Evidence Review Group (ERG) on malaria elimination

Dr Richard Steketee, ERG chair

MPAC meeting - Geneva, 14 September 2016
Rationale for an ERG on malaria elimination

- The malaria landscape has changed dramatically since 2007
  - Increased funding for malaria programme activities
  - Large-scale implementation of malaria interventions
  - Impressive reductions in malaria burden
  - Increasing number of countries eliminating or considering elimination of malaria
  - Changes in policy recommendations and available tools
  - Development of new Global Technical Strategy for Malaria 2016-2030
    (3 pillars incl. elimination, 2 supporting elements) – all countries to accelerate towards malaria elimination

“Malaria elimination: An operational manual” for release in Q4, 2016
ERG on malaria elimination - membership

• 13 members with expertise and experience across relevant disciplines:
  - Dr Rick Steketee, PATH-MACEPA *(ERG Chair)*
  - Dr Majed Al-Zadjali, Department of malaria, MoH, Oman
  - Dr Graham Brown, Nossal Institute for Global Health
  - Dr Tom Burkot, James Cook University
  - Dr Justin Cohen, Clinton Health Access Initiative (CHAI)
  - Dr Mikhail Ejov, independent consultant
  - Dr Rossitza Mintcheva-Kurdova, independent consultant
  - Dr Bruno Moonen, Bill & Melinda Gates Foundation
  - Dr Gao Qi, Jiangsu Institute of Parasitic Diseases
  - Dr Frank Richards, The Carter Center
  - Dr Christophe Rogier, French Military Medical Service
  - Dr Allan Schapira, independent consultant
  - Dr Robert Snow, KEMRI Wellcome Trust Research Programme
1st ERG meeting in New Delhi (9/13 experts attending), July-August 2015: deep dive into the current manual (2007), with identification of gaps/new content and needed changes for the new guidance

- Title: “Malaria elimination: An operational manual”
- Audience: all, but primarily National Malaria Control Programme managers
- Scope: all epidemiological settings as opposed to countries nearing elimination only
- Focus: progression of all malaria-endemic countries towards elimination in accord with the GTS, moving away from the previous multi-staged / compartmented process from control to elimination
- Steps A to E to progress towards elimination with package of interventions – link with GTS pillars and SEs

New content identified

- Chapter “Innovation and research”
- Section on Subnational verification of malaria elimination
- Glossary to be aligned with the WHO malaria terminology work underway at that time (released in June 2016, available at [http://apps.who.int/iris/bitstream/10665/208815/1/WHO_HTM_GMP_2016.6_eng.pdf](http://apps.who.int/iris/bitstream/10665/208815/1/WHO_HTM_GMP_2016.6_eng.pdf))

First outline drafted with writing/peer-review assignments among experts for 1st draft to be developed by November 2015
Development and consolidation of **first draft** of the new Malaria elimination: An operational manual (134 pages)

**2nd ERG meeting** in Montreux (11/13 experts attending), December 2016: comprehensive analysis and review of the draft. **Decision points:**

- Rewriting work/synthesis to be done jointly by WHO-MACEPA staff based on a **final and detailed outline (for review during 3rd and final ERG meeting)**
- Further components to be developed
  - section on surveillance
  - annex on diagnostic tools
  - details on the biology of malaria
  - clarification of re-introduction vs re-establishment throughout the manual
  - more details on case/focus classification
ERG on elimination: 3rd reporting to MPAC - Sept 2016

- January through May 2016: Malaria elimination operational manual revised by PATH-MACEPA and WHO staff based on inputs from the Montreux meeting – document made more concise.

- 2-3 June 2016: 2nd draft reviewed during a 3rd and final ERG meeting (11/13 experts attending) held in Shanghai where a final outline was approved with further writing assignments for ERG experts and WHO programme staff due within 10 days.

- Consolidation by PATH-MACEPA.

- Consultation process over July/August 2016
  - Review and final suggestions by all ERG members, WHO regional advisors and GMP Director, Coordinators & Team leaders
  - Field testing of the document at malaria elimination training workshops held end of June/beginning of July (Bhutan and Philippines, respectively under SEARO and WPRO)
  - Comments received from malaria managers and experts in other WHO regions: WHO NPOs (AFRO), MoH and NMCP staff (Botswana, Brazil, Myanmar, South Africa and Suriname).

- Consolidation of most inputs into the document presented for MPAC review. Relevance of other inputs (received or to be received) still to be examined, also in light of MPAC feedback.
Overview of where we are and next steps

- Review of the draft guidance
- Clear and detailed outline set

- Deep dive into the manual
- Consensus on the gaps and suggested changes
- Outline of new guidance and each chapter
- Focal point to coordinate the process of collecting revised sections and compilation of inputs

Experts to develop working papers, conduct in-depth search or review papers/collect historical experience

Prep. work

1st ERG meeting New Delhi July-Aug 2015
2nd ERG meeting Montreux Dec 2015

Consultative process
- Discussion at regional meetings
- ITWs with programme managers

Feedback consolidation work

Write, synthesize and rearticulate (WHO-PATH/MACEPA)

Final review

MPAC presentation

Regular teleconferences as needed
Ongoing interactions with GMP coordinators

- Incorporation of inputs from MPAC
- Review of other feedback (from regions and countries)

Global Malaria Programme

Production & publishing

MPAC presentation

14 Sept 2016

Launch in Cairo (TBC)

1st ERG meeting New Delhi
2nd ERG meeting Montreux

March 2016 May 2016 2-3 June 2016

3rd ERG meeting China

March 2016

Feedback consolidation work

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What’s new in the manual?

