



**GLOBAL MALARIA
PROGRAMME**

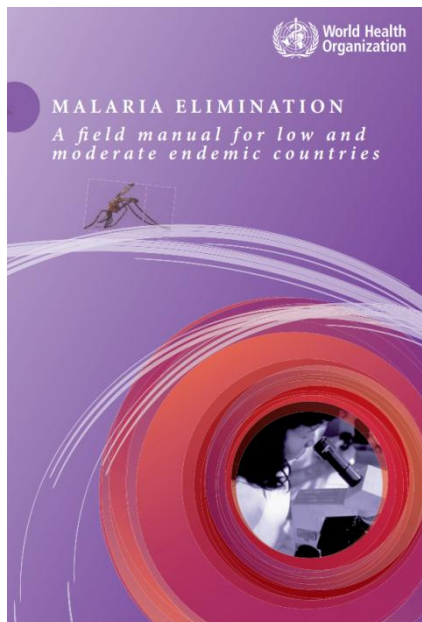


**World Health
Organization**

Guidance on malaria elimination in the context of the Global Technical Strategy for Malaria (2016-2030)

**Malaria Policy Advisory Committee
Geneva, Switzerland
16-18 September 2015**

Rationale for ERG on field manual for 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

2015–2016

Need to update the manual to reflect these changes

WHO malaria policy changes and reviews since 2007

Policy changes since 2007

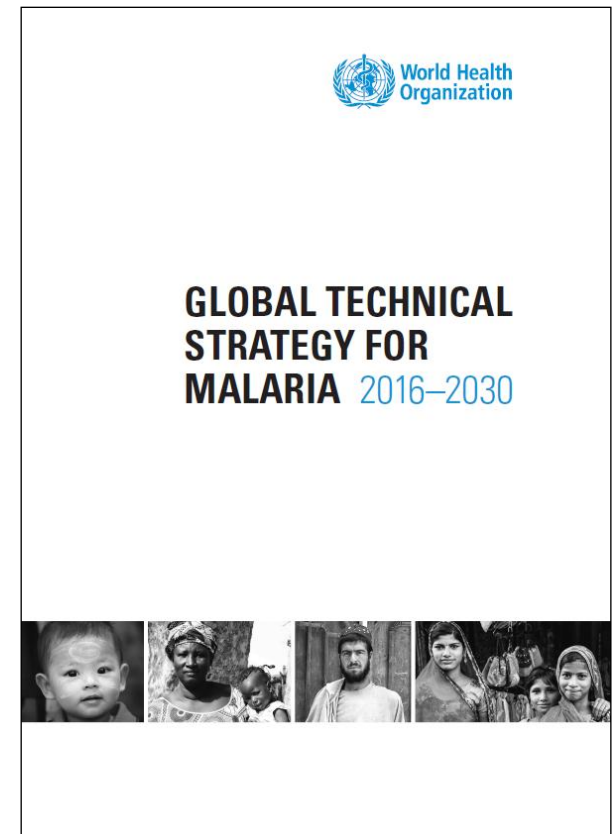
- Universal bednet coverage
- Universal testing
- Treatment with primaquine

