14th Stakeholders’ Meeting
Critical challenges to malaria elimination in S.E. Asia
Bali | 11 – 12 October 2017

Kevin Baird, Global Technical Strategy,
Steering Committee member

Defeating Malaria Together

Medicines for Malaria Venture
Genesis, Strategy and Evidence Base for the Technical Brief of Plasmodium vivax from WHO

Kevin Baird
Global Technical Strategy, Steering Committee member
*Plasmodium vivax* Technical Brief, Steering & Writing Committees chairs

_Eijkman-Oxford Clinical Research Unit,
Eijkman Institute of Molecular Biology_
Jakarta, Indonesia

&

Centre for Tropical Medicine

_Nuffield Department of Clinical Medicine_
University of Oxford
Oxford, United Kingdom
Malaria 2025:
Accelerate to Eliminate
The Global Technical Strategy for Malaria: 2016 - 2025

Setting the Scene and Introductions

Manila, 10-11 June 2014
The need for a new Global Strategy

• The last decade has witnessed unprecedented progress in malaria reduction, especially in Africa, the continent that bears the greatest burden
• A massive increase in resources has led to tremendous scale-up and increased access and coverage of key interventions
• Nevertheless, there is still a long way until elimination of malaria and new challenges such as parasite resistance have appeared
• At present, new guidance is needed to address the heterogeneity and changing dynamics of malaria in order to secure continued progress and to guide countries and regions
• Given this context, the Malaria Policy Advisory Committee (MPAC) supported the idea that WHO-GMP should develop a Global Technical Strategy for Malaria 2016–2025
GTS development process is collaborative

- The development of the GTS is led by a Steering Committee, composed of 14 leading experts in malaria, maternal and child health, health systems and economics, and representatives of endemic countries.

- The committee provides guidance to GMP on the development of the GTS and ensures that the process is rigorous, inclusive of national and regional inputs, and closely coordinated with the development of GMAP2.

- In October 2013 in Geneva, Switzerland, WHO held the first of a series of country consultations on the development of the GTS.

- The convening of seven Regional consultations led by the WHO Regional Offices from March to June of 2014 is a central piece in the GTS development process.
# Global Technical Strategy (GTS) – Steering Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Pedro Alonso - Chair</td>
<td>ISGlobal, Barcelona Institute for Global Health, Spain</td>
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<tr>
<td>Abdisalan Noor</td>
<td>KEMRI-Wellcome Trust Research Programme, Kenya</td>
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<tr>
<td>Ana Carolina Santelli*</td>
<td>Coordenação Geral do Programa Nacional de Controle da Malária (CGPNCM), Brazil</td>
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<tr>
<td>Azra Ghani</td>
<td>Chair in Infectious Disease Epidemiology, Imperial College, London</td>
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<tr>
<td>Ciro de Quadros</td>
<td>Sabin Vaccine Institute, Washington DC</td>
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<tr>
<td>Corine Karema*</td>
<td>National Malaria Control Programme, TRACPlus, Rwanda</td>
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<tr>
<td>Gao Qi</td>
<td>Jiangsu Institute of Parasitic Diseases, China</td>
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<tr>
<td>Kevin Baird</td>
<td>Eijkman-Oxford Clinical Research Unit, Jakarta, Indonesia</td>
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<tr>
<td>Lesong Conteh</td>
<td>Centre for Health Policy, Imperial College, London</td>
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<tr>
<td>Margret Gyapong</td>
<td>Dodowa Health Research Centre; Ghana</td>
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<tr>
<td>Sandii Lwin</td>
<td>Myanmar Health &amp; Development Consortium</td>
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<tr>
<td>Tom Burkot</td>
<td>School of Public Health, James Cook University, Australia</td>
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<tr>
<td>Wichai Satimai*</td>
<td>Former Director, Bureau of Vector Borne Disease, Ministry of Public Health, Thailand</td>
</tr>
<tr>
<td>Zulfiqar Bhutta</td>
<td>AGA KHAN UNIVERSITY, Pakistan</td>
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<tr>
<td>David Brandling-Bennett (ex officio)</td>
<td>Bill &amp; Melinda Gates Foundation</td>
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<tr>
<td>Bernard Nahlen (ex officio)</td>
<td>U.S. President’s Malaria Initiative</td>
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<tr>
<td>Fatoumata Nafo-Traore (ex officio)</td>
<td>Roll Back Malaria Partnership Secretariat</td>
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<tr>
<td>John Reeder (ex officio)</td>
<td>WHO Global Malaria Programme</td>
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* Also sits on the Global Malaria Action Plan 2 Task Force
GTS vs. Technical Brief

• GTS included elements of *P. vivax* integrated within its broad framework but the *P. vivax* Technical Brief was a separate effort with its own steering and writing committees

• GTS broad and strategic, Technical Brief narrow and tactical

• *P. vivax* Technical Brief intended to provide guidance taking into account its specific character, i.e., on what separates it from *P. falciparum* with regard to its control and elimination.

