

Malaria Policy Advisory Committee (MPAC) Meeting , 10–12 April 2019

Documentation related to Sessions 1 and 2

Wednesday, 10 April 2019			
	Session 1	Open	For information
09:00 – 09:10	Welcome by the WHO Chief Scientist	Dr Soumya Swaminathan	
09:10 – 09:30	Introduction by the Chair, MPAC	Dr Dyann Wirth	
09:30 – 10:30	Report from the Director, GMP	Dr Pedro Alonso	
10:30 – 11:00	Coffee break		
	Session 2	Open	For guidance
11:00 – 13:00	Update on the high burden to high impact approach	Dr Alastair Robb Dr Abdisalan Noor Dr Maru Weldedawit Dr Abdourahmane Diallo, RBM Dr Neeraj Dhingra, India Dr Jimmy Opigo, Uganda Dr Eric Mukomena Sompwe, DRC	

Report from the Global Malaria Programme

Malaria Policy Advisory Committee
Geneva, Switzerland

Pedro L. Alonso
10 April 2019

Global **Malaria** Programme



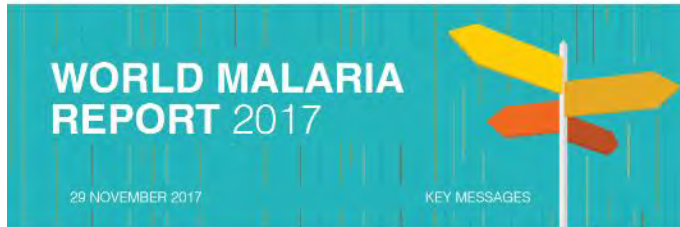
World Health
Organization

The Global Targets

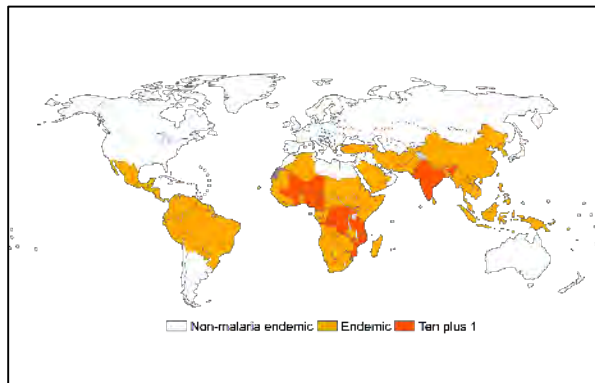


Vision: A world free of malaria			
Goals	Milestones		Targets
	2020	2025	2030
1. Reduce malaria mortality rates globally compared with 2015	≥40%	≥75%	≥90%
2. Reduce malaria case incidence globally compared with 2015	≥40%	≥75%	≥90%
3. Eliminate malaria from countries in which malaria was transmitted in 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

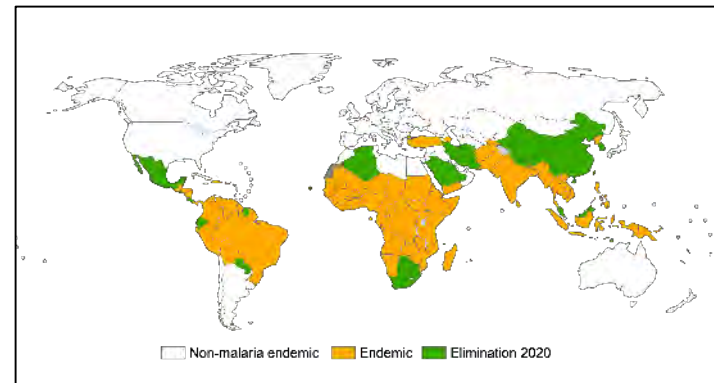
The world increasingly divided into 2 distinct groups



High burden countries

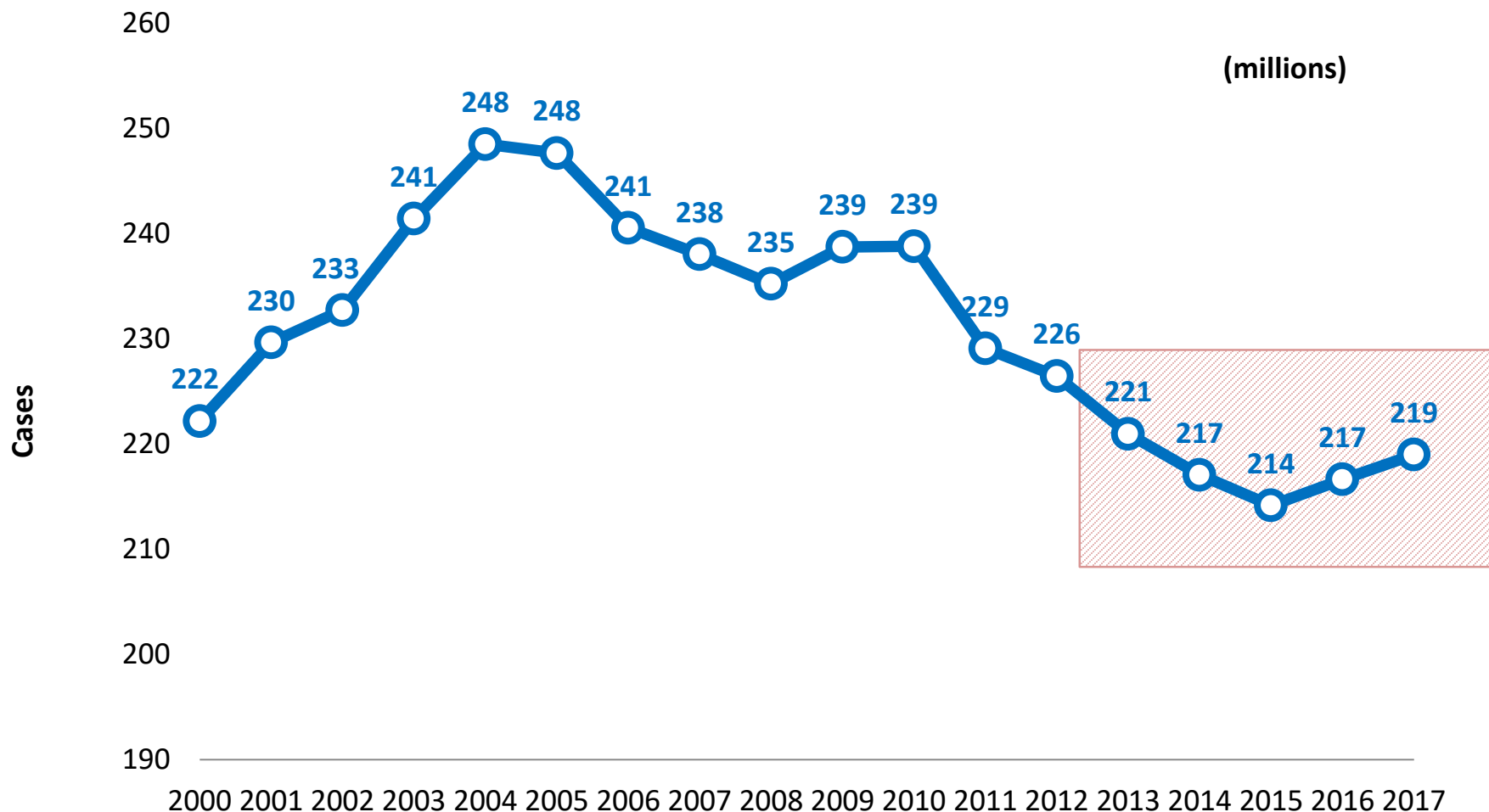


Countries close to elimination

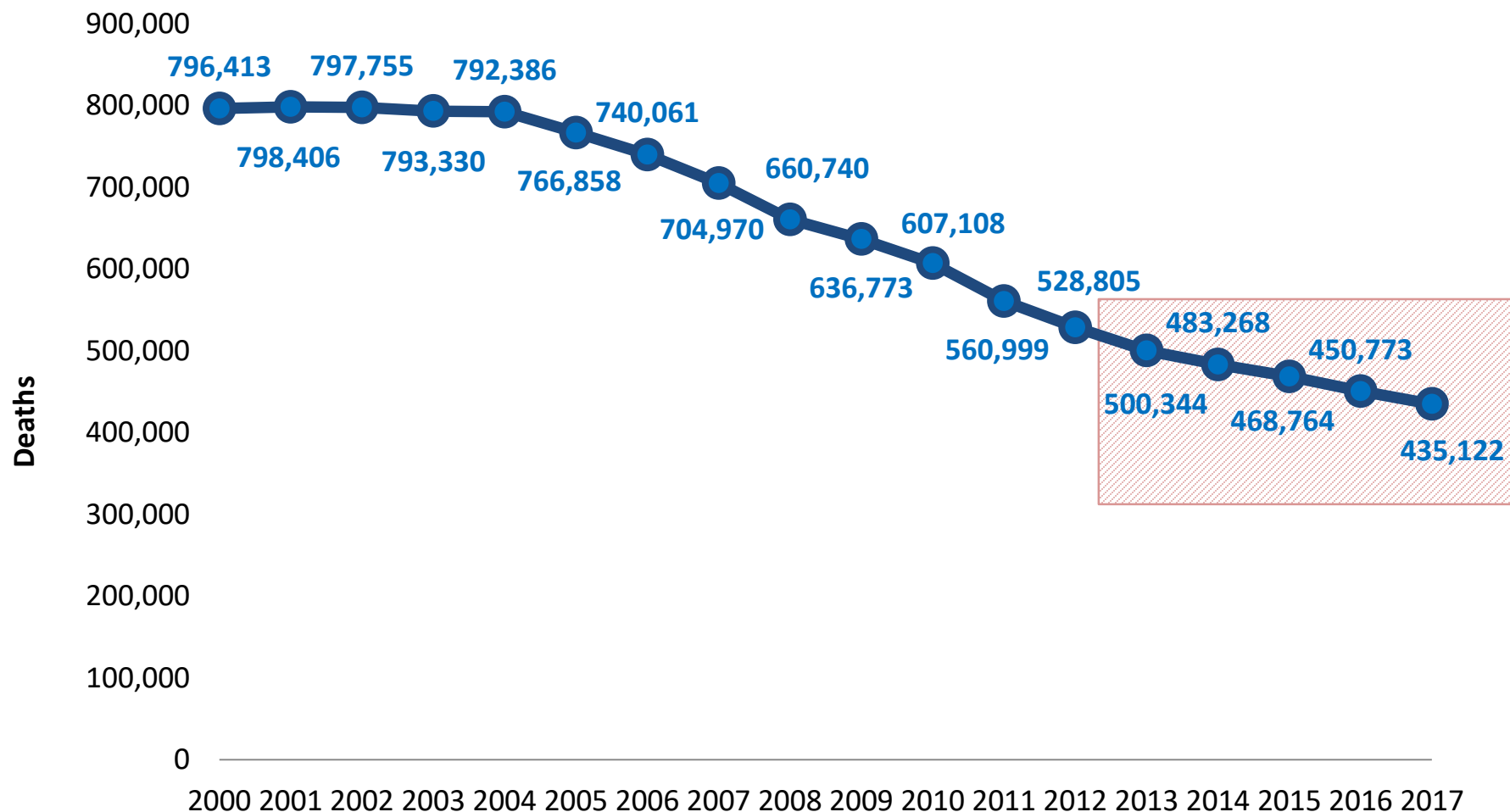


We are likely to meet the GTS 2020 elimination targets but **not** the morbidity and mortality targets

Number of malaria cases worldwide, 2000–17



Number of malaria deaths worldwide, 2000–17



Malaria cases by WHO Region, 2017

Estimated malaria cases by WHO region, 2017 Estimated cases are shown with 95% upper and lower CI. *Source: WHO estimates.*

	Number of cases (000)					
	African	Americas	Eastern Mediterranean	South-East Asia	Western Pacific	World
Lower 95% CI	184 500	880	3 630	8 560	1 395	202 800
Estimated total	200 500	976	4 410	11 290	1 857	219 000
Upper 95% CI	243 600	1 128	5 560	14 840	2 399	262 000

Estimated *P. vivax*

Lower 95% CI	19	648	1 162	2 881	330	5 720
Estimated total	701	723	1 366	4 200	523	7 510
Upper 95% CI	2 197	843	1 773	5 900	774	9 900
Proportion of <i>P. vivax</i> cases	0.3%	74.1%	31.0%	37.2%	28.1%	3.4%

CI: confidence interval; *P. vivax*: *Plasmodium vivax*; WHO: World Health Organization.

Malaria deaths globally and by WHO region, 2010–17

TABLE 6.3.

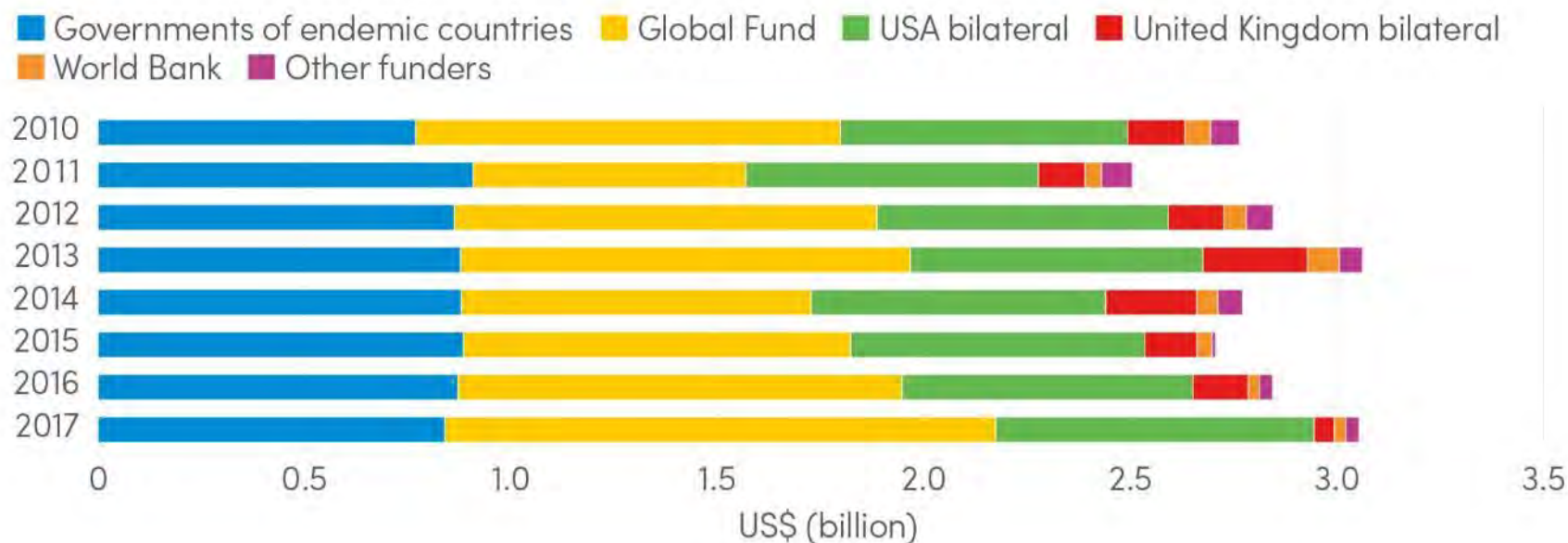
Estimated number of malaria deaths by WHO region, 2010–2017 *Source: WHO estimates.*

	Number of deaths							
	2010	2011	2012	2013	2014	2015	2016	2017
African	555 000	517 000	489 000	467 000	446 000	432 000	413 000	403 000
Americas	480	450	400	400	300	320	460	630
Eastern Mediterranean	8 070	7 280	7 340	6 750	8 520	8 660	8 160	8 300
European	0	0	0	0	0	0	0	0
South-East Asia	39 800	32 800	28 400	21 800	24 100	25 200	25 600	19 700
Western Pacific	3 770	3 340	3 850	4 600	4 420	2 860	3 510	3 620
World	607 000	561 000	529 000	500 000	483 000	469 000	451 000	435 000
World (children aged under 5 years)	444 600	405 000	371 000	344 000	322 000	302 000	283 000	266 000

WHO: World Health Organization.

Funding for malaria by channel (US\$), 2010–17

Funding for malaria control and elimination 2010–2017, by channel (constant 2017 US\$) Sources: ForeignAssistance.gov, United Kingdom Department for International Development, Global Fund, NMP reports, OECD creditor reporting system database, the World Bank Data Bank and WHO estimates.

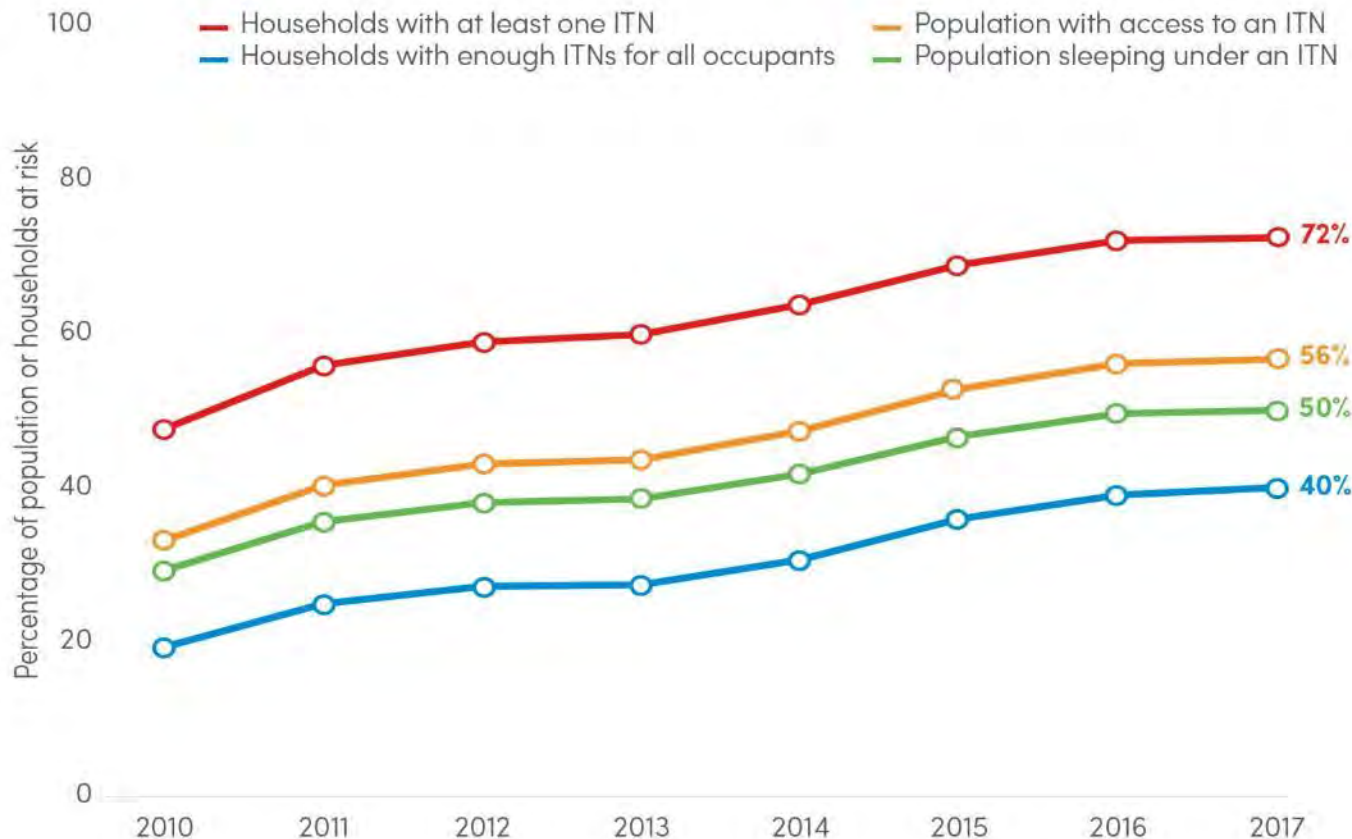


NMP: national malaria programme; OECD: Organisation for Economic Co-operation and Development; USA: United States of America; WHO: World Health Organization.

US\$ 3.1 billion invested in 2017 | US\$ 6.6 billion needed by 2020 to reach the GTS targets

ITN ownership and coverage (Sub-Saharan Africa), 2010–17

Percentage of population at risk with access to an ITN and sleeping under an ITN, and percentage of households with at least one ITN and enough ITNs for all occupants, sub-Saharan Africa, 2010–2017 *Source: ITN coverage model from MAP.^a*

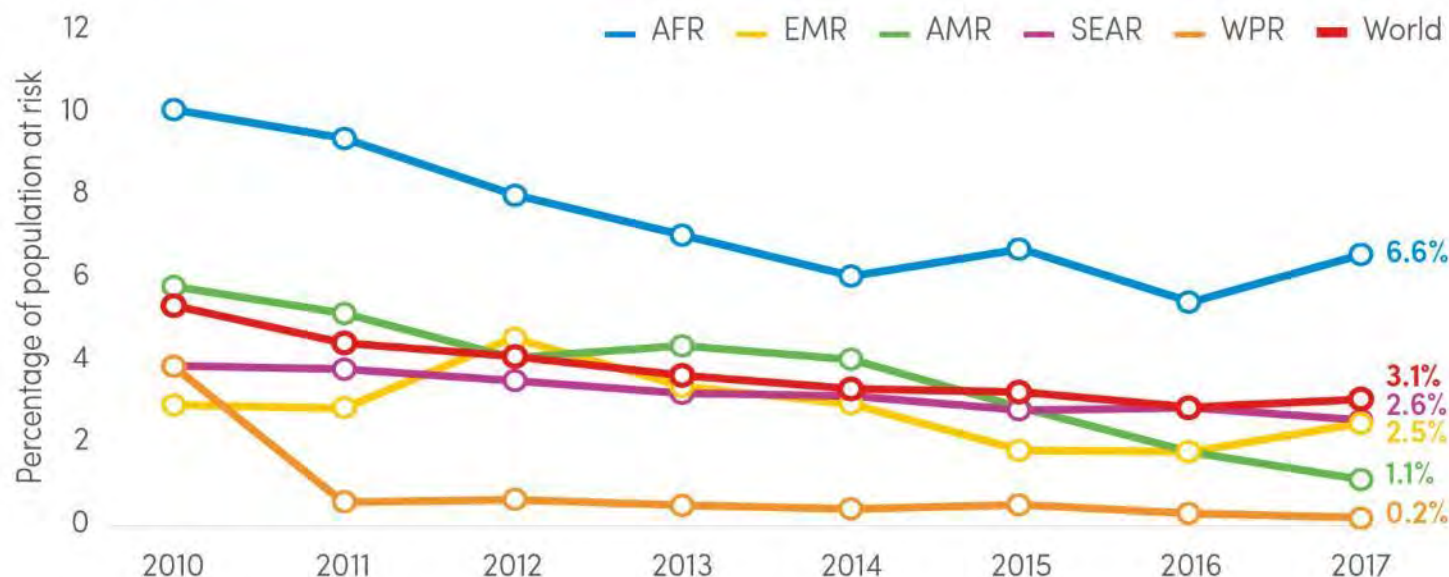


ITN: insecticide-treated mosquito net; MAP: Malaria Atlas Project.

^a <http://www.map.ox.ac.uk/>

Population protected by IRS, 2010–17

Percentage of the population at risk protected by IRS by WHO region, 2010–2017 *Source: NMP reports.*



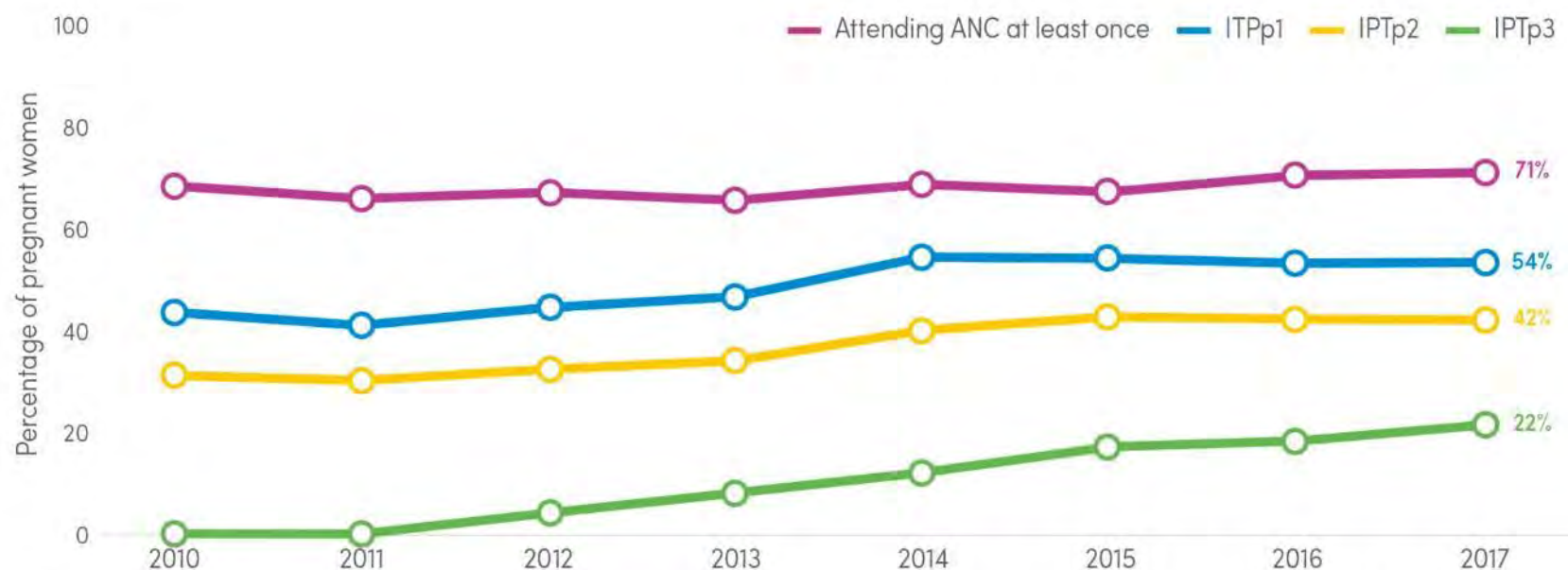
AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; IRS: indoor residual spraying; NMP: national malaria programme; SEAR: WHO South-East Asia Region; WHO: World Health Organization; WPR: WHO Western Pacific Region.