Policies recently reviewed

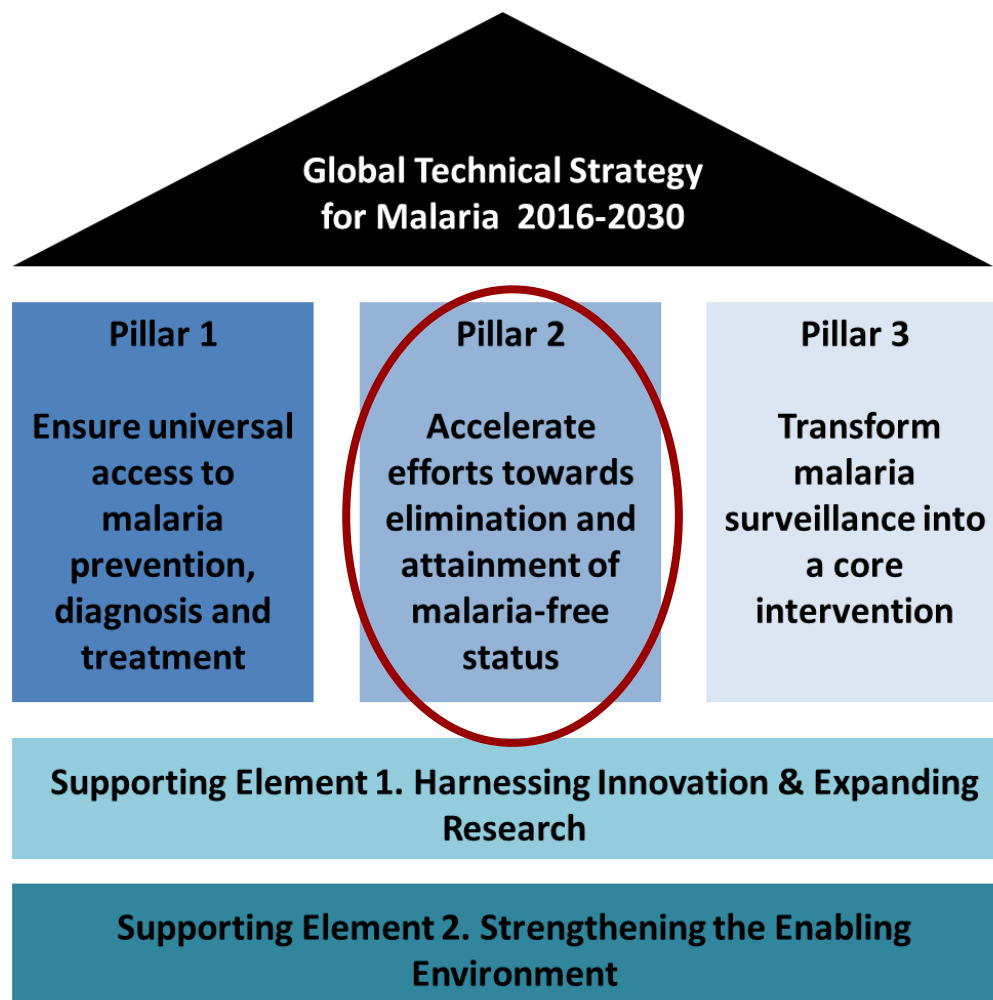
- Molecular testing methods
- Mass drug administration
- Malaria treatment guidelines
- *P. vivax* strategy

Global Technical Strategy for Malaria developed with five principles in mind

1. **All countries can accelerate** efforts towards elimination through combinations of interventions tailored to local contexts.
2. **Country ownership and leadership**, with involvement and participation of communities, are essential to accelerating progress through a multisectoral approach.
3. **Improved surveillance, monitoring and evaluation**, as well as **stratification** by malaria disease burden, are required to optimize the implementation of malaria interventions.
4. **Equity in access to services** especially for the most vulnerable and hard-to-reach populations is essential.
5. **Innovation in tools and implementation approaches** will enable countries to maximize their progression along the path to elimination.