- **All** malaria-endemic countries are addressed as opposed to moderate and low endemic ones previously.
- Programme actions are highlighted across the continuum of transmission, **from high to very low/zero**.
- Notion of feasibility of elimination is replaced by **critical requirements** to achieve and maintain elimination.
- Emphasis on the critical role of **information systems** and **surveillance as an intervention**.
- Emphasis on systems required for appropriate documentation of **certification** of elimination (national level), on the role of **verification** of elimination (subnational level), and on the role of **celebrating incremental progress** in reducing incidence, illness, severe disease and mortality.
- Acceleration and the speed of change are quicker than anticipated, **planning** for next step has to be done early.
- **RDTs** and **light microscopy** are both recommended for malaria diagnosis.
- **Focus classification has been simplified**: 3 instead of 7 types of foci with an emphasis on defined, but adaptable intervention packages for each focus type.
- **Updated strategies** are recommended for different transmission intensities (e.g. MDA).
- Proposed **simplified process for certification of malaria elimination** with key role by a WHO malaria Certification Elimination Panel (CEP), recommendation by the MPAC and decision by the WHO DG (following request of the MPAC in September 2015).
- Careful national investigation and consultation with WHO will be required before a country’s malaria-free certification is lost. A **minimum threshold for possible re-establishment of transmission** would be the occurrence of ≥3 indigenous malaria cases per year in the same focus for 3 consecutive years irrespective of the malaria species.
Outline of the manual for MPAC review (1)

Glossary – aligned with WHO terminology, some revisions for discussion

“What’s new”

Introduction (malaria biology, recent progress, GTS, malaria elimination, challenges and opportunities, regional initiatives)

1. **Principles and practices of malaria elimination** (to include all countries and settings): Understanding transmission intensity and country stratification; Accelerating to elimination: aligning field actions with the *GTS for malaria 2016-2030*; illustrative spectrum of transmission intensity and intervention package; “Documenting malaria elimination” box

2. **Strategies and interventions for elimination** *(the “What”)*
   - 2.1 Introduction
   - 2.2 Local stratification according to receptivity and transmission intensity
   - 2.3 Vector control for malaria elimination: core interventions; supplemental strategies; vector control in active transmission foci; vector control after elimination/prevention of re-establishment; M&E of vector control
   - 2.4 Enhancing and optimizing case detection and case management: case detection (passive and active); parasitological diagnosis; treatment incl. asymptomatic infections; role of QA and reference laboratories in malaria elimination
   - 2.5 Surveillance: increasing sensitivity of surveillance systems; surveillance as an intervention; case characterization, classification and investigation; focus identification, characterization, classification and investigation; special surveys; data management, analysis, feedback and decision-making
   - 2.6 Accelerating efforts to elimination: population-wide medicine-based strategies; additional interventions to accelerate malaria elimination

3. **Management and planning** *(the “How”)*
   - 3.1 Planning process: strategic and operational planning; resource mobilization
   - 3.2 Data for decision-making: monitoring and evaluation; data quality; data management
   - 3.3 Programme structure and management: programme management; programme staffing; training and retaining staff
Outline of the manual for MPAC review (2)

3.4 Supply chain systems
3.5 Independent national malaria elimination advisory committee
3.6 Creating an enabling environment: political commitment; necessary legislation; strategic partnerships across sectors (other government sectors, private sector); community engagement

4. Prevention of the re-establishment of malaria
   4.1 What are the risks of malaria re-establishment: how to measure receptivity/vulnerability; how to manage these risks, i.e. lower and mitigate receptivity and vulnerability
   4.2 Maintaining a strong health system
   4.3 Integrating malaria activities into general health services

5. Certification and verification of malaria elimination
   5.1 WHO certification of malaria elimination - general
   5.2 WHO certification of malaria elimination – procedure (with “New steps for the certification process” box): national elimination report, activities of the malaria CEP; field visit
   5.3 Follow-up of WHO certification
   5.4 Subnational verification of malaria elimination: general principles and suggested process for interested countries

6. Innovation and research for malaria elimination
   6.1 R&D for malaria elimination and eradication: medicines; diagnostics; vector control; vaccines
   6.2 Operational research
   6.3 Regulatory environment for malaria elimination
Outline of the manual for MPAC review (3)

Annexes

- 1. Biology of malaria: parasitological and entomological aspects (includes malaria transmission cycle)
- 2. Diagnosis and treatment of *P. f.* vs *P. v.* malaria
- 3. Monitoring and evaluation indicators for different interventions in an elimination programme
- 4. Terms of reference for the WHO malaria Certification Elimination Panel (CEP) – *drawn from the presentation made at the MPAC in September 2015*
- 5. Key documents of the elimination database to be prepared by the national government for the CEP
- 6. Outline of the content of the national elimination report
- 7. Sample of a national malaria case register
- 8. Sample malaria case investigation record form
- 9. Sample malaria focus investigation record form
- 10. Information to be included in the annual report for follow-up of WHO certification
Thank you