In the WHO African Region, the percentage of the population at risk protected by IRS declined from 10.1% (80 million) in 2010 to a low of 5.4% (51 million) in 2016, before rising to 6.6% (64 million) in 2017

Pregnant women protected by IPTp (Sub-Saharan Africa), 2010–17

FIG. 3.5.

Percentage of pregnant women attending ANC at least once and receiving IPTp, by dose, sub-Saharan Africa, 2010–2017 Source: NMP reports, WHO and US Centers for Disease Control and Prevention (CDC) estimates.

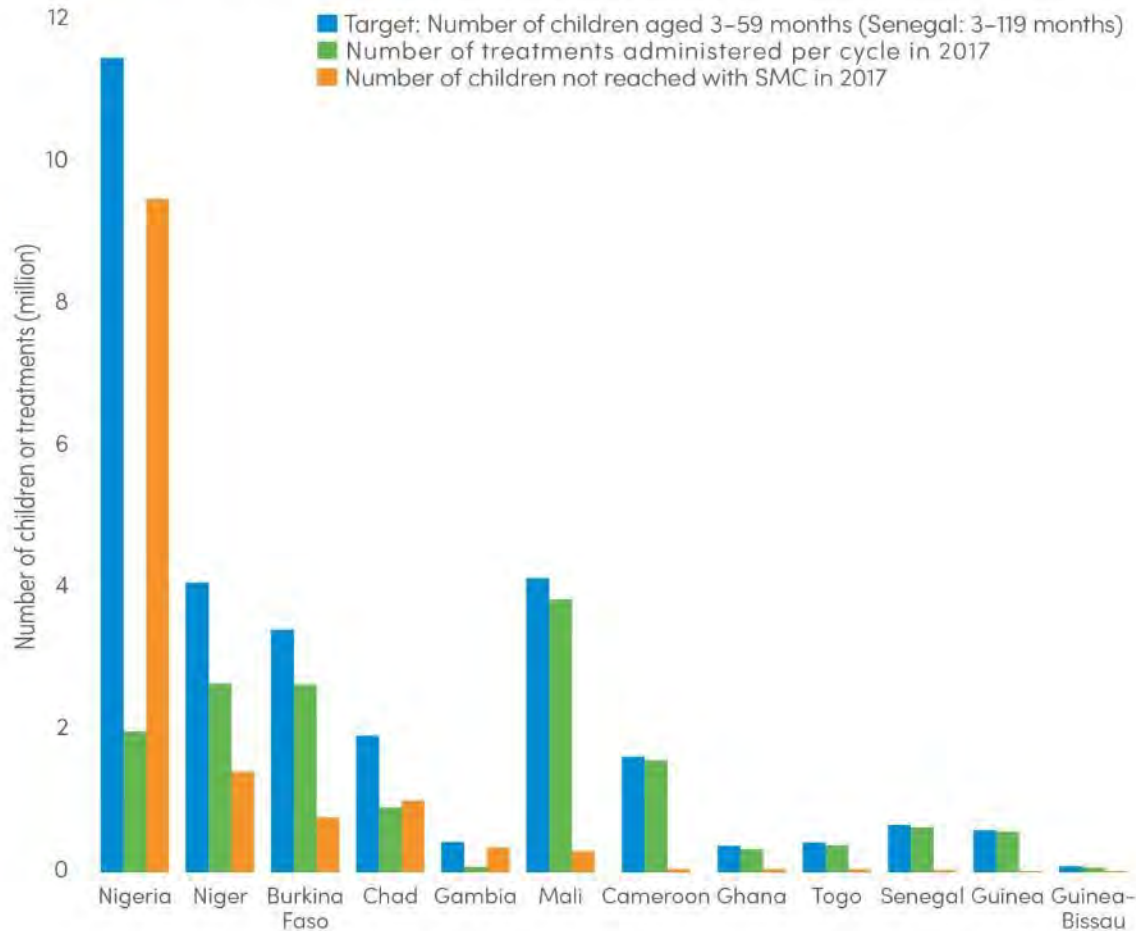


ANC: antenatal care; IPTp: intermittent preventive treatment in pregnancy; NMP: national malaria programme; WHO: World Health Organization.

Data received from 35 countries for IPTp1 and 2, and from 33 countries for IPTp3

Children protected by SMC in the Sahel, 2017

Number of SMC target children and treatments administered in SMC implementation countries in 2017 *Source: London School of Hygiene & Tropical Medicine.*

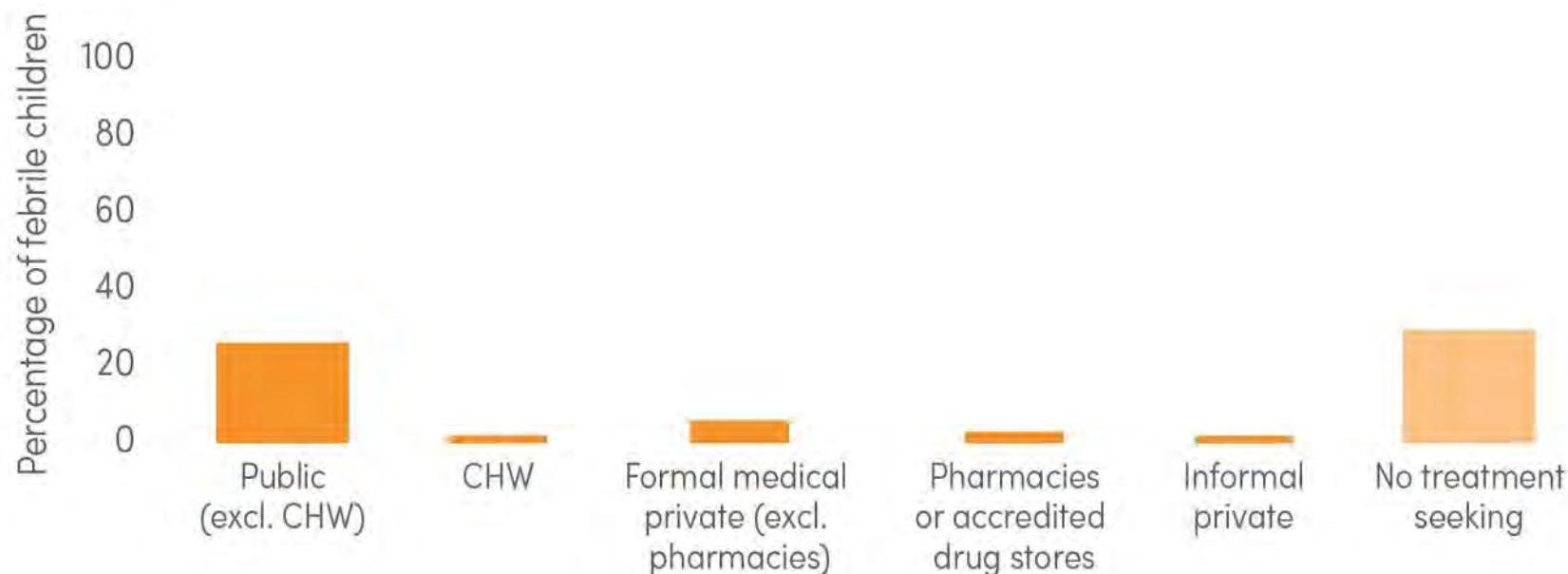


- 15 million children treated in 2017; of these, 53% received the recommended 4 doses
- **13.6 million children yet to be reached**

SMC: seasonal malaria chemoprevention.

Treatment seeking for fevers in children (Sub-Saharan Africa), 2015–17

Median percentage of febrile children by treatment seeking behaviour, sub-Saharan Africa, 2015–2017^{a,b} Sources: Nationally representative household survey data from DHS and MIS.



CHW: community health worker; DHS: demographic and health survey; MIS: malaria indicator survey.

^a Respondents can select more than one source of care for one episode of fever.


^b CHW data are based on 13 countries: Burundi, Chad, Ghana, Liberia, Madagascar, Malawi, Mali, Mozambique, Nigeria, Rwanda, Senegal, Togo and Uganda.

World Health Organization English ?

Malaria Threats Map

Tracking biological challenges to malaria control and elimination

VECTOR INSECTICIDE RESISTANCE




Resistance of malaria mosquitoes to insecticides used in core prevention tools of treated bed nets and indoor residual sprays threatens vector control effectiveness

[Go to Threat Map](#)

[Read more](#)

PARASITE GENE DELETIONS




Gene deletions among some malaria parasites cause false negative diagnostic test results, complicating case management and control

[Go to Threat Map](#)

[Read more](#)

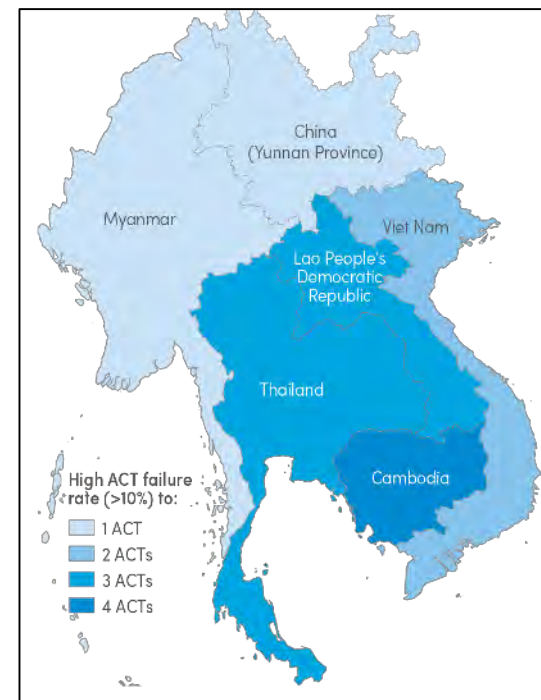
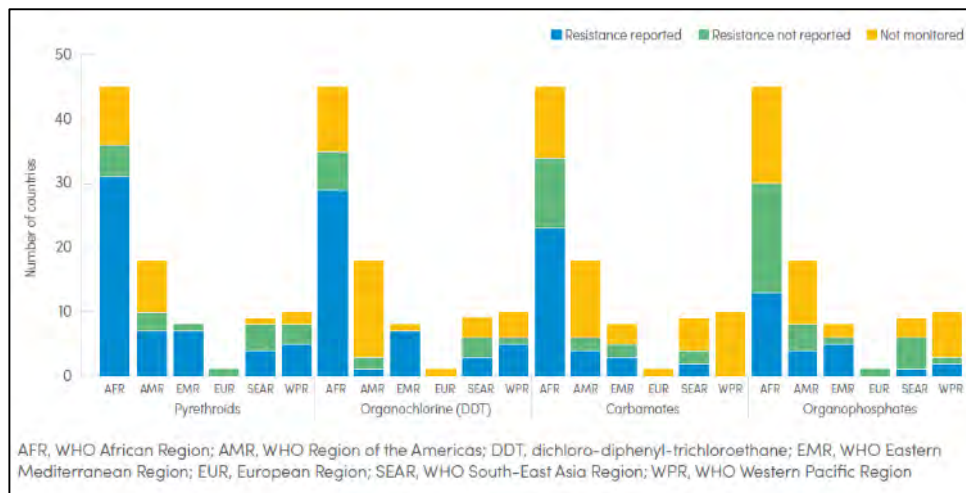
PARASITE DRUG RESISTANCE



Resistance of malaria parasites to artemisinin – the core compound of the best available antimalarial medicines – threatens antimalarial drug efficacy

[Go to Threat Map](#)

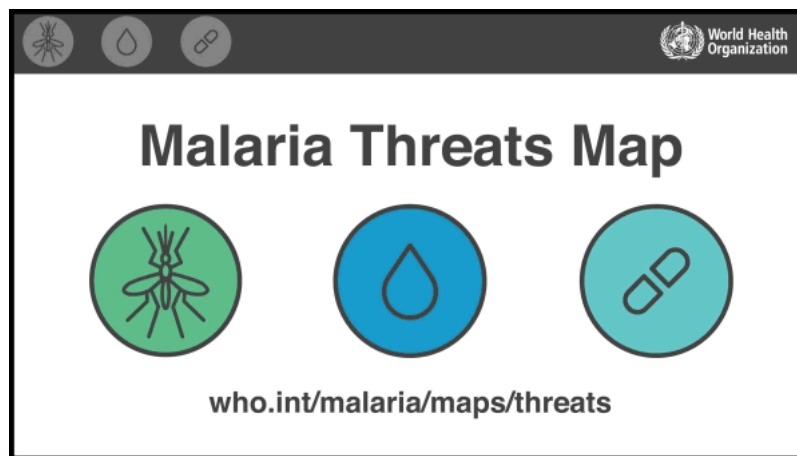
[Read more](#)



Progress and Achievements

Malaria Threats Map

- Online mapping platform that harmonizes the display of data for:
 - *Anopheles spp.* malaria vector insecticide resistance
 - *P. falciparum* hrp2/3 gene deletions
 - *P. falciparum* and *P. vivax* antimalarial drug efficacy and drug resistance
- 13,350 unique visitors this year; average 2000 visits per month

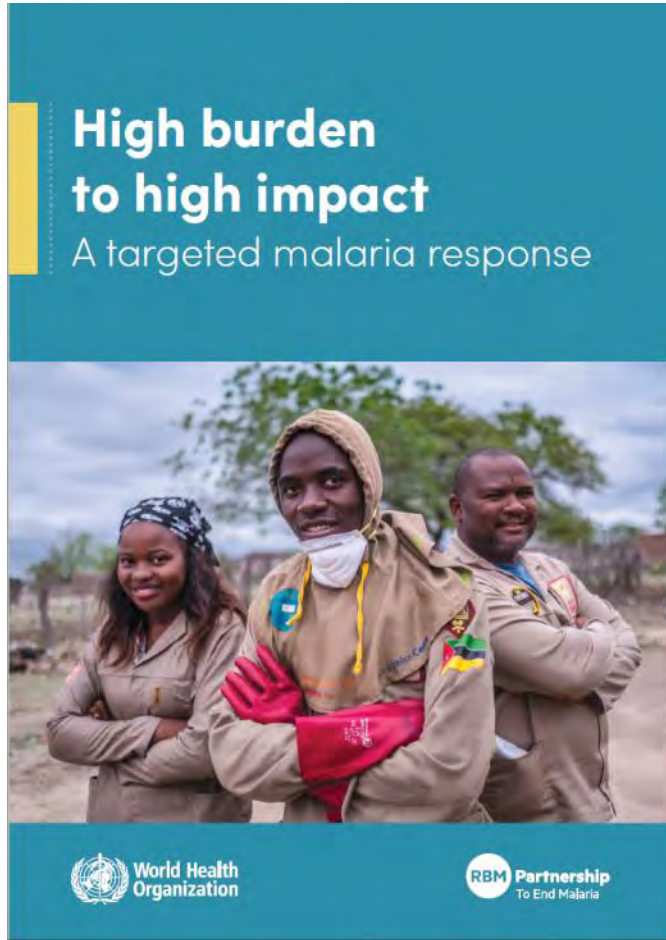


World malaria report app

Download the app for an interactive experience with the report's country data:
[App Store \(iOS devices\)](#) | [Google Play \(Android devices\)](#)



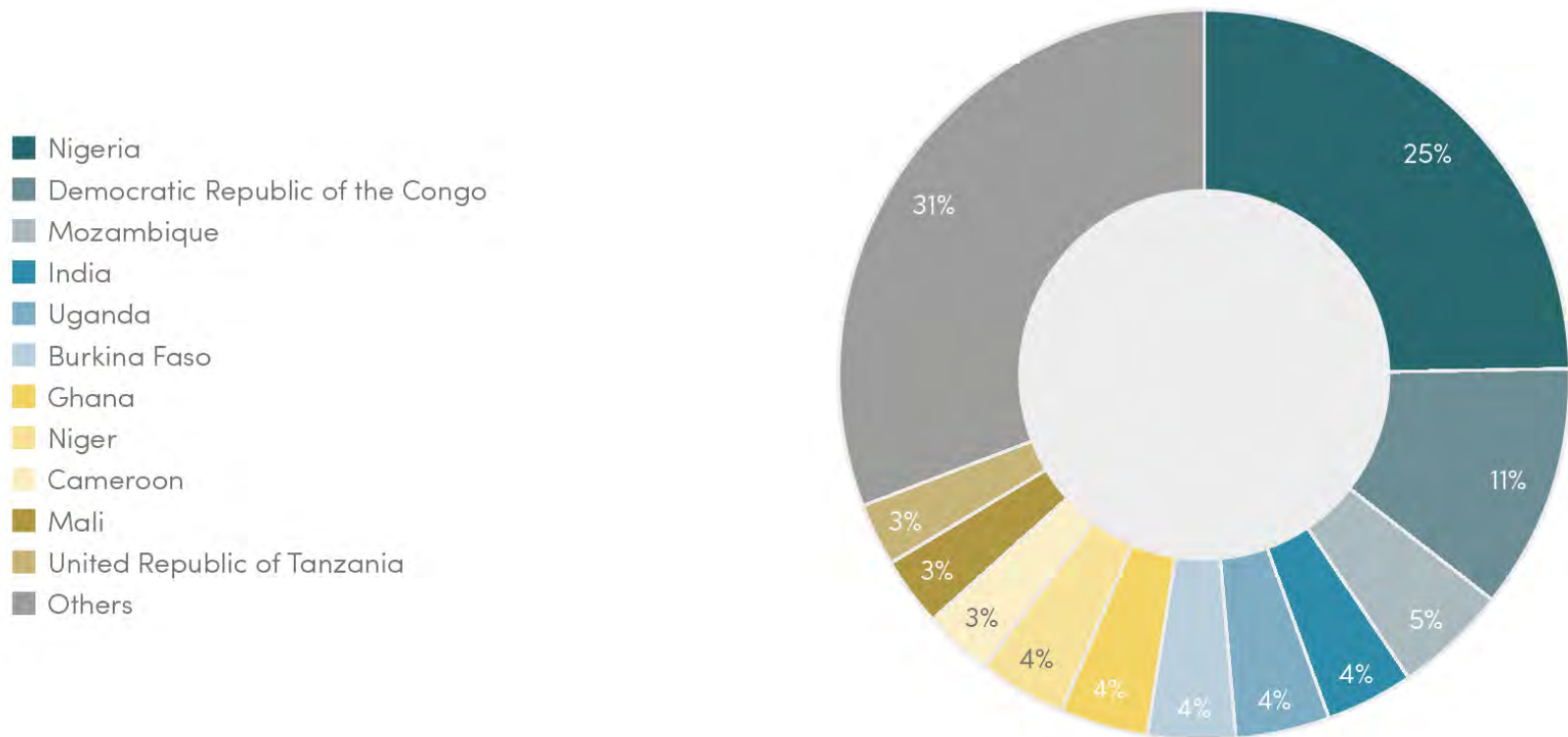
Getting back on track



- New response launched by WHO and RBM Partnership at high-level event in Maputo (Nov 2018)
- Initial focus on the 10 + 1 highest burden countries
- Lessons learned will be applied to other countries with a high burden of malaria

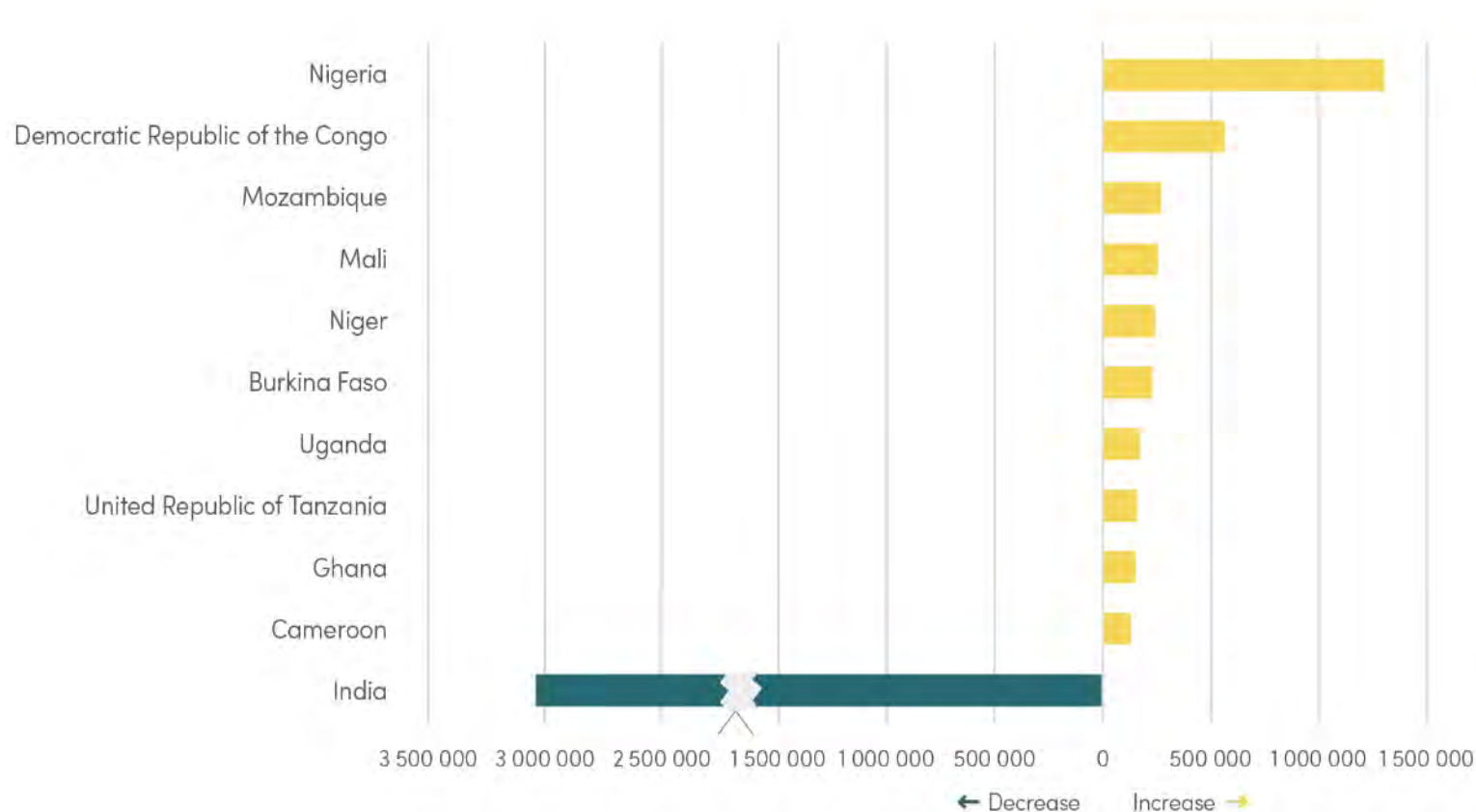
11 countries account > 70% of the global malaria burden

Estimated country share of total malaria cases in the 11 highest burden countries, 2017



Of the 11 highest burden countries, only India achieved a reduction in malaria cases

Estimated reduction (green) or increase (yellow) of more than 100 000 malaria cases in the 11 highest burden countries between 2016 and 2017