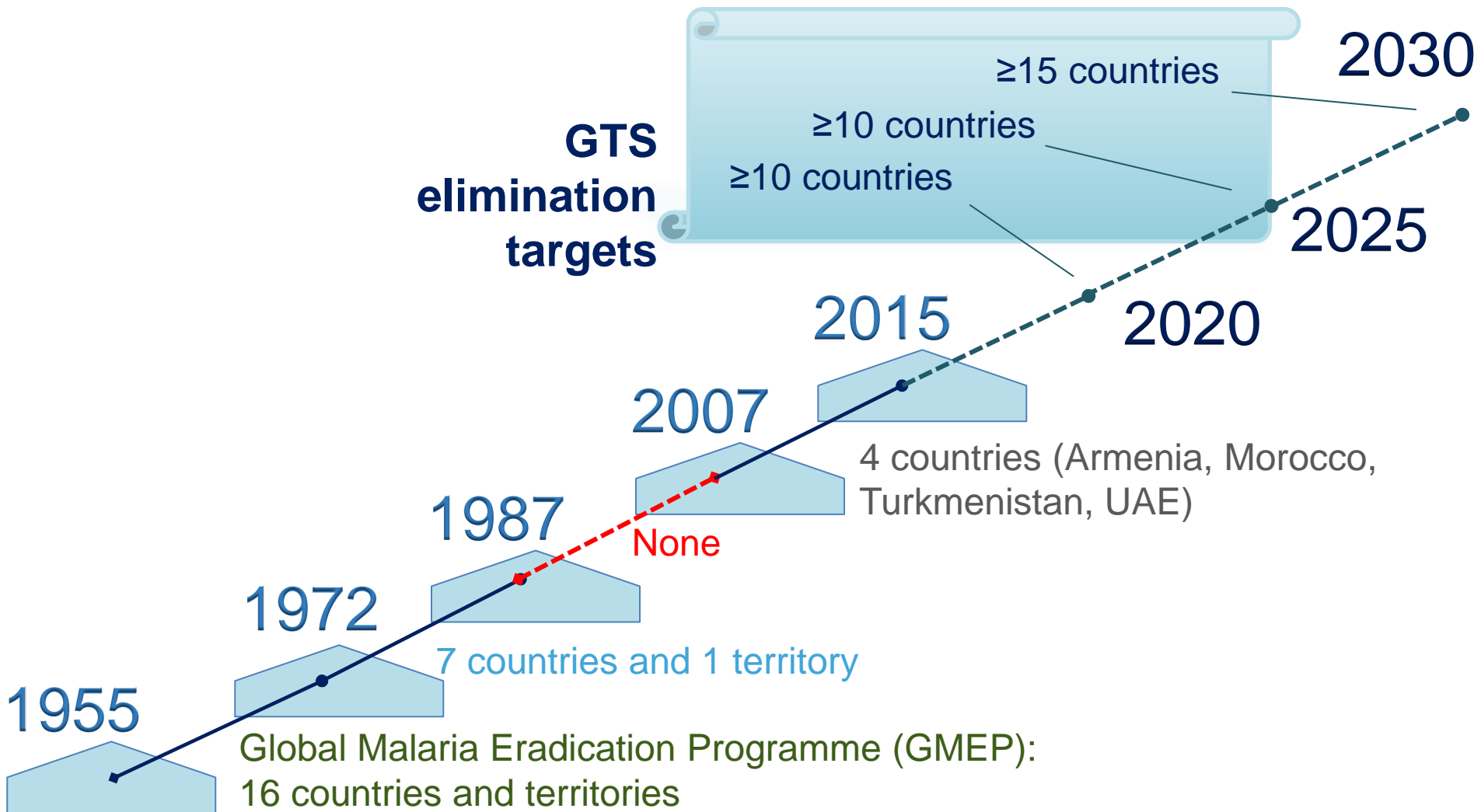
Malaria elimination reflected in GTS structure, pillars and supporting elements



Malaria elimination reflected in GTS vision, goals, milestones and targets

Vision: A world free of malaria			
Goals	Milestones		Targets
	2020	2025	2030
1. Reduce malaria mortality rates globally compared with 2015	≥40%	≥75%	≥90%
2. Reduce malaria case incidence globally compared with 2015	≥40%	≥75%	≥90%
3. Eliminate malaria from countries in which malaria was transmitted in 2015	At least 10 countries	At least 20 countries	At least 35 countries
4. Prevent re-establishment of malaria in all countries that are malaria-free	Re-establishment prevented	Re-establishment prevented	Re-establishment prevented

Number of countries certified malaria-free by WHO to 2015



Process and timelines for the development of new guidance on malaria elimination

Evidence Review Group (ERG) objective

- Update the Malaria Elimination guidance to cover all epidemiological settings, and provide comprehensive and relevant guidance in the new malaria landscape, in line with the mandate of the Global Technical Strategy for Malaria 2016-2030.



