ministry of Health and NMCP to facilitate programs to collect and utilize vector surveillance data and implement evidence-based vector control and elimination.