Malaria on the rise in 10 highest burden African countries

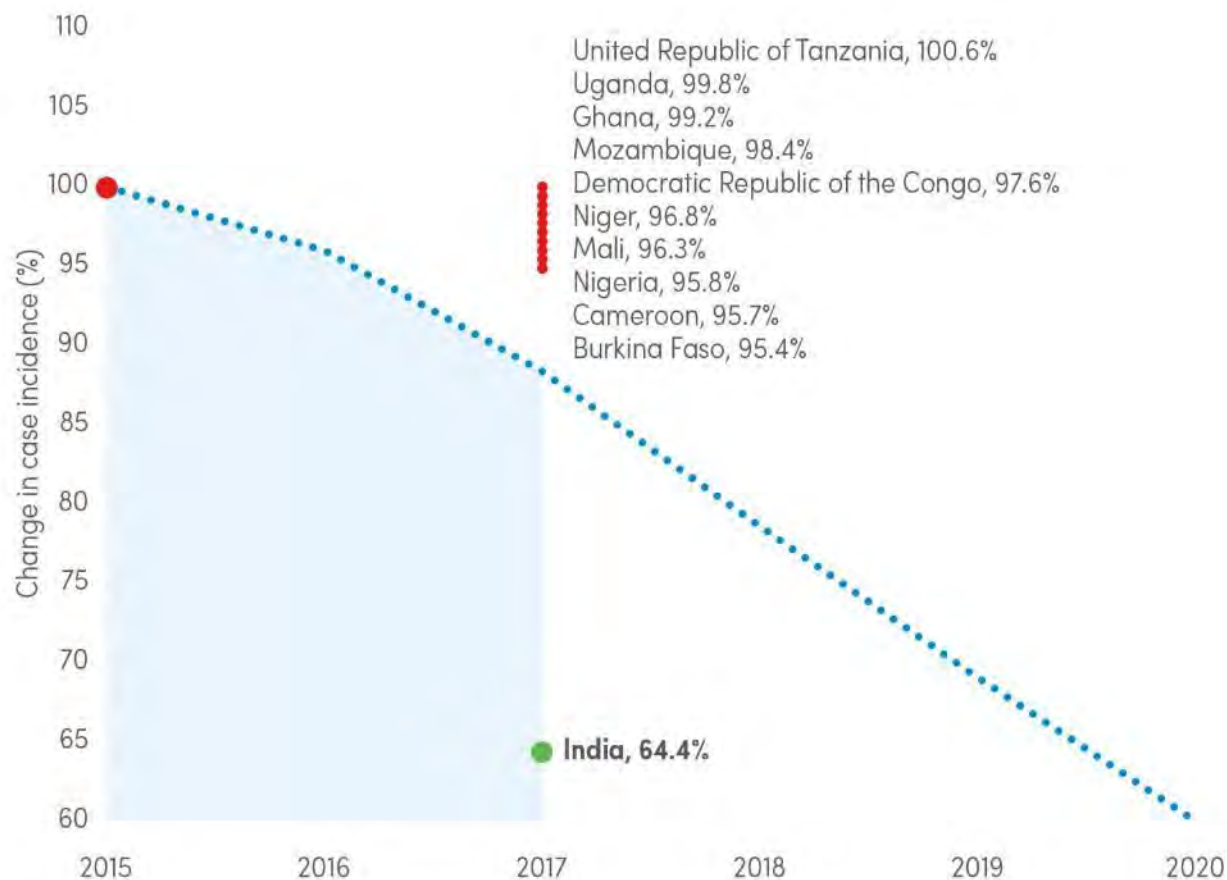
Malaria cases in the 10 highest burden countries in Africa, 2010–2017



An estimated **3.5 more malaria cases** in the 10 highest burden countries in 2017 compared to the previous year

Progress towards 2020 GTS milestones in 11 highest burden countries

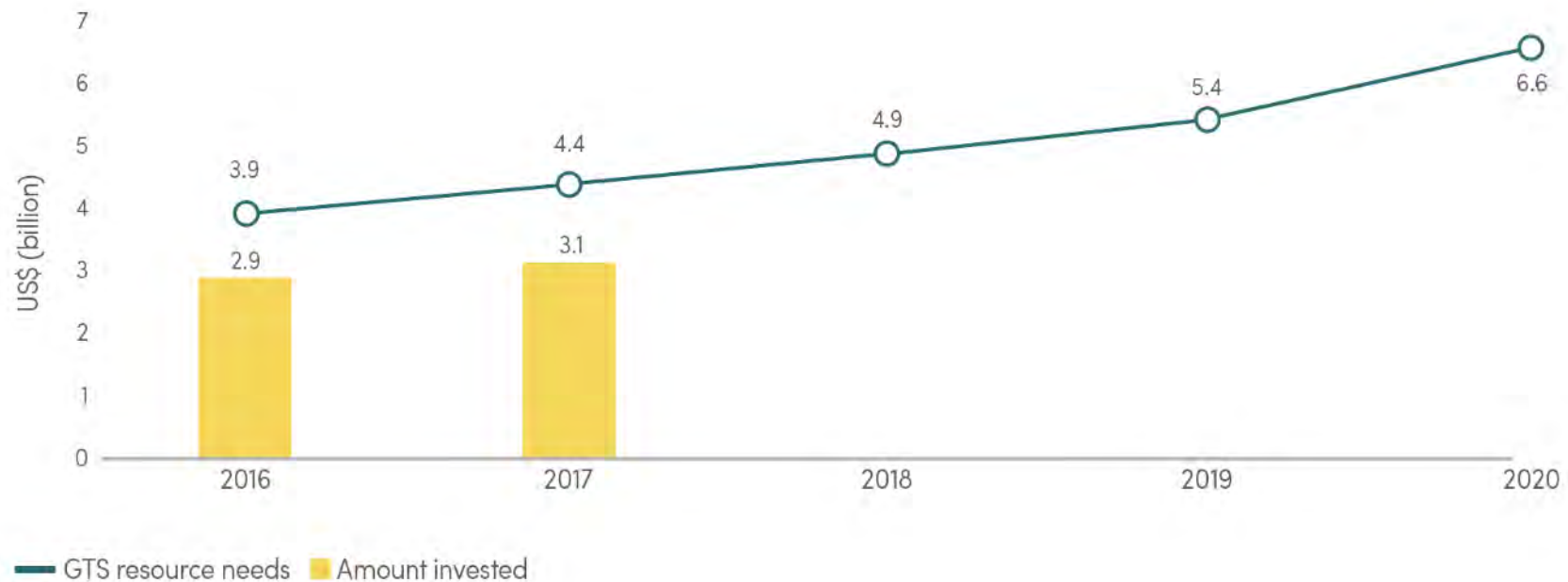
Expected change in malaria case incidence if on target to meet GTS milestones for 2020 versus estimated change in case incidence between 2015 and 2017 *Source: WHO estimates.*



GTS: Global technical strategy for malaria 2016–2030; WHO: World Health Organization.

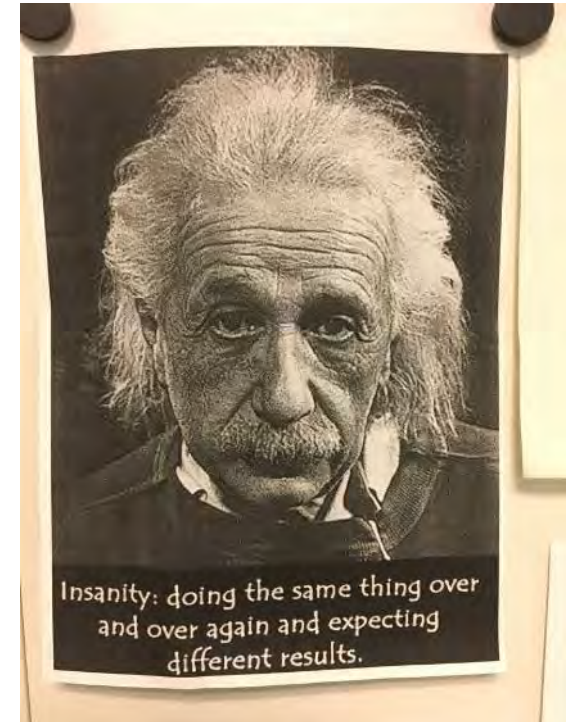
Funding levels fall far below estimated needs

GTS investment targets for the period 2016–2020 and estimated levels of investment in 2016 and 2017



How to respond to the challenge ?

- No new transformative tools to reach the field in the next 5 years
- Population growth
- Likely worsening of biological threats
- *Status quo* is not an option



A problem to be solved, not simply a task to be performed

An urgent and credible response

Four key mutually reinforcing response elements

**Best global
guidance**



**Political
commitment**



Impact

**Strategic
use of
information**



**Coordinated
response**

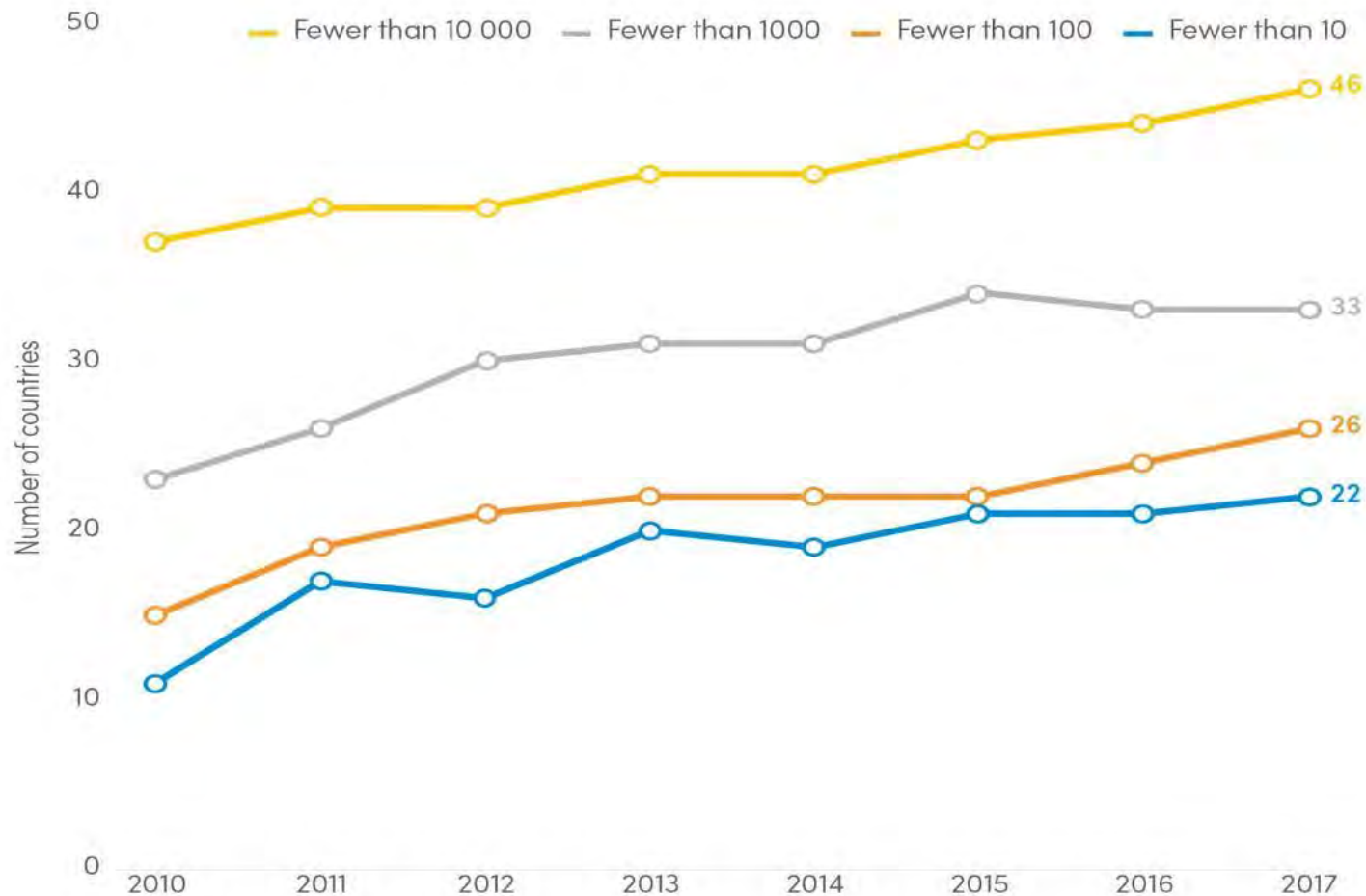


Guiding principles

1. Country-owned, country-led, and aligned with the GTS, the health-related Sustainable Development Goals (SDGs), national health goals, strategies and priorities;
2. Focused on high-burden settings;
3. Able to demonstrate an impact, with an aggressive approach to reducing mortality while ensuring progress is on track to reach the GTS targets for reducing malaria cases.
4. Characterized by packages of malaria interventions, optimally delivered through appropriate channels, including a strong foundation of primary health care.

Progress towards elimination (2010-2017)

Number of countries that were malaria endemic in 2000 with fewer than 10, 100, 1000 and 10 000 indigenous malaria cases in 2010 and 2017 *Source: NMP reports.*



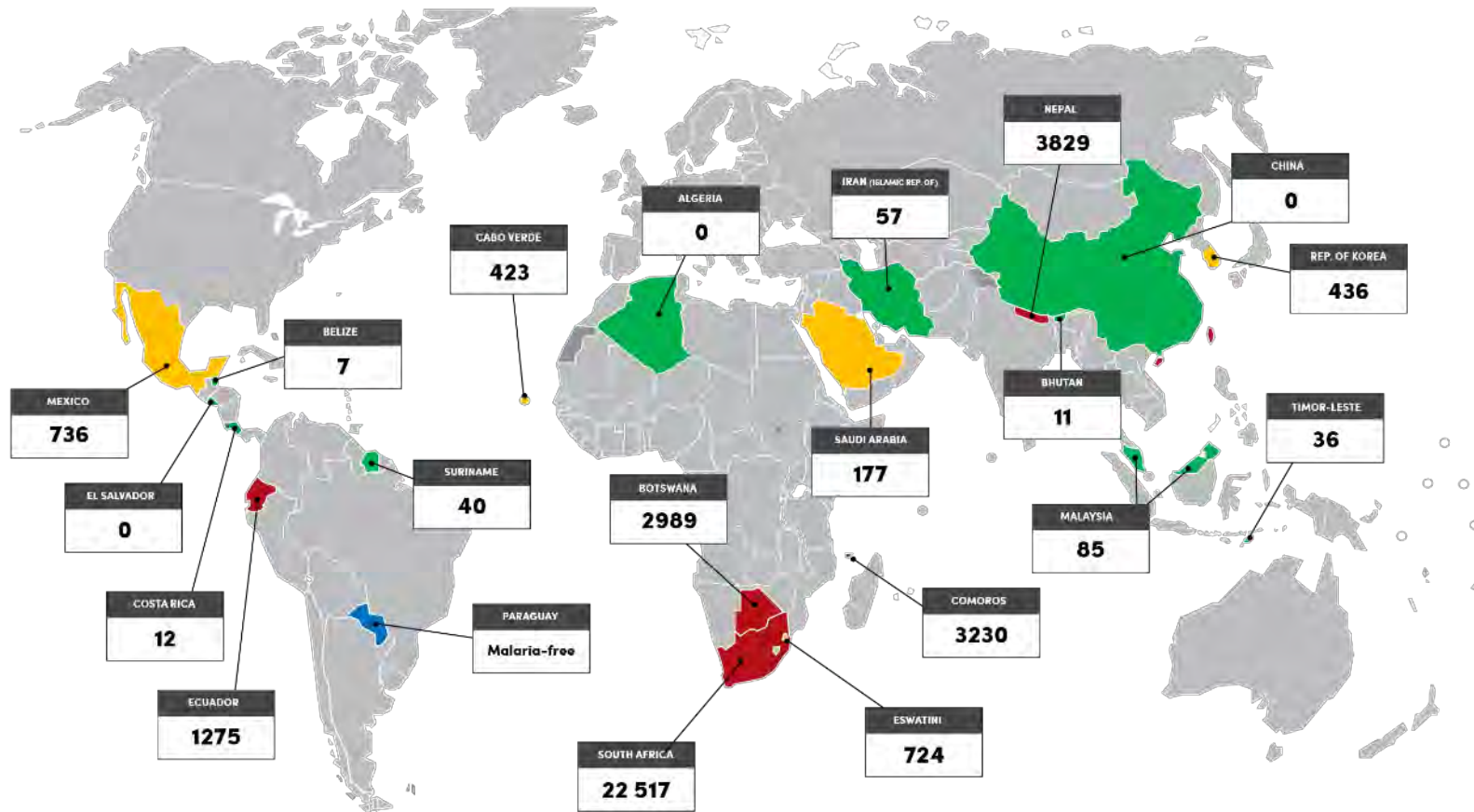
NMP: national malaria programme.

The “E-2020 initiative”



- Special initiative formed by WHO in 2017 to support 21 malaria-eliminating countries in “getting to zero” by 2020
- Annual global forum brings together malaria programme managers from E-2020 countries
- 3rd global forum to be held in China from 18-20 June

Malaria cases in E-2020 countries, 2017



The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Ten E-2020 countries on track to reach the GTS elimination target by 2020

WHO region	Country	2016	2017	
Africa	Algeria	0	0	●
	Botswana	1150	2989	●
	Cabo Verde	48	423	●
	Comoros	1143	3230	●
	Eswatini	350	724	●
	South Africa	4323	22517	●
Americas	Belize	4	7	●
	Costa Rica	4	12	●
	Ecuador	1191	1275	●
	El Salvador	12	0	●
	Mexico	551	736	●
	Paraguay	0	0	●
	Suriname	76	40	●
Eastern Mediterranean	Iran (Islamic Republic of)	81	57	●
	Saudi Arabia	272	177	●
South-East Asia	Bhutan	15	11	●
	Nepal	2754	3829	●
	Timor-Leste	148	36	●
Western Pacific	China	3	0	●
	Malaysia	266	85	●
	Republic of Korea	602	436	●

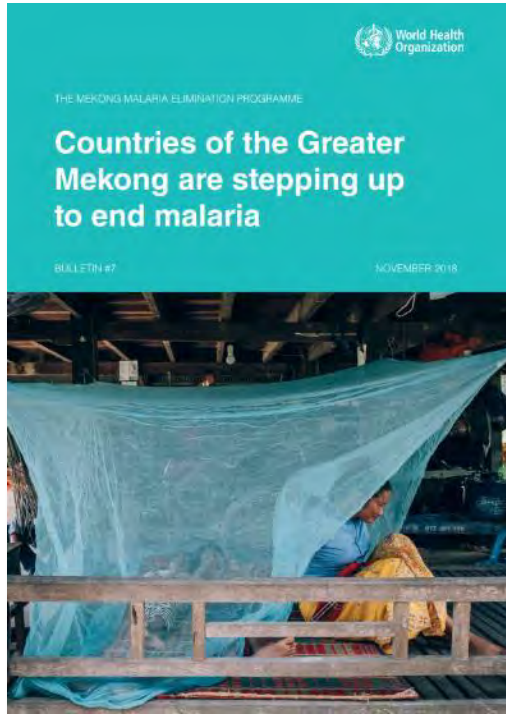
- Certified malaria-free by WHO
- On track, less than 100 indigenous cases
- Somewhat off track, between 100 and 999 indigenous cases
- Off track, more than 1000 indigenous cases

WHO malaria-free elimination certifications



- Countries that achieve at least 3 consecutive years of zero indigenous cases can apply for an official WHO certification of malaria elimination
- Two countries reached this milestone in 2018: Paraguay and Uzbekistan
- Argentina and Algeria are seeking the WHO certification in the spring of 2019 (decision expected in June)

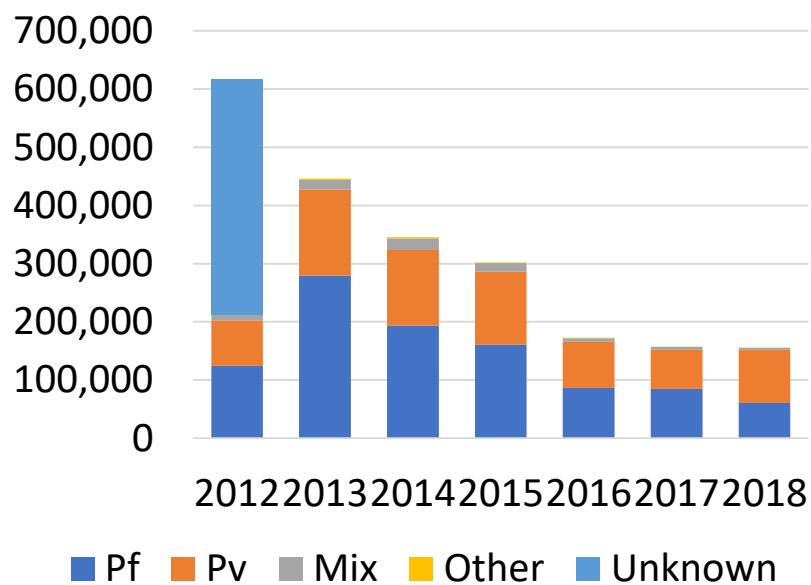
Significant progress in reducing malaria in the Greater Mekong Subregion (GMS)



- Latest WHO bulletin (Dec 2018) shows a major decline in cases and deaths in the GMS between 2012 and 2017:
 - 75% reduction in malaria cases
 - 93% reduction in malaria deaths
- In 2018, progress in reducing *P. falciparum* malaria – the primary target in view of drug resistance:
 - Thailand (-28%)
 - Myanmar (-30%)
 - Cambodia (-28%)

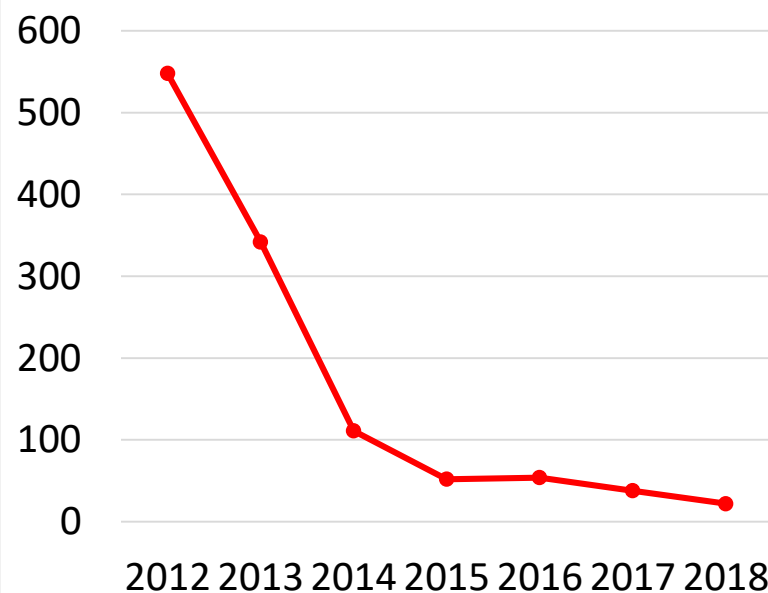
Malaria cases in the GMS (2012-2018)

Confirmed Cases



Source: WHO subregional database

Deaths



Strategic Advisory Group on malaria eradication

- Purpose of the SAGme:
 - Analyze future scenarios for malaria
 - Biological, technical, socioeconomic, political and environmental determinants
 - Potential products of innovation
 - Provide advice to WHO on the feasibility, expected cost and potential strategies of malaria eradication over the ensuing decades





GTS 2030

Subnational strategies to get back on track to meet 2030 milestones



OTHER DISEASES

Achieve and reflect on eradication of polio



NEW TOOLS

Develop new tools to attack malaria in the most difficult places



REGIONS

Establish and achieve national and regional elimination goals



RESEARCH

Resolve bottlenecks through operational and implementation research

Setting the Prerequisites for Malaria Eradication

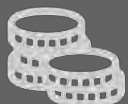


CAPACITY

Develop a national and global malaria workforce

Continue financial commitment to malaria eradication

FINANCING



Make key investments in strengthening people-centred health systems

HEALTH SYSTEMS



Build investment cases for contribution to other national priorities

OTHER PRIORITIES



Countries take ownership of malaria elimination and eradication

LEADERSHIP



New guidelines for malaria vector control

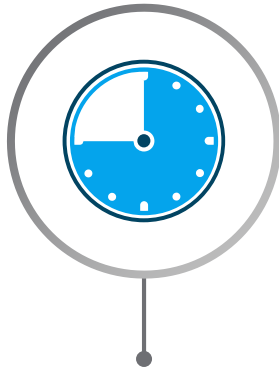


The new guidelines:

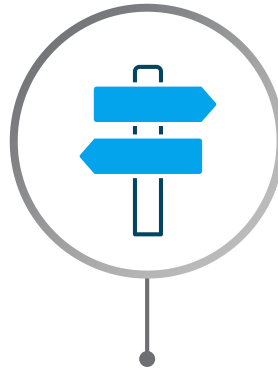
- consolidate more than 20 sets of WHO recommendations and good practice statements in a single resource
- cover 4 categories of intervention:
 - Core interventions
 - Supplementary interventions
 - Personal protection measures
 - Other interventions with potential public health value
- intended as a “living document”
 - Input sought from our stakeholders at:
vcguidelines@who.int

Norms & Standards

Why did GMP review its policy making process?



