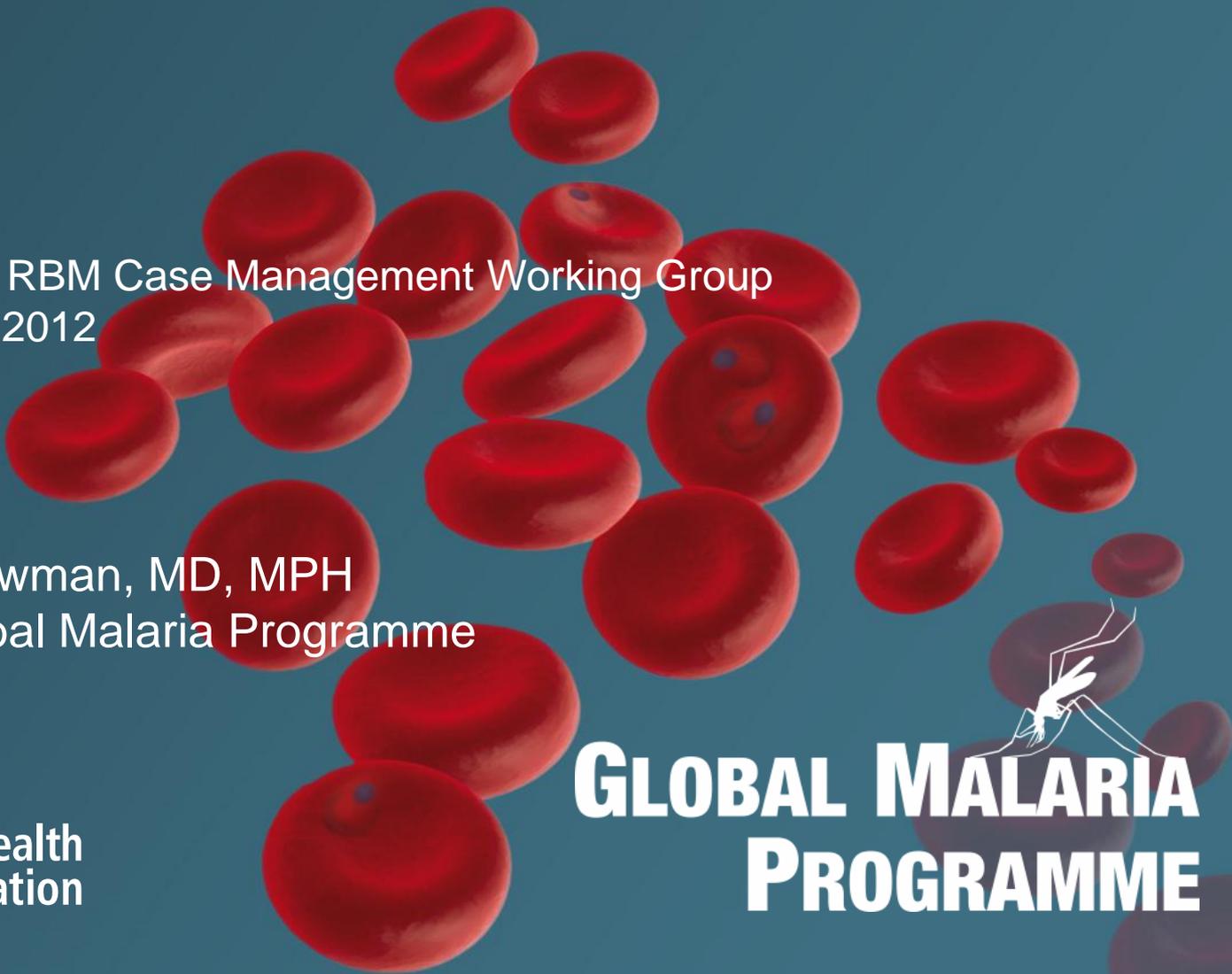


T3: Test. Treat. Track

Meeting of the RBM Case Management Working Group
Geneva, June 2012

Robert D. Newman, MD, MPH
Director, Global Malaria Programme



**GLOBAL MALARIA
PROGRAMME**

Malaria diagnostic testing – the facts

Important recent progress

- Rate of testing in WHO African Region rose from < 5% in 2000 to 45% in 2010 (among reported malaria cases in the public sector)
- Worldwide, number of RDTs delivered by manufacturers increased from 45 million (2008) to 88 million (2010)
- 90 endemic countries have adopted policy of providing malaria diagnostic testing for all age groups (37 in WHO African Region)