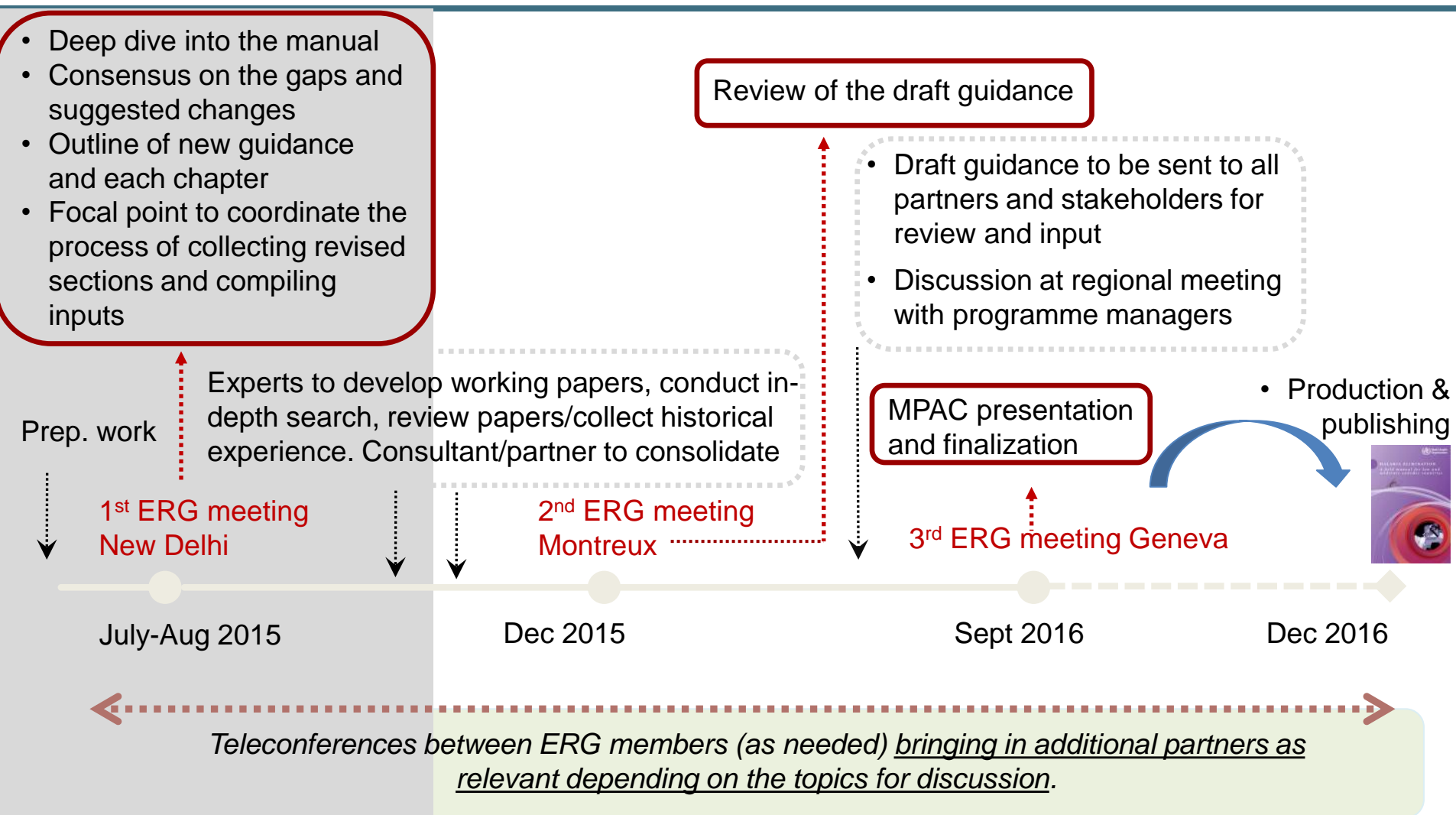
ERG establishment and membership, June-July 2015