Perceived lack of
transparency and
lengthy process

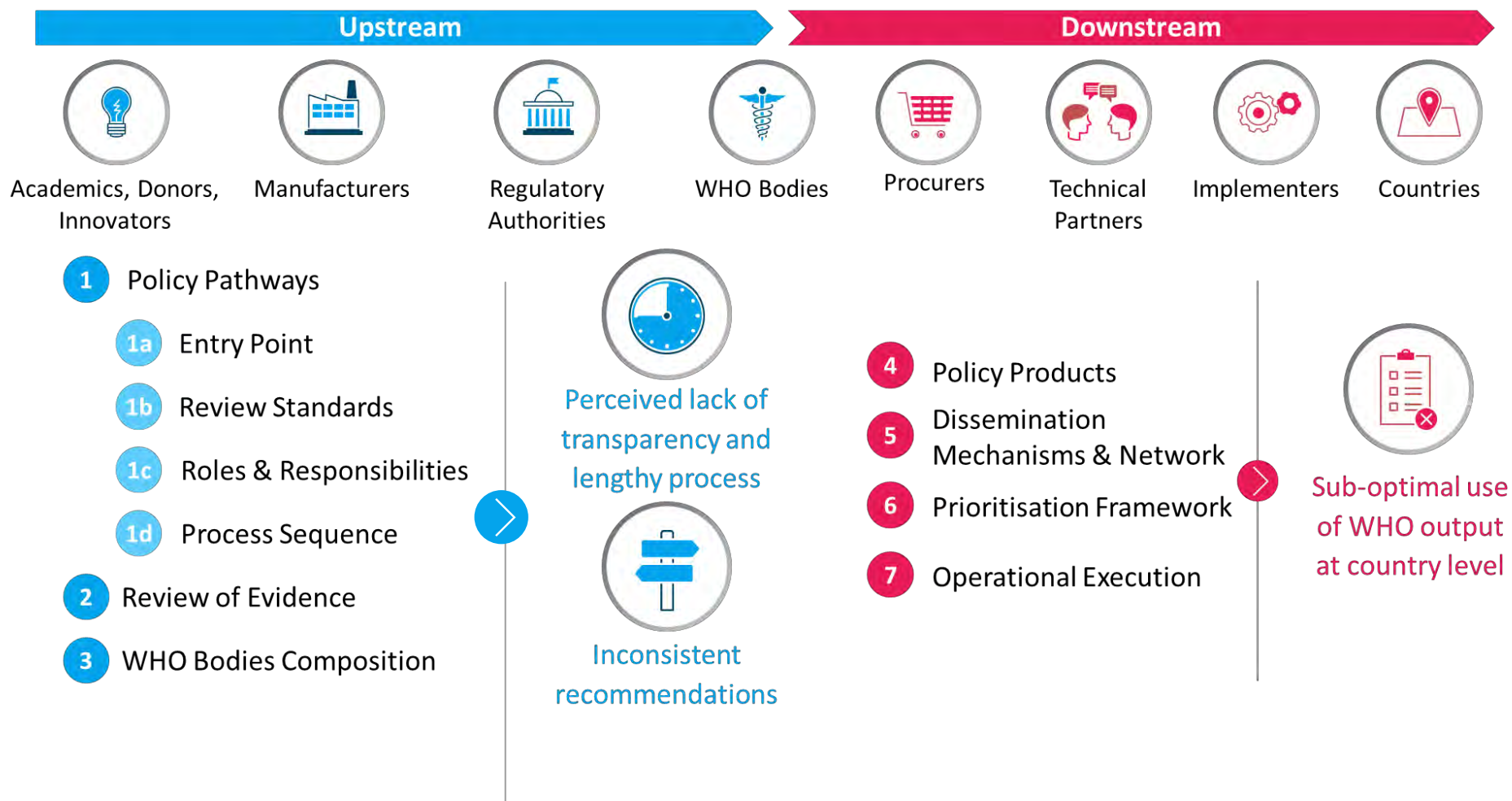


Inconsistencies in
review standards

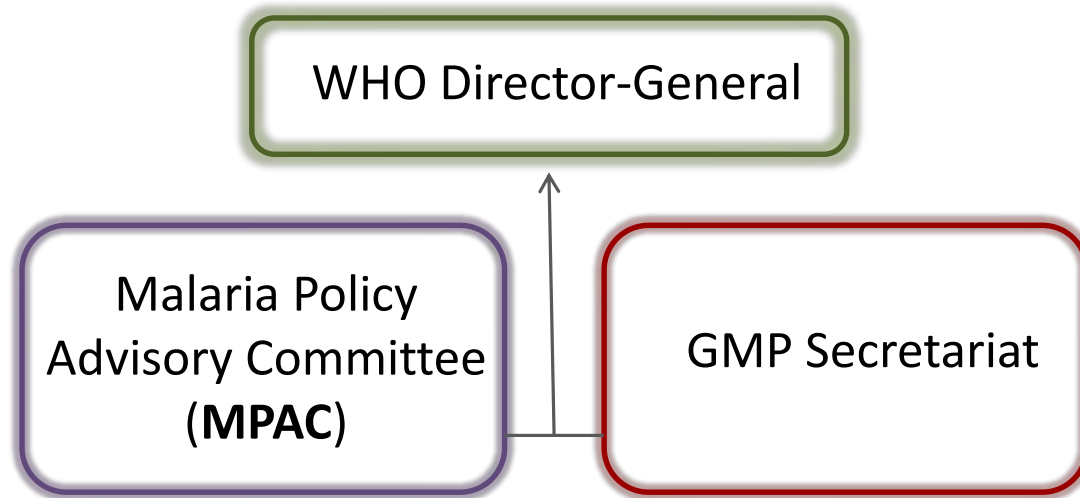


Sub-optimal use of GMP
output at country level

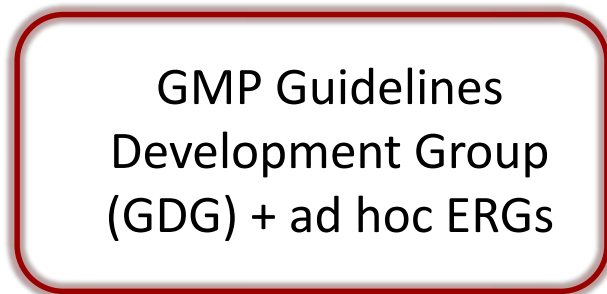
Analytical framework, 7 focus areas were identified



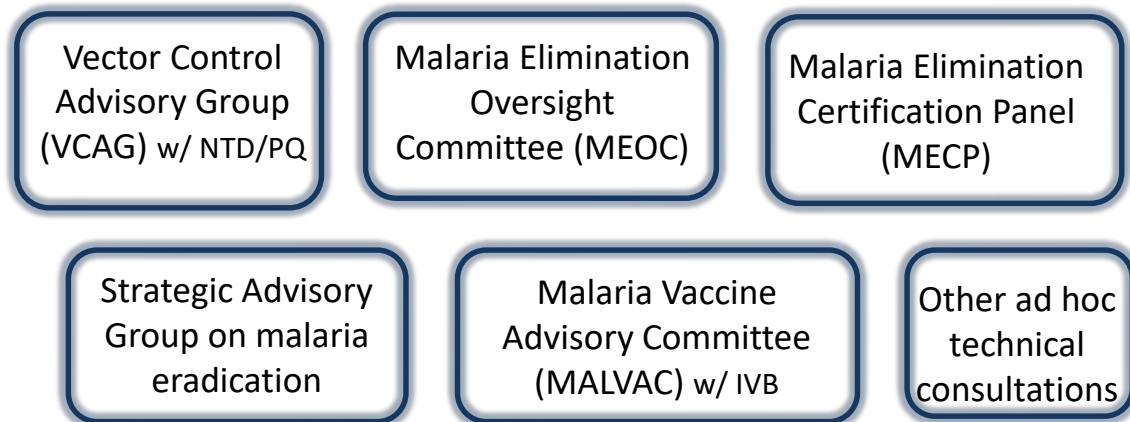
GMP Advisory bodies structure



Policy



Advisory



Vector control advisory group (VCAG)



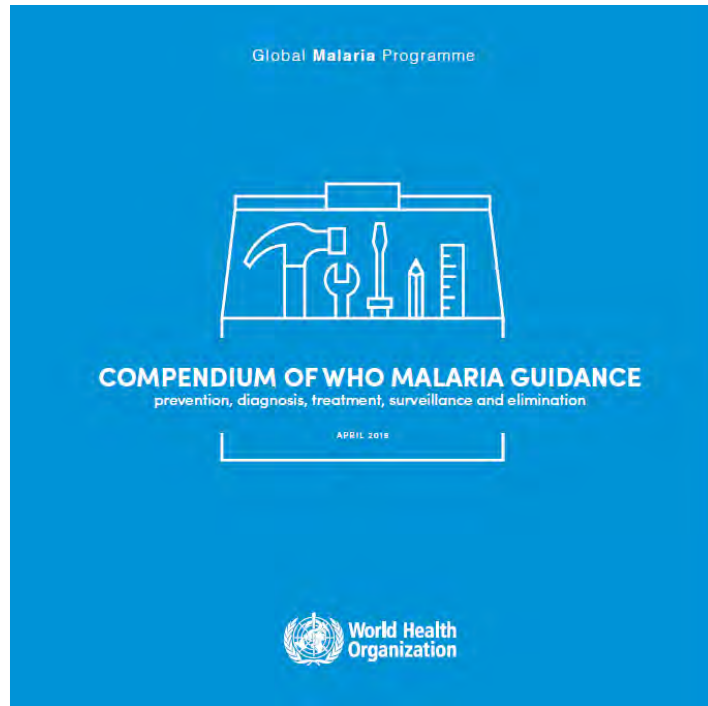
- Clarified processes:
 - Updated terms of reference
 - SOPs for VCAG applicants
 - Roles / responsibilities clearly defined between NTD, PQT-VC and GMP
 - Overview of products under VCAG review developed
- Streamlined running of meetings: option for off-cycle reviews
- Improved communications: new website and regular updates

VCAG: next steps



- Update / revise 2 key documents to align with revised policy-making process:
 - The evaluation process for vector control products
 - How to design vector control efficacy trials
- Further diversify VCAG membership

New malaria compendium



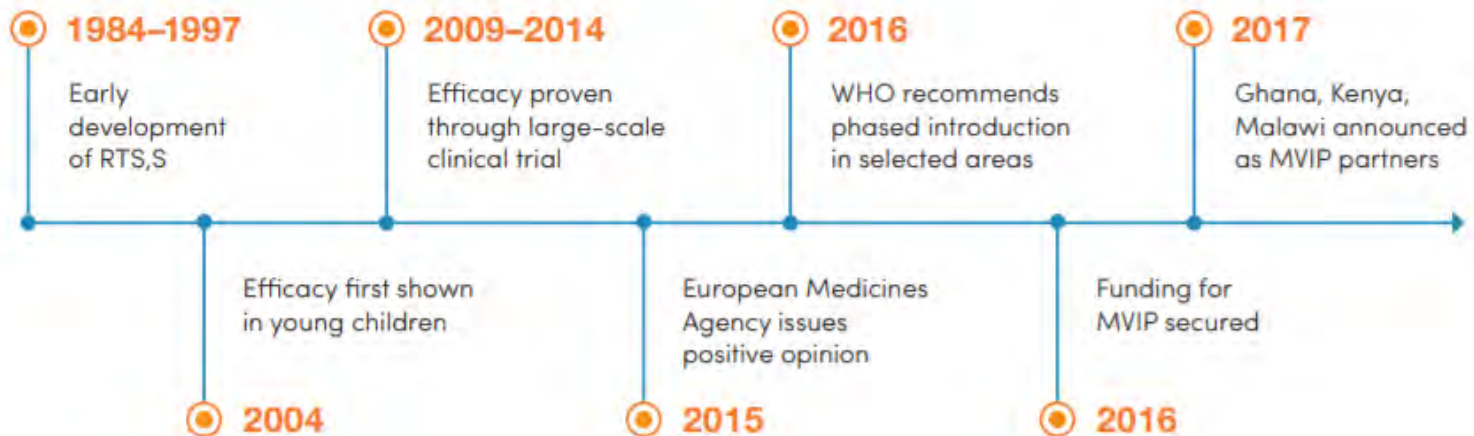
- Aims to simplify access for the end user by providing all WHO policy recommendations on malaria in one document
 - Includes only recommendations that have been approved by the Guideline Review Committee
 - Lists accompanying handbooks, manuals, information notes and policy briefs

The urgent need for new tools and strategies

- With current diagnostic tools and available drugs – no one should be dying of malaria
- Our tools for prevention are only moderately efficacious:
 - We do not have optimal drugs for chemoprevention
 - Current vector control tools are imperfect
 - achieving permanent reductions of vectorial capacity is not (yet) within our reach
 - We do not have a highly efficacious vaccine
- We face biological challenges
- The performance of health systems, including surveillance

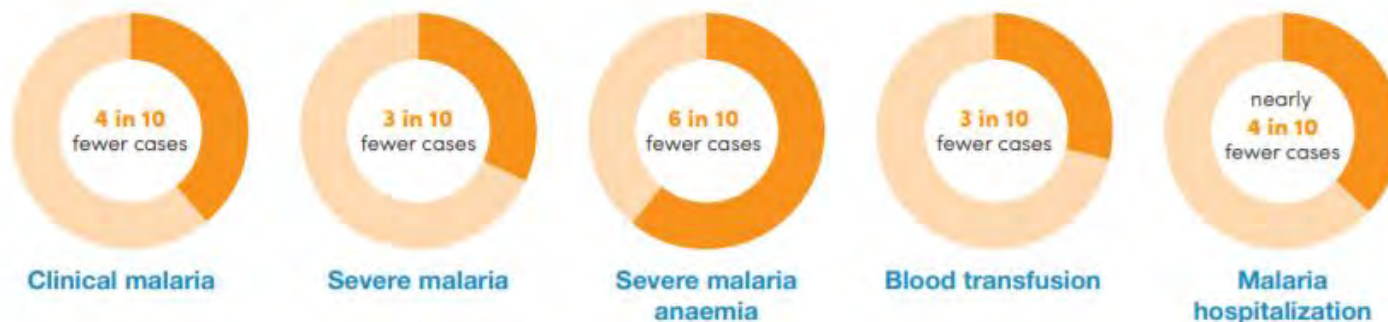
RTS,S Malaria Vaccine Implementation Programme (MVIP)

THE RTS,S JOURNEY: KEY MILESTONES



PROVEN RESULTS

Children receiving four doses of RTS,S experienced significant reductions in malaria and malaria-related complications, in comparison with those who did not receive RTS,S.



RTS,S Malaria Vaccine Implementation Programme (MVIP)





- Vaccine introductions imminent
 - Ghana and Malawi targeting 23 April, Kenya expected soon after
 - At least 360 000 children to be vaccinated in the intervention areas across the 3 countries
- Proposed framework for policy decision on RTS,S endorsed by SAGE on 3 April
 - Clarifies how and when data collected through the programme will be utilized to inform a policy recommendation on wider use of the vaccine





HBHI

MPAC 10th APRIL

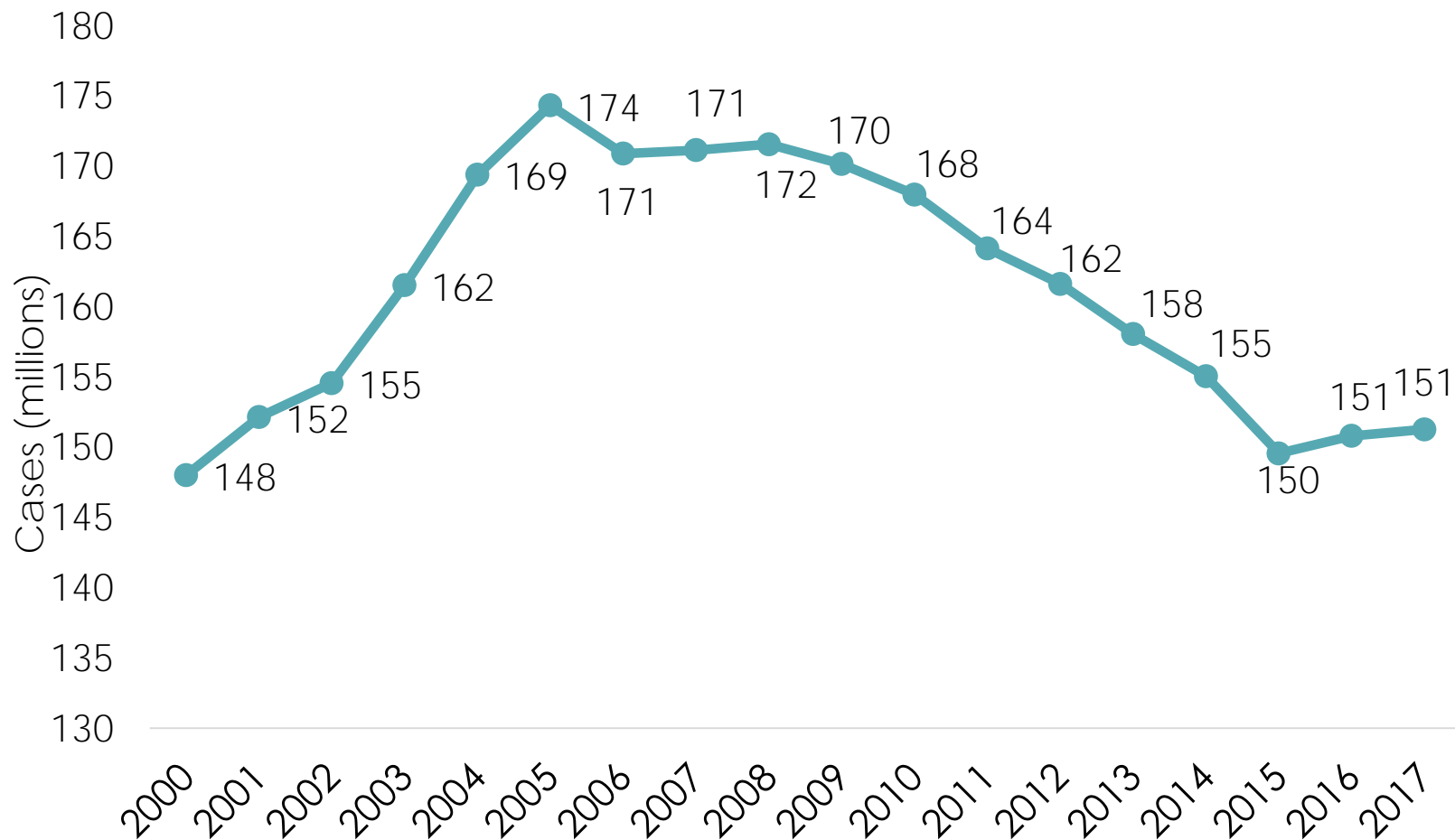


World Health
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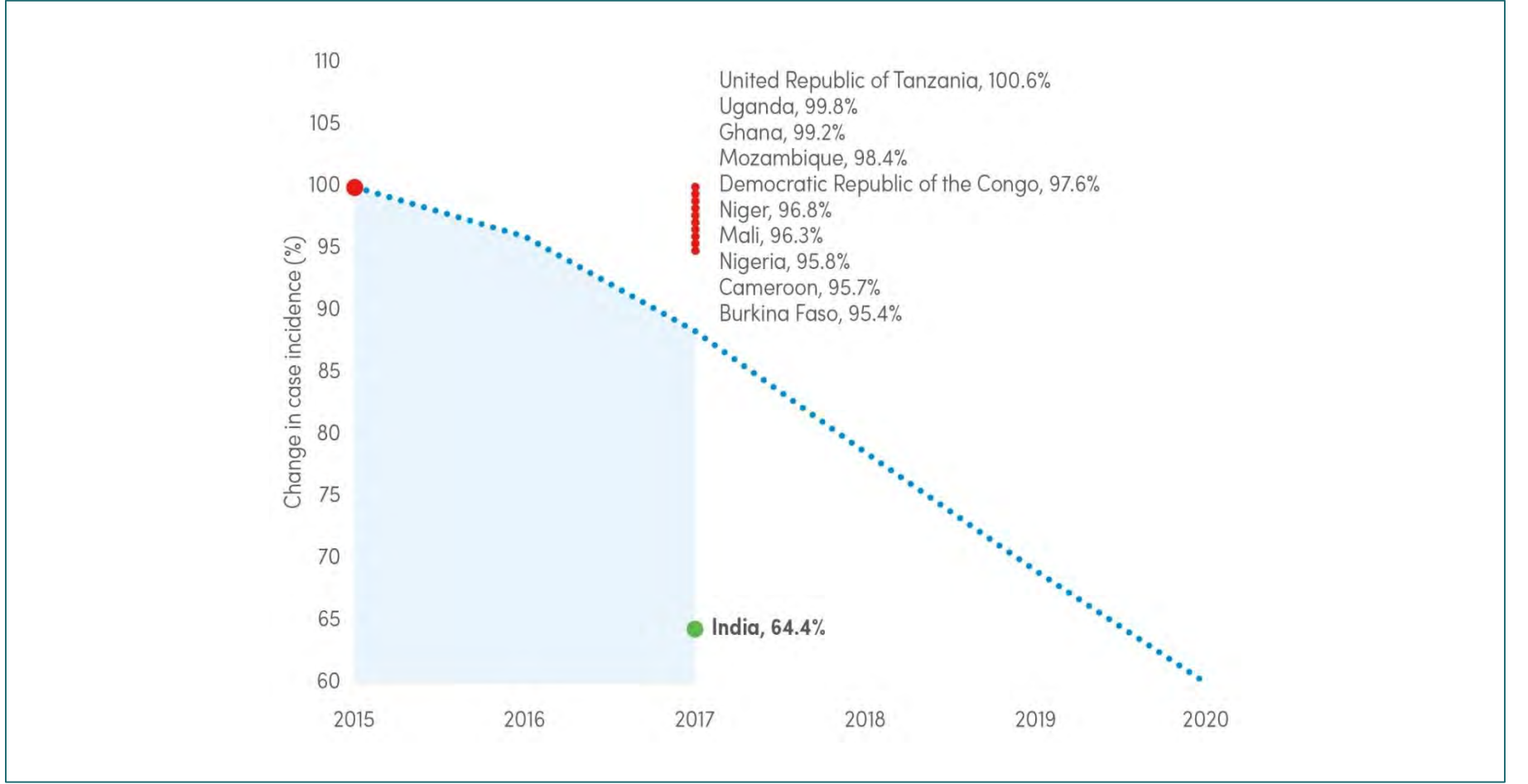
Partnership
To End Malaria

Rising number of malaria cases in 10 high burden countries



A pronounced decrease in malaria is needed in 11 highest burden countries to get back on track to meet the GTS milestones for 2020

Expected change in malaria case incidence if on target to meet GTS milestones for 2020 vs. estimated change in case incidence between 2015 and 2017



SOURCE: WMR, 2018; WHO estimates
GTS: Global technical strategy for malaria 2016-2030, WHO

High Burden High Impact : A targeted malaria response – objectives

Objectives

HBHI aims to reaffirm commitment and refocus activities *initially* in the highest burden countries¹ to accelerate progress towards GTS goals through 4 response elements