But

- Most endemic countries in Africa – esp. highest burden countries – are still far from achieving universal access to diagnostic testing
- Number of diagnostic tests carried out in 2010 in Africa was less than half the total number of ACTs procured and distributed
- In half of all endemic countries in Africa, over 80% of cases are still treated without diagnostic testing

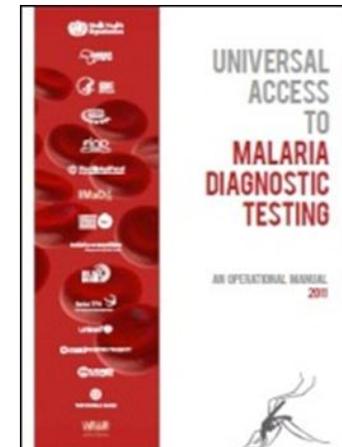


Malaria diagnostic testing – required next steps

- Countries need to move towards universal diagnostic testing
 - Quality-assured, relatively inexpensive RDTs are available, making it possible to move testing beyond health facilities and into communities;
 - Testing improves differential diagnosis and fever management, diminishes unnecessary use of ACTs, and provides accurate surveillance data
- *Universal Access to Malaria Diagnostic Testing: an Operational Manual (2011)* provides comprehensive roadmap to guide scale-up

Key WHO recommendations

- Every suspected malaria case should be confirmed by microscopy or RDT prior to treatment;
- All diagnostic tools must be quality-assured across all levels of the health system;
- Scale-up of malaria diagnostic testing should be integrated with efforts to improve the management of other febrile illnesses.



Malaria treatment – the facts

Important recent progress

- In 2010, 181 million ACT courses were procured worldwide in the public sector – up from 158 million in 2009, and just 11 million in 2005
- By the end of 2010, 84 countries had adopted ACT as the first-line treatment for *Plasmodium falciparum* malaria
- In 2010, 60 countries were providing ACTs free of charge for all age groups in the public sector

But

- Despite availability of effective, high-quality antimalarials, millions of people in endemic countries still lack ready access to appropriate treatment
- Many patients are treated in private sector with oral artemisinin-based monotherapies, and antimalarials that do not meet quality standards
- Growing parasite resistance to artemisinins in Greater Mekong sub-region is major threat to malaria control efforts, requiring urgent action

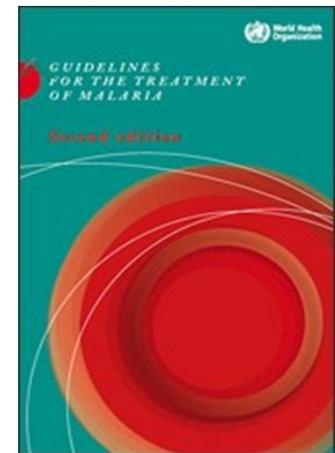


Malaria treatment – required next steps

- Countries need to ensure universal access to antimalarial treatment
 - A scale-up of quality-assured, effective antimalarials will result in dramatic reduction of malaria-related morbidity and mortality
 - Need to intensify efforts to improve drug quality, strengthen regulation of pharmaceutical market
- *Guidelines for the Treatment of Malaria (Second edition) (2010)* contains all of WHO's evidence-based recommendations for all endemic regions.

Key WHO recommendations

- After diagnostic confirmation, every uncomplicated case of *P. falciparum* malaria should be treated with a quality-assured ACT;
- Every severe case of *P. falciparum* malaria should be treated with IV or IM artesunate, followed by full ACT course;
- Antimalarials should be routinely monitored for therapeutic efficacy.



