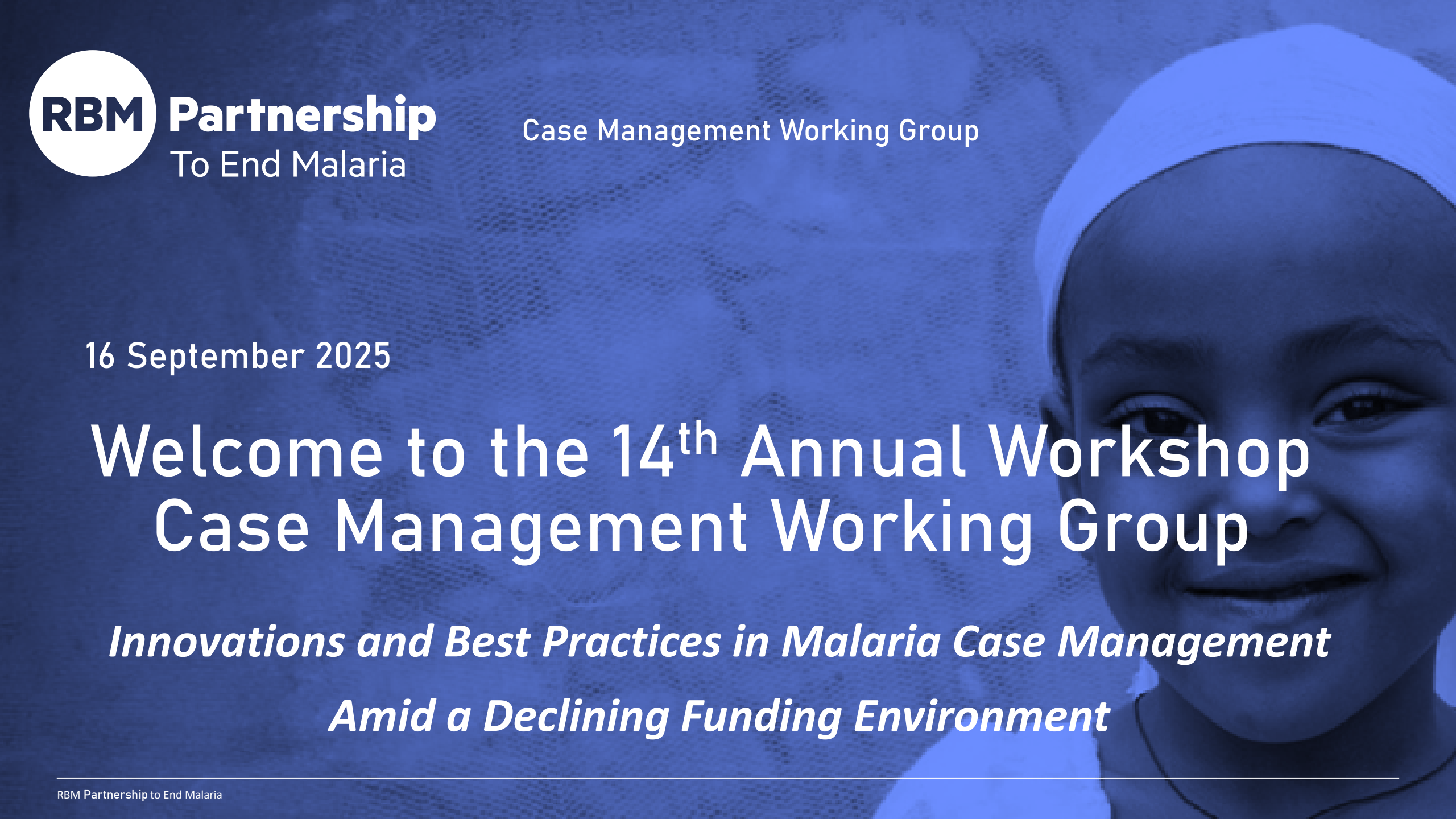
RBM Partnership To End Malaria

Case Management Working Group



16 September 2025

Welcome to the 14th Annual Workshop Case Management Working Group

Innovations and Best Practices in Malaria Case Management Amid a Declining Funding Environment

RBM Partnership
To End Malaria

16 September 2025

Session 1:
Introductions, objectives, key updates

Chair, CMWG

RBM Partnership
To End Malaria

16 September 2025

Welcome and introduction of participants

Prof. Olugbenga Mokuolu, CMWG Co-Chair

Case Management Working Group

Purpose and objectives

- To minimize wasteful duplication, maximize synergies, and encourage harmonisation and pooling of efforts for faster uptake and scale up of malaria case management strategies and interventions
- The main objectives of this group mirror the functions of the RBM partnership
  - Convene: Provide a forum for the dissemination of the normative and policy-setting guidelines of WHO and for sharing best practices for adaptation and implementation by international and country-level partners
  - Support the scale up and implementation of policies and strategies to ensure universal coverage and access to quality malaria case management in endemic countries
  - Coordinate: Align and facilitate collaboration between partners to avoid duplication and inefficiencies; sharing experiences and best practices; and identification of challenges or bottlenecks for discussion by the working group.

The CMWG-14 is sponsored by the Swiss Agency for Development and Cooperation (SDC) through the GlobMal project at Swiss TPH, MMV, Novartis, MARC-SE, Malawi-Liverpool Welcome Clinical Research Programme and UCT.

RBM Partnership
To End Malaria

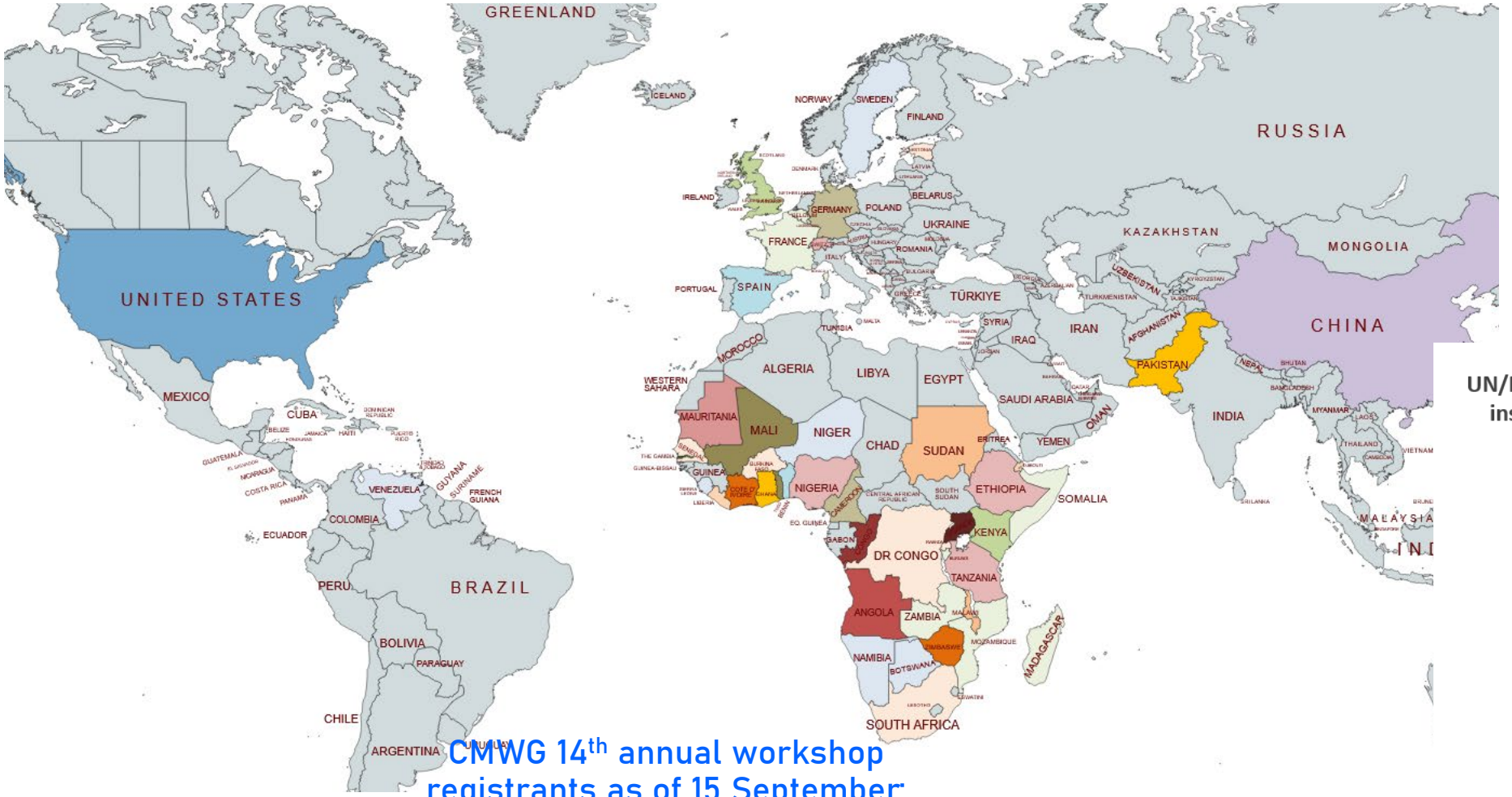
16 September 2025

Overview of agenda and objectives for CMWG-14

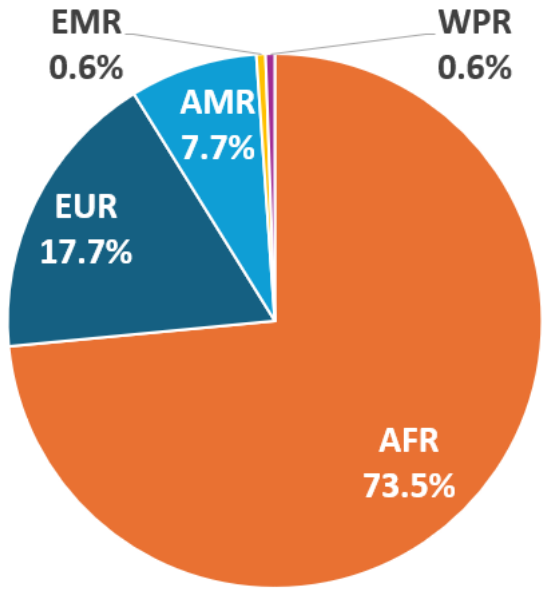
Co-Chair Noella Umulisa, CMWG

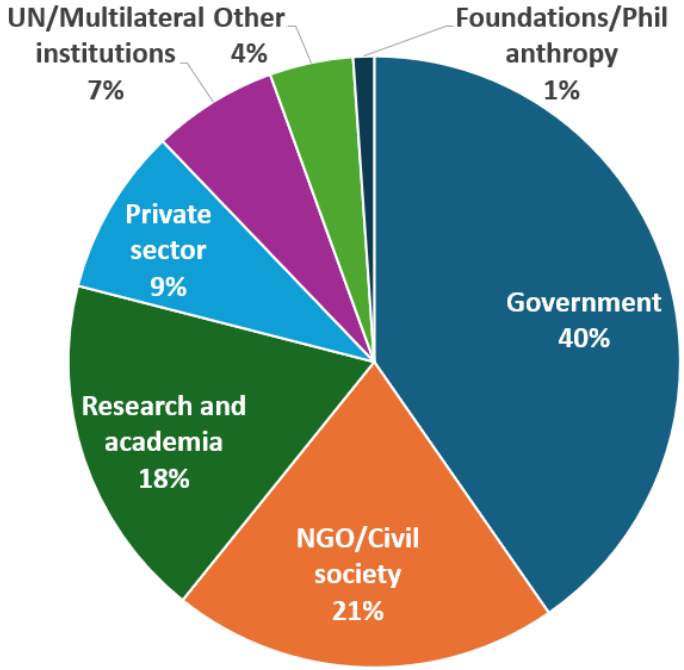
RBM Partnership To End Malaria | Vector Control Working Group

CMWG - 14th annual workshop 2025 in Abidjan



CMWG 14th annual workshop registrants as of 15 September:
181 participants from 46 countries
(74% malaria-affected countries)





Objectives of the 14th RBM CMWG Annual Workshop

- To provide updates on state of the art tools and hot topics in malaria case management
- To convene country representatives and malaria partners to share experiences and evidence on best practices for improving malaria case management
- To facilitate deep discussion and produce concrete outputs or recommendations to the CRSPC
- Serve as a consultative forum to gather field experiences and best practices that can inform the broader malaria community

RBM Partnership
To End Malaria

16 September 2025

Opening Remarks

1. Dr Daniel Ngamije, World Health Organization, Global Malaria Programme (remoted)
2. Dr Michael Charles, CEO, RBM Partnership to End Malaria (video)
3. MoH representative, Côte d'Ivoire

RBM Partnership
To End Malaria

16 September 2025

Progress towards malaria elimination in Cote D'Ivoire

Dr Tanoh, NMCP Coordinator, Côte d'Ivoire

REUNION ROLL BACK MALARIA

PROGRES VERS L'ELIMINATION DU PALUDISME EN CÔTE D'IVOIRE

16 Septembre 2025

PNLP

Dr TANOH MEA ANTOINE, DC-PNLP CÔTE D'IVOIRE

PLAN

- Introduction
- Situation épidémiologique du paludisme
- Stratégies de lutte
- Approche de mise en œuvre des interventions de lutte contre le paludisme
- Principaux résultats
- Leçons apprises et défis
- Conclusion

INTRODUCTION

Mis en place ou créé par arrêté **N°311MSHP/CAB du 04 octobre 2007**, les attributions du PNLP sont :

Mission : Contribuer à la réduction de la morbidité et de la mortalité liées au paludisme par des activités de types promotionnels, préventifs, curatifs et de recherche ; Coordonner les activités de lutte contre le paludisme.

Vision : « Le PSN 2021-2025 vise une Côte d'Ivoire prospère sans paludisme à travers un accès universel et équitable aux interventions de lutte contre le paludisme».

Valeurs: Les valeurs cardinales attendues de tous les acteurs :

- Respect de la diversité des peuples et des cultures ;
- Respect de la dignité de la personne humaine ;
- Respect des droits humains et de l'égalité du genre.