• Presentations to Regional Office stakeholders for GTS and Technical Brief occurred on separate days

• *P. vivax* Technical Brief had no WHO antecedent construct, it needed inventing

• This approach and vision came from Rob Newman, then Director of GMP
WHO Technical Briefing on *P. vivax*: Rationale, Process, and Strategic Directions

Western Pacific Regional Consultation on the WHO Technical Briefing on *Plasmodium vivax* Control and Elimination
Manila, Philippines
9 June 2014
Rationale of *P. vivax* Technical Briefing

- A neglected and very significant burden of morbidity & mortality
- Conspicuous gaps in understanding & tools:
  - Pathogenesis
  - Diagnosis
  - Treatment
  - Vector Control
  - Epidemiology
- Much more difficult to prevent, diagnose, treat, and control relative to falciparum malaria
- WHO technical guidance has in past been focused on falciparum malaria, and the Pv technical brief aims to rectify that with specific practical technical advice to apply in combatting endemic vivax malaria
Malaria Policy Advisory Committee to the WHO: conclusions and recommendations of September 2012 meeting:

• A global strategy for \textit{P. vivax} malaria was urgently needed

• It should fall under the umbrella of the overall Global Technical Strategy for Malaria Control and Elimination, 2016–2025

• To be commissioned as a separate piece of work to ensure that it is fully developed

• Establishing a small steering committee to be convened before the end of 2012

• Hiring of a consultant to support the entire process
Progress

- Funding: Medicines for Malaria Venture (MMV)
- 1st steering committee meeting in Nov 2012
  - Kevin Baird, Chair.
  - Kamini Mendis, MPAC member, to help link *P.vivax* and GTS
- Writing Committee established
  - contribute to evidence reviews
  - review and/ or bring together information from
    - GMP databases
    - Thematic Reviews
    - Country Landscape Brief
  - help to draft *P.vivax* Technical Briefing
- Consultant hired: Chansuda Wongsrichanalai
- Writing Committee convened in May and Nov 2013
- Each Thematic Review section has been done
- 10 countries selected for Landscape Briefs (8 completed)
Steering Committee Composition

- **J. Kevin Baird - Chair**
  Eijkman Oxford Clinical Research Unit, Jakarta, Indonesia

- **Stephan Duparc**
  Medicines for Malaria Venture (MMV), Geneva, Switzerland

- **Patrick Kachur**
  US CDC, Atlanta, GA, USA

- **Ric Price**
  Menzies School of Health Research, Darwin, Australia

- **Nick White**
  The Wellcome Trust-Mahidol University-Oxford Tropical Medicine Research Programme, Bangkok, Thailand

- **Quique Bassat**
  Barcelona Centre for International Health Research (CRESIB), Barcelona, Spain

- **(Kamini Mendis, MPAC member, linking Pv Document to GTS)**
<table>
<thead>
<tr>
<th>Writing Committee Composition</th>
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<tbody>
<tr>
<td>J. Kevin Baird (SC)</td>
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<td>John W. Barnwell</td>
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<td>Quique Bassat (SC)</td>
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<td>Michael Bangs</td>
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<td>Andrea Bosman</td>
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<td>Brice Campo</td>
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<td>Richard Cibulskis</td>
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<td>A.C. Dhariwal</td>
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<td>Stephan Duparc (SC)</td>
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<td>Penny Grewal Daumerie</td>
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<td>Simon Hay</td>
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<td>D. Gray Heppner</td>
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<td>Jeff Hii</td>
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<td>Rosalind Howes</td>
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<td>Patrick Kachur (SC)</td>
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<td>Anatoly Kondrashin</td>
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<td>Rossitza Mintcheva</td>
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<td>Abraham Mnzava</td>
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<td>Kamini Mendis (MPAC)</td>
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<td>Ivo Mueller</td>
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<td>Piero Olliaro</td>
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<td>Jetsumon Prachumsri</td>
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<td>Ric Price (SC)</td>
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<td>Vaseeharan Sathiyamoorthy</td>
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<td>Erin Shutes</td>
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<td>Georges Snounou</td>
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<td>G. Dennis Shanks</td>
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<td>Neena Valecha</td>
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<td>Mar Velarde</td>
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<td>Michael White</td>
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<td>Nick J. White</td>
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<td>A.R. Wickremasinghe</td>
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<tr>
<td>Chansuda Wongsrichanalai</td>
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<tr>
<td>Shunmay Yeung</td>
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<td>Toby Leslie – Editor</td>
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Inputs and outputs