Surveillance for malaria – the facts



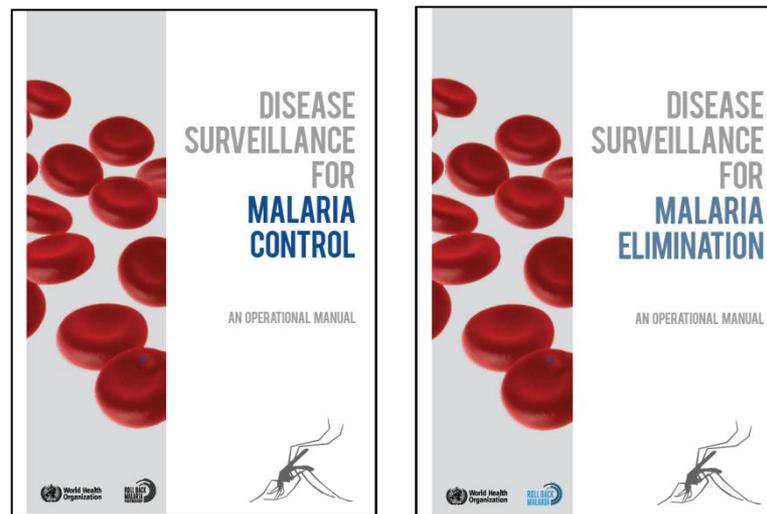
- In low and middle-income countries, less than 10% of deaths are registered; reliable cause-of-death statistics not available for majority of endemic countries
- Not possible to determine malaria trends with certainty in 38 of 99 countries with ongoing transmission
- Scale-up of malaria interventions increases need for timely and accurate information on incidence
- Increasing availability of RDTs allows for tracking of confirmed cases and better targeting of resources



Surveillance for malaria

Two new global manuals now available

- Providing guidance to endemic countries on the operation of malaria surveillance systems for control and elimination
- Focusing on program implementation and complementing other existing guidance on malaria indicators
- Updated surveillance guidance has not been issued by WHO since Global Malaria Eradication Programme era



**Launched in Namibia by
WHO Director- General
(24 April 2012)**

Content of surveillance manuals

- **Main focus of two volumes**

- Routine information systems, decentralized analysis, interpretation and use of surveillance data;

- **Structure of documents**

1. Overview of malaria surveillance in different phases of malaria control;
 2. Key concepts in malaria surveillance;
 3. Data recording, reporting, analysis and use;
 4. Establishing surveillance systems;
- Annexes
 - Diagnostic tests/ quality assurance;
 - Core surveillance indicator;
 - Registers, case investigation forms, report forms, sample analyses.

Surveillance in control phase (high and moderate transmission settings)

Health facility level

- Registers of individual cases kept – maybe as part of outpatient register;
- Aggregate data reported to district and higher levels;
- Case-based surveillance of malaria admissions and deaths: to respond to cases of severe disease and attain a target of near-zero malaria deaths;
- Cases graphed on a monthly basis to assess the extent to which control measures are reducing the incidence of malaria.

District/ national level

- Cases and deaths summarized on a monthly basis through five control charts to assess the success of malaria control interventions and identify trends that need an urgent response;
- Analysis is also undertaken by health facility catchment area/ district in order to prioritize activities.

Surveillance in control phase (low transmission settings)

Health facility level

- Registers of individual cases kept;
- Aggregate data reported to district and higher levels, *plus* line-lists of admitted patients and deaths, *plus* when caseloads permit lists of all confirmed cases;
- Case-based surveillance of malaria cases: aim to identify locations or population groups with highest malaria incidence;
- Cases are graphed on a weekly monthly basis to assess identify trends that require attention and mapped by village to identify clusters.

District/ national level

- Cases and deaths summarized monthly through five control charts;
- Analysis undertaken by health facility catchment area/ district to prioritize activities;
- Register of severe cases and deaths maintained and investigations undertaken in order to identify and address program weaknesses.



Surveillance in elimination phase

Health facility level

- Confirmed cases immediately notified to district & central levels;
- Full investigation of each case (including additional blood sampling) to determine if case imported, locally acquired (introduced, indigenous, relapsed) or induced;
- Each new focus of transmission investigated (including entomological investigation). Focus classified and status updated continuously;
- Health facilities & districts monitor extent of surveillance in high risk foci - comparing number of diagnostic tests done with number expected.