- Results from a wide consultative process led by the GMP Director and the malaria advisors in the Americas and Eastern Mediterranean regions, with inputs from other coordinators and advisors in HQ/WHO regions
- **13 experts outside WHO:**
 - representing the wide range of malaria control/elimination stakeholders and all malaria-endemic regions, and covering key disciplines, expertise, and experience related to elimination of malaria and other vector-borne diseases at national and sub-national levels;
 - knowledgeable of critical areas of work relevant for the development of new elimination guidance are covered: malaria certification processes and key technical and intervention areas, namely epidemiology, entomology, vector control, drug/insecticide resistance and surveillance.

ERG members

- Dr Majed Al-Zadjali, Department of malaria, MoH, Oman
- Dr Graham Brown, Nossal Institute for Global Health
- Pr Tom Burkot, James Cook University
- Dr Justin Cohen, CHAI
- Dr Mikhail Ejov, independent consultant
- Dr Gao Qi, Jiangsu Institute of Parasitic Diseases
- Dr Rossitza Mintcheva-Kurdova, independent consultant
- Dr Bruno Moonen, Bill & Melinda Gates Foundation
- Dr Frank Richards, The Carter Center
- Pr Christophe Rogier, Pasteur Institute of Madagascar
- Dr Allan Schapira, independent consultant
- Pr Robert Snow, KEMRI Wellcome Trust Research Programme
- Dr Rick Steketee, PATH-MACEPA

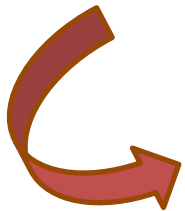
Process for development of new guidance (June 2015-Dec 2016)



Outcome of the 1st ERG meeting and work underway

Consensus points for new guidance under development

- **New title:** “Malaria elimination: An operational manual”
- **Audience:** all, but primarily National Malaria Control Programme managers
- **Scope of guidance:** 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.