I Political will to reduce malaria deaths



II Strategic information to drive impact



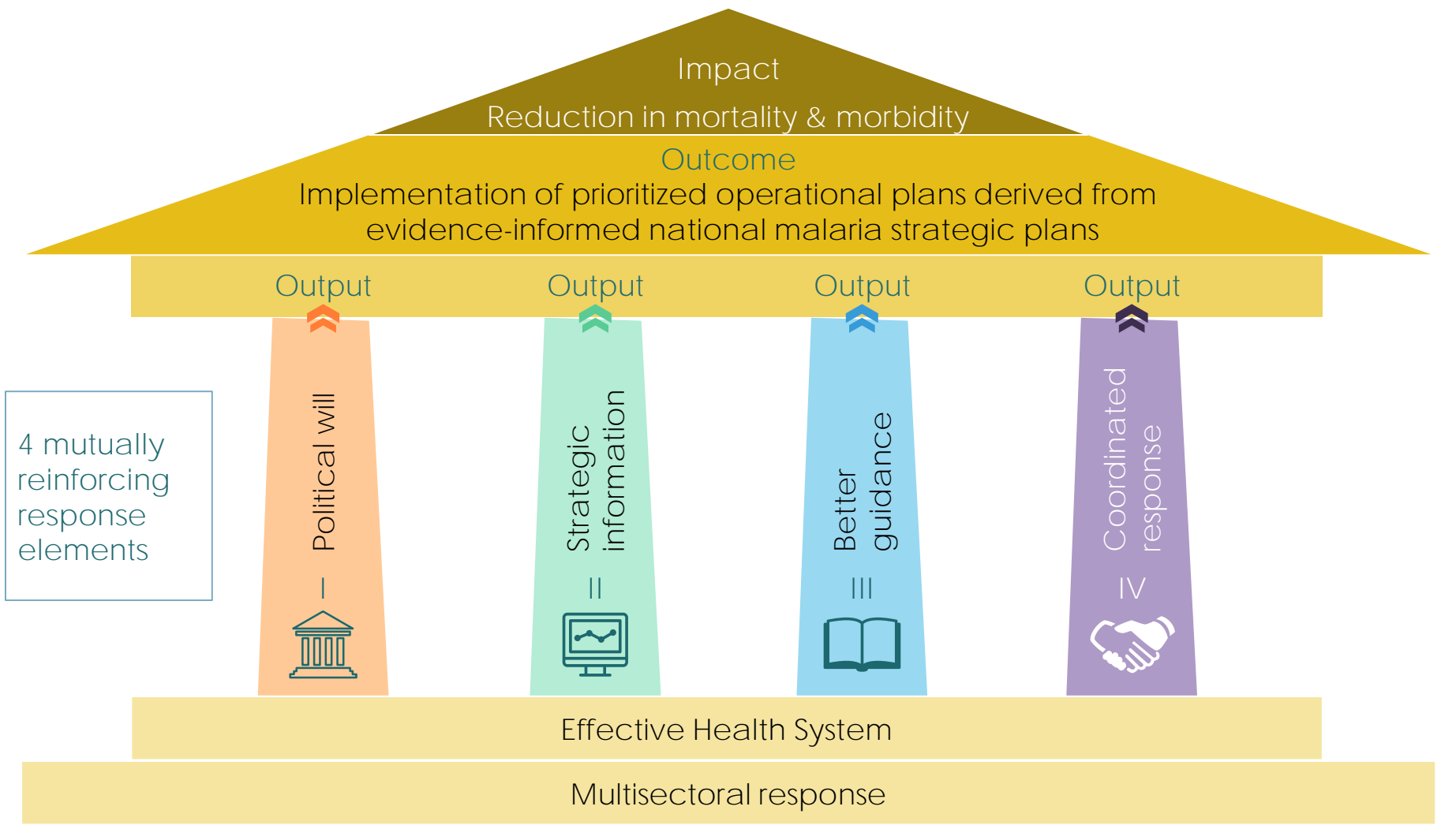
III Better guidance, policies and strategies



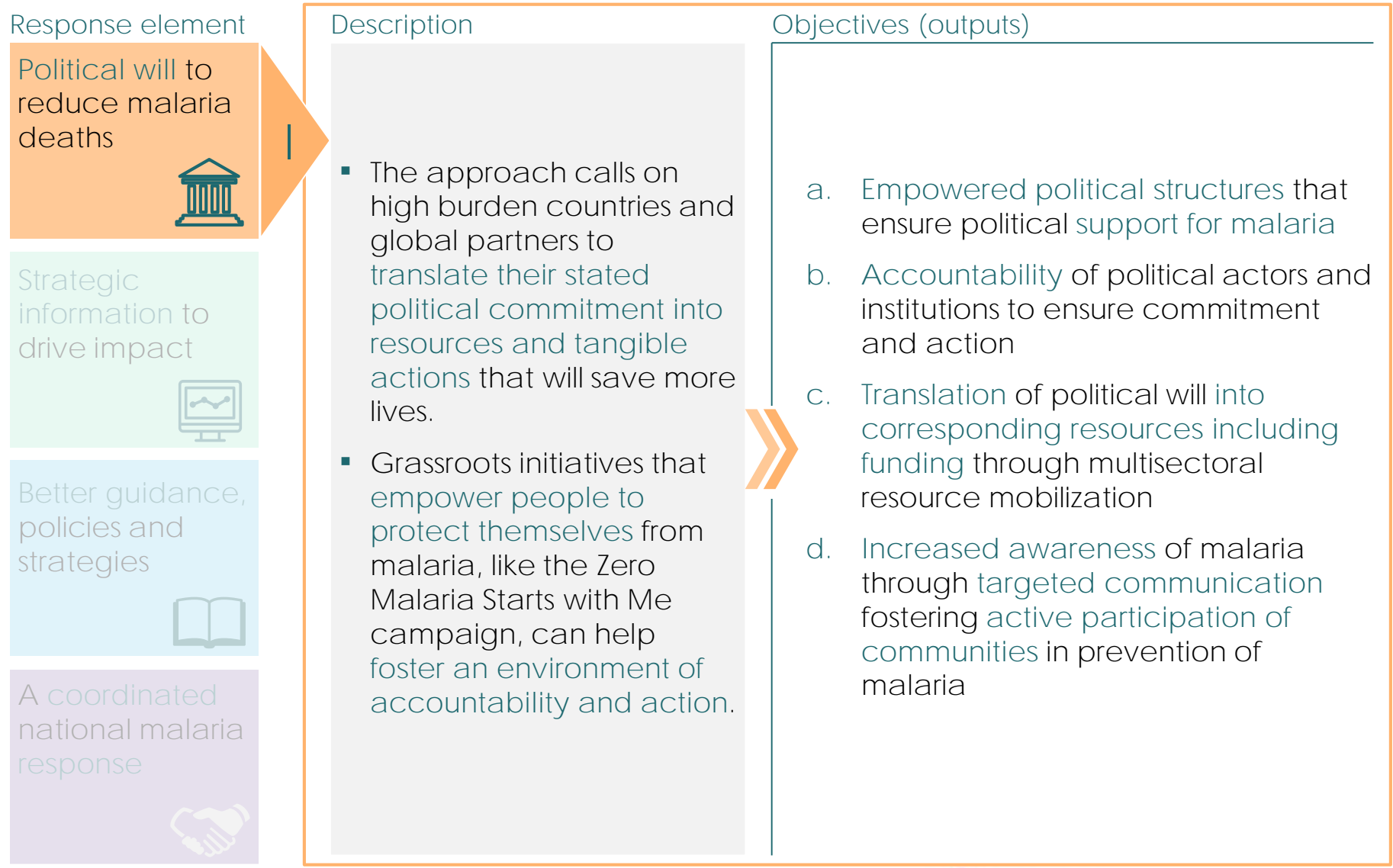
IV A coordinated national malaria response

¹ Burkina Faso, Cameroon, DRC, Ghana, India, Mali, Mozambique, Niger, Nigeria, Tanzania, Uganda

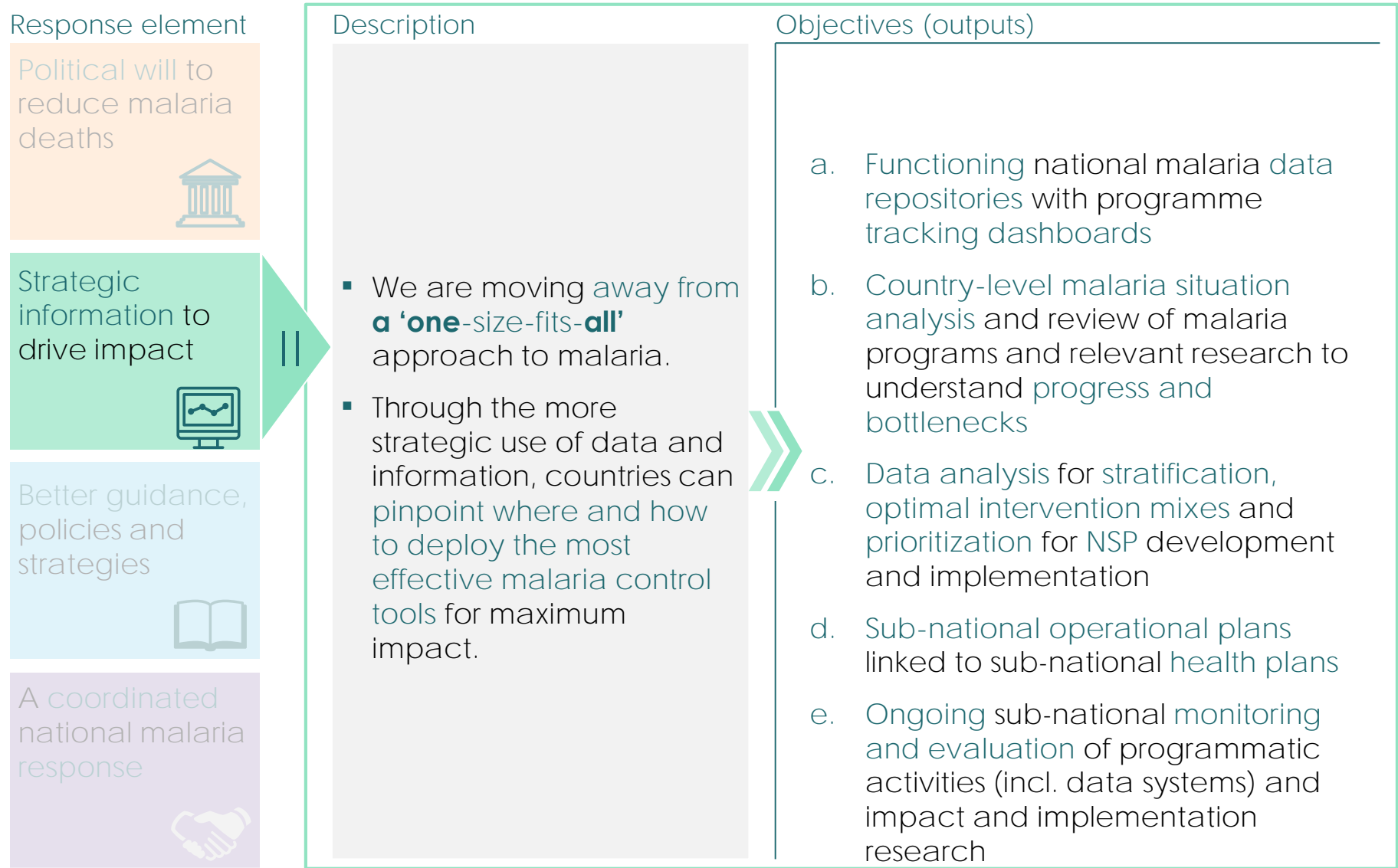
HBHI is a holistic approach, with the 4 elements feeding into tangible actions through NSP implementation and concrete outcomes



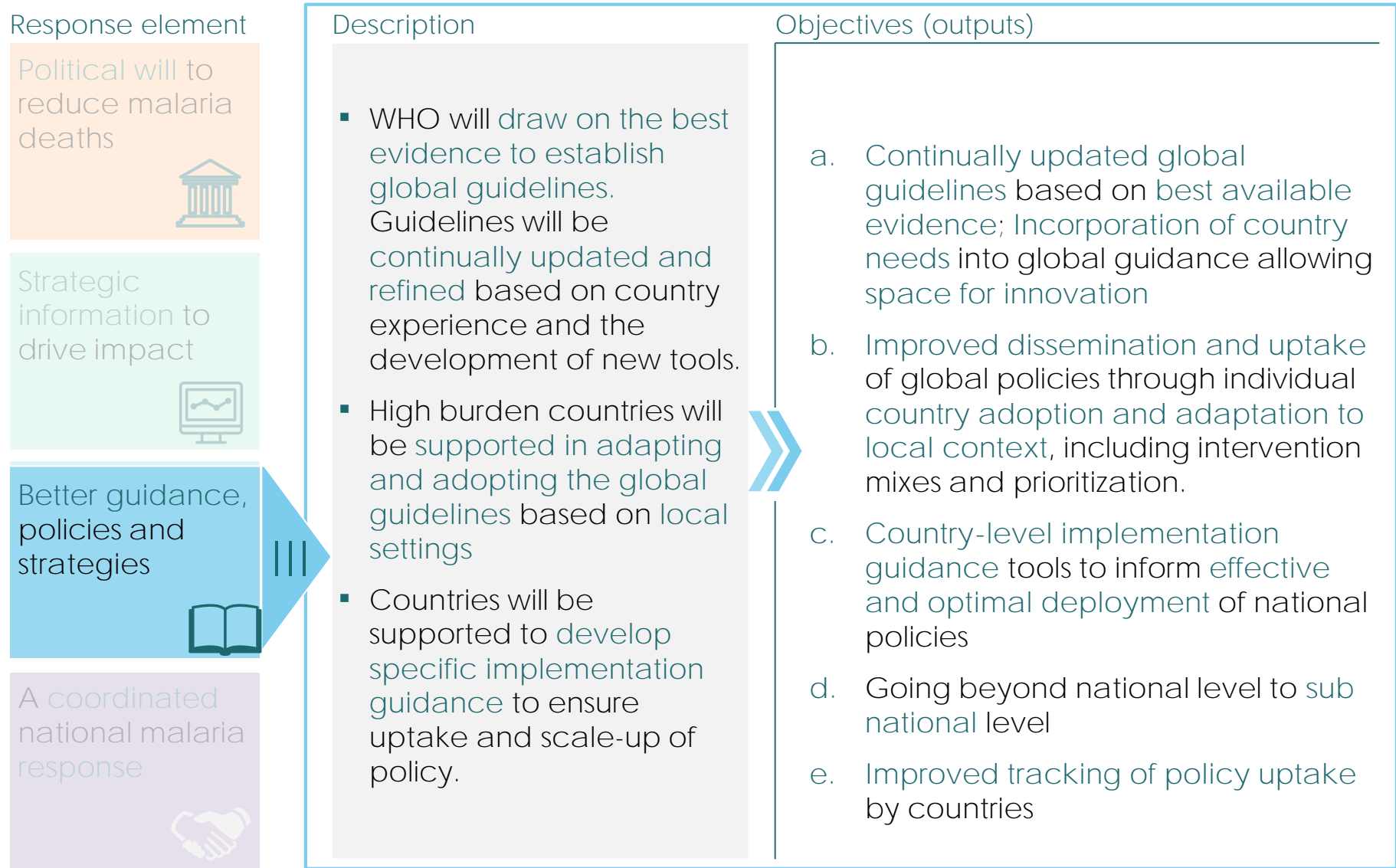
Response element I of the HBHI approach: Political will to reduce malaria deaths



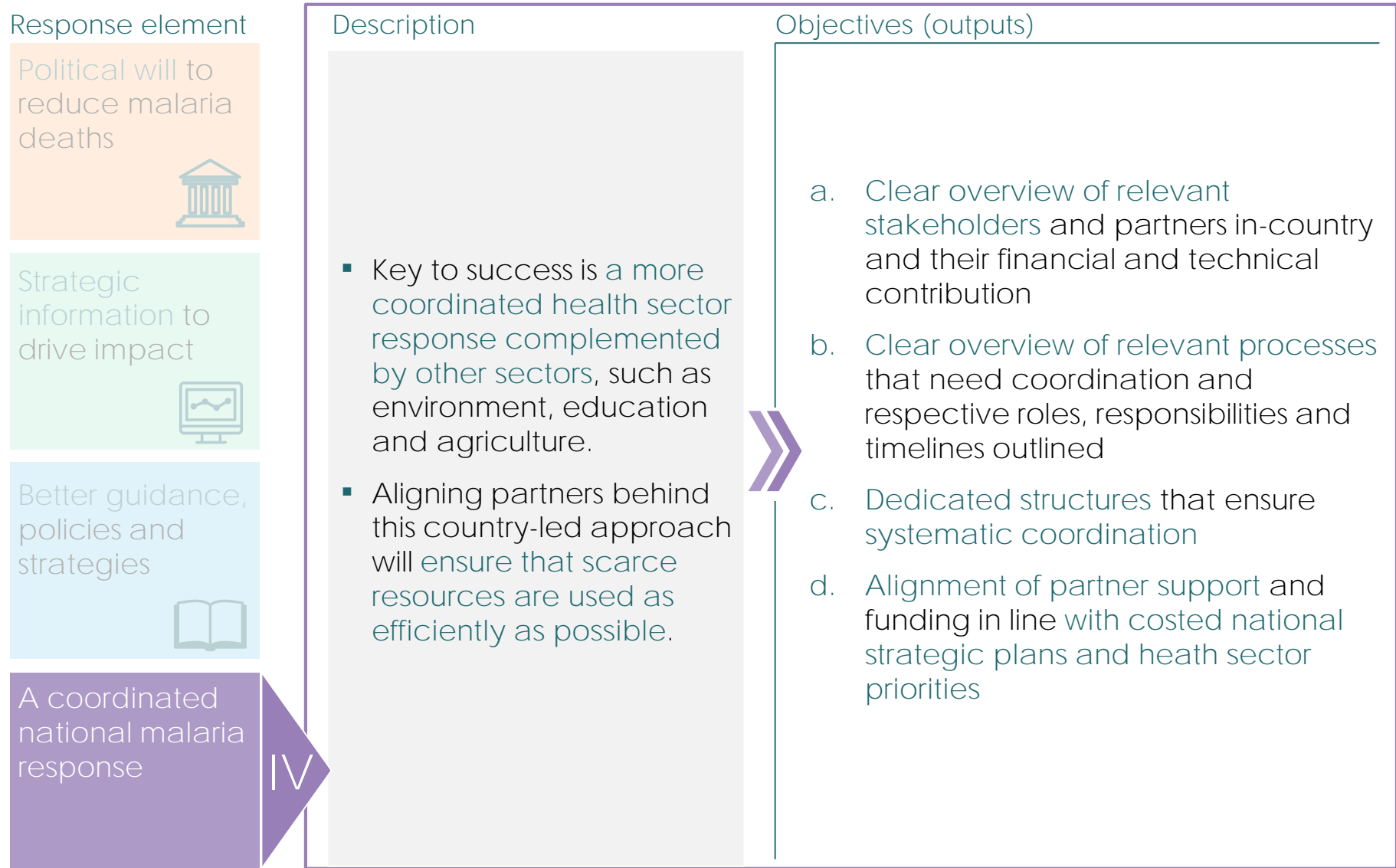
Response element II of the HBHI approach: Strategic information to drive impact



Response element III of the HBHI approach: Better guidance, policies and strategies

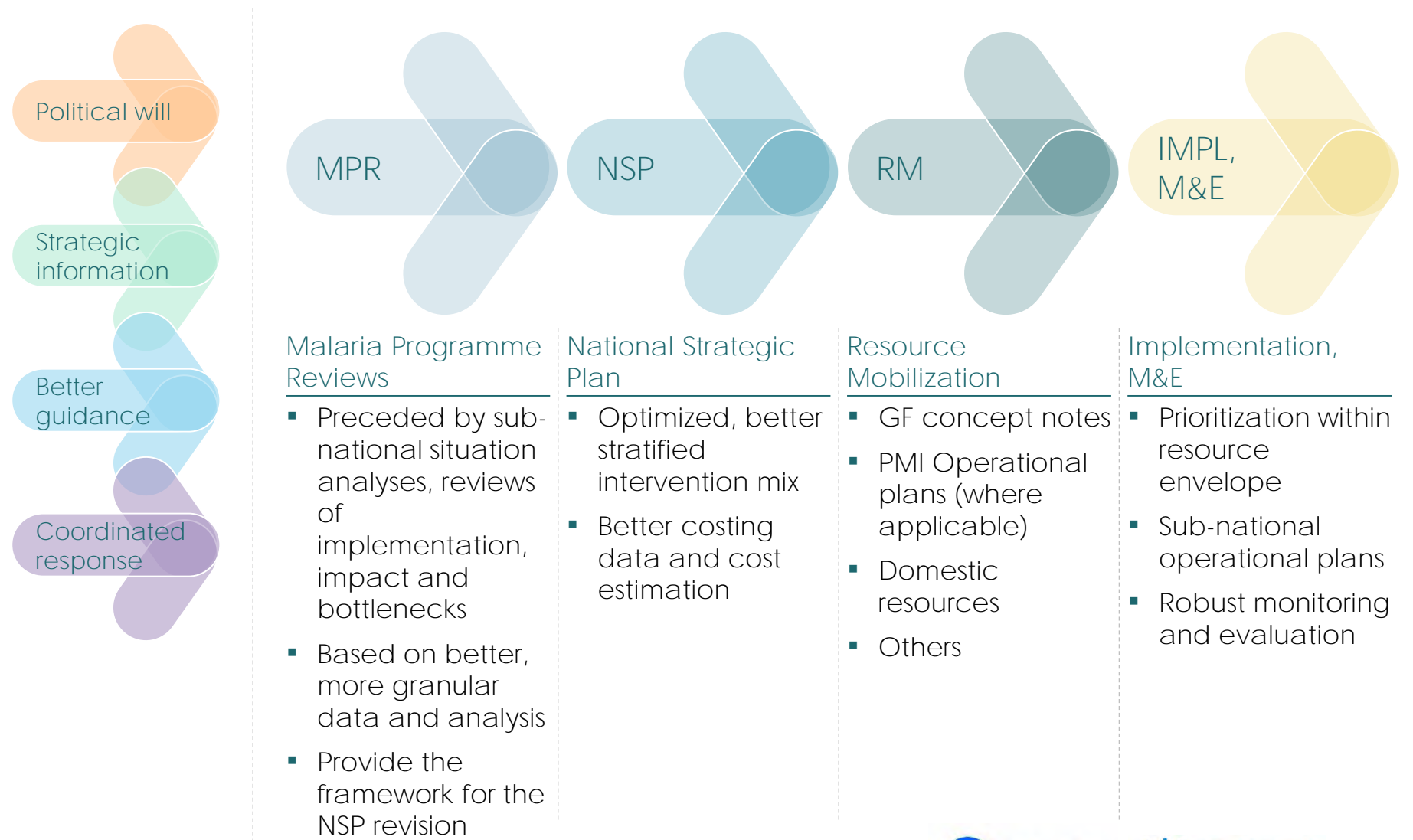


Response element IV of the HBHI approach: A coordinated national malaria response



Together the response elements, feed into the overarching implementation process to drive outcomes and impact...

Pre-meeting Meeting Follow-up



High Burden High Impact

Guiding principles for the HBHI approach

Highest burden countries¹ are the focus of the first wave of the approach

 Burkina Faso

 Cameroon

 DRC

 Ghana

 Mali

 Mozambique

 Niger

 Nigeria

 Uganda

 Tanzania

 India²



Guiding principles



Country-owned, country-led approach, aligned with the GTS, SDGs, national health goals, strategies and priorities



Better coordinated support from in-country and external partners paired with increased transparency to ensure efficient responses



Commitment from partners to share and jointly analyse data

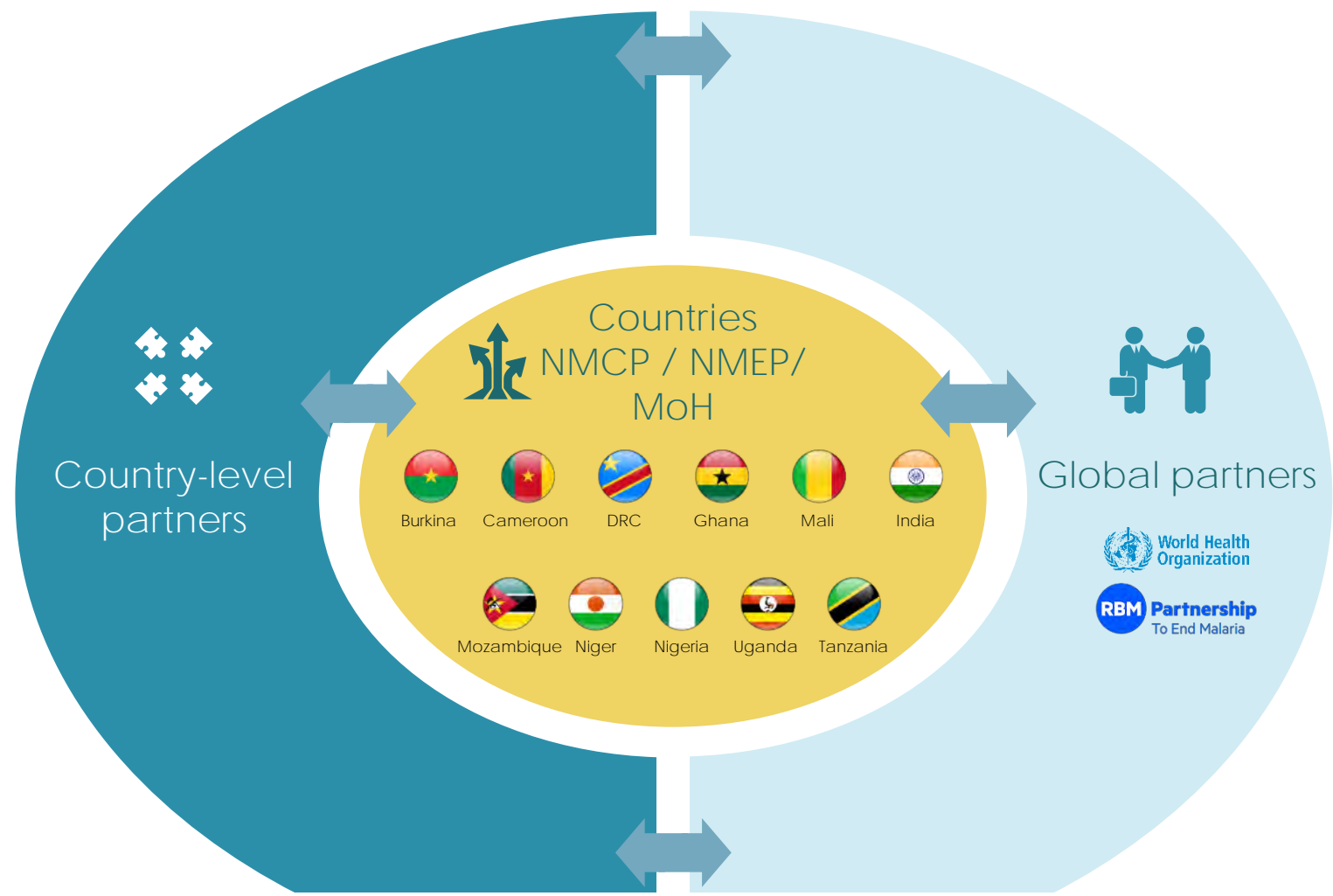


Support for enhanced domestic and international resource mobilization

¹ 11 countries with highest burden of malaria concentrate 70% of cases and deaths

² All of the 10 highest burden African countries reported increases in malaria cases over the previous year, ranging from an estimated 131,000 more cases in Cameroon to 1.3 million additional cases in Nigeria. Only India marked progress in reducing its disease burden, registering a 24% decrease compared to 2016.