District/ national level

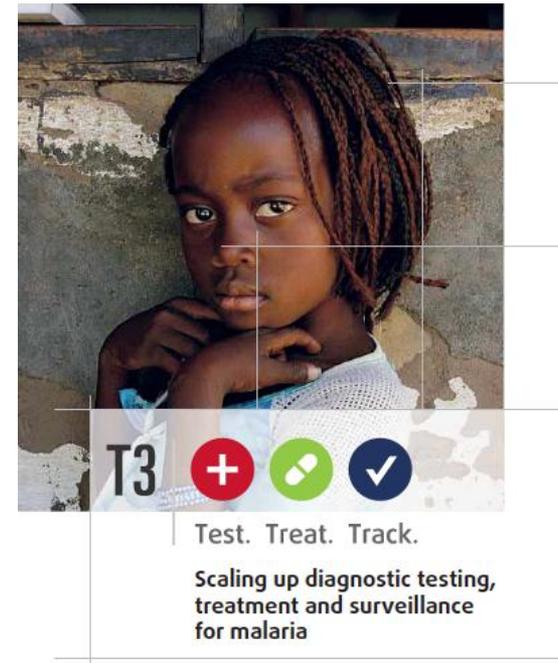
- Databases kept of malaria case investigation forms, foci investigation forms, and a foci register with changes in status;
- Maps kept showing distribution of cases by household, vector breeding places, possible sites of transmission etc;
- National reference laboratory reconfirms all positive test results and a sample of negative test results, and organizes testing panels for laboratories QA network;
- Full set of documentation kept at national level ready for certification.



T3: Test. Treat. Track. initiative

Coordinated international effort needed

- To support countries in scale-up of diagnostic testing, treatment and surveillance
- End goal is to ensure that
 - Every *suspected* malaria case is tested
 - Every *confirmed* case is treated with a quality-assured antimalarial medicine
 - The disease is tracked through timely and accurate surveillance systems



T3: Test. Treat. Track. initiative

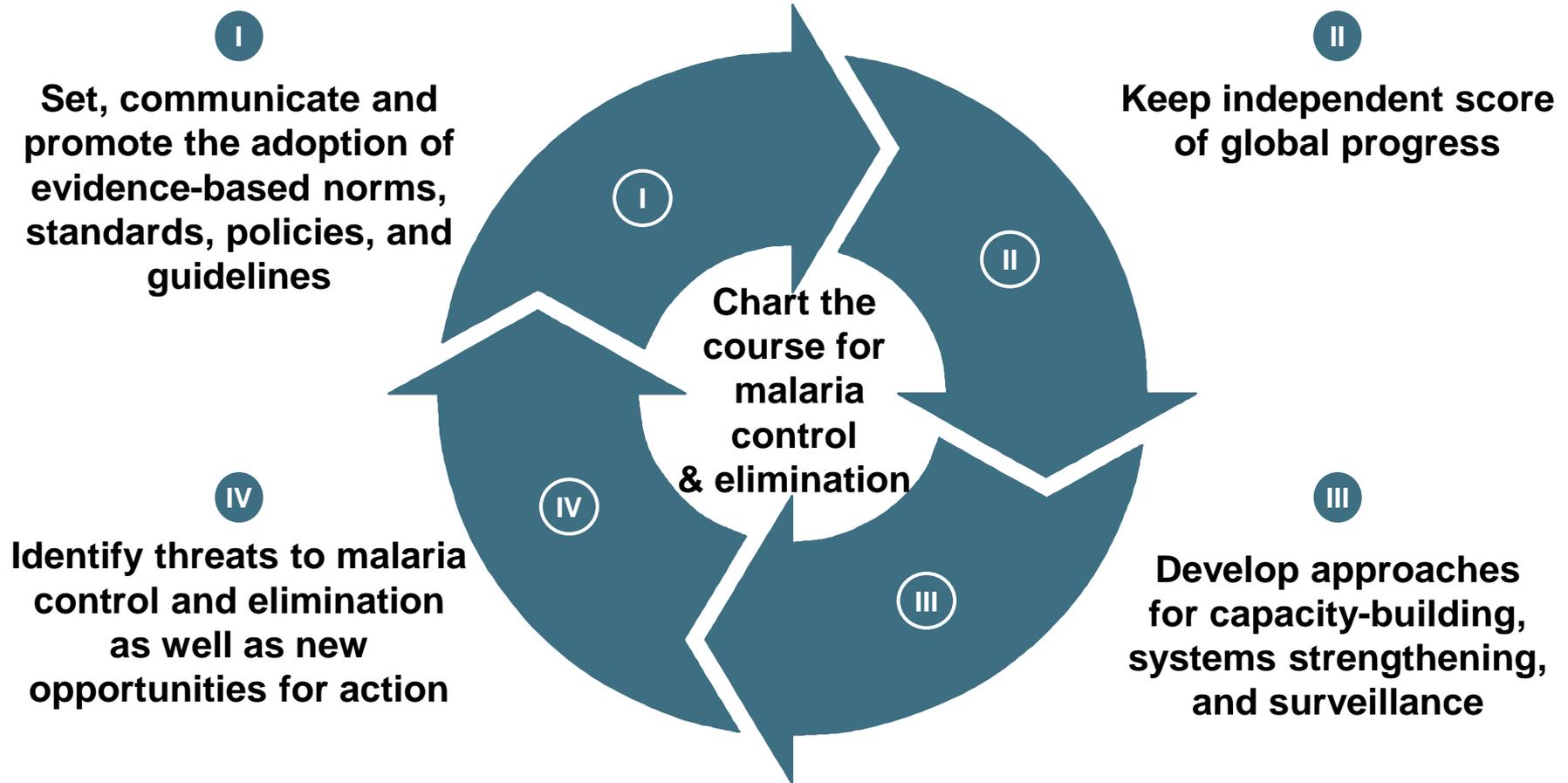
Need to move from set of recommendations to scale-up