SITUATION EPIDEMIOLOGIQUE DU PALUDISME EN CI 1/2

- Pays Hight Burden Hight Impact (HBHI) depuis février 2024 selon les critères de l'OMS
- **Prévalence hospitalière** est passée de 50% en 2012 à 32% en 2024
- **Incidence élevée:** 241 ‰ dans la population générale en 2024
- **Décès liés au paludisme** : Baisse continue depuis 2017, passant de **3222 en 2017 à 1144 en 2024**,soit une réduction de plus **de 60%.**

SITUATION EPIDEMIOLOGIQUE DU PALUDISME EN CI 2/2

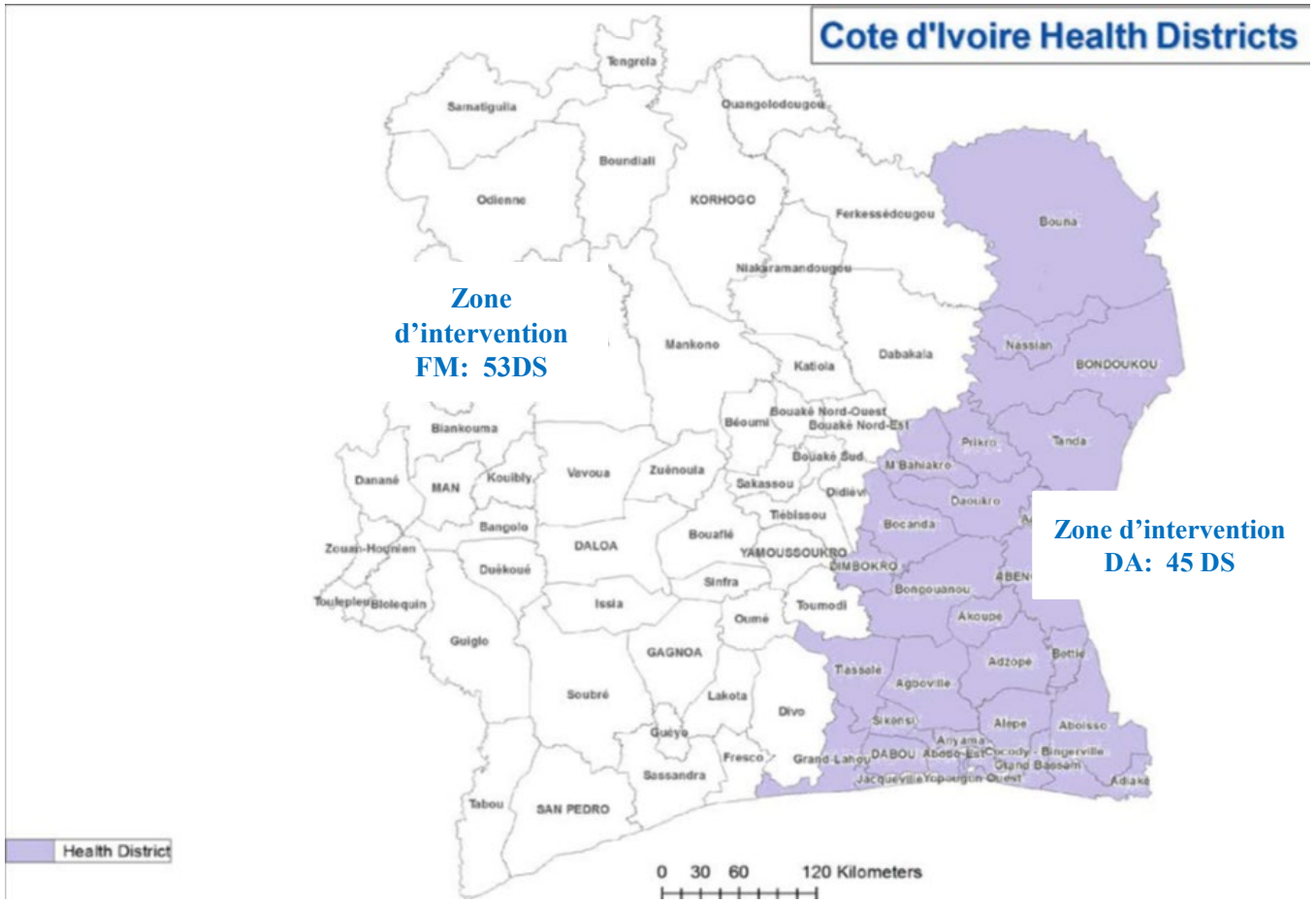
- **La mortalité** est passée **de 11 décès 100,000 hbts en 2017 à 4.35 décès pour 100,000 en 2023** soit une **réduction** de plus de **60%.**
- **Cibles vulnérables** : enfants de 0-5ans et femmes enceintes bénéficiaires des principales stratégies de prévention en routine
- **Principaux vecteurs**: A. gambia (95%) , A. funestus et colluzzi
- **Agents pathogènes** : *plasmodium falciparum* (95%) et *p. malariae* et *p. ovale*.

STRATEGIES DE LUTTE

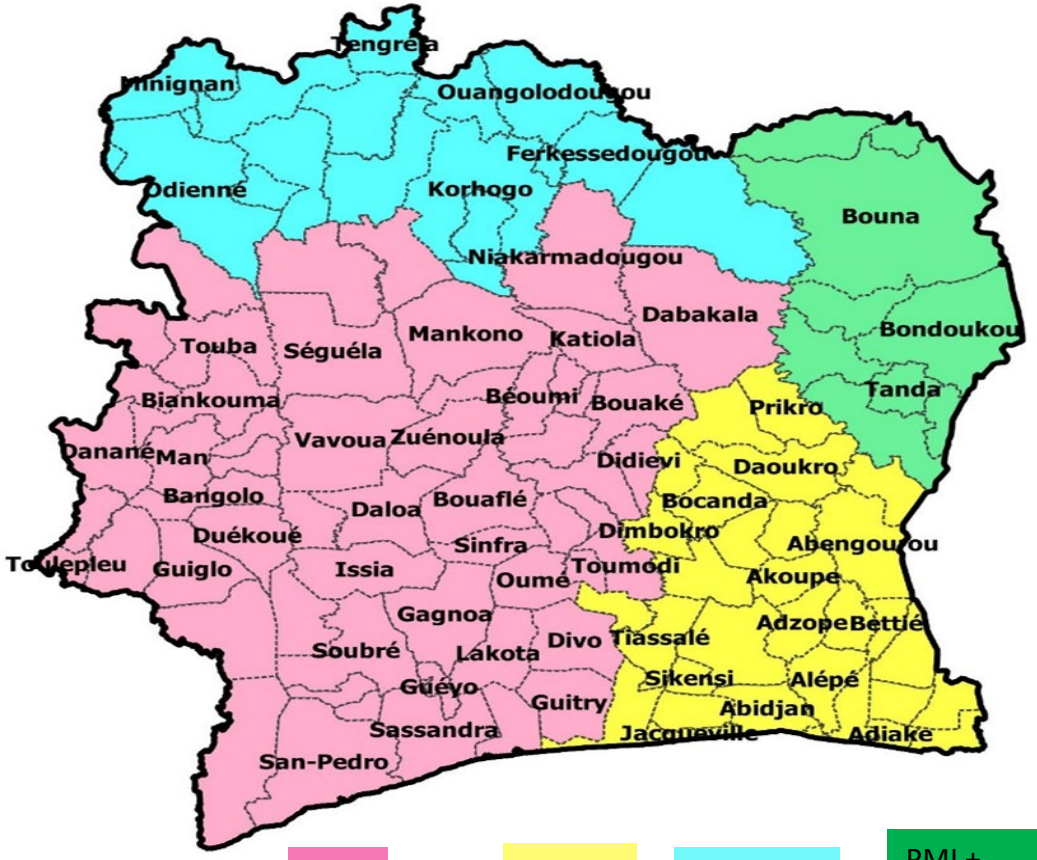


APPROCHE DE MISE EN ŒUVRE DES INTERVENTIONS DE LUTTE CONTRE LE PALUDISME

Activités dans les formations sanitaires



Activités Communautaires



Gestion des intrants se fait dans un système de panier commun

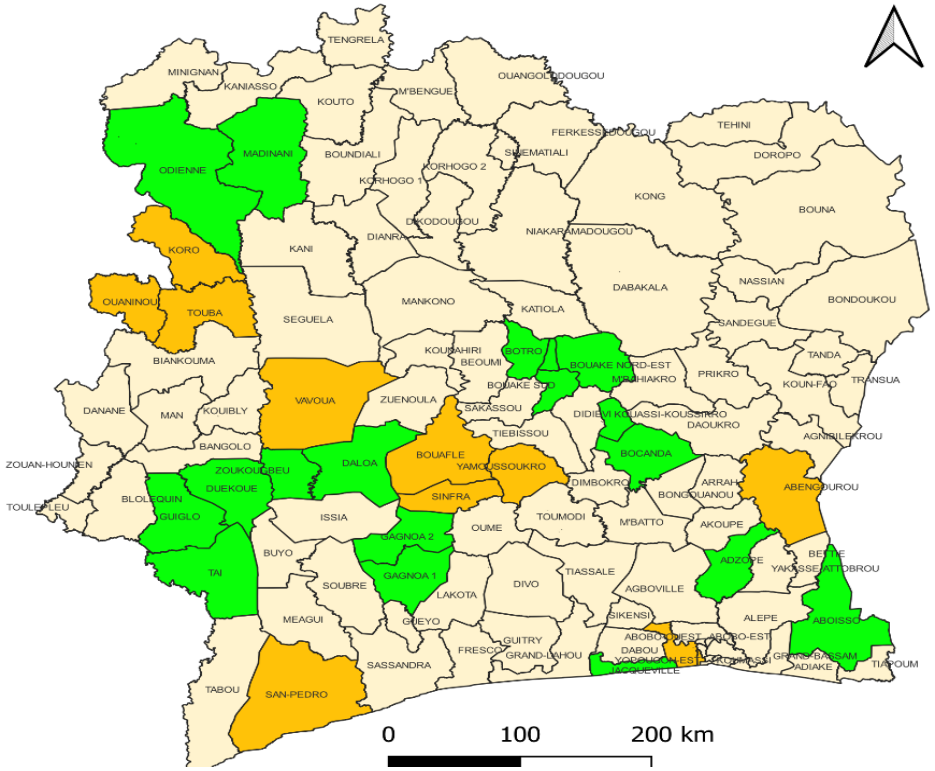
Activités de coordination et de S&E: Co-financement Département Américain (DA) et FM

Stratification selon l'endemicité

Strates		Incidence annuelle	Districts Sanitaires	Population par strate en 2021	% population par strate
Endémicité faible		≤100‰	**(07 Districts):** Yopougon est, Abobo Est, Abobo Ouest, Treichville Marcory, Adjamé plateau attecoubé, Port-Bouet-Vridi, Koumassi	4 937 503	17%
Endémicité Moyenne		100 - 199‰	**(22 Districts):** Agboville, Ouangolodougou, Korhogo 1, Kouto, Cocody Bingerville, Bouake Nord-Ouest, Agnibilekrou, Yopougon-Ouest Songon, Bangolo, Dianra, Grand-Lahou, Duekoue, Gagnoa1, Adzope, Daloa, Aboisso, San-Pedro, Anyama, Akoupe, Oume, Boundiali, M'bengue	8 230 720	28%
Forte Endemicité		200 - 299‰	**(45 Districts);** Bouake-Sud, Tiassale, Korhogo 2, Yamoussoukro, Bocanda, Kounahiri, Zouan-Hounien, Bouake Nord-Est, Ferkessedougou, Lakota, Kong, Abengourou, Danane, Kaniasso, Tiapoum, Tengrela, Sassandra, Tabou, Meagui, Bondoukou, Kouibly, Grand-Bassam, Dikodougou, Sandegue, Issia, Adiake, Zoukougbeu, Mankono, Gagnoa2, Madinani, Soubre, Divo, Kouassi Kouassikro, Vavoua, Mbahiakro, Zuenoula, Tehini, Yakasse-Attobrou, Tai, Bouna, Didievi, Dimbokro, Sikensi, Bouafle, Buyo	10 462 245	36%
Très forte endémicité		≥ 300‰	**(39 Districts):** Guitry, Sinfra, Bongouanou, Sakassou, Dabou, Prikro, Seguela, Minignan, Alepe, Koun-Fao, Transua, Biankouma, Daoukro, Odienne, Arrah, Sinematiali, Jacqueville, Toumodi, Tanda, M'batto, Man, Gueyo, Niakaramadougou, Nassian, Dabakala, Kani, Koro, Blolequin, Bettie, Ouaninou, Katiola, Beoumi, Tiebissou, Doropo, Guiglo, Fresco, Botro, Touba, Touleupleu	5 758 682	20%
NIVEAU PAYS			**113 DISTRICTS SANITAIRES**	29 389 150	100%

Stratification des MILDA en fonction de la résistance des vecteurs aux insecticides