Country level and global partners support countries for a smooth HBHI approach



*Aligned technical and financial support,
Communication, coordination and transparency*

Country meeting overview – status update (04 April 2019)

Country	Proposed mission dates
 Uganda	12 - 15 February 2019
 Nigeria	25 - 29 March 2019; July 2019 for high level mission
 Tanzania	13-17 May 2019 (TBC)
 Burkina Faso	13-17 May 2019
 Ghana	17- 21 June 2019 (confirmed)
 Mali	July (TBC)
 Mozambique	3 - 7 June 2019 (confirmed)
 Niger	May (TBC)
 Cameroon	29 April - 3 May 2019 (confirmed)
 DRC	June (TBC)
 India	TBC

What is new

1. Intensive political and social movement (including WHO's engagement)
2. Departing from one-size fits all to context specific mix of interventions optimally delivered to those in need
3. Maximizing interventions that lead to near-zero mortality while intensifying on transmission reduction
4. Providing opportunities for introducing new tools or identifying opportunities for maximizing existing tools
5. Improving quality and coverage of interventions
6. Maximizing value of partners



High Burden High Impact (HBHI) – UGANDA

MPAC

Briefing document | 09 April 2019



World Health
Organization



Partnership
To End Malaria

Contents

Malaria Context and Uganda malaria strategy

Assumptions, lessons and the response

The HBHI approach in Uganda

HBHI Country Progress Update



Uganda context

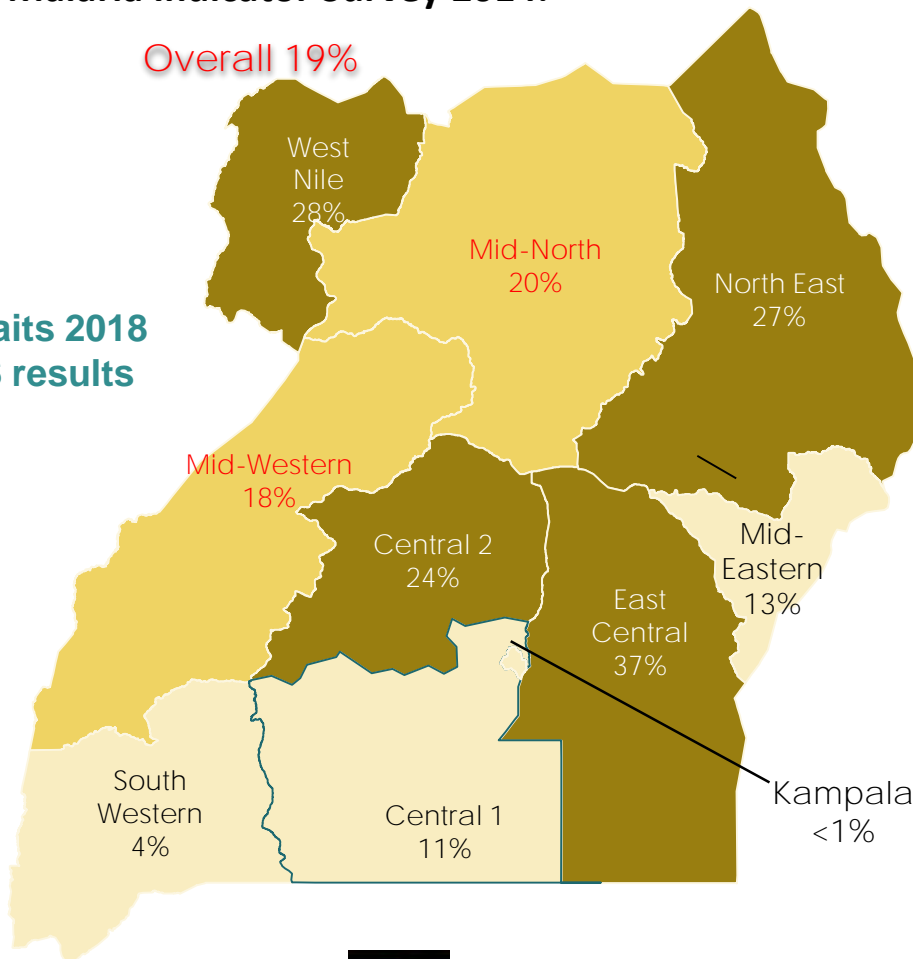


Uganda context

Malaria Indicator Survey 2014:

Overall 19%

Awaits 2018
MIS results



9th

Mortality

Uganda ranked 9th globally in terms of mortality in 2016 WMR 2017

5th

Morbidity

Uganda ranked 10th globally in terms of morbidity in 2016 WMR 2017

40M

Population

There are an estimated 38M Ugandans reside in 133 districts

70%

Anopheles gambiae s.s

Is the dominant vector species

98%

Plasmodium Falciparum

Most aggressive parasite species

E

Ecology i.e. favorable temp, vegetation and water shade



Uganda Malaria Reduction Strategic Plan [2014-2020]



Aim:

**To accelerate malaria reduction for
against specific targets by 2020**

Goal 1:

By 2020, Reduce annual malaria deaths from the 2013 levels (30 per 100,000) to less than 1 death per 100,000 population

Goal 2:

By 2020, Reduce malaria morbidity from 150 to 30 parasitological confirmed cases per 1000 population

Goal 3:

By 2020, Reduce malaria parasite prevalence from 19% to less than 7%.

SIX STRATEGIC OBJECTIVES

Integrated Vector Management

Diagnosis & Case Management

Health Promotion, IEC/SBCC

Program Management &
multisectoral collaboration

Surveillance, M&E, Operational
Research

Emergencies, Epidemic
Preparedness/Response



Key Assumptions for Success (1)

1. Adequate funding for comprehensive implementation of interventions
2. Comprehensive, contiguous and integrated programming and implementation
3. Empowered malaria control programme
4. Sustainability plans for gains attained
5. Use of the decentralized structures at regional and district level in UMRSP implementation



Key Assumptions for Success (2)

6. Adequate capacity of the districts to implement the strategic plan
7. Availability of quality data for use in evidence-based planning;
8. Effective engagement of the private sector to tap on its potential;
9. Buy-in and ownership (of key stakeholders) through adequate advocacy, social mobilization, BCC and IEC in both scope and scale
10. Proactively pre-empt dev. and manage insecticide and parasite resistance



Response

- Face the reality: Malaria burden in Uganda is huge among other health challenges
- Evidence based situation analysis that informs program decisions
- Targeted delivery of malaria and health-related Interventions
- Proactive engagement of key stakeholders e.g. political, legislative, community structures, etc.
- Joint planning, partnership and resource mobilization
- Continuous performance monitoring and periodic review and reprogramming
- Result-oriented programming



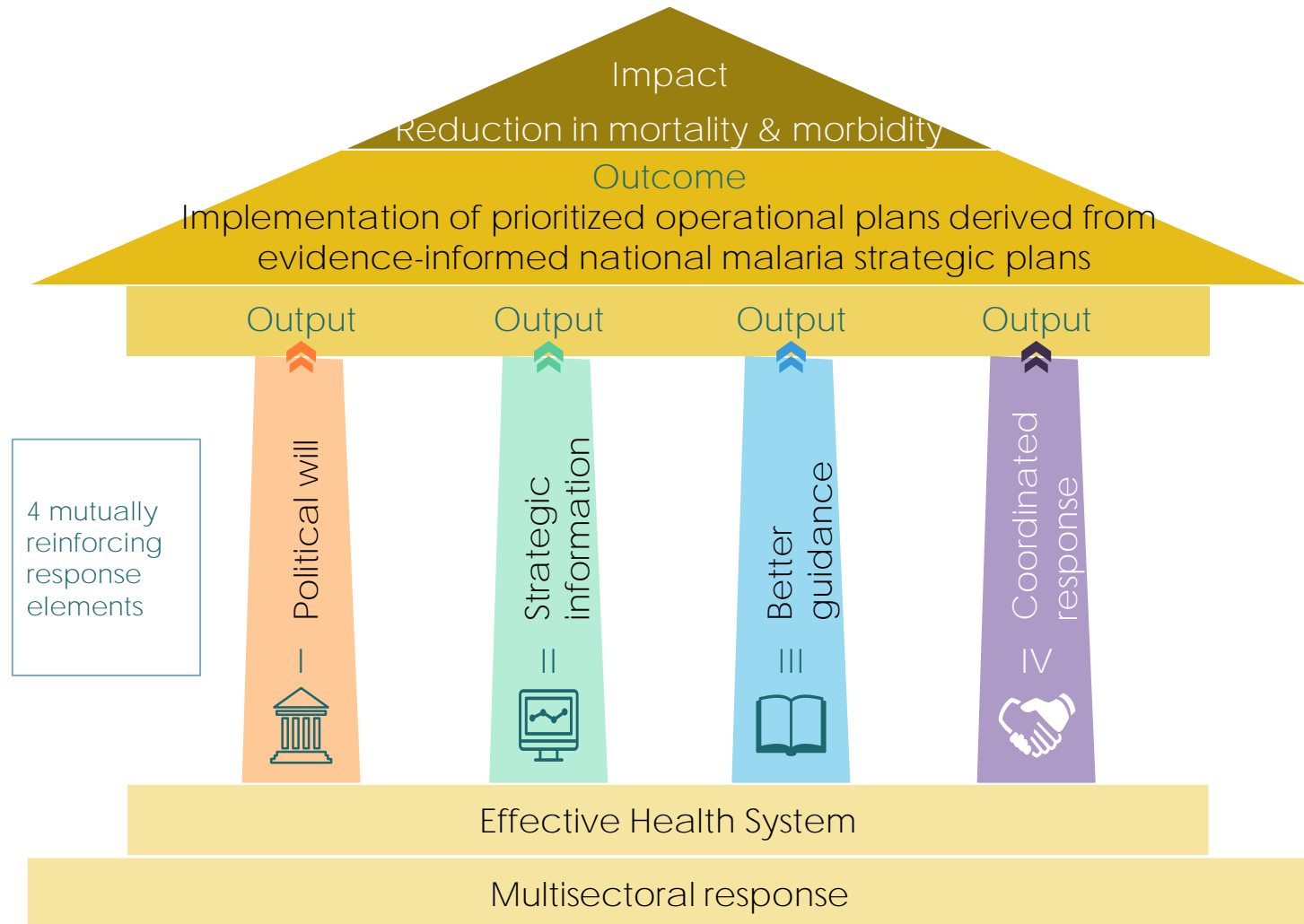
Way forward: 2017-Mid Term Review

“To sustain the gains in reducing malaria mortality, MOH and partners should strengthen health care delivery system to ensure prompt diagnosis, treatment and timely referral at all levels”.

and

“Government should take lead in **mobilizing** the entire population into mass action against malaria”

The 4 elements of the HBHI approach are appropriate for Uganda response



Progress on Pillar 1 of the HBHI approach in Uganda



- Translate political commitment into resources and tangible actions that will save more lives.
- Grassroots initiatives that empower people to protect themselves from malaria and help foster an environment of accountability and action.

Progress on pillar 1

- Functionalize the Uganda Parliamentary Forum for malaria
- Enact a Malaria Act
- Develop and initiate Implementation of Constituency Malaria Scorecards
- Establish End Malaria Council / Task Force at National level and District Malaria Task Force in high burden districts
- Establish Presidential Malaria Fund- finalization of concept note, legal documentation and resource mobilization
- Engaging the Office of the Prime Minister (OPM) and Ministry of Finance to facilitate multisectoral commitments
- Developing Business Plan for UMRSP and Resource Mobilisation Strategy for use as resource mobilization tool
- Developing and updating multisectoral resource mobilization plans to raise resources at National and Sub national levels
- Private Sector Strategy: consensus reached, being finalized



PROPOSED MALARIA FUND

- A trust fund to mobilise public and private, domestic and external, and institutional and grassroots financing to eliminate malaria in Uganda
- Pooling of resources to reduce fragmentation
- Participation by multi-sectoral stakeholders in the stewardship (i.e., deployment and use) of malaria resources



H.E. President Museveni calls for the establishment of a national malaria fund to mobilise resources for the fight against malaria during the MAAM launch in April 2018

UK All Party Parliamentary Group & UPFM delegation meeting President YK Museveni



UK All Party Parliamentary Group
& UPFM delegation meeting
President YK Museveni



Uganda manufacturers of LLINs and ACTs
meeting the President and Minister of Trade

The president pledged to give
50bn UGX per year to support
the local manufacturing of LLINs

'MAAM Initiative': An achievable dream

- Mass Action Against Malaria – Reaching Every Household with Appropriate Malaria Interventions
- Malaria becomes **everyone's business** requiring mass action against malaria at all levels.
- A Framework, a Business Plan (2018-2020), an integral part of, to accelerate implementation of UMRSP (2014-2020) for a Malaria-Free Uganda
- Aligns with WHO's Global Technical Strategy for Malaria (2016-2030)
- A synonym of High Burden – High Impact
- MAAM and UPFM were launched on 05 April 2018 by Mr President



President Yoweri Museveni signing his commitment to MAAM



Advocacy and Communication

❑ MAAM

- Finalize and Disseminate MAAM including M& E framework and implementation tools- [MOH/NMCD /DHO, WHO/ALMA/RBM](#)
- Advocate for political commitment from political leaders at Subnational level- [MOH/NMCD /DHO, WHO/ALMA/RBM](#)

❑ Sensitization

- Design and Develop advocacy fact sheets tailored to specific key messages: malaria burden and economic impact- [NMCD/CHC](#)
- Sensitization of political leadership on malaria at all levels- [NMCD](#)

❑ Identification of Malaria Champions at all levels

- Advocacy champions
- Affected champions

❑ World Malaria Day 2019 commemoration

Progress on Pillar 2 of the HBHI approach in Uganda



- Move **away from a 'one-size-fits-all'** approach to malaria.
- Through the more strategic use of data and information, **pinpoint** where and how to deploy the most effective malaria control tools for maximum impact.

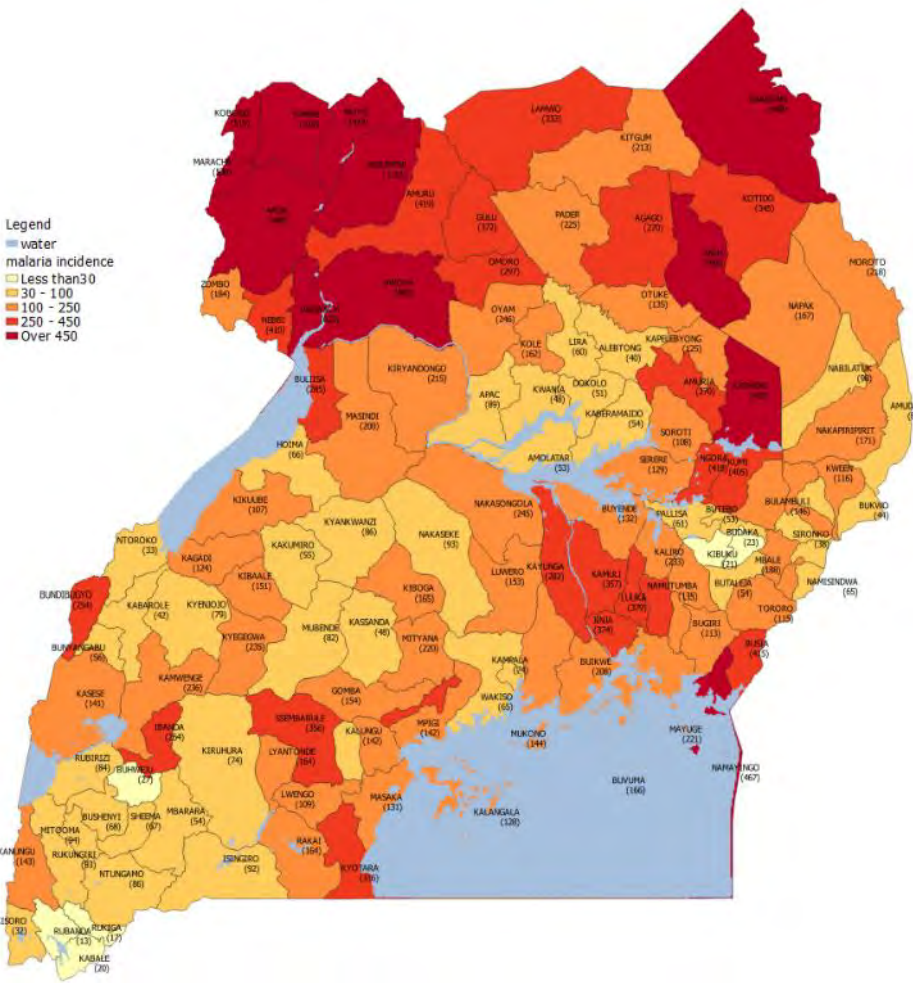
Strategic Use of Information for impact

- Assemble and structure subnational geocoded data on demography, epidemiology, health system, malaria interventions etc in a national malaria repository
- Develop subnational malaria profiles and implement a malaria program review.
- Analyze country data to develop subnational malaria stratification maps and optimum intervention mixes to enhance efficient targeting of resources.
- Resource prioritization analysis to subnational operational units
- Develop national and subnational operational plans based on the agreed reprioritization and M&E framework for implementation

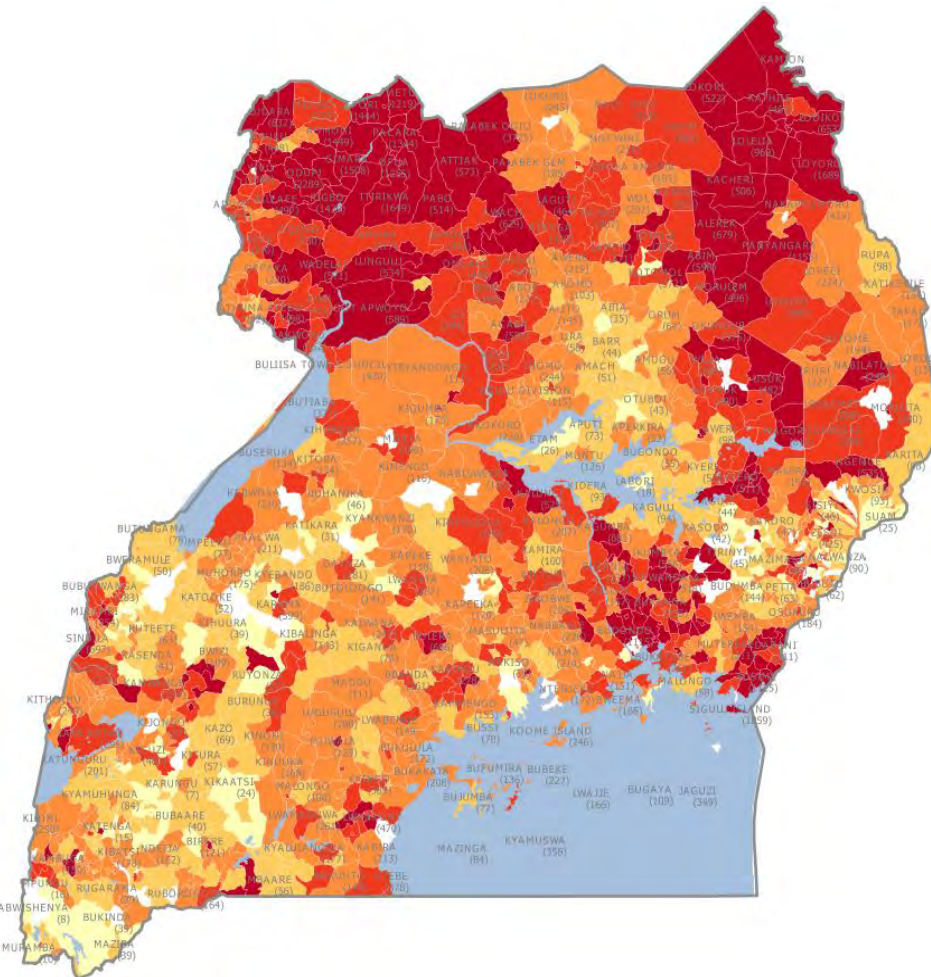


Strategic Use of Information for impact

Malaria incidence in Uganda by District (2018)



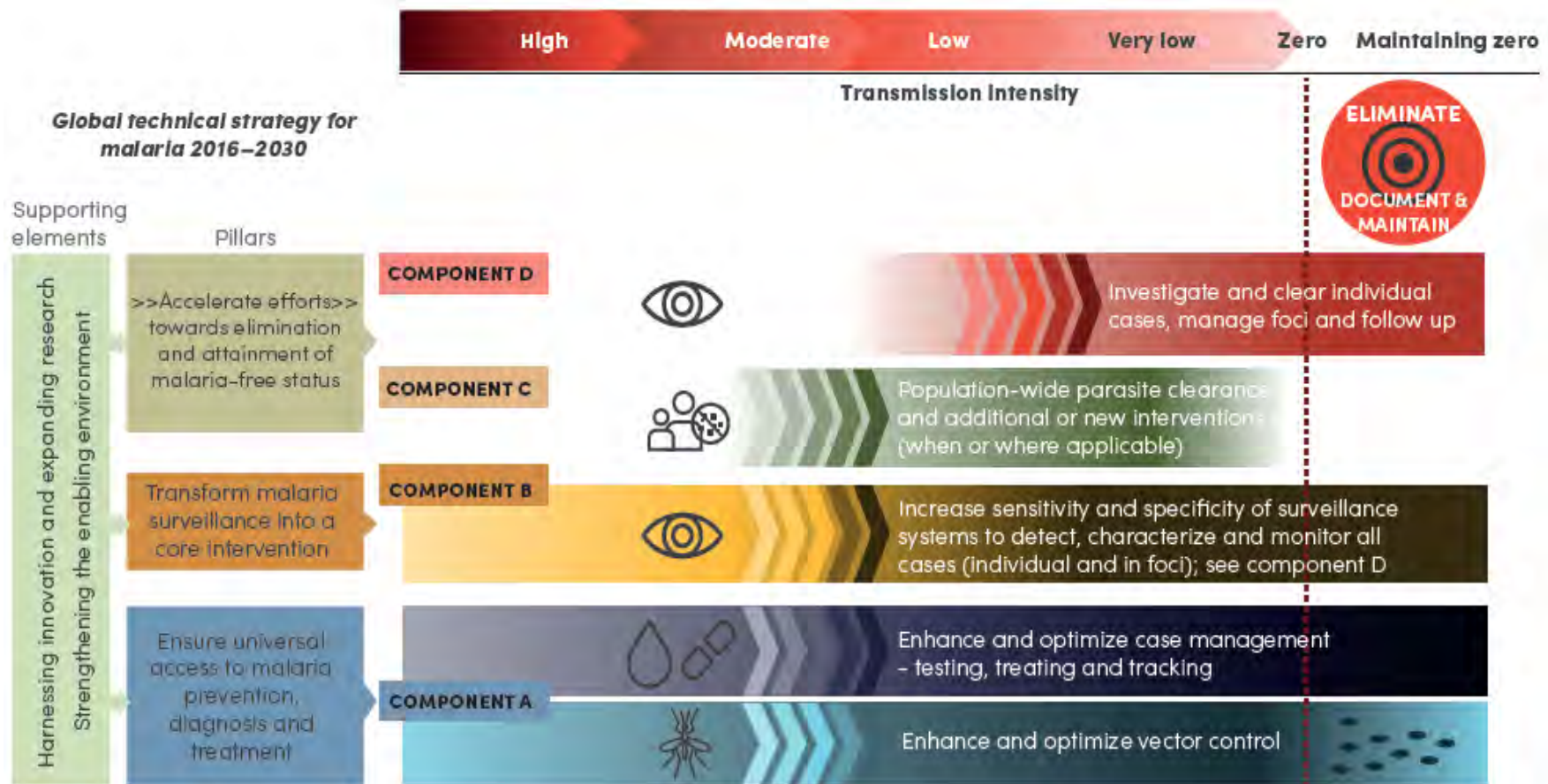
Malaria incidence in Uganda by Sub-County (2018)



High Burden High Impact



Strategic Use of Information - Identify locally appropriate mix of Interventions



*Acceleration – as represented by arrow bars (>>>>>) here – relates to time-limited efforts made across all components in order to (1) achieve universal/optimal coverage in malaria prevention and case management (**Component A**), and increase sensitivity and specificity of surveillance systems so they are able to detect, characterize and monitor all malaria cases and foci (**Component B**); and (2) bring malaria transmission to sufficiently low levels (with or without population-wide parasite clearance and other strategies, **Component C as an option**) where remaining cases can be investigated/cleared and foci can be managed and followed up (**Component D**).