- Dedicate financial resources and intensify advocacy efforts
- Provide assistance to countries to develop scale-up strategies
 - Support vertical scale-up (institutionalisation)
 - Support horizontal scale-up (expansion)
- Develop case studies, share lessons learned, strengthen evidence base
- Reach out to wider audiences



RBM CMWG can play a key role

WHO Global Malaria Programme: four key roles



MPAC Background

- Scale up of malaria control and major investments in research = rapidly evolving policy environment for new tools and technologies (and end of one-size-fits-all approach)
- Setting policy, norms and guidance on malaria control is primary role of WHO Global Malaria Programme (GMP)
- MPAC provides independent strategic advice and technical input to WHO for development of policies related to malaria control & elimination
- GMP dedicated to a policy setting process that is more:
 - **Timely, transparent, and accountable**
- 2011 was a critical year in the redesign, launch and implementation of a strengthened policy setting process

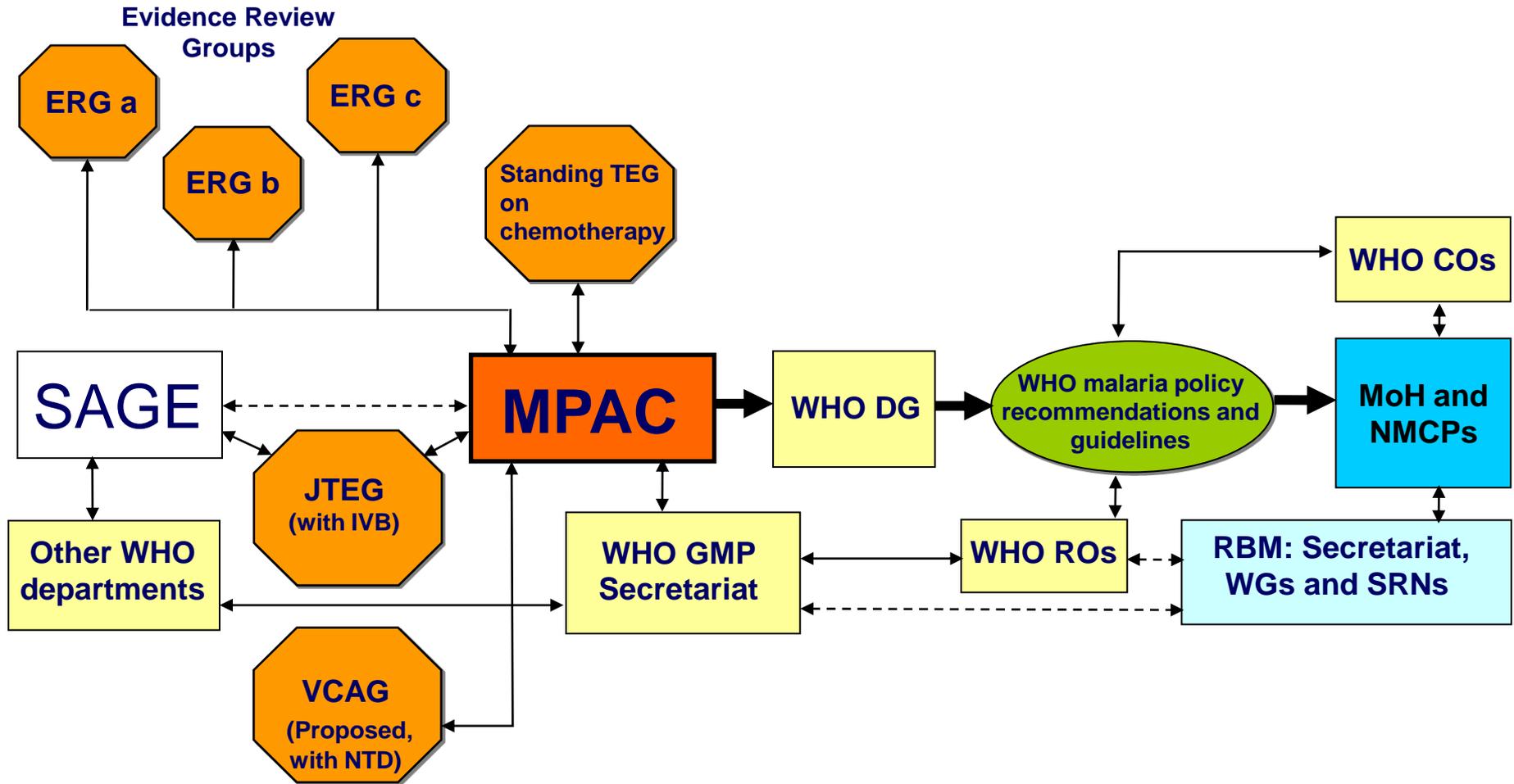


Designing and Launching MPAC

- March 2011 - GMP Advisory Group on policy setting convened to review previous and existing processes, consider successful models, propose draft ToR
- April-June 2011 - Draft ToR (based on SAGE) received extensive input from over 40 external stakeholders
- August 2011 – ToR approved by WHO Director General
- September-October 2011 – Open call for nominations, 100 applications received & reviewed by independent selection panel
- November 2011 – 15 nominees appointed as MPAC members, selected for their experience and broad expertise
- December 2011 – all MPAC related information available online
- January/February 2102 – Inaugural meeting
- April 2012 – MPAC report published in Malaria Journal



MPAC: organogram



Interface between Roll Back Malaria Partnership (RBM) and WHO-GMP

- RBM Secretariat is hosted at WHO
- RBM Roles
 - Advocacy
 - Resource mobilization
 - Partner harmonization
- Important to optimize interface between RBM mechanisms and WHO-GMP
 - Example: MPAC meetings are offset from RBM Board meetings by 3 months to allow for dissemination of new policies and input into next agenda



Potential roles of RBM CMWG in relation to T3

- Mapping of in-country partners capable of supporting National Malaria Control Programmes to scale-up T3
 - Diagnostic testing
 - Treatment
 - Surveillance
- Harmonizing the work of in-country partners in support of T3
 - Ensuring dissemination of global guidance documents
 - Assisting with national adaptation of global norms
- Creating consensus among partners with regard to implementing T3; how best to do this?
- Identifying south-south capacity building opportunities

