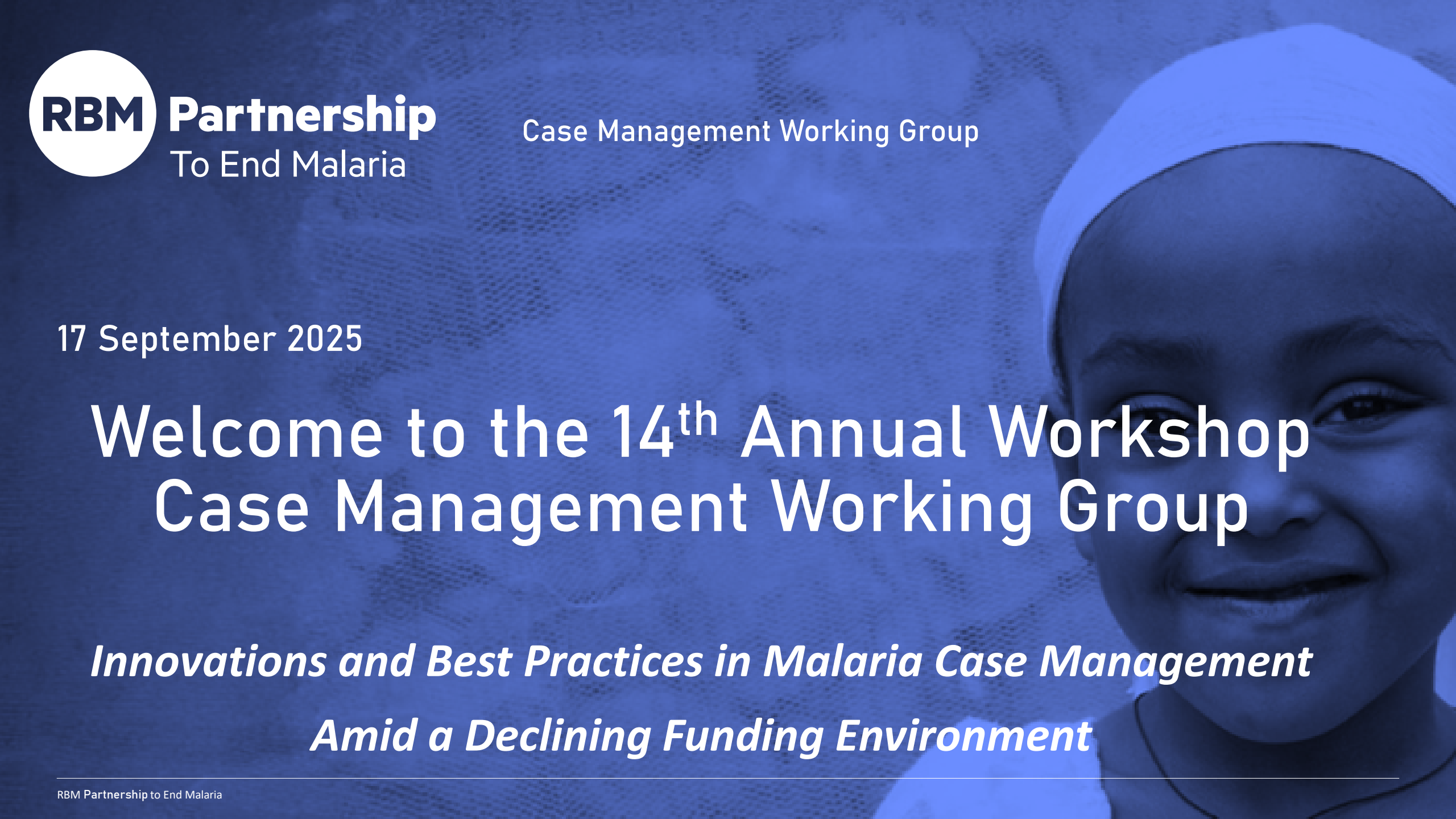
RBM Partnership To End Malaria

Case Management Working Group



17 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

17 September 2025

Work Stream 2 Severe Malaria

Co-leads Anitta Kamara & Afolabi Eliassou, CMWG

RBM Partnership
To End Malaria

17 September 2025

Meeting overview

Co-leads Anitta Kamara & Afolabi Eliassou, CMWG

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17 September 2025

Guidelines for pre-referral rectal artesunate implementation at community level for children with severe malaria

Ernest Chanda, Zambia

Introducing Guidelines for Pre-referral Rectal Artesunate Implementation at Community Level



Ernest Chanda - Transaid

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MMV Medicines for Malaria Venture

A case study from Zambia – MAMaZ Against Malaria



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MMV
Medicines for Malaria Venture

Background

- Started as a 12-month pilot project (July 2017 – July 2018)
- Implemented in 1 district (Serenje)
- Implemented by Transaid, Development Data, DAI Global Health and Disacare in partnership with Serenje District Health Management Team and National Malaria Elimination Centre (NMEC)
- Funding from Medicines for Malaria Venture
- Based on the pilot's success, a scaled-up intervention was launched in 10 districts, with support from Grand Challenges Canada (2018-2021)

Pilot Intervention

- MAMaZ Against Malaria set out to provide proof of concept and evidence of impact
- The pilot intervention tested:
  - Feasibility of training CHWs to provide RAS
  - Effective ways to mobilise communities to access appropriate treatment for severe malaria and reduce life-threatening delays
  - How to build sustainable capacity at district level to support effective severe malaria case management (i.e. RAS at community level; injectable artesunate at rural HFs)
  - How to prepare the ground for scale-up beyond the pilot intervention sites working in partnership with District Health Management Team and National Malaria Elimination Centre

MAM and MAM@Scale Approach

Innovative training for CHWs in RAS administration and community mobilization

CHWs raised awareness at community level on SM danger signs and actions to take

Community systems established to address barriers and delays (food banks, emergency savings schemes)

ETS scheme: bicycle ambulance with trained riders









District capacity built to manage and lead implementation of severe malaria programme

Experience and evidence shared with NMEC to inform national scale up

National procurement of RAS

RAS distributed to communities and systems for resupply put in place