Strategic Use of Information to define optimal means of delivery

- Evidence-based
- Cost – effectiveness
- Integrated approach
- Results-focused
- Value for Money
- Health Systems thinking
- Sustaining gains

These and many more questions will call for Operational Research



Progress on Pillar 3 of the HBHI approach in Uganda



- WHO will draw on the best evidence to establish global guidelines. Guidelines will be continually updated and refined based on country experience and the development of new tools.
- Adapting and adopting the global guidelines based on local settings
- Develop specific implementation guidance to ensure uptake and scale-up of policy.

Better guidance, policies and strategies have been and are being adapted for local context

- By different strategic objective areas
- For different levels of program operations
- SBCC materials for translation to local languages
- Notable documents:
 - National Malaria Control and Elimination Policy Guideline
 - EPR Guidelines
 - Entomological Surveillance framework, Etc.



Progress on Pillar 4 of the HBHI approach in Uganda



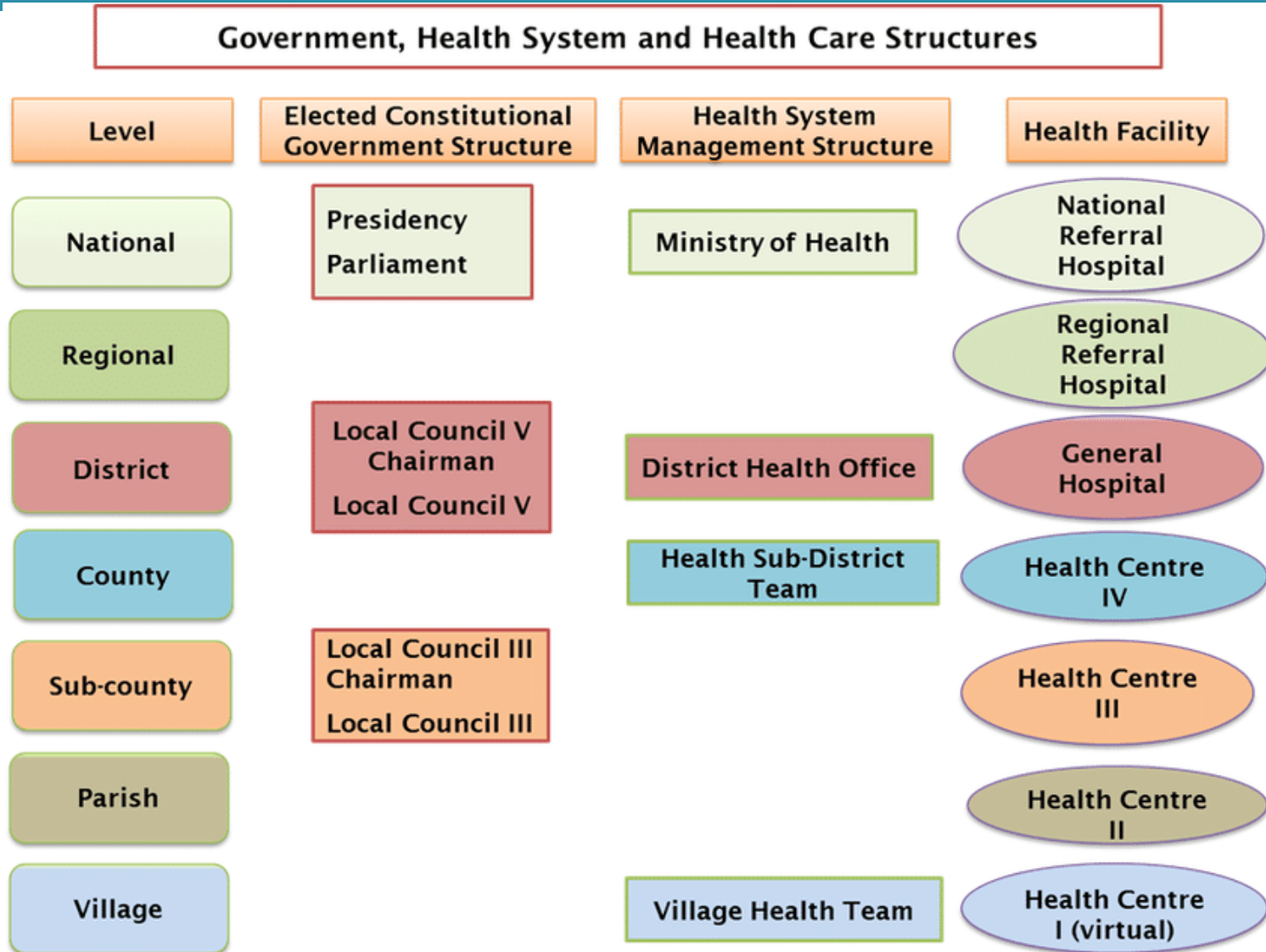
- A more coordinated health sector response complemented by other sectors, such as environment, education and agriculture.
- Aligning partners behind this country-led approach will ensure that scarce resources are used as efficiently as possible

A coordinated national malaria response

Areas requiring improved coordination:

- Research agenda
- Information sharing
- Intervention placement
- Work Scheduling
- Alignment of projects
- Coordination at district level
- Participation and support of the
- coordination mechanisms
- Governance of technical working groups

Uganda – health system structure



Coordination

1 Plan
1 Coordination
1 M&E



HBHI Uganda Approach

Stakeholders Meeting – Kampala, Uganda

- HBHI meeting (Uganda)
- February 11-15, 2019
- Brought partners together to strengthen our response to malaria
- Served as a consensus building process
- Press Release issued;
- Meeting Report has been finalized
- Follow –up mission is planned



Conclusion / Moving Forward:

- **More** Technical Assistance and guidance is needed to follow up on the existing good work
- Time to continue on reality checks is here: evidence based review of local context should inform initiatives (**what works, what did not, where, why?**)
- Everyone, including politicians, heads of households, children, has a significant role to play in achieving GTS targets (**who did what, why, and who else is needed, where?**)
- We need to sell malaria differently. It cannot continue to be business as usual
- **Test, Treat, Track and TELL.** We need to tell our own story!
- Achieving the 2030 malaria goals will make a substantial contribution to the attainment of Universal Health Coverage and SDG3 “Good Health and Well-being”



We bale n yor!
Thanks!
Obrigado!
Merci beau coup!
Shukran Jesilen!



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To End Malaria

High Burden High Impact: NIGERIA

MPAC

10th APRIL 2019



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Partnership
To End Malaria

Presentation outline

Country Profile
Burden of disease

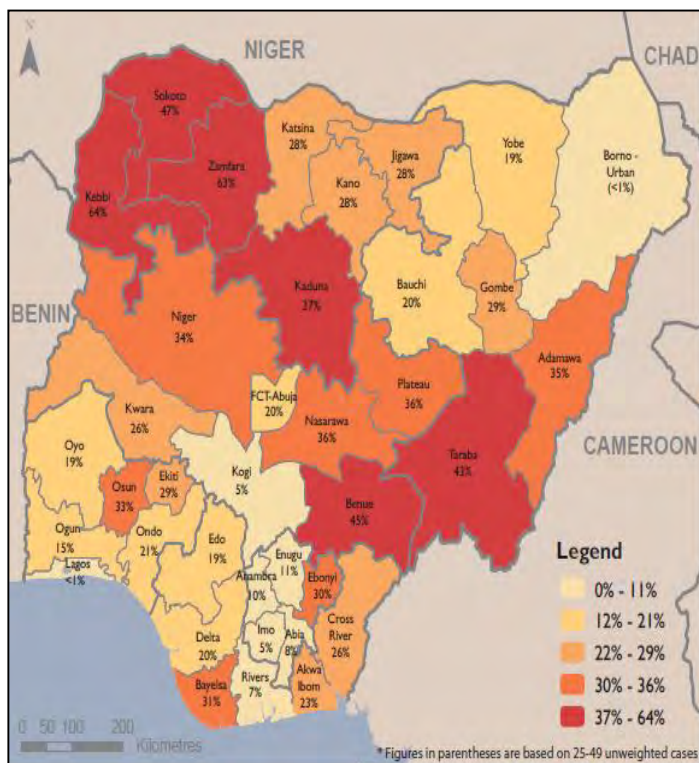
Background

Update on the response elements

Conclusion



Background: Country Profile & Malaria Situation



- Africa most populous country; estimated population: 199,220,487 in 2017
- Nigeria contributed 25% of the 219 million malaria cases and 19% of the 435,000 malaria deaths (WMR 2018)
- *Plasmodium falciparum*, most prevalent species (>95%)
- Prevalence Reduction 42% (2010) to 27% (2015)
- Differences in malaria epidemiology across the country also reflected by the variation in transmission
- Inequity in access to functional health facilities: urban vs rural



Malaria Burden in Nigeria

Risk

Entire population (198 Million) at risk

Morbidity

Annual Cases:

53.7 Million

25% of global burden

53% of West Africa burden

Prevalence: 27% (2015 MIS), range (<1% - 64%)

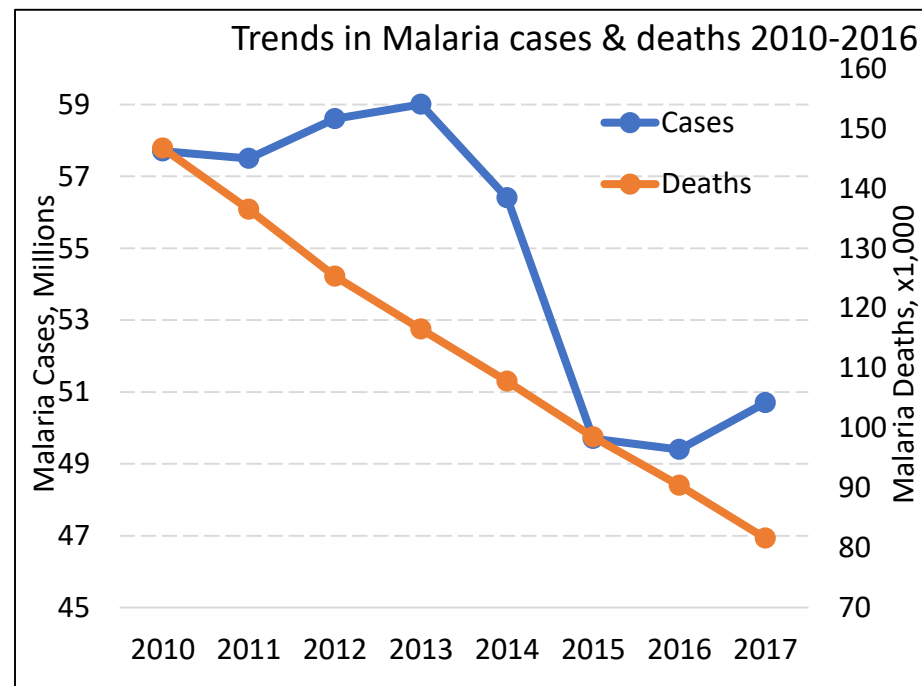
Mortality

Annual Deaths:

81,640 deaths

19% of global burden

45% of West Africa burden



Source: World Malaria Report 2018



WHO launched HBHI in Mozambique in November 2018

Engagement meeting with 10+1 countries held in Nouakchott, Mauritania in 1st and 2nd February 2019

Self assessment was done in-country to document the situation in the country according to the 4 response elements:

- Political Will to reduce malaria deaths
- Strategic Information to drive impact
- Better Guidance, Policies and Strategies
- A Coordinated national malaria response

Scoping mission and in-country stakeholder engagement held in Abuja in March 2019



- Translate political commitment into resources and tangible actions that will save more lives.
- Grassroots initiatives that empower people to protect themselves from malaria and help foster an environment of accountability and action.

Response element 1: Political Will



S/ N	Key Area	Current activities	Self-Assessment	Status of Implementation
1	Political structures	NMEP initiates policy formulation and linked within FMOH structure; capacity is weak at sub-National levels (State/LGA).	Potential for improvement	Planned advocacy to exiting governance structures: Governors forum, Legislators forum and Federal Exec. Council
2	Accountability	Executive and Legislative structures exist at all tiers including CSO/NGO-based networks	Potential for improvement	Push for “malaria agenda” underway at National Assembly Sub-Committee on Health; including use of score cards for periodic rating
3	Awareness	SBCC (“ACSM”) frameworks exist and informs messaging and strategies at all levels; includes use of National Goodwill Ambassadors.	Potential for improvement	National Malaria Dialogue planned for May 2019
4	Financing	Health is 5.79% of 2018 Federal budget; % of NMSP funded not available; households malaria cost largely ‘Out-of-Pocket’ (82%)	Need to establish tracking systems and increase domestic financing	Plans to adapt/adopt existing tracking tools; domestic funding on agenda of planned National Malaria Dialogue in May 2019



- Move **away from a 'one-size-fits-all'** approach to malaria.
- Through the more strategic use of data and information, **pinpoint** where and how to deploy the most effective malaria control tools for maximum impact.

Response element 2: Strategic Information



S/N	Key Area	Current activities	Self-Assessment	Status of Implementation
1	National malaria data repositories	Data available in fragmented databases; NMDR currently at planning phase, with high stakeholder wide support.	Fragmented databases	NMDR development process is at Phase 1 of 4
2	Progress review	Nigeria is up-to-date on reviews; MPR planned in 2019; considering subnational (state-level) reviews; QPRMs newly commenced at national level	On-course	MPR Phase 1-3 to commence in 2019
3	Analysis of stratification, intervention mixes and prioritization	New generation NSP in view by 2020; in-depth/granular data analysis and intervention mixes being proposed	Sub-optimal	Analysis to be nested in upcoming MPR
4	Subnational operational plans	State AOP review and development inconsistent, not integrated and often not operationalized;	Sub-optimal	Newly launched QPRMs to feature subnational (state) plans
5	Monitoring and Evaluation	Dedicated SME staff at national level Regular assessment is being done at the national	Functional	Ongoing plans to integrate with other programmes



- WHO will draw on the best evidence to establish global guidelines. Guidelines will be continually updated and refined based on country experience and the development of new tools.
- Adapting and adopting the global guidelines based on local settings
- Develop specific implementation guidance to ensure uptake and scale-up of policy.



Response element 3: Guidance, Policies, strategies

S/N	Key Area	Current activities	Self-Assessment	Status of Implementation
1	Continually updated guidelines	Clear guidelines are available and regularly updated; except for private sector engagement	Potential for improvement	Awaiting MPR recommendations
2	Improved dissemination and update of global policies at the country-level	TWG Sub-committee structures guide periodic updates	functional	On-going process
3	Effective and optimal deployment of national policies	Clear guidelines are available except for private sector engagement, but deployment is suboptimal	Potential for improvement	Broad private sector strategy to guide oversight by NMEP
4	Improved tracking of policy update	No defined or deliberate tracking system	Potential for improvement	Need to develop a simple tracking tool that incorporates adoption and adherence



- A more coordinated health sector response complemented by other sectors, such as environment, education and agriculture.
- Aligning partners behind this country-led approach will ensure that scarce resources are used as efficiently as possible

Response element 4: Coordination



S/N	Key Area	Current activities	Self-Assessment	Status of Implementation
1	Processes requiring coordination	Harmonization of partners support; including non-traditional donors; More coordinated private sector involvement; integration with other diseases, programmes	Potential for improvement	Private Sector Engagement Strategy; Mal-RMNCAH integration; SOML project; BHCPF/NPHCDA
2	Coordination structures	Established coordination mechanisms exist ensuring aligned partner support on NSPs and health sector priorities	Potential for improvement	Strengthen functionality of TWG at national; establish/strengthen at subnational
3	Aligned partner support	Partner support is aligned with health sector priorities and an evidence-based, costed National Strategic Plan; and ensure partners work plans key into the NSP	Potential for improvement	Engagement within the partners' forum and QMPRs



- Improved planning environment
- Improvement in domestic resources
- Inclusion of malaria in national budget
- Private sector engagement as donors and investors
- Financial instruments from Banks
- Improve prog implementation in private sector
- Support for domestic response
- Stratification of intervention



- National Malaria Dialogue Operationalizing the National OR Agenda
- Improve advocacy to sub-national governments for domestic financing
- Improved delivery systems through the integration of routine services for sustaining malaria control efforts e.g. MAL-RMNCAH integration
- Improved targeting of communication arrangements
- Strengthening of SME especially coverage to private sector



Nigeria plan to launch the HBHI approach nationally in May 2019 within the Malaria Dialogue meeting

Implementation of evidence-based and data-driven NMSPs key to success

Aligning malaria annual work plans with government budget and appropriation cycles at various levels will ensure financing

Nigeria is committed to implementing strategic actions to impact significantly on the goal towards achieving low transmission and eventual elimination

HIGH BURDEN HIGH IMPACT APPROACH TO MALARIA ELIMINATION IN INDIA

Dr. Neeraj Dhingra
Additional Director
NVBDCP, INDIA

Content

India's health system – malaria integrated in UHC

Commitments for malaria elimination

Use of strategic information for identification of high burden areas

Accelerated malaria strategies

Impact of interventions in high burden areas

Challenges

Demographic & Health Systems Profile of India

- **Population of India:**

- **1,364,056,517**
- **17.74%** of the total world population.
- Population density - 460 per Km²
- **33.6 %** of the population is **urban**

- **No. of States/Provinces/Districts**

- **29 States and 7 Union Territories**
- **712 districts**

- **No. of Villages:649,481**

- **No. of Health Facilities with details**

District Hospitals	Sub District/Sub Divisional Hospitals	Community Health Centres	Primary Health Centres	Sub Centres
779	1108	5624	25650	156231

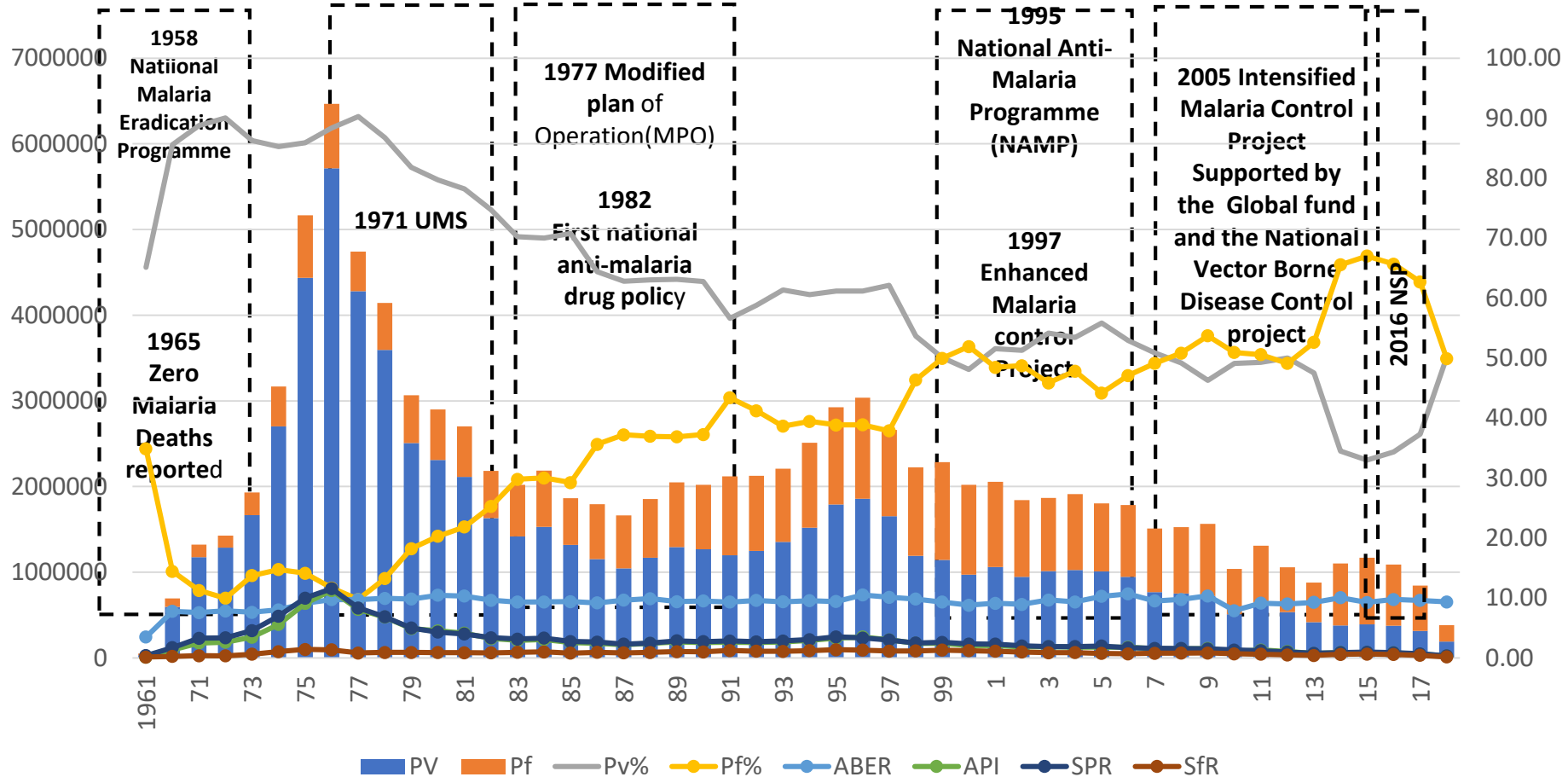
- **No. of HWs**

- ANMs (Auxillary Nurse Midwife) - **198356**
- Health Worker (F): **220707**
- Health Worker (M) : **56263**

- ASHA (Accredited Social Health Activists) - **1018019**



Malaria Situation in India



INDIA'S RESPONSE TO MALARIA ELIMINATION

HIGH POLITICAL COMMITMENT

- Global Technical Strategy for Malaria 2016–2030 (GTS) adopted by the World Health Assembly in May 2015 – India signatory to the commitment
- Commitment at the highest office of India to malaria elimination in East Asia Summit and APLMA meeting
- India signatory to SEARO Free of malaria – declaration signed by Health Ministers of SEARO countries in New Delhi
- Drafting of India's approach on Malaria - Launch of National Framework for Malaria Elimination (NFME) 2016- 2030 - February, 2016 by Hon'ble Health Minister
- Dissemination of NFME 2016- 2030 to all States and UTs with instructions to initiate key actions
- Launch of Operational Manual for Malaria Elimination - April, 2016
- Launch of National Strategic Plan (2017-22) - July, 2017 by Hon'ble Health Minister
- Formation of a National Task Force on Malaria Elimination under the Union Health Secretary to promote intersectoral cooperation and engagement of all stakeholders including community who are members.
- Technical Working Group under the DGHS for oversight of all malaria elimination activities in the country.