2019

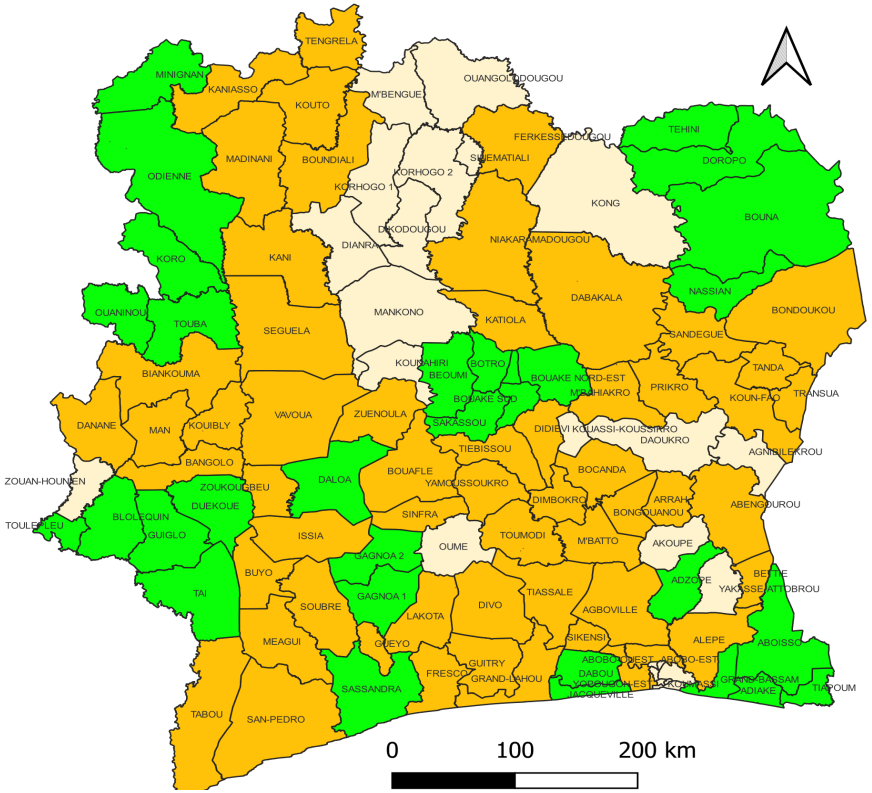


Standard (84 districts/ 74%)

MILDA IG2 (18 districts/ 16%)

MILDA PBO (11 districts/ 10%)

2022



Standard (24 districts/ 21%)

MILDA IG2 (31 districts/ 27%)

MILDA PBO (58 districts/ 51%)

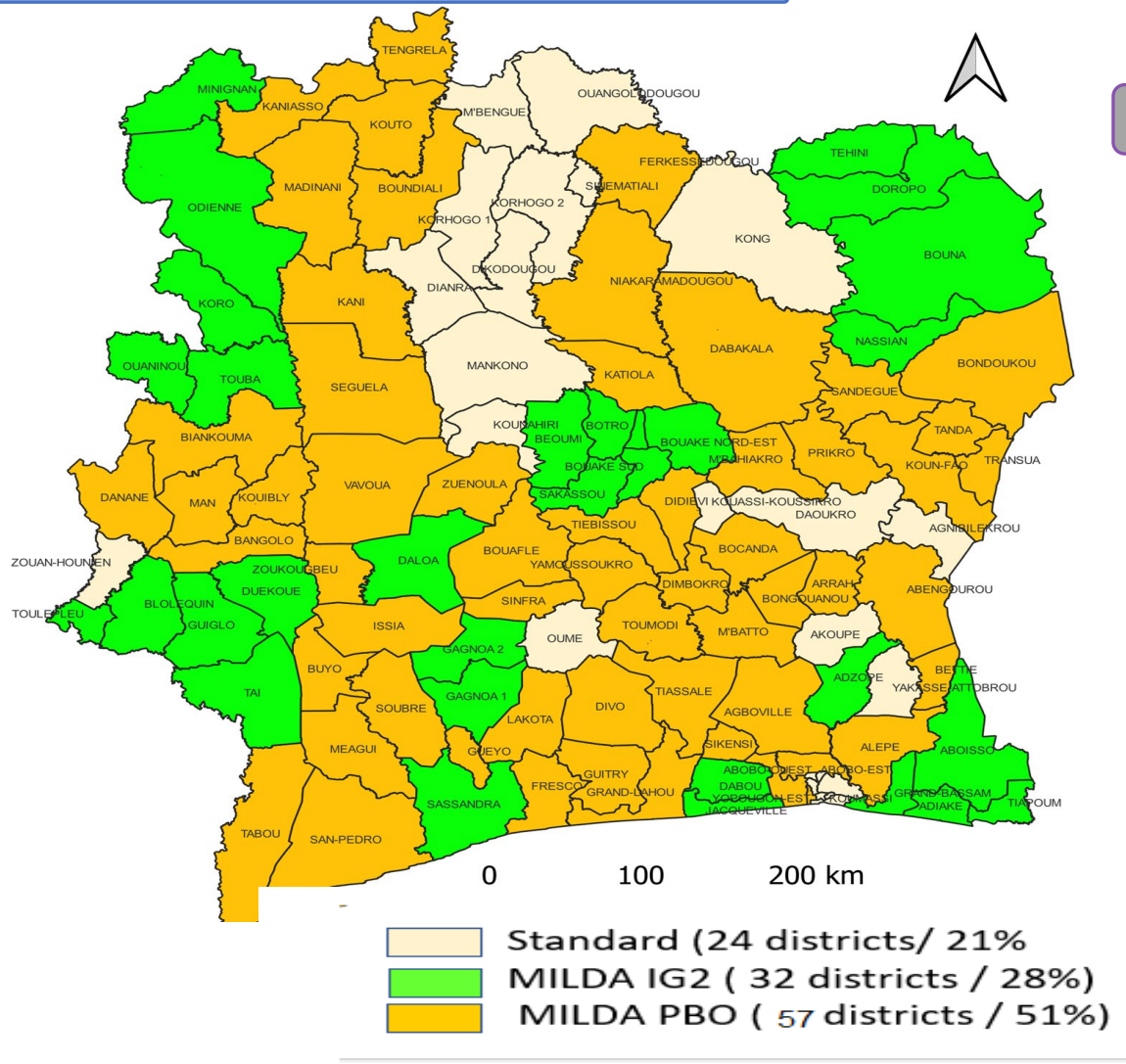
Lutte antivectorielle

2022

❖Utilisation des MILDA

- Distribution en routine
- Campagne de Masse

Campagne de masse et la routine suivent la stratification



Lutte antivectorielle

❖**Lutte anti larvaire par la destruction des gîtes et l'assainissement du cadre de vie**

➢ Utilisation de drones pour la destruction des larves et des moustiques adultes

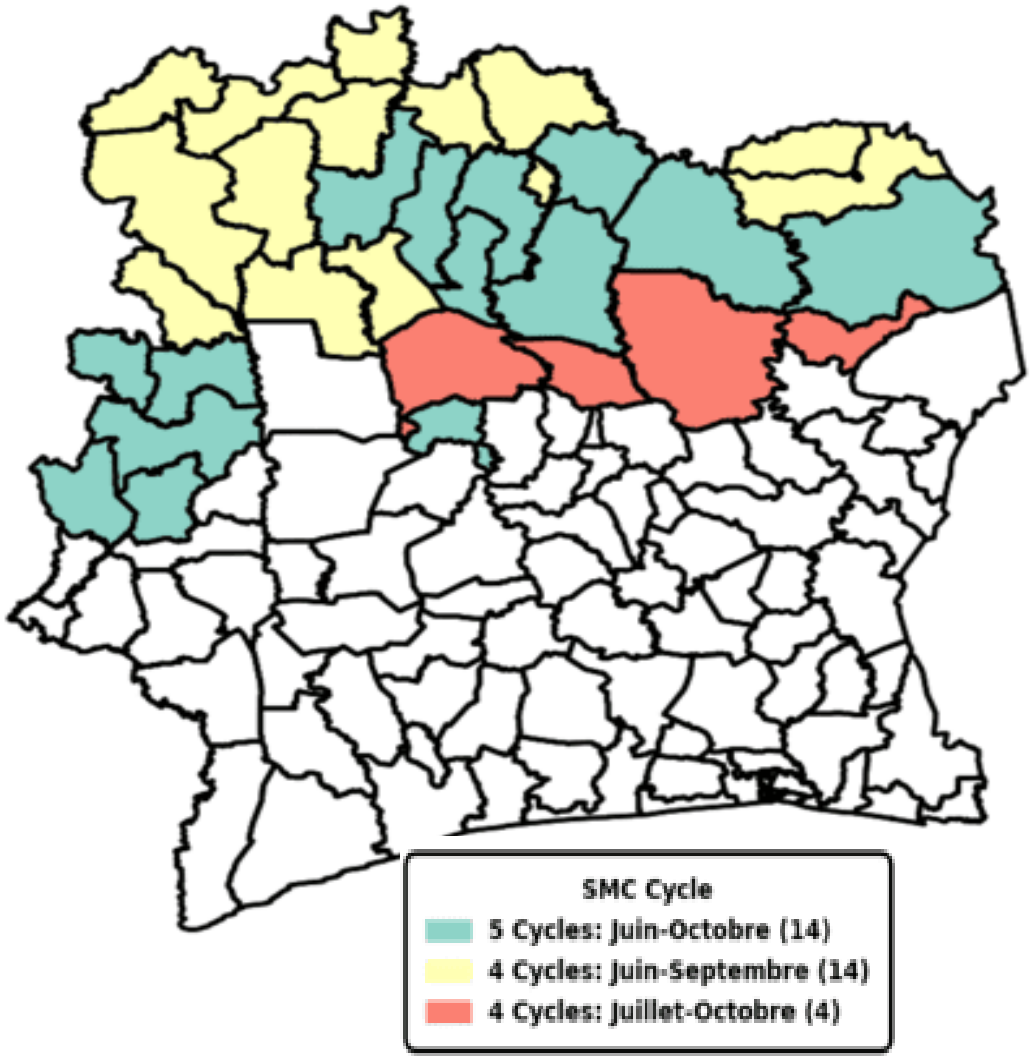
❖**Chimioprophylaxie chez la femme enceinte**

1ere dose: à partir de la 16ème semaine ou dès l'apparition des mouvements actifs du fœtus



Chimioprévention du paludisme saisonnier : CPS

Districts éligibles à la CPS



- En 2021, une étude pilote conduite dans le district de Dikodougou par l'INSP a montré la faisabilité et l'efficacité de la CPS en Côte d'Ivoire.
- De 2023-2024, le PNLP a bénéficié de l'appui technique et financier de PMI/USAID pour la campagne dans les districts sanitaires de Dabakala et Dikodougou.
- En 2025, 8 districts complète la liste à 10 dont 7 financés par le Fonds mondial et 1 par PMI.
- 32 districts sanitaires sont éligibles à cette stratégie

Vaccin antipaludique

L'OMS recommande que le vaccin soit administré aux enfants vivant dans des zones où le paludisme est endémique, priorité aux zones de transmission modérée et élevée

- **Choix du vaccin** : R21/Matrix-M
- **Stratégie de l'introduction** : Routine
- **Juillet 2024** : Mise en œuvre de la phase 1 avec **38 Districts sanitaires**
- **Calendrier vaccinal** : 6 mois, 8 mois, 9 mois et 15 mois
- Rédaction du plan de mise à échelle du 05 au 09 Août 2024
- Soumission du plan à GAVI et accord de financement
- **14 Juillet 2025**: passage à échelle du VAP dans tous les **113** Districts sanitaires du pays

Prise en charge

- **Diagnostic biologique**:
  - Tests de diagnostic rapide
  - Goutte Epaisse / Frottis Sanguin
  - Biologie Moléculaire
- **Traitement des cas confirmés** :
  - Paludisme simple
  - Paludisme grave
- **Prise en charge Communautaire (iCCM)**
  - iCCM dans les villages situés à plus 5km d'un centre de santé dans 101 Districts sanitaires
  - Les Consultation en stratégie avancée dans les villages situés à plus de 5km

La prise en charge du paludisme est gratuite dans les centres de santé publiques

Surveillance, suivi-évaluation et recherche

- ❖Surveillance entomologique, parasitologique et pharmacovigilance
- ❖Suivi de la qualité des prestations
- ❖Task force semestrielle avec tous acteurs de la lutte contre le paludisme pour le bilan et une réorientation des interventions
- ❖Contrôle qualité des données avec RDQA ou MRDQA
- ❖Etudes entomologiques: mise en évidence d'une répartition variable de la résistance des moustiques aux insecticides.
- ❖Etudes et Enquêtes : efficacité des Combinaisons thérapeutiques à base de dérivés de l'Artémisinine (CTA), Malaria Matchbox Audits des cas et Décès, Enquête post-campagne, MBS…)
- ❖Colloque scientifique tous les deux ans pour partager et disséminer les études de recherches.





Communication et partenariat

LE SOMMET AFRICAIN DU CHANGEMENT SOCIAL ET COMPORTEMENTAL
2 - 4 JUILLET 2024

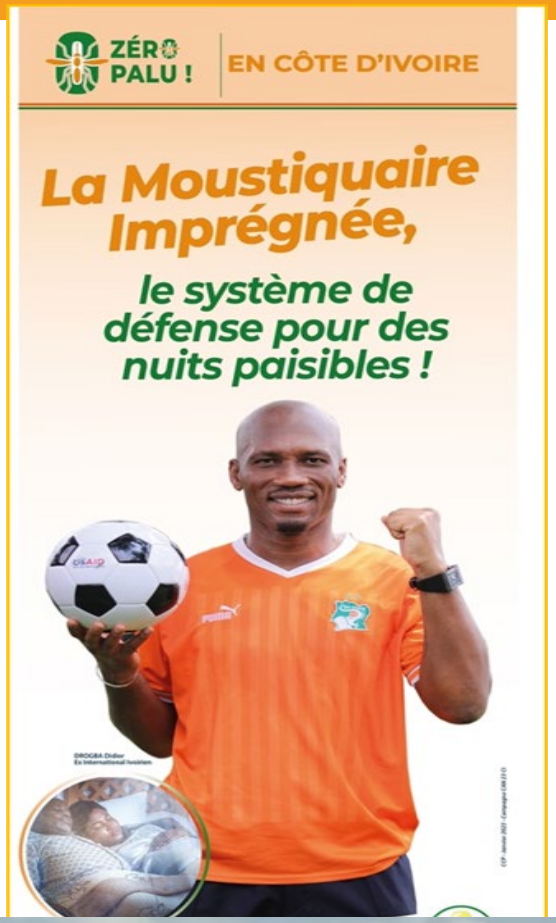
- **Plaidoyer et Mobilisation communautaire**
- **Sensibilisation en milieu scolaire:** en partenariat avec le Ministère en charge de l'éducation nationale Emission Télévisée RTI Petit à Petit
- **Journée Mondiale de Lutte contre le Paludisme**
- **Communication Digitale**: Instagram; Facebook;