Steering Committee oversight

WMR Data
Country Landscape Briefs
Thematic Reviews

Regional consultations

P. vivax contributions to GTS
P. vivax Strategic Plan
Global Report on P. vivax

Technical Briefing
Thematic Reviews

• *P. vivax* biology

• *P. vivax* epidemiology

• Vector control considerations for *P. vivax*

• Diagnosis and treatment

• Surveillance and elimination

• Cost-effectiveness of interventions

• Research priorities
Country Landscape Briefs

- Summary of epidemiology, policies, programme coverage and trends in disease
Content of Landscape Briefs

• *P.vivax* epidemiology
  • Cases, admissions and deaths, distribution by age group, sex, occupation, etc.
  • Evidence of proportion of cases imported, recurred/relapsed
  • Parasite prevalence surveys, 2000-2012

• Vector control data

• Malaria control interventions (especially *P.vivax*-specific)
  • Policies, national/sub-national levels, plans, financing, vector control strategies
  • Diagnosis and treatment strategies and coverage 2000-2012

• G6PD deficiency and adverse primaquine reactions

• Drug resistance, 2000-2012

• Systems for surveillance, monitoring and evaluation 2000-2012

• Interpretation of distributional patterns and trends over time

• Reasons for changes in disease incidence/mortality

• Analysis of differences between what is planned and implemented

• Constraints to programme implementation

• Where policy/programme guidance from WHO is lacking
Objectives of *P. vivax* Technical Briefing

- Highlight key issues that need to be addressed if the *P. vivax* infection and disease is to be reduced and eliminated.
- Provide guidance on how to use the most appropriate tools for different settings to achieve specific goals.
- Provide practical advice to malaria programmes to reduce and eliminate *P. vivax*.
Strategic Directions in Technical Briefing

1. Surveillance and Response
   1.1 Improving Surveillance System
   1.2 Preventing Re-introduction

2. Preventing Cases and Reducing Transmission
   2.1 Vector Control
   2.2 Preventive Chemotherapy and Travellers

3. Case Management
   3.1 Diagnosis
   3.2 Treatment
      3.2.1 Radical Therapy
      3.2.2 Monitoring Drug Efficacy

4. Innovation and Research

5. Advocacy and Governance
Feedback Sought

For each element of the strategic directions:

1. Acceptable as is
2. Requires modification (indicate if regional specific)
3. Delete

• Relevant to Region?

• Requires addition (indicate if regional specific)
# Revised Timeline

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
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<tbody>
<tr>
<td>• Regional Consultations</td>
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<tr>
<td>1. PAHO (Panama City)</td>
<td>3 Apr 2014 (1-day)</td>
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<td>2. EMRO (Casablanca)</td>
<td>14 Apr 2014 (1/2 day)</td>
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<tr>
<td>3. SEARO (Delhi)</td>
<td>30 Apr 2014 (1 day)</td>
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<tr>
<td>4. WPRO (Manila)</td>
<td>9 Jun 2014 (1-day)</td>
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<td>5. EURO (Copenhagen)</td>
<td>16 Jun 2014 (a GTS session)</td>
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<tr>
<td>• Presenting to MPAC; finalizing the documents</td>
<td>Sep 2014</td>
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Overview of *P. vivax* Technical Briefing

- **Surveillance & Response**
  - Guarding against re-introduction to malaria-free receptive areas
  - Improving surveillance systems for vivax malaria
- **Prevention**
  - Appropriate vector control measures
  - Chemoprophylaxis & chemoprevention in high risk groups
- **Case Management**
  - G6PD testing & primaquine therapy
  - Universal access to a high quality diagnosis
  - Radical cure of blood and liver stages
  - Monitoring drug efficacy & safety
- **Innovation & Research**
- **Advocacy & Governance**