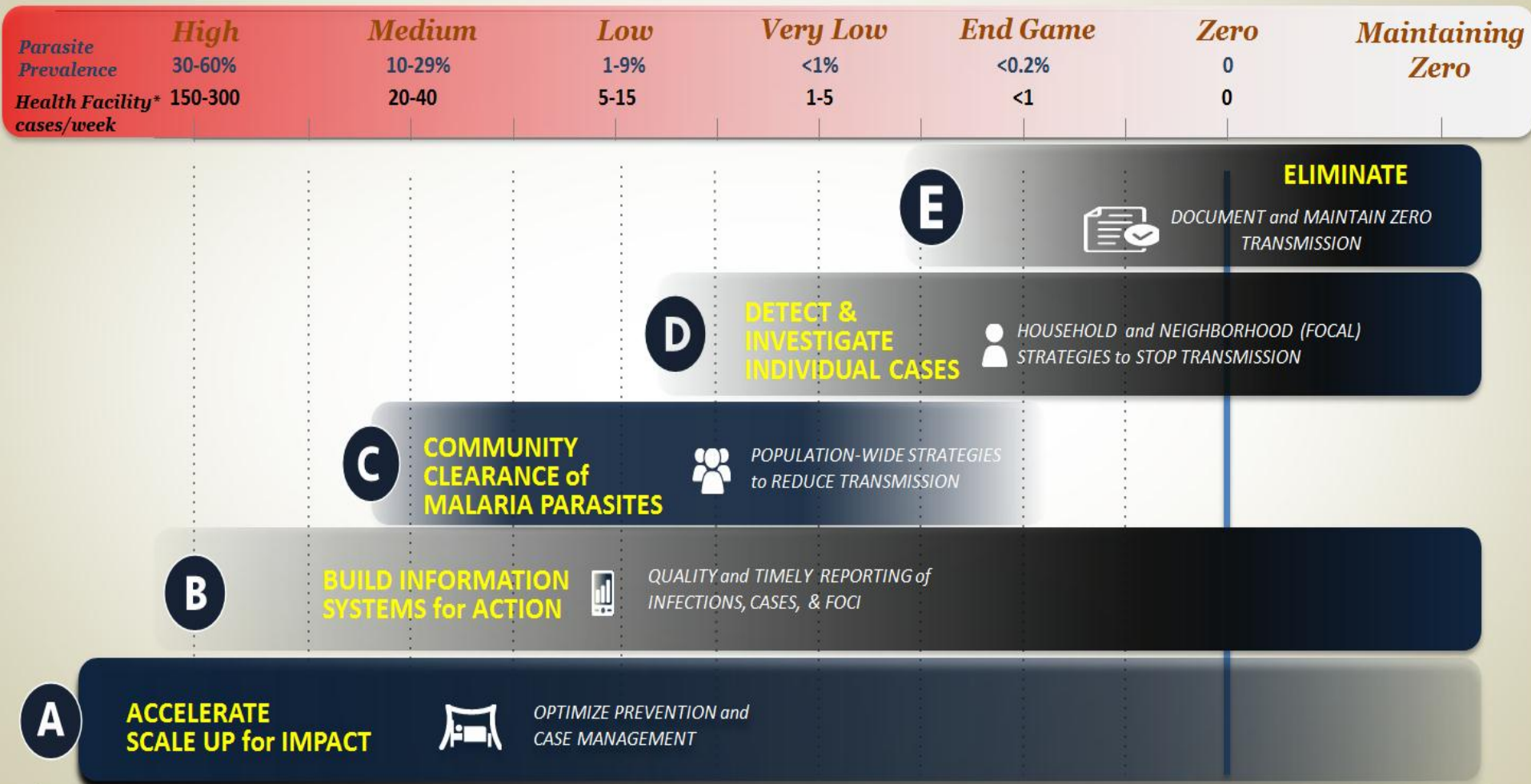


Previous Chapter 2 “Feasibility of malaria elimination” will be renamed (e.g. “Progression towards elimination”) to preclude the “Go/No Go” idea behind “Feasibility of...”

Steps of “progression towards malaria elimination” and link with GTS pillars and supporting element 2

Steps to Accelerate from Control to Elimination

Range of Transmission Intensity



Spectrum of interventions for “progression towards malaria elimination” depending on each transmission setting (R. Snow)

Scale Up For Impact (SUI)	Sustained control		Pre-Elimination Prevent rebound		Consolidation	Maintenance	
Holo-hyperendemic	Mesoendemic 1	Mesoendemic 2	Hypoendemic 1	Hypoendemic 2	Low Endemic Controlled Low Endemic	Unstable/ Residual foci	Malaria Free
	<u>IPTp</u>	<u>IPTp</u>	<u>IPTp</u> (Test & RX)	LLIN (CLE only)	ACD+PCD	ACD+PCD	ACD+PCD
	LLIN	LLIN	LLIN	IRS (hist. used in CLE)	<u>rACD+pACD</u> (MBS)	Prevention re-introduction	
	SMC (6m-5years)	SMC (6m-5years)	SMC (6m-10years)	MDA (with radical cure)	Hotspot mapping (drain infectious pools)	LC	
	IRS (where LLIN low)	IRS	IRS	LC	IRS (focal)	Regional Cooperation (dry up infection Source)	
		[LC]	MDA [LC]	[PCD + ACD]	MDA (with radical cure)		
					LC	Border Screening	

Malaria Diagnosis and treatment

New content for guidance on malaria elimination

- New chapter “Innovation and research for elimination” (*GTS supporting element 1. Harnessing innovation and expanding research*).
- New section on subnational elimination of malaria, referred to as Subnational **verification** of malaria elimination (country process) on the way to the WHO-led process of national certification.
- Special situations, lessons learnt from malaria elimination: examples and or boxes will be inserted where appropriate.
- Glossary to be aligned with the malaria elimination / eradication terminology work underway and led by Andrea Bosman (WHO) and Rick Steketee (MACEPA).