YouTube; TikTok, les groupes Whatsap

Le site: https://www.pnlpcotedivoire.org,



An existing poster adapted to promote care-seeking in case of fever



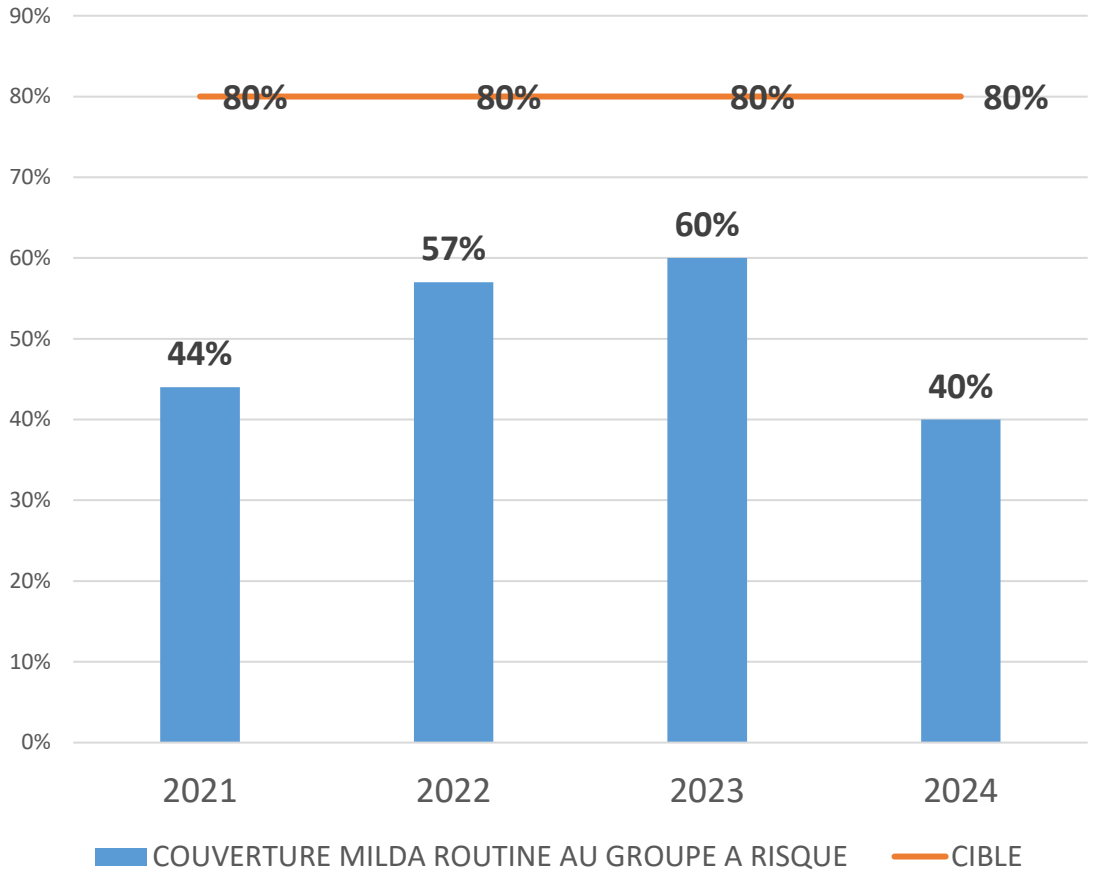




Principaux résultats

MILDA en campagne et routine

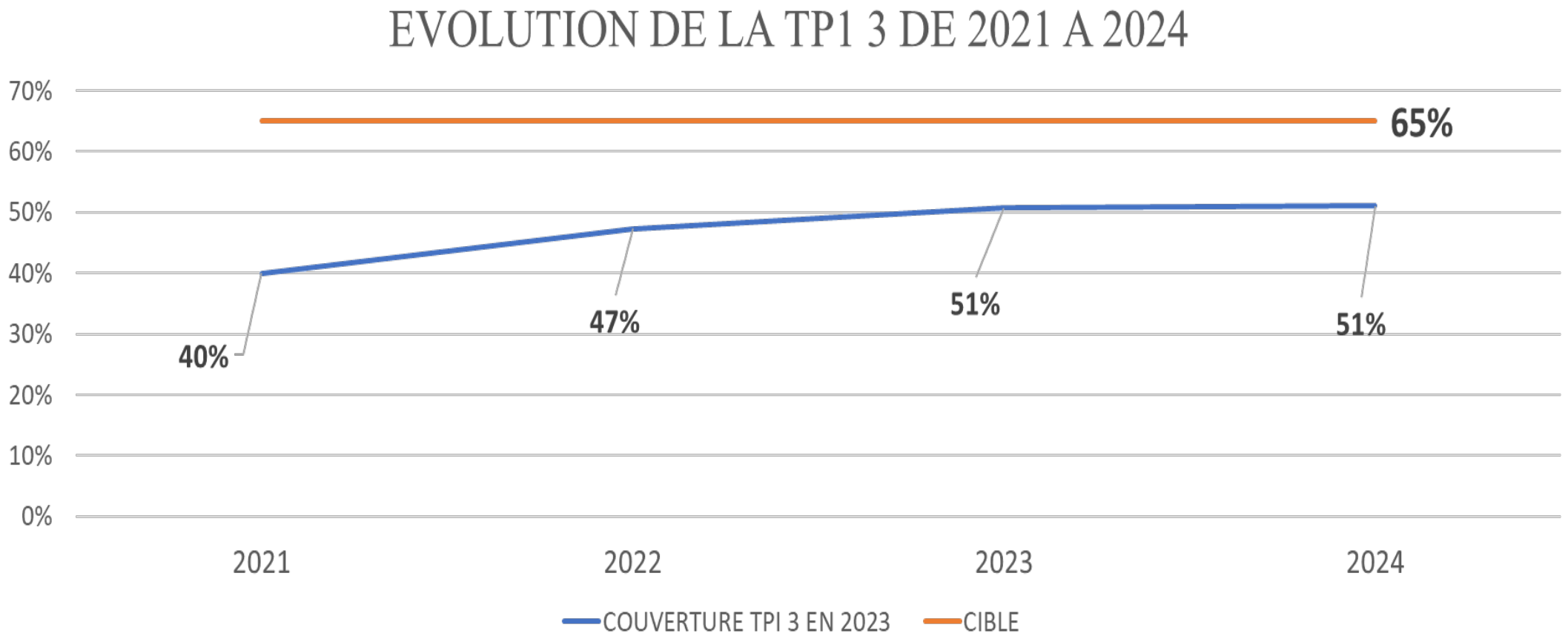
COUVERTURE MILDA ROUTINE GROUPE A RISQUE DE 2021 A 2024



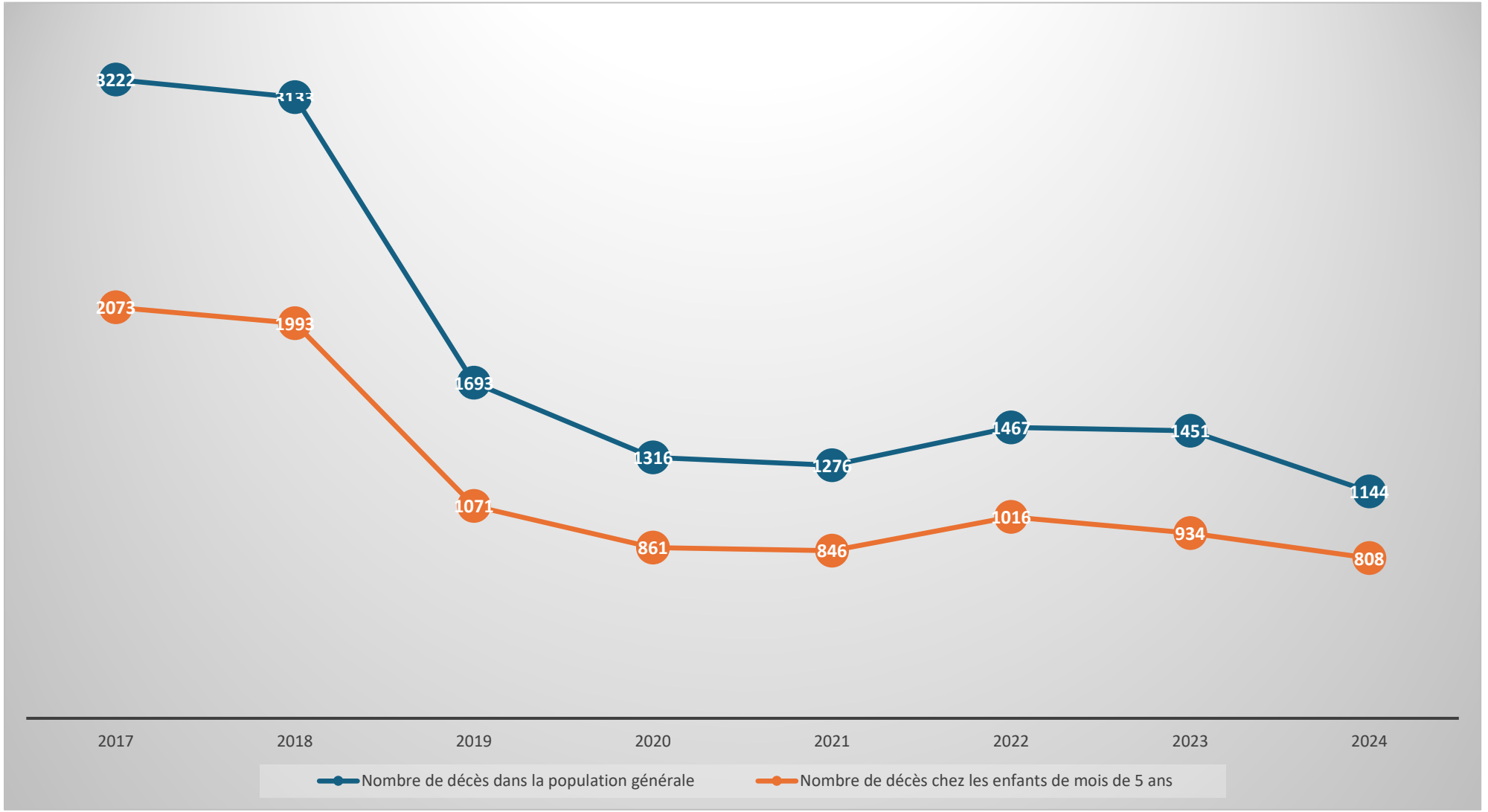
CAMPAGNE MILDA STRATIFIEE DE 2024

- **14 216 184 de moustiquaires** distribuées dans 101 districts sanitaires sur 113
- Atteinte de la couverture universelle avec une performance de distribution de 96% et un taux d'atteinte de la population 96%.
- trois types de MILDA :Standard, PBO et IG2

Couverture en SP



Evolution des décès dus au paludisme de 2017 à 2024



DÉFIS

- La résistance des vecteurs aux insecticides habituels(80% des districts sanitaires avec des MILDA de seconde génération)
- Le changement climatique et ses répercussions sur la transmission du paludisme
- La faible intégration des données du secteur privé dans le DHIS2
- Le maintien des acquis face à la raréfaction des ressources
- La recherche d'autres partenaires

LEÇONS APPRISES

- Mobilisation de ressources
- Stratification en fonction de l'endémicité et celle des MILDA en fonction de la resistance des vecteurs aux insecticides
- Digitalisation de certaines interventions comme la campagne de distribution des MILDA et la Chimioprévention du Paludisme Saisonnier (CPS)
- Collaboration avec le secteur privé et capture des données épidémiologiques dans le DHIS2

CONCLUSION

Avec:

- Le passage à échelle de la prise en charge intégrée du paludisme, de la diarrhée et de la pneumonie ; l'implémentation de la chimio-prévention du paludisme saisonnier dans les 32 districts éligibles ;
- le passage à échelle de la vaccination contre le paludisme ;
- la poursuite de l'implication du secteur privé et des activités de lutte antivectorielle à travers les drones avec appropriation effective des mesures de prévention par les communautés,

CONCLUSION

Avec:

- le maintien de la couverture universelle en MILDA , l'assainissement du cadre de vie par les populations avec l'appui des collectivités locales, des Ministères de la salubrité, de l'environnement, la construction et de l'Agriculture,

Nous pourrons prétendre à l'élimination du paludisme en Côte d'Ivoire d'ici 2030.