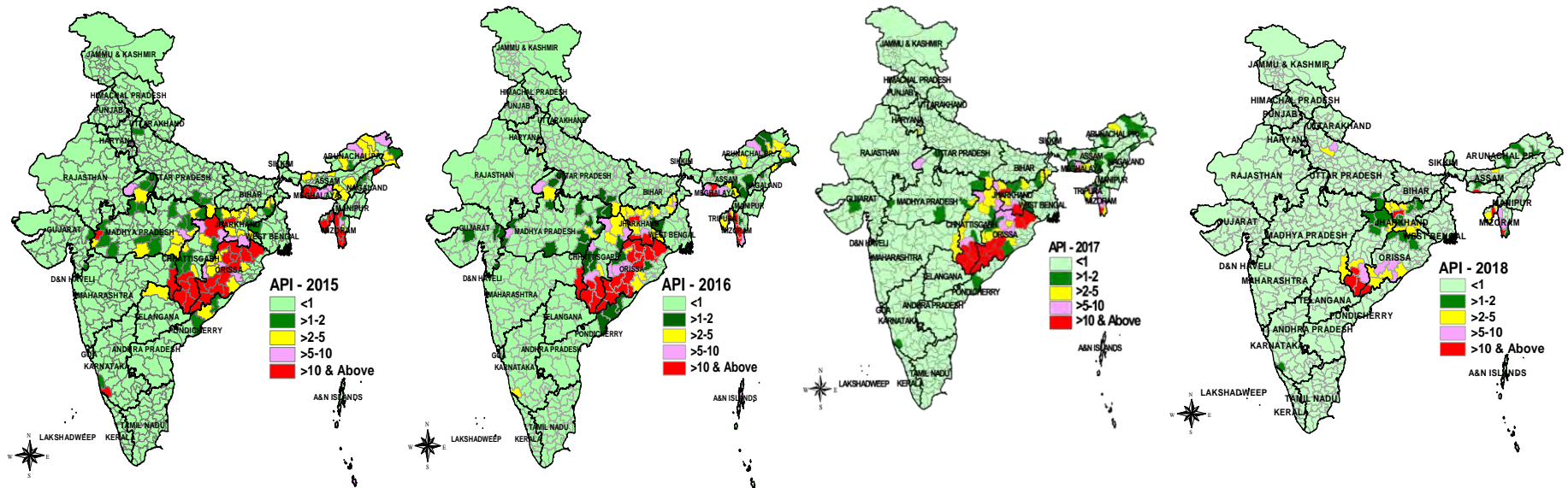
Political Commitments- progress and next steps

1. India's malaria programme reviewed by the Central Council of Health in 2018 which reaffirmed continuous support to malaria programme
2. Malaria Review, an agenda in all state councils of health and in zonal health meetings
3. Malaria a part of National Health Mission (Universal Health Coverage approach)
4. Elected representatives involved in distribution of LLINs and IEC campaigns

FURTHER ADVOCACY :

1. Newer government formation after elections in India in May2019.
2. Briefing of the newer elected representatives
3. Launch of subnational malaria elimination strategies at the Central and State levels by political head
4. Incentivisation of districts and states maintaining "zero Indigenous cases" for 1 year and subsequently 3 years
5. Awards to be given by the State and Central Ministers
6. Announcement of 2020 states which achieve "zero malaria cases" in a big function
7. Formation Parliamentary and Legislative Forum on Malaria Elimination

INDIA'S HIGH BURDEN MALARIA STATES



In last 3 years, malaria has gone down. Few pockets still remain high endemic shown in red above

STRATIFICATION OF STATES BASED ON MALARIA BURDEN (API)

Category 1 (15)

- State/Districts reporting an API of less than 1 case per 1000 population

Chandigarh, Daman & Diu, Delhi, Goa, Haryana, Himachal Pradesh, J & K, Kerala, Lakshwadeep, Manipur, Puducherry, Punjab, Rajasthan, Sikkim, Uttarakhand-

ELIMINATE MALARIA BY 2020

Category 2 (11)

- State < 1 API but some districts report API of 1 case per 1000 population

Andhra Pradesh, Assam, Bihar, Gujarat, Karnataka, Maharashtra, Nagaland, Tamil Nadu, Telangana, Uttar Pradesh, West Bengal

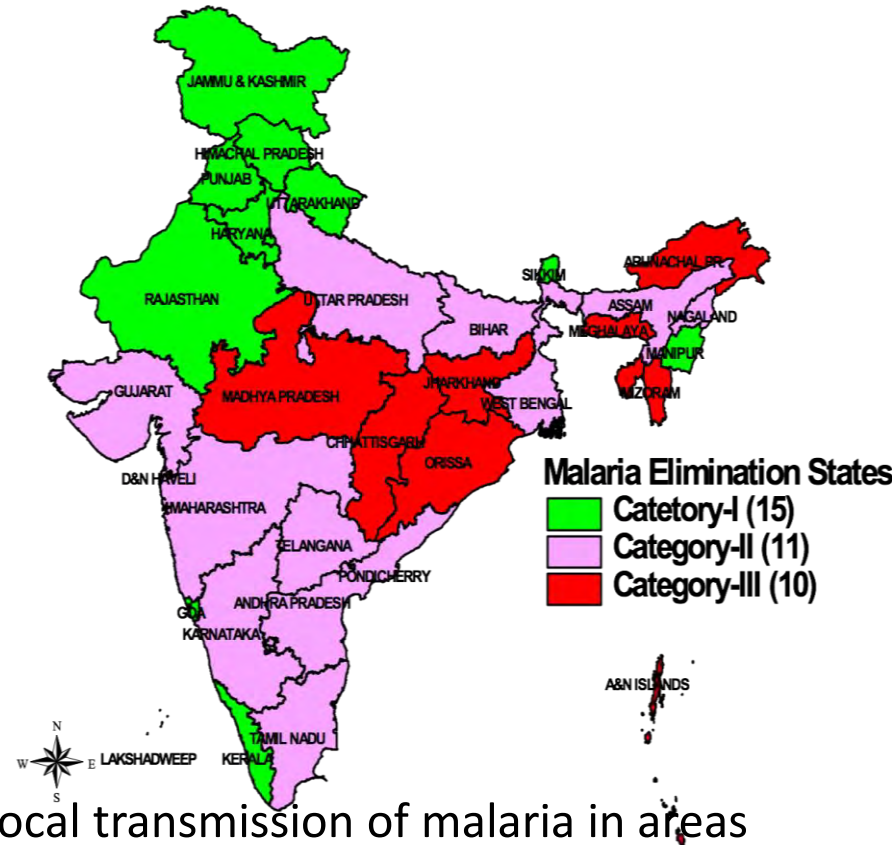
ELIMINATE MALARIA BY 2022

Category 3 (10)

- States with API of 1 or more per 1000 population

A & N Islands, Arunachal Pradesh, Chhatisgarh, Dadra & Nagar Haveli, Jharkhand, Madhya Pradesh, Meghalaya, Mizoram, Odisha, Tripura

By 2030 and beyond



- Prevent the re-establishment of local transmission of malaria in areas where it has been eliminated and maintain national malaria-free status

STRATIFICATION OF DISTRICTS (API based)

Category of districts	Definition	Number (%)
Category 0: Prevention of re-establishment phase	No local transmission and reporting of malaria cases	75 (11.0)
Category 1: Elimination phase	Districts/units having API less than 1 per 1000 population	448 (66.1)
Category 2: Pre-elimination phase	Districts/units having API 1 and above, but less than 2 per 1000 population.	46(6.8)
Category 3: Intensified control phase	Districts/units having API 2 and above per 1000 population.	109(16.1)

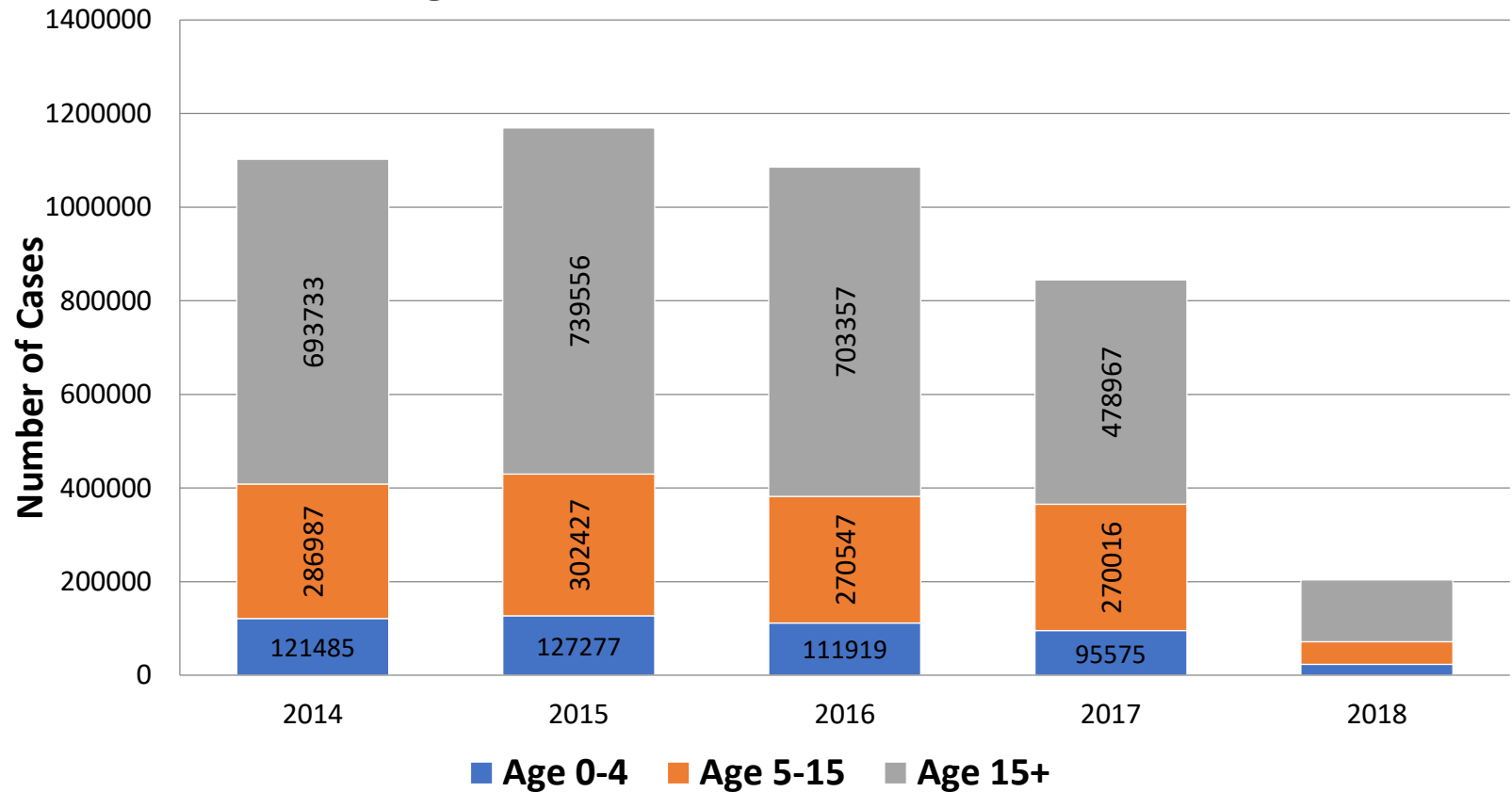
Year	Category 0	Category 1	Category 2	Category 3	Total
2015	75	448	46	109	678
2017	102	501	71	32	706
2018*	165	483	38	22	708
2019	305	233	33	107	678
2020	523	48	15	92	678
2022	571	15	30	62	678

**ALL PHC/
VILLAGES
CATEGORISED
BASED ON
MALARIA
ENDEMICITY IN
HIGH BURDEN
STATES**

4 STATES CONTRIBUTE MAXIMUM BURDEN OF MALARIA IN INDIA

Name of the State/UTs	Pf Cases				Malaria Cases			
	2017		2018		2017		2018	
	Pf Cases	% TO Pf.	Pf Cases	% TO Pf.	Malaria Cases	% TO TOTAL MALARIA	Malaria Cases	% TO TOTAL MALARIA
ODISHA	297554	56	54021	27	352140	42	66301	17
CHHATTISGARH	115153	22	61271	31	141310	17	77140	19
JHARKHAND	42047	8	19121	10	92770	11	53798	13
MADHYA PRADESH	15554	3	6121	3	46176	5	21311	5
MEGHALAYA	14974	3	6076	3	16433	2	6394	2
TOTAL OF ABOVE STATES	485282	91	146610	73.48	648829	77.2	224944	56.36

Age-wise Malaria Cases 2014-2018



NEXT STEPS FOR STRATEGIC INFORMATION ON MALARIA

- Existing malaria data used for stratification of high burden areas – State/District/PHC and villages
- Setting up of health web based reporting system for the whole country on Integrated Health Information Platform (IHIP) – malaria included. Trials going on in 2 States on malaria elimination formats for web based, real time malaria reporting. Can link malaria data to various other aspects like hospital admissions and deaths (all causes), climatic conditions, diagnosis of fever (other than malaria) and so on. Reporting from private sector included
- Handheld devices will be used on pilot basis at the ANM Level in one state
- Mapping of high malarious areas using GIS maps and hot spots for identification and follow up.
- Tracking of cases and follow up, better knowledge in the acceptance and usage of LLINs and IRS would lead better decision making and make corrections mid-course

CHALLENGES

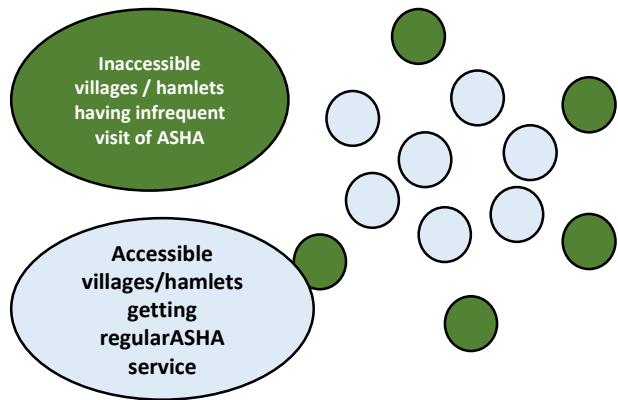
- Results of IHIP would be known by August –September 2019
- Availability of hardware and technical competence in remote areas

STRATEGIES TO ACCELERATE MALARIA ELIMINATION

- Identification of high endemic States/districts/blocks/PHCs/villages by stratification based on malaria cases and deaths
- Increase outreach of the Programme by engaging Accredited Social Health Activists (ASHA), community volunteers and ANM for doing Rapid Diagnostic Test (RDT) and providing treatment based on the results at the village level itself.
- Enhanced microscopy with cross checking for quality
- 50 million LLINs distributed/being distributed in high endemic villages- centrally procured with Global Fund and domestic budget
- Enhancing surveillance – Integrated Health Information Platform (IHIP) with WHO support initiated as a pilot
- Decentralisation of procurement items to States – RDT, Synthetic Pyrethroids for IRS, Larvicides, drugs.

Special Initiative DAMaN

Access to Inaccessible (Reaching the Unreached)



- **“DAMaN” is a State specific special intervention** for inaccessible areas for mass screening of population for malaria and screening of vulnerable population for nutritional parameters
- Implemented three rounds a year, in 23 districts of Odisha to address malaria and mal-nutrition

1st round health camp (April – May)

Malaria Mass screening + Health check of <5 children + Preg & Lactating mothers
-First round IRS followed by LLIN & intensified routine programme

-2nd round camp (September – October)

Malaria Mass screening +Health Check up of <5 children + Pregnant & lactating mothers

Second round followed by IRS & intensified routine programme

3rd round health camp (Jan– Feb)

Malaria screening + Health check of <5 children + Preg & Lactating mothers

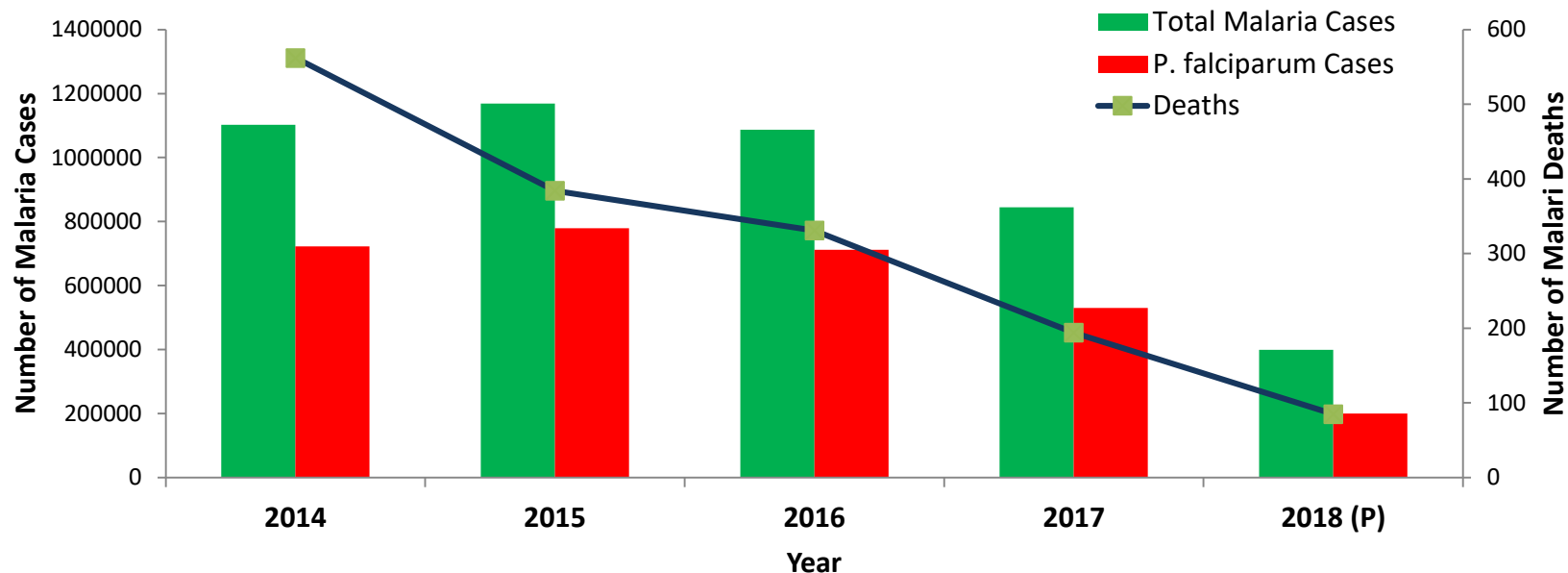
All supportive activities – Training, IEC BCC, M&E , OR, Intersectoral coordination etc
Establishment of Non-ASHA FTD

LLIN DISTRIBUTION

- Long Lasting Insecticidal Nets (LLINs) distribution effective, efficient and transparent
- All high endemic Sub Centres covered with LLINs – API>1
- All the villages in the identified are distributed LLINs irrespective of their individual village API
- Priority Groups
 - Pregnant women and young children (under five)
 - Jhoom cultivators and hostellers
- Household surveys for assessment of LLIN required for each house.



IMPACT IN HIGH BURDEN STATES



	Pf Malaria	Malaria Cases	Deaths
ALL INDIA 2017	529530	844558	194
ALL INDIA 2018	199517	399134	98

Cases 53% decreased

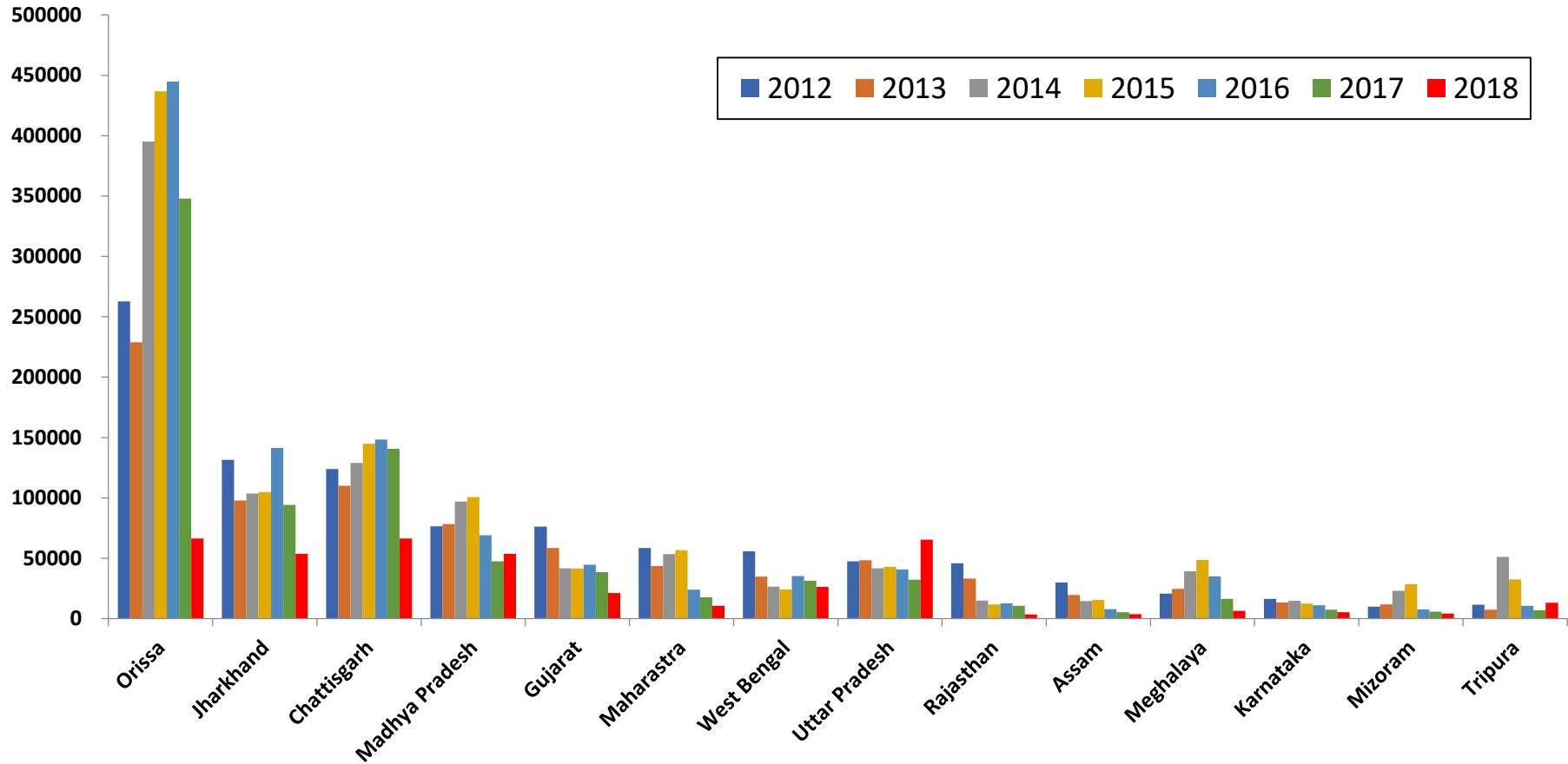
Deaths 49% decreased

	Pf Malaria	Malaria Cases	Deaths
ALL INDIA 2015	778821	1169261	384
ALL INDIA 2018	199517	399134	98

Cases 65.9% decreased

Deaths 74.5% decreased

IMPACT IN HIGH BURDEN STATES



COMMITMENT TO SUSTAINED FUNDING FOR NVBDGP BUDGET (IN Rs. Crores)

Year	Budget Estimates	Final Estimates
2012-13	572.00	455.00
2013-14	572.00	310.48
2014-15	572.00	572.00
2015-16	505.65	505.65
2016-17	505.65	505.65
2017-18	502.21	988.12
2018-19	955	

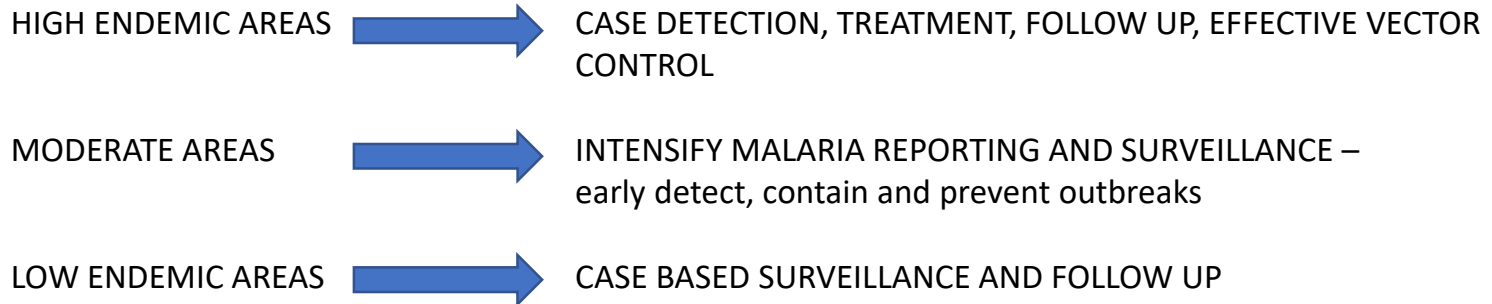
1 crores = 10 million

Coordinated National Malaria Response

- India's malaria response part of MOH and embedded in the National Health Mission (NHM) and implemented by National Vector Borne Disease Control Programme (NVBDCP) – assured Universal Health Coverage
- Health is a State subject but common Annual Project Implementation Plan (PIP) is formulated wherein sharing of resources from Centre and State decided. Each intervention of malaria coded and financial resources decided
- Malaria budget part of Communicable flexi pool budget in PIP – gives leverage to States to use more than what is allocated in malaria if need arises.
- Sharing of resources between Centre and State is to the extent of 60:40 and in some high endemic malaria it is 90:10
- Common Review Mechanisms at all levels- malaria main focus in high endemic areas.
- Implementation and basic research by ICMR/NIMR and other institutions

Malaria elimination – Challenges in India

Technical Strategies will need to adapt to this bring this change and maintain it:



IN INDIA- WE WILL NEED TO IMPLEMENT THE ABOVE IN DIFFERENT REGIONS AT SAME TIME

SUPPORT NEEDED

1. India would need differential skills for manpower in different areas – newer SOPs, modules, etc
2. Newer skills would need to be added to the Programme – surveillance, management, social scientists, enhanced entomological component- TECHNICAL SUPPORT UNITS ESPECIALLY IN HIGH BURDEN STATES AND NVBDCP
3. Task shifting in areas where malaria has gone down drastically in the last 3 years
3. Capacity building for huge numbers
4. Enhanced Surveillance mechanism

Thank you