Outline of new guidance – sections currently under development or review (1)

- **Introduction:** history of malaria, elimination challenges; scope; audience; current status of elimination; regional & subregional initiatives; GTS continuum; alignment with GTS, *P. vivax* strategy, AIM.
- **Principles of malaria elimination:** from GTS principles; Steps/interventions of progression towards elimination; concept of subnational elimination; focus on multisectoral, cross-cutting issues/enabling elements.
- **Progression towards elimination:** planning and management; elimination scenario planning; milestones; subnational elimination; regulations required for elimination; border malaria, cross-border collaboration and migrant populations.
- **GTS supporting element 1:** Harnessing innovation and expanding research.
- **Approaches for achieving elimination:** expand on principles and link with GTS pillars (1-2-3) and Supporting element 2 required; quality of interventions.

Outline of new guidance – sections currently under development or review (2)

- **M&E progress towards malaria elimination:** monitoring framework for elimination with indicators; present metrics to be used along the continuum; measure to evaluate the strength of surveillance system, response capacity, etc.).
- **Prevention of the re-establishment of malaria transmission:** define and highlight importance of the risk of reintroduction, re-establishment of local transmission at subnational/national level, simplify the issue of receptivity and vulnerability; need for sustained strength of surveillance and response capacity; importance of policy/legislation, annual reporting, training people even when local transmission is interrupted; resurgence).
- **Subnational verification and national certification of malaria elimination:** emphasis on the need to sustain efforts when transmission is interrupted; reporting of subnational and national milestones thru WMR; subnational verification will encourage early documentation efforts for national certification; importance of capacity to prevent outbreaks.
- **Special situations:** lessons learnt from malaria elimination.
- **Glossary aligned with malaria elimination/eradication terminology work**

WHO Malaria Elimination Certification Panel

Certification of malaria eradication - History (1)

- 1960: the World Health Assembly (1960), requested the Director-General to establish an **official register** listing areas where malaria eradication has been achieved, after inspection and verification by a **WHO evaluation team**.
resolution WHA 13.55
- The guiding principles for WHO's certification procedures published in reports of the **WHO Expert Committees** on Malaria in **1960, 1963, 1973, 1980**.

Certification of malaria eradication – History (2)

- **1990s: certification no longer conducted.**
 - The annual updates of International Travel and Health, provide information on malaria risk areas in endemic countries, or its absence
- **2004:** certification of malaria elimination was re-initiated when the United Arab Emirates officially requested WHO to certify its achievement of malaria elimination.

Weekly epidemiological record, 18 July 2014, No. 29 , 321-336

<http://www.who.int/wer>

2014, 89, 321-336

No. 29



World Health
Organization

Organisation mondiale de la Santé

Weekly epidemiological record Relevé épidémiologique hebdomadaire

18 JULY 2014, 89th YEAR / 18 JUILLET 2014, 89^e ANNÉE

No. 29, 2014, 89, 321-336

<http://www.who.int/wer>

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WHO procedures for certification of malaria elimination

Malaria elimination is defined as the reduction to zero of the incidence of infection caused by human malaria parasites¹

Procédures de l'OMS pour la certification de l'élimination du paludisme

L'élimination du paludisme est définie comme la réduction à zéro, suite à des efforts délibérés, de l'incidence de l'infection causée par les

² Available at http://www.who.int/malaria/publications/world_malaria_report_2012/wmr2012_full_report.pdf; accessed June 2014.

³ Of note: sub-national validation of achievement of malaria elimination by the Ministry of Health may be an option in decentralized health systems. This process is independent of WHO.

General principles of WHO certification of malaria elimination

- Whole country
- 4 human malaria species - *Plasmodium falciparum*, *P. vivax*, *P. malariae* and *P. ovale*.
- Process managed by WHO (Global Malaria Programme + Regional Office)
- Independent expert assessment teams
- Final decision by WHO's Director-General
- Process initiated after official request from the country

Certification – Proof

The country requesting certification should provide the assessment team with proof that:

- malaria transmission has been interrupted in the country at a given time;
- good-quality surveillance systems are in place, capable of detecting any single case and responding to local transmission, if occurred;
- a programme of preventing re-establishment of transmission is in place.