JE VOUS REMERCI POUR VOTRE AIMABLE ATTENTION

RBM Partnership
To End Malaria

16 September 2025

Group Photo and Morning Break

RBM Partnership
To End Malaria

16 September 2025

Technical updates on malaria case management from the WHO Global Malaria Programme

Peter Olumese, WHO GMP

WHO Malaria Technical Updates

14th Annual RBM Case Management Working Group Workshop
16-18 September 2025,
Abidjan, Cote d'Ivoire

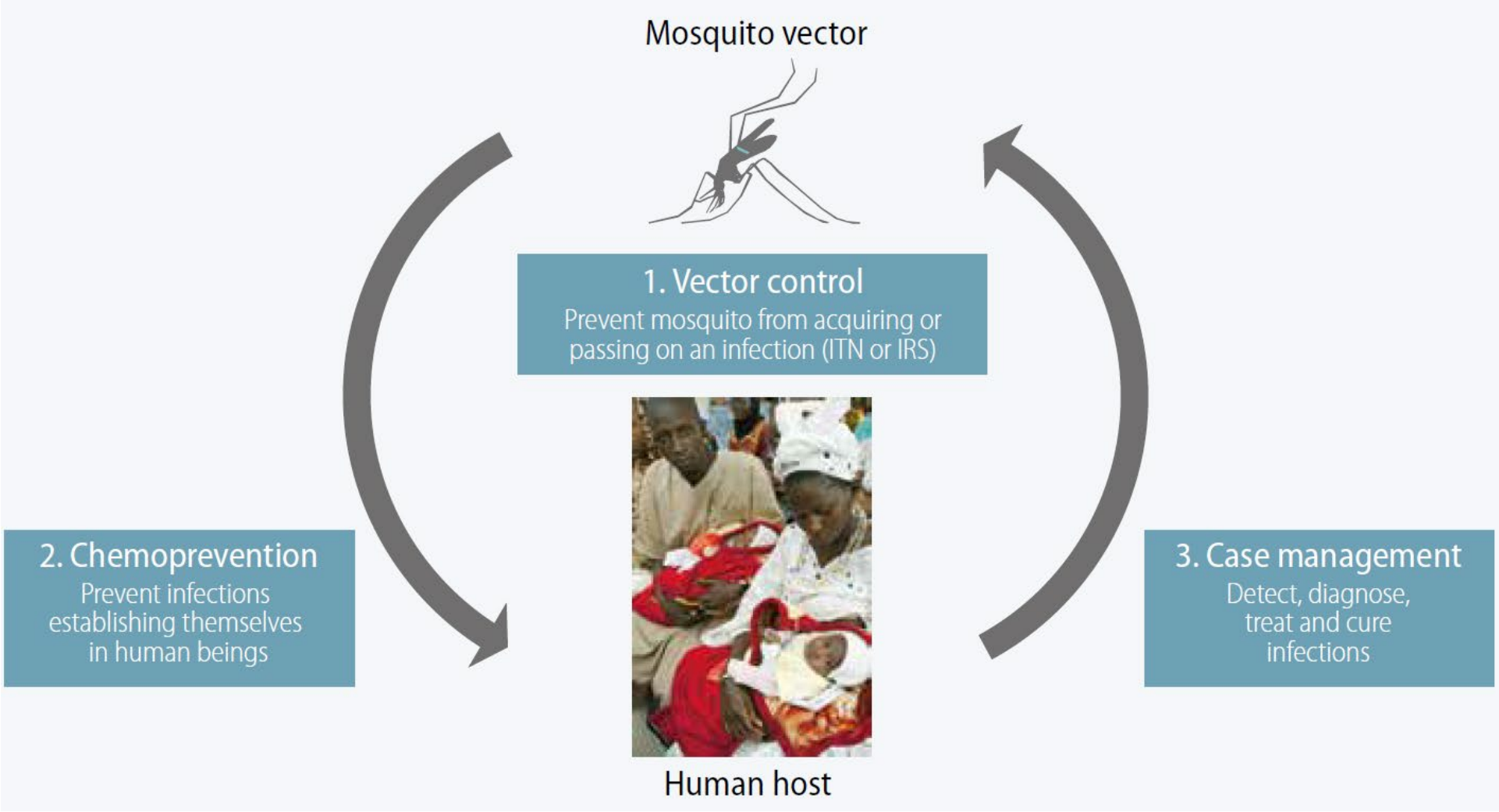


Dr. Peter OLUMESE,
Global Malaria Programme
WHO, Geneva, Switzerland.

Global **Malaria** Programme

World Health Organization

Main malaria prevention and treatment strategies



Key antimalarial interventions & strategies

Prevention

- Insecticide-treated mosquito nets
- Indoor Residual Spraying
- Larviciding

Preventive Chemotherapy

- IPT in pregnancy (IPTp)
- Perennial Malaria Chemoprevention
- Seasonal Malaria Chemoprevention
- IPT in School Children
- Post Discharge malaria chemoprevention
- Mass Drug Administration

Malaria vaccine

Diagnosis & Treatment

- Parasite based diagnosis
  - Microscopy
  - Rapid Diagnostic Tests
- Artemisinin-based combination therapies (ACTs)
- Severe Malaria
  - Artesunate

Case management service delivery areas::

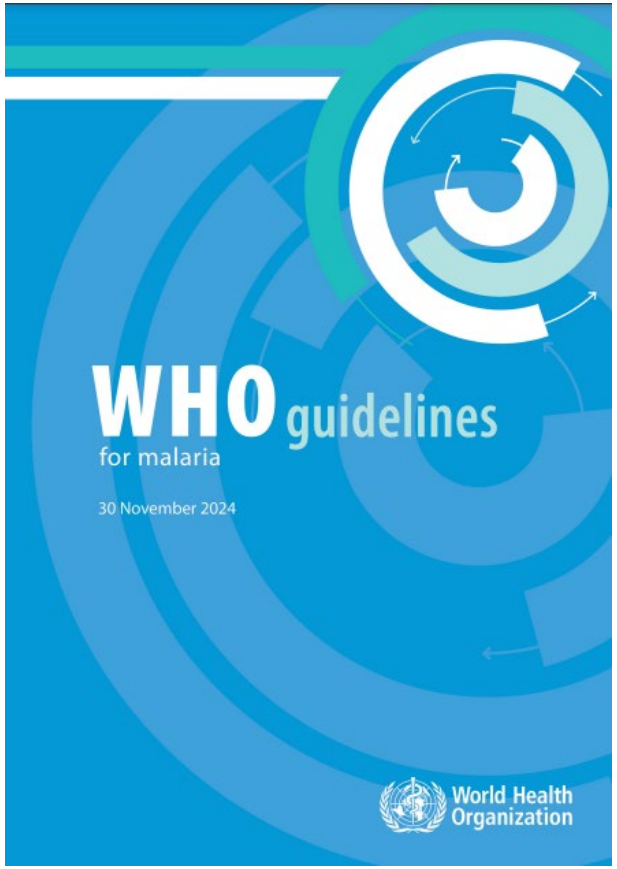
- Health facilities
- Community Case Management
- Private sector

Surveillance, M & E

- Routine HMIS
- Malaria surveillance and response systems
- Household surveys
- Health Facility Surveys

Strengthening health systems in endemic countries

Main malaria prevention and treatment strategies



- WHO Guidelines for Malaria (2021)
  - These consolidated guidelines replaced 2 WHO guidelines the Guidelines for the treatment of malaria, 3rd edition and the Guidelines for malaria vector control.
  - The consolidated WHO Guidelines for malaria include
    - Prevention (vector control, preventive chemotherapies and vaccines)
    - Case management
    - Elimination and prevention of re-introduction
    - Surveillance*
  - As new evidence becomes available, the recommendations will be reviewed and updated, where appropriate, using WHO's transparent and rigorous guideline development process.
- Current 9th update published on 13 August 2025, to be updated on a continuing basis (moving towards living guidelines)
- Available online: https://www.who.int/publications/i/item/guidelines-for-malaria

** Not developed following the WHO guidelines development process*

Malaria Case Management



Global **Malaria** Programme

World Health Organization

Malaria Diagnosis

- All suspected malaria cases should have a parasitological test (microscopy or RDT) to confirm the diagnosis.
- Deployment of both microscopy and RDTs should be supported by a quality assurance programme
  - The results of parasitological diagnosis should be available within less than two hours of the patient presenting. In the absence or delay, patients with suspected severe malaria, and other high-risk groups, should be treated on clinical grounds.

Treatment of uncomplicated falciparum malaria

Strong recommendation for, High certainty evidence | **Updated**

Artemisinin-based combination therapy (2015)

Treat children and adults with uncomplicated *P. falciparum* malaria with one of the following ACTs*:

- artemether-lumefantrine (AL)
- artesunate-amodiaquine (AS+AQ)
- artesunate-mefloquine (ASMQ)
- dihydroartemisinin-piperaquine (DHAP)
- artesunate + sulfadoxine-pyrimethamine (AS+SP)
- artesunate-pyronaridine (ASPY) (2022)

**artesunate + sulfadoxine-pyrimethamine and artesunate-pyronaridine are not recommended for use in the first trimester of pregnancy. For details of treatment using ACTs in the first trimester of pregnancy, see details below.*

Treatment of uncomplicated falciparum malaria

Strong recommendation for , High certainty evidence

Duration of ACT treatment (2015)

ACT regimens should provide 3 days' treatment with an artemisinin derivative.

Strong recommendation for , Low certainty evidence

Reducing the transmissibility of treated *P. falciparum* infections (2024)

In low-transmission areas, a single dose of 0.25 mg/kg bw primaquine should be given with an ACT to patients with *P. falciparum* malaria (except pregnant women) to reduce transmission. G6PD testing is not required.

Treatment of Malaria in special populations : 1st trimester of pregnancy

Strong recommendation for , Low certainty evidence

Treatment in the first trimester of pregnancy (2022)

Pregnant women with uncomplicated *P. falciparum* malaria should be treated with artemether-lumefantrine during the first trimester.

Remark:

- Limited exposures to other ACTs (artesunate-amodiaquine, artesunate-mefloquine and dihydroartemisinin-piperaquine) suggest that the current evidence is insufficient to make a recommendation for routine use of these other ACTs in the first trimester of pregnancy. However, consistent with the previous WHO recommendation that provided for limited use of ACTs if the first-line recommended medicine was not available, these other ACTs may be considered for use where artemether-lumefantrine is not a recommended ACT for uncomplicated malaria or is not available, given the demonstrated poorer outcomes of quinine treatment, along with the challenges of adherence to a seven-day course of treatment.
- Antifolates are contraindicated in the first trimester of pregnancy. Therefore, ACTs containing sulfadoxine-pyrimethamine are contraindicated during the first trimester of pregnancy.
- There is currently no documented record of the use of artesunate-pyronaridine during the first trimester of pregnancy.
- Continued pharmacovigilance and clinical research, including prospective controlled trials on the efficacy and safety of antimalarial medicines for the treatment of malaria in pregnancy, should be supported and funded.

Treatment of falciparum Malaria in special populations

Strong recommendation for

Young children and infants (2015)

Infants weighing < 5 kg with uncomplicated *P. falciparum* malaria should be treated with an ACT at the same mg/kg bw target dose as for children weighing 5 kg.

Strong recommendation for , High certainty evidence

Non-immune travellers (2015)

Travellers with uncomplicated *P. falciparum* malaria returning to non-endemic settings should be treated with an ACT.

Practice Statement

Patients co-infected with HIV (2015)

In people who have HIV/AIDS and uncomplicated *P. falciparum* malaria, artesunate + SP is not recommended if they are being treated with co-trimoxazole, and artesunate + amodiaquine is not recommended if they are being treated with efavirenz or zidovudine.

Treatment of uncomplicated non-falciparum Malaria

Strong recommendation for , High certainty evidence

Blood stage infection (2015)

In areas with chloroquine-susceptible infections, adults and children with uncomplicated *P. vivax*, *P. ovale*, *P. malariae* or *P. knowlesi* malaria should be treated with either an ACT or chloroquine.

In areas with chloroquine-resistant infections, adults and children with uncomplicated *P. vivax*, *P. ovale*, *P. malariae* or *P. knowlesi* malaria should be treated with an ACT.

Practice Statement

Blood stage infection (2015)

If the malaria species is not known with certainty, adults and children should be treated as for uncomplicated *P. falciparum* malaria.

PREVENTING RELAPSE IN P. VIVAX OR P. OVALE MALARIA

Practice Statement

Blood stage infection (2024)

The G6PD status of patients should be used to guide administration of either primaquine or tafenoquine for preventing relapse.

Preventing relapse in *P. vivax* or *P. ovale* malaria (2015)

When G6PD status is unknown and G6PD testing is not available, a decision to prescribe primaquine should be based on an assessment of the risks and benefits of adding primaquine.

Glucose-6-phosphate dehydrogenase (G6PD) testing

Strong recommendation for , Moderate certainty evidence

Qualitative near-patient G6PD tests (2024)

Qualitative near-patient tests for G6PD deficiency should be used to inform administration of specific treatment regimens to prevent relapses of *P. vivax* and *P. ovale*. G6PD non-deficient individuals can receive 0.5 mg/kg/day primaquine for 14 days or 0.5 mg/kg/day primaquine for 7 days.

Remark:

- In males and females, <30% of normal G6PD activity is considered deficient.
- In patients undergoing G6PD activity testing, near-patient qualitative tests for G6PD deficiency are considered highly accurate to distinguish G6PD above or below a threshold of 30% of normal G6PD activity.
- These tests cannot be used to identify females with intermediate G6PD deficiency (30–70% G6PD activity) due to a heterozygous genotype. Instead, females with G6PD activity in this intermediate range will be classified as normal with a qualitative test.

Glucose-6-phosphate dehydrogenase (G6PD) testing

Strong recommendation for , Moderate certainty evidence

Semi-quantitative near-patient G6PD tests (2024)

Semi-quantitative near-patient tests with fixed standard thresholds for deficient, intermediate and normal G6PD activity should be used to inform administration of specific treatment regimens. The dose of 1 mg/kg/day primaquine for 7 days or single dose tafenoquine should only be given to those above the threshold that corresponds to >70% of normal G6PD activity; and 0.5 mg/kg/day primaquine for 14 days or 0.5 mg/kg/day primaquine for 7 days can be given to those with a threshold that corresponds to > 30% of normal G6PD activity to prevent relapses of *P. vivax* and *P. ovale*.

Tafenoquine as anti-relapse treatment of *P. vivax* and *P. ovale*

Conditional recommendation for , Low certainty evidence

Tafenoquine as anti-relapse therapy (2024)

Tafenoquine is recommended as an alternative to primaquine (3.5 mg/kg total dose) for preventing relapses of *P. vivax* in patients ≥ 2years of age, who have ≥ 70% G6PD activity and who receive chloroquine treatment.

Remark:

- These recommendations pertain only to South America.
- Quantitative or semi-quantitative determination of G6PD activity must be done before tafenoquine administration.
- Tafenoquine is not recommended in pregnant and lactating women.
- Tafenoquine is not recommended in patients receiving artemisinin-based combination therapies for the treatment of *P. vivax*.
- Controlled deployment and /or further research is encouraged outside of South America, to generate evidence of the efficacy and safety of tafenoquine compared to primaquine as an anti-relapse treatment.
- No data is available comparing tafenoquine with primaquine given at a total dose of 7.0 mg/kg.

Primaquine as anti-relapse treatment of *P. vivax* and *P. ovale*

Strong recommendation for , Moderate certainty evidence

Primaquine as anti-relapse therapy (2024)

To prevent relapse, children and adult (except pregnant women, infants aged < 1 months and women breastfeeding infants aged < 1 months, and people with G6PD deficiency), primaquine should be given at a high total dose (7 mg/kg) at 0.5 mg/kg/day for 14 days or 1 mg/kg/day for 7 days for prevention of relapses in patients with uncomplicated *P. vivax* or *P. ovale* malaria.