Current process of certification

- **Official written request** for certification originated from the **MoH** of the Member State to the DGO, with copy to the respective WHO Country and Regional offices.
- **WHO mission**, to assess the chances of certification and if the claim is considered plausible, to prepare a plan of action for the certification procedures.
- The **country prepares the required documentation and a national report**.
- Inspection and evaluation are carried out by an **independent assessment team**, organized by WHO-GMP (review of documentation, field visits).
- The **assessment report** of the inspection team is reviewed by at least 5-10 members of the **WHO Expert Panel on Malaria**.
- The Chair of the most recent **Expert Committee** submits a recommendation to the **WHO Director-General** on whether or not to be certified.
- WHO publishes certification in the **Weekly Epidemiological Record** and announces it during the next World Health Assembly.

Proposal for updating the process of WHO Certification of Elimination

Why an update?

- Policy setting in WHO/GMP has changed.
- Malaria Policy Advisory Committee (MPAC) is the key decision-making body replacing the WHO Expert Committee.
- Global Technical Strategy for Malaria with a key pillar on malaria elimination.
- Suggestion: update certification of malaria elimination process.
- Objective: simplification and harmonization, to be within MPAC role.

Establishment of WHO Malaria Certification Elimination Panel (CEP)

Key roles

- Conduct country missions for country assessment/field observation
- Review the country documentations, validate the national certification report
- Prepare a final evaluation report for country certification with the recommendations, to be submitted to the WHO /MPAC

Elimination Certification Panel - Role and responsibilities (1)

Conduct country assessment/ evaluation missions: consider 2-3 identified members

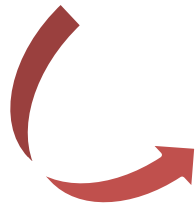
- Review submitted country documentation and report, discuss content, via video conference, teleconference or face-to-face meetings.
- Review, assess how proposed WHO procedures and criteria implemented to document elimination of malaria transmission. Includes evaluation of the performance of the surveillance system, quality case management etc.
- Verify data and information included in county documentation and report are accurate; includes field visits for validation and evaluation, especially to the latest active malaria foci.
- Review national guidelines and plan of action to ensure strategic technical components and guidelines are up-to-date.
- Collect and review other needed information from meetings with key stakeholders, published/unpublished documents, journal publications, etc.
- Assess the capacity of the Government to maintain the malaria-free status and prevent reestablishment of malaria transmission.
- Prepare evaluation report of the country certification mission and submit to WHO secretariat.

Elimination Certification Panel - Role and responsibilities (2)

- Final review and recommendation: all members of CEP review the evaluation report and agree on the recommendations on certification of malaria elimination or postponing such decisions with details on the extra evidence required to demonstrate that this has occurred.
- Report to WHO/MPAC: the key findings in the evaluation report, with the recommendations for decision-making
- Upon approval by WHO/MPAC, the summary will be forwarded to the Director-General of WHO.
- If the claim of elimination is postponed, WHO will request the country to provide any further evidence needed to certification.

Composition of the Malaria Certification Elimination Panel CEP

- Members appointed by DG, in consultation with relevant WHO/Regional Offices
- The appointment for at least 3 years, with possibility of renewal,
- The composition may include up to 8 members and formal chairperson
- Members should have knowledge and skills on elimination of malaria, with at least one of them is as entomologist
(may cover various fields, such as tropical medicine, laboratory science, epidemiology, vector biology/control, information system, other public health specialists).
- Should provide independent opinion and have no conflict of interest
- Those going for assessment/evaluation mission should not be citizen of the applicant country, should not have provided recent support to the country in reviewing its malaria programme, not involved in developing the country certification report



Members yet to be nominated

MPAC (Sept 2013)

- Documentation of certification of elimination refers to the whole country while verification/or validation of malaria elimination can be in an area inside the country and is **national responsibility**.
- National verification committee can be established