Remark:

- The primaquine high dose (7 mg/kg) should be provided at 1 mg/kg/day for 7 days only to patients with ≥70% G6PD activity.
- National decisions regarding the two high-dose (7 mg/kg) primaquine regimens given over 7 or 14 days will be affected by the availability of G6PD semi-quantitative testing and capacity for supervised therapy.
- Evidence for the magnitude of benefit may vary geographically. Whether a high dose of primaquine 7 mg/kg is given in 14 days or 7 days, the absolute benefit of using the high primaquine total dose will vary according to the risk of recurrence in the population. The benefits are higher in Africa, South-East Asia and Oceania. However, in areas on the Indian subcontinent and in the Americas, where the absolute benefit of a total high dose of 7 mg/kg might be only marginally greater than that of 3.5 mg/kg, primaquine at a low 3.5 mg/kg total dose might be used.

Primaquine as anti-relapse treatment of *P. vivax* and *P. ovale*

Conditional recommendation for , Very low certainty evidence

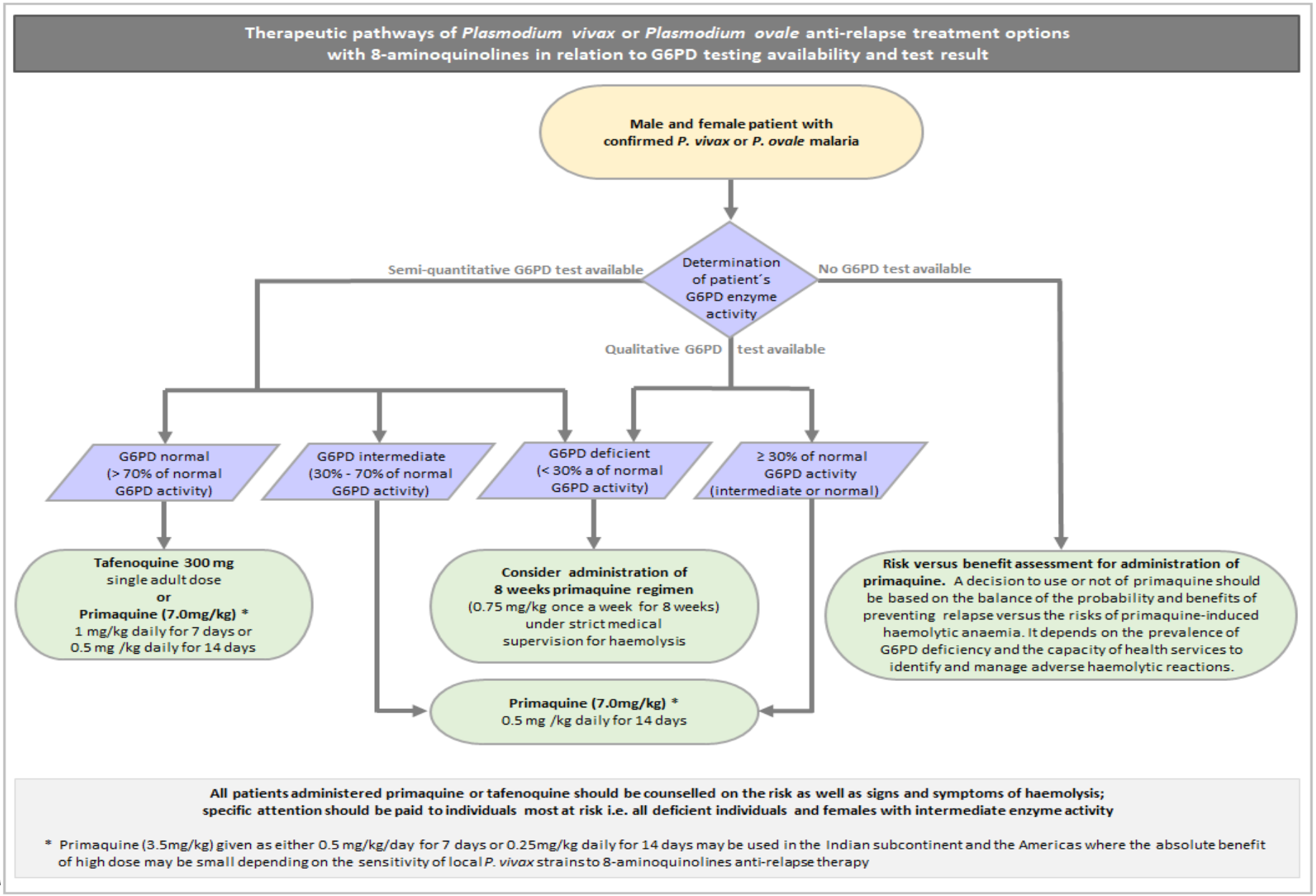
Preventing relapse in people with G6PD deficiency (2015)

In people with G6PD deficiency, primaquine base at 0.75 mg/kg bw once a week for 8 weeks can be given to prevent relapse, with close medical supervision for potential primaquine-induced haemolysis.

Conditional recommendation for , Moderate certainty evidence

Pregnant and breastfeeding women (2015)

In women who are pregnant or breastfeeding, weekly chemoprophylaxis with chloroquine can be given until delivery and breastfeeding are completed, then, on the basis of G6PD status, primaquine can be given to prevent future relapse.


Therapeutic pathways of Plasmodium vivax or Plasmodium ovale anti-relapse treatment options with 8-aminoquinolines in relation to G6PD testing availability and test result
Male and female patient with confirmed P. vivax or P. ovale malaria
Determination of patient´s G6PD enzyme activity
Semi-quantitative G6PD test available
No G6PD test available
Qualitative G6PD test available
G6PD normal (> 70% of normal G6PD activity)
G6PD intermediate (30% - 70% of normal G6PD activity)
G6PD deficient (< 30% a of normal G6PD activity)
≥ 30% of normal G6PD activity (intermediate or normal)
Tafenoquine 300 mg single adult dose or Primaquine (7.0mg/kg) * 1 mg/kg daily for 7 days or 0.5 mg /kg daily for 14 days
Consider administration of 8 weeks primaquine regimen (0.75 mg/kg once a week for 8 weeks) under strict medical supervision for haemolysis
Risk versus benefit assessment for administration of primaquine. A decision to use or not of primaquine should be based on the balance of the probability and benefits of preventing relapse versus the risks of primaquine-induced haemolytic anaemia. It depends on the prevalence of G6PD deficiency and the capacity of health services to identify and manage adverse haemolytic reactions.
Primaquine (7.0mg/kg) * 0.5 mg /kg daily for 14 days
All patients administered primaquine or tafenoquine should be counselled on the risk as well as signs and symptoms of haemolysis; specific attention should be paid to individuals most at risk i.e. all deficient individuals and females with intermediate enzyme activity
* Primaquine (3.5mg/kg) given as either 0.5 mg/kg/day for 7 days or 0.25mg/kg daily for 14 days may be used in the Indian subcontinent and the Americas where the absolute benefit of high dose may be small depending on the sensitivity of local P. vivax strains to 8-aminoquinolines anti-relapse therapy

What is severe malaria

P. falciparum asexual parasitaemia and no other obvious cause of symptoms, the presence of one or more of the following clinical or laboratory features classifies the patient as severe malaria

- *Clinical features:*
  - **impaired consciousness or unrousable coma**
  - **prostration, i.e. generalized weakness so that the patient is unable walk or sit up without assistance**
  - **multiple convulsions – more than two episodes in 24 h**
  - **deep breathing, respiratory distress (acidotic breathing)**
  - **circulatory collapse or shock, systolic blood pressure < 70 mm Hg in adults and < 50 mm Hg in children**
  - **clinical jaundice plus evidence of other vital organ dysfunction**
  - **Haemoglobinuria**
  - **abnormal spontaneous bleeding**
  - **pulmonary oedema (radiological)**
- *Laboratory findings:*
  - **hypoglycaemia (blood glucose < 2.2 mmol/l or < 40 mg/dl)**
  - **metabolic acidosis (plasma bicarbonate < 15 mmol/l)**
  - **severe normocytic anaemia (Hb < 5 g/dl, packed cell volume < 15%)**
  - **Haemoglobinuria**
  - **hyperparasitaemia (> 2%/100 000/µl in low intensity transmission areas or > 5% or 250 000/µl in areas of high stable malaria transmission intensity)**
  - **hyperlactataemia (lactate > 5 mmol/l)**
  - **renal impairment (serum creatinine > 265 µmol/l).**

Severe malaria

- Therapeutic objectives
  - Main objective is to prevent the patient from dying
  - Secondary objectives are to prevent disabilities and prevention of recrudescent infection
- Death from severe malaria often occurs within hours of onset of symptoms or admission to hospital
  - Essential that therapeutic concentrations of a highly effective antimalarial are achieved as soon as possible
- Management of severe malaria comprises four main areas
  - Clinical assessment of patient
  - Specific antimalarial treatment
  - Additional treatments (managements of other complications), and
  - Supportive care

Treatment of severe malaria

Strong recommendation for , High certainty evidence

Treating severe malaria (2015)

Adults and children with severe malaria (including infants, pregnant women in all trimesters and lactating women) should be treated with intravenous or intramuscular artesunate for at least 24 h and until they can tolerate oral medication. Once a patient has received at least 24 h of parenteral therapy and can tolerate oral therapy, treatment should be completed with 3 days of an ACT.

Strong recommendation for

Treating severe malaria in children (2015)

Children weighing < 20 kg should receive a higher dose of artesunate (3 mg/kg bw per dose) than larger children and adults (2.4 mg/kg bw per dose) to ensure equivalent exposure to the drug.

Treatment of severe malaria: pre-referral treatment

Strong recommendation for , Moderate certainty evidence

Pre-referral treatment options (2015)

Where complete treatment of severe malaria is not possible, but injections are available, adults and children should be given a single intramuscular dose of artesunate, and referred to an appropriate facility for further care. Where intramuscular artesunate is not available, intramuscular artemether or, if that is not available, intramuscular quinine should be used.

Where intramuscular injection of artesunate is not available, children < 6 years should be treated with a single rectal dose (10mg/kg bw) of artesunate, and referred immediately to an appropriate facility for further care. Rectal artesunate should not be used in older children and adults.

Community Case Management of Malaria

- CCM of malaria delivered as part of integrated CCM (iCCM), which includes the treatment of pneumonia and diarrheal diseases.
- Trained community providers (CHWs, Medicine Sellers or Retailers) should be provided with:
  - Rapid Diagnostic Tests (RDTs)
  - ACTs for treatment of uncomplicated malaria.
  - Rectal artemisinin suppositories for pre-referral treatment of severe malaria.
  - Information, Education and Communication materials.
  - simple patient registers and reporting forms.

Malaria surveillance

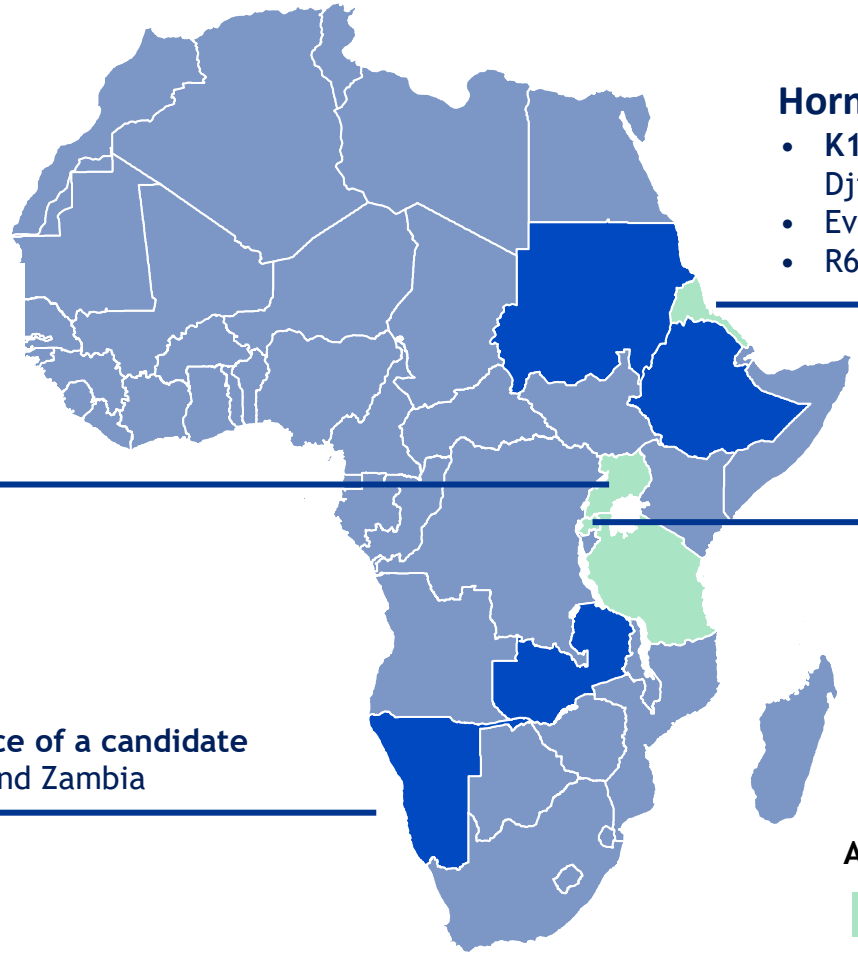
Pillar 3 of the GTS 2016-2030

Transform Malaria Surveillance into a Core Intervention

	High	Moderate	Low	Very Low	Zero	Maintaining Zero
Case detection	Passive case detection	Passive case detection	Passive case detection	Passive + Active case detection		
Recording	Outpatient and inpatient registers	Outpatient and inpatient registers	Outpatient and inpatient registers	Individual patient forms		
Reporting frequency	Monthly	Weekly	Weekly	Real Time		
Resolution of reported data	Aggregate case by age	Aggregate case by age	Aggregate case or line listing by age	Case reports with recommended details on patient history		
Data use: health facility	Data analysed and displayed weekly	Data analysed and displayed weekly	Data analysed and displayed weekly	Data analysed and displayed in real time		
Data use: district	Data analysed and displayed monthly	Data analysed and displayed monthly	Data analysed and displayed weekly	Data analysed and displayed weekly		
Data use: province & national	Data analysed and displayed monthly or quarterly	Data analysed and displayed monthly	Data analysed and displayed monthly	Data analysed and displayed weekly		
Response time	Monthly	Monthly or weekly	Weekly	Case & foci investigation within 48 hours, foci response within 7 days		
Feedback frequency to lower level	Annually	Quarterly	Monthly	Every two weeks		
Surveillance system monitoring	Annually	Quarterly	Monthly	Every two weeks		

Emerging Challenges

Drug resistance | Artemisinin partial resistance emerging and spreading



Horn of Africa

- **K13 mutation R622I** detected in several countries including Djibouti, Eritrea, Ethiopia, Sudan and Somalia
- Evidence of slow parasite clearance in Eritrea
- R622I has been detected in parasites *with Pfhrp2/3* deletions

Uganda

- **Different K13 mutations are spreading** with foci where parasites carry validated artemisinin resistance markers

Rwanda & Tanzania

- **K13 mutations, predominately R561H,** have been found at high prevalence in studies with evidence of delayed clearance in Rwanda and Tanzania

Southern Africa

- 2023 survey found **high prevalence of a candidate K13 marker (P441L)** in Namibia and Zambia

Artemisinin partial resistance:

Confirmed

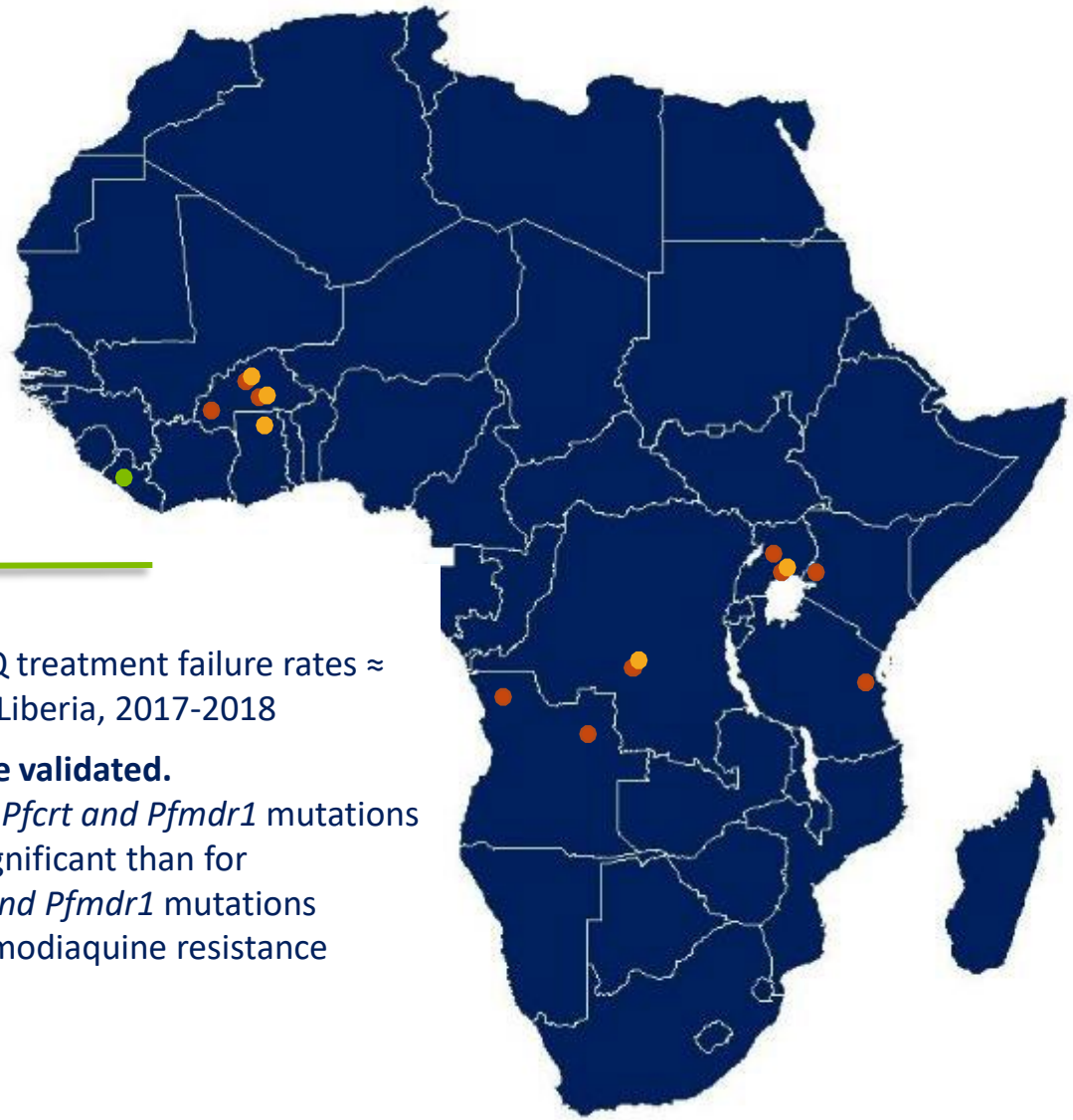
(Evidence of delayed clearance in patients with validated markers)

Suspected

(Evidence of delayed clearance or >5% with validated or candidate markers)

World Health Organization

Scattered reports of high treatment failure but no confirmed partner drug resistance in Africa



TES with high failure rates from 2015 - 2023

Amodiaquine

- **Published studies:** ASAQ treatment failure rates ≈ 10% identified in TES in Liberia, 2017-2018
- **Molecular marker: To be validated.**
  IC50 affected in vitro by *Pfcrt and Pfmdr1* mutations but shift of IC50s less significant than for chloroquine, and *Pfcrt and Pfmdr1* mutations cannot be considered amodiaquine resistance markers at present

Piperaquine

- **Published studies:** DP treatment failure rates > 10% or ≈ 10% reported in Burkina Faso, the Democratic Republic of Congo, Uganda and Ghana
- **Molecular marker:** *Pfpm2–3* increased copy number and *Pfcrt* mutations validated in Asia and South America

Comments:

- Studies have used PCR-correction method a Bayesian algorithm & some concerns on quality of microscopy
- In Burkina Faso, Uganda and DR Congo, DP treatment failures in sites where AL treatment failures were also found in studies using Bayesian algorithms for PCR corrections. In Ghana, only one marker (msp2) used for PCR correction

Lumefantrine

- **Published studies:** AL treatment failure rates > 10% reported in Angola, Burkina Faso, Democratic Republic of Congo, Kenya. Since the launch of the strategy, additional reports of high treatment failure in Tanzania and Uganda
- Increased IC_{50} in Uganda
- **Molecular marker: To be validated**
  Studies show that lumefantrine selects for *Pfmdr1* N86

Comments: Different challenges with TES for AL

- High reinfection rates in some sites
- Short half-life -> potential misclassification of reinfections as recrudescences
- Some studies have used PCR-correction method based a Bayesian algorithm, some concerns on quality of microscopy, and some studies without supervision of evening dose

Impact of the decrease in funding for malaria

Programmatic threats

Consequences

Reduction of vector control activities → Increase cases and malaria epidemics

Reduction in chemoprevention → Increase patient load in health facilities

Interruption of RDT supplies → Increased ACT consumption in public health facilities

Interruption of ACT supplies →

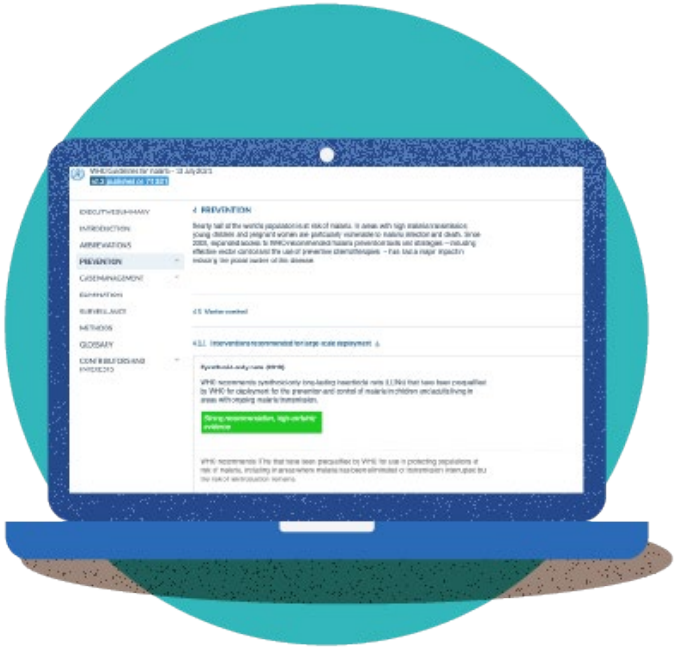
Increased treatment seeking towards the private sector
- High levels of malaria presumptive treatment
- Subtherapeutic exposure to antimalarial medicines
- Irrational use of artemisinin-based injections

Increased risk of resistance emerging and spreading

Interruption of support for TES → Decreased ability of detect decline in efficacy

How to access WHO malaria guidance







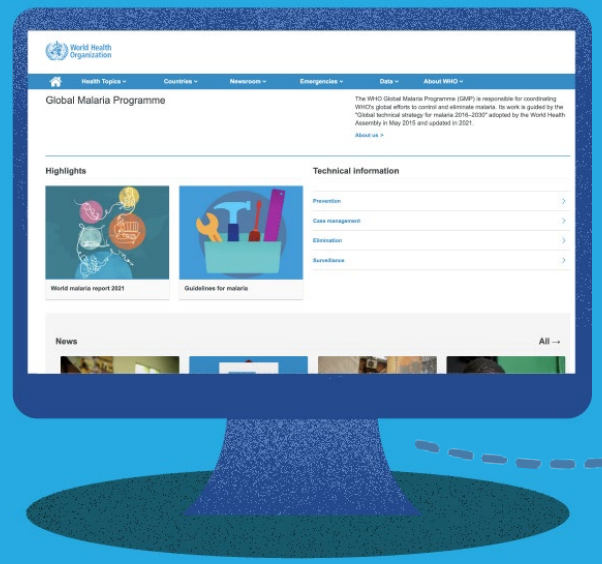
1 **WHO Global Malaria Programme website**

2 **MAGICapp**

3 **WHO Malaria Toolkit app**

World Health Organization

Ways to access WHO malaria guidance



1

The WHO Global Malaria Programme website is the main gateway through which national malaria programmes and partners can access the most up-to-date malaria guidance.

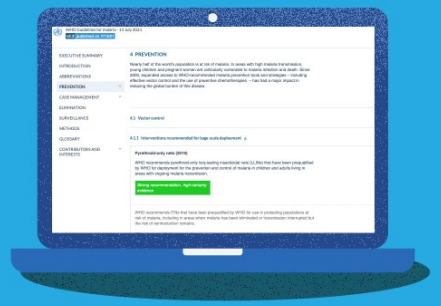
The new consolidated *WHO Guidelines for malaria* bring together all current WHO recommendations on malaria in one easy-to-navigate web-based platform.

They are a living resource that will be updated periodically as new evidence becomes available.

Ways to access WHO malaria guidance

WHO's malaria guidance can also be found on 2 digital platforms:

2



Through MAGICApp, you can access a consolidated set of all WHO malaria guidance, including:

- All official WHO recommendations
- Operational manuals
- Handbooks
- Frameworks
- And links to other resources

3



All WHO recommendations can also be accessed through an easy-to-navigate mobile "Malaria Toolkit app".

The app is available for iOS devices and Android devices.

In addition to the WHO recommendations, it provides the latest data and trends from the *World malaria report*.

Thank you

For more information, please contact:

Dr Peter Olumese
Diagnosis, Medicine and Resistance Unit,
Global Malaria Programme
olumesep@who.int

World Health Organization
Global Malaria Programme

World Health Organization

RBM Partnership
To End Malaria

16 September 2025

Update from RBM Partnership to End Malaria on the Big Push

Patrick Okello, RBM Partnership to End Malaria (remoted)



RBM Partnership To End Malaria

BIG PUSH AGAINST MALARIA

Dr Patrick Okello, RBM Partnership to end Malaria

September, 2025

The Malaria Crisis Today

Progress has stalled. Funding gaps are widening. Countries are being asked to do more with less, while threats to malaria control multiply.

- **263 million cases & 597,000 deaths** (2023)
- **Momentum stalling** — widening funding gaps expose fragile programmes
- **Threats multiplying** — extreme weather, conflict, displacement, resistance to drugs & insecticides
- **Lives and economies at risk** — malaria drives poverty, instability, and economic loss

Why the Big Push?

A unifying call to action. Progress now depends on coordinated pushes from every actor — in a decisive five-year window.

- **Not a new plan** — builds on existing commitments, adds urgency and clarity
- **Collective effort** — no country or partner can succeed in isolation
- **Decisive 5-year window** — bend the curve before costs and risks spiral
- **From theory to action** — every partner contributes tangible, aligned pushes

The Big Push against malaria includes transformative and supporting actions collectively recognized by the ecosystem, reducing malaria and saving lives

RBM Partnership To End Malaria

	1 Improve coordination between global, regional, and country partners for efficient resource use	2 Advance national leadership, accountability, and an integrated malaria response	3 Strengthen data systems and enable data-driven decision making	4 Increase accessibility, acceptability & quality for existing interventions	5 Develop and prepare for rapid introduction of new fit-for-purpose tools	6 Protect funding for malaria and advocate for new resources
Transformative actions	1.1 Create and leverage one country-led costed and optimized three-year, dynamic operational plan for funding processes, linked to wider health sector plans 1.2 Hold regular dialogues with key partners to ensure alignment on strategic topics	2.1 Advocate to maintain malaria as a political priority, with accountability mechanisms in place 2.2 Support integrated, multi-sectoral approaches in the response against malaria	3.1 Increase use of data to inform decision-making, including for resource optimization and intervention deployment, with consideration for vulnerable groups	4.1 Enable step-change in public and private delivery of care, with emphasis on community-based & private sector workforce	5.1 Streamline regulatory & policy processes to expedite approval and launch of new products	6.1 Protect current sources and increase funding for malaria, by communicating the impacts of backsliding and benefits of eventual eradication
Supporting actions	1.3 Promote and implement regional and multi-country coordination initiatives 1.4 Implement an umbrella coordination mechanism for market-shaping	2.3 Support building & sustaining local capacity, including partnerships with civil society, academic, private sector, among others 2.4 Facilitate improved information sharing for transparency and accountability	3.2 Protect and strengthen local routine surveillance capacity and capabilities 3.3 Enable step-change in surveillance of biological threats	4.2 Accelerate switch to products addressing biological threats 4.3 Build and maintain resilient end-to-end supply chains to absorb shocks and respond to outbreaks	5.2 Continue investing in and developing transformational tools and incorporate end-user input to increase acceptability 5.3 Strengthen mechanisms to support countries in adapting and adopting policies rapidly	6.2 Support countries to secure new and/or emerging funding opportunities 6.3 Mobilize funding at the intersection of health and climate adaptation & resilience agendas

Reinforce the benefits of addressing malaria alongside primary health care systems

Africa's Leadership

Africa bears the heaviest burden — and is driving the Big Push with political will, innovation, and country-driven action.

- **95% of malaria burden is in Africa**
- **African-led solutions** — AU, RECs, Ministers, and Champions steering the agenda
- **Innovation in action** — Nigeria and others advancing new financing agenda, digital tools, and local manufacturing
- **The Big Push is Africa's call** — shaping its own destiny in the fight to end malaria

The Opportunity Ahead

With new tools, smarter systems, and innovative financing, a malaria-ready ecosystem is within reach — if we act decisively together.

- **New tools & intelligence** — vaccines, LLINs, digital surveillance, real-time data
- **Integrated health systems** — linking malaria to PHC, MNCH, and climate resilience
- **Financing innovation** — blended finance, regional compacts, private sector investment
- **From "pillars" to outcomes** — measurable steps toward a malaria-ready ecosystem

The Call to Action

The Big Push depends on every actor playing their part — aligned, decisive, and relentless until malaria is defeated.

- **Political will** → **sustained financing** to sustain and scale impact
- **Private sector** → **invest in prosperity** through innovation and economic growth
- **Communities** → **empowered frontline defenders** of health and resilience
- **Partnership** → **many small pushes** adding up to one united Big Push


RBM Partnership
To End Malaria

RBM Partnership
To End Malaria

16 September 2025

Presentation from CRSPC – RBM strategic direction related to country financing

Hana Bilak & Dorothy Achu, CRSPC (remoted)



RBM Partnership To End Malaria

Updates on CRSPC objectives and implementation plan

September 2025

Hana Bilak, Co-chair

CRSPC Responsibilities

CRSPC Purpose: provide a platform to engage the RBM Partnership to harmonize and coordinate Partnership support at country and regional levels. The overall objective of the CRSPC is to optimize technical resources and strengthen capacities by improving partner coordination and delivering effective, high-quality technical assistance.

- **Coordinate Partnership support** to countries and regions to identify resources to address critical gaps, bottlenecks, and challenges.

- **Convene Partners** to facilitate exchange on best practices and diverse challenges in program implementation.

- **Support resource mobilization.** CRSPC efforts complement the activities of the Advocacy Resource Mobilization and Communication Partner Committee (ARCPC) (which focus on global and high political leadership levels)

- **Ensure accessibility to and improve the content, knowledge, and use of publicly** available RBM Partnership malaria dashboard by socializing their existence and sharing guidance on its use through multiple, diverse channels (CRSPC annual meetings, CRSPC bi-monthly online meetings, conferences, RBM Working Group meetings, newsletters, etc).

- **Support in-country malaria initiatives** championed by local partners such as the implementation of the Yaoundé Declaration, the High Burden to High Impact (HBHI) initiative, the "Zero Malaria Starts with Me" campaign, and the “Big Push”.

CRSPC Objectives

RBM Partnership To End Malaria

Respond to country support requests in a focused and effective manner

- Provide country implementation support through a country-driven, agile, and equity-focused system
- Empower national programs to lead, strengthen local capacity
- Integrate malaria within broader health system
- Ensure lifesaving services reach the most vulnerable

Unpacking Country Support

RBM Partnership To End Malaria

WHY



- Compounding effects of biological threats, climate change and conflicts
- Dramatic changes in the malaria donor landscape with evolving and harder to predict changes
- Countries and partners need to redefine how to work together efficiently and sustainably, with partners contributing to the achievement of national targets and goals.

WHAT



- Mapping current NMP support to identify gaps and avoid redundancy
- Coordinating and providing focused Country Implementation Support:
  - Strategic planning and financing support: SNT, MPR, NSP, Costed operational optimized plans (COOP), modeling and financial optimization, GC8 planning and preparation
  - Operational support for strengthening implementation: Campaigns (e.g. ITN, SMC), resource diversification, strengthened case management, including community case management and private sector integration.
  - Equity, human rights and gender

Unpacking Country Support



WHO

- Endemic countries
- "Traditional" partners
- New partners, including the **private sector**
- Partners in transition



WHEN

- Immediate response to country implementation support requests
- GC8 preparation (September and beyond)



HOW

- Country coordination mechanism:
  - In-country partners
  - South-South Collaboration and peer learning
  - In person RBM consultants
  - Virtual RBM implementation support



WHERE

Equity driven support

- Mapping existing NMP Support to identify gaps and avoid redundancy

CRSPC areas of focus

Demand-driven Country Implementation Support (CIS)	Facilitating coordinated, country-led & focused support
Agile technical assistance	Providing a rapid, flexible response to fill gaps and advance country-defined priorities
Integrated programming	Embedding malaria within resilient, inclusive health systems
Equity-focused	Keeping vulnerable and underserved populations at the center of service delivery.

How CRSPC Will Provide Support

- Streamlined Country Implementation Support Requests: Requests made via the RBM dashboard, with tracking and feedback loops.

- Coordinated Partner Response: Clear mapping of existing support, identification of gaps and provision of focused support geared towards sustainable capacity building, strengthening in-country coordination and consultations.

- Knowledge, Equity & Advocacy: Peer learning and sharing of best practices, and supporting domestic resource mobilization

Country Implementation Support Overview



Submission Process



Purpose of Submission

The process is designed to streamline requests for technical assistance. It facilitates collaboration and communication among teams.



Submission Platform

The submission process begins on the RBM dashboard.
Access the platform via the link: https://endmalaria.jotform.com/team/crspc/RequestTAReview.



Feedback Mechanism

Feedback is provided immediately Feedback at the subregional team. This ensures that submissions are reviewed thoroughly and effectively.

Feedback Mechanism

To the country	This ensures that the feedback mechanism is localized and addresses specific national needs
To partners	This collaboration strengthens the overall feedback process, ensures inclusivity, and reduces duplication
To CRSPC at the regional /global level	This facilitates alignment and consistency across different levels of operation
RBM Secretariat	Operations and accountability

Stages of Country approval

1.Development of concept note and TORs

2. Submission on RBM dashboard
https://endmalaria.jotform.com/team/crspc/RequestTA

3. Review and feedback from the subregional team

4. Submission for CRSPC co-chair approval

5. Contracting and implementation

6. Monitoring implementation

7. Report submission and financial accountability

Monitoring and Reporting

RBM Partnership To End Malaria



Implementation Monitoring

Monitoring implementation ensures that projects are on track and objectives are being met. It involves regular assessments to identify and address any issues promptly.



Accountability and Reporting

Report submission is crucial for maintaining transparency and tracking progress. Financial accountability ensures that resources are used effectively and responsibly.

Q3 and Q4 Priority Activities

Activities	Timeline
CRSPC implementation guide development and approval	End September 2025
Support 10 priority countries (MPR,NSP, ITNs, other)	Through December 2025
Recruitment of additional Country Implementation Support Experts	By end October 2025
GC8 Preparation Meeting	TBC 2-5 December 2025
Malaria epidemic preparedness workshop	TBC 25-28 November 2025

RBM Partnership
To End Malaria

Thank you

RBM Partnership
To End Malaria

16 September 2025

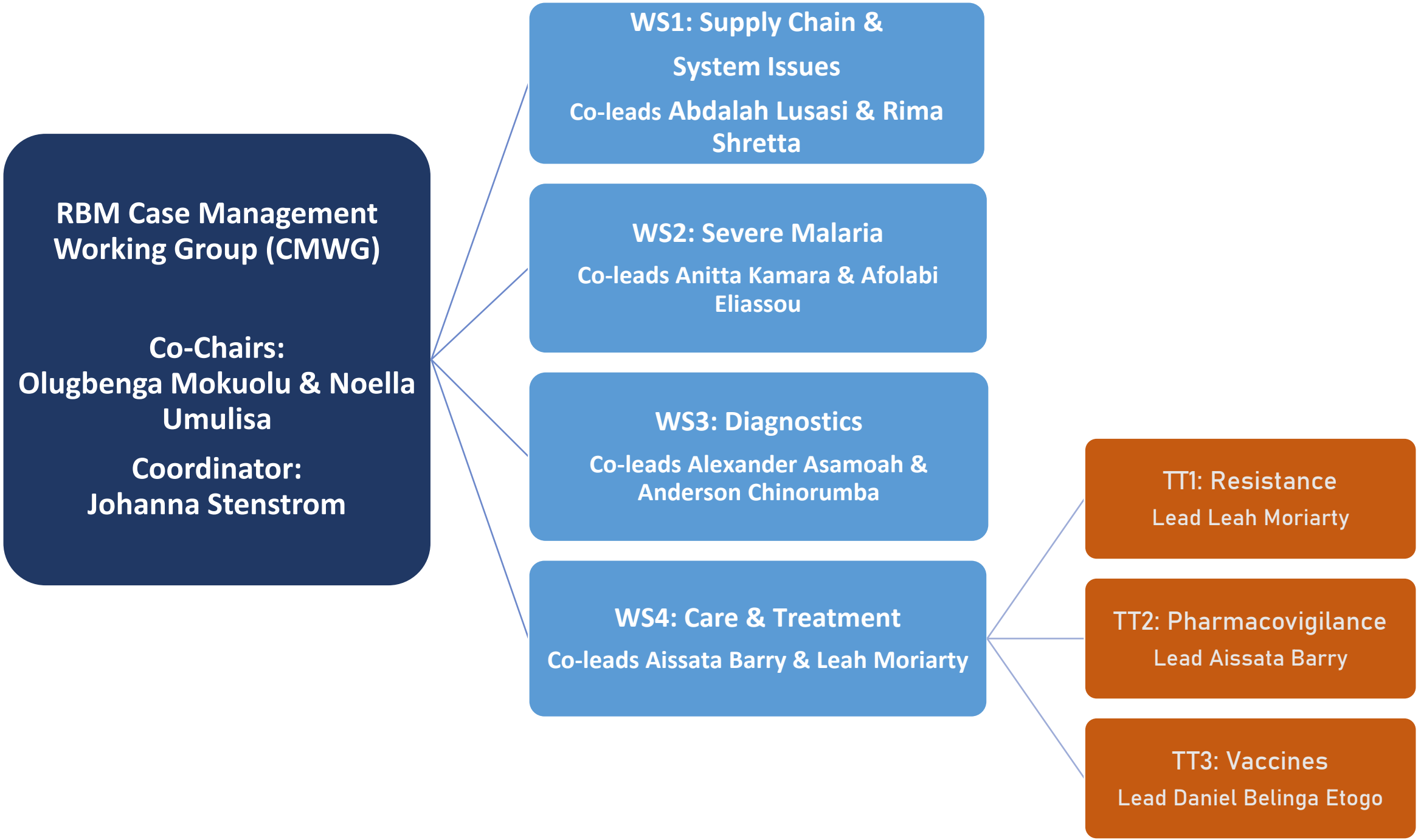
Update on the status of the CMWG workstreams

Olugbenga Mokuolu & Work Stream Co-leads, CMWG

Roles and Functions of CMWG Work Streams and Task Teams

Contact and coordinate professional networks (national programs, international partners, and private entities) to encourage participation in CMWG activities through the respective workstreams and Task Teams

- Conduct in-depth analysis of topical issues related to the respective WSs/TTs to guide the activities and decisions of the CMWG
- Promptly alert the CMWG Co-Chairs and Coordinator to any emerging issues of regional or global relevance in malaria case management identified through discussions within WSs/TTs;
- Participate in quarterly CMWG general calls and provide updates on WS and TT activities
- Respond to requests for technical, organisational, or logistical support or feedback from the CMWG Coordinator or Co-Chairs (e.g. technical review of documents, preparations for in-person meetings, and other support and feedback, as needed)
- The Co-Chairs will serve as members of the Core Team in planning the Annual Workshops
- Help arrange presenters for periodic webinars on behalf of the CMWG on identified priority topics
- Work through the Co-Chairs and Coordinator of the CMWG to leverage partner resources in support of the CMWG and WS/TT activities


RBM Case Management Working Group (CMWG)
Co-Chairs:
Olugbenga Mokuolu & Noella Umulisa
Coordinator:
Johanna Stenstrom
WS1: Supply Chain & System Issues
Co-leads Abdalah Lusasi & Rima Shretta
WS2: Severe Malaria
Co-leads Anitta Kamara & Afolabi Eliassou
WS3: Diagnostics
Co-leads Alexander Asamoah & Anderson Chinorumba
WS4: Care & Treatment
Co-leads Aissata Barry & Leah Moriarty
TT1: Resistance
Lead Leah Moriarty
TT2: Pharmacovigilance
Lead Aissata Barry
TT3: Vaccines
Lead Daniel Belinga Etogo

Work Stream membership

- Supply Chain and Systems Issues (Work Stream 1) : 24 members
- Severe Malaria (Work Stream 2) : 55 members
- Diagnosis (Work Stream 3) : 45 members
- Care and Treatment (Work Stream 4) : 69 members

Work Stream activities to date

- Confirmed members from expressed interest – Let us know if you are interested in joining!
- Members calls held to begin prioritizing topics and focus areas
- CMWG-14 agenda: topics defined, and agenda developed

RBM Partnership
To End Malaria

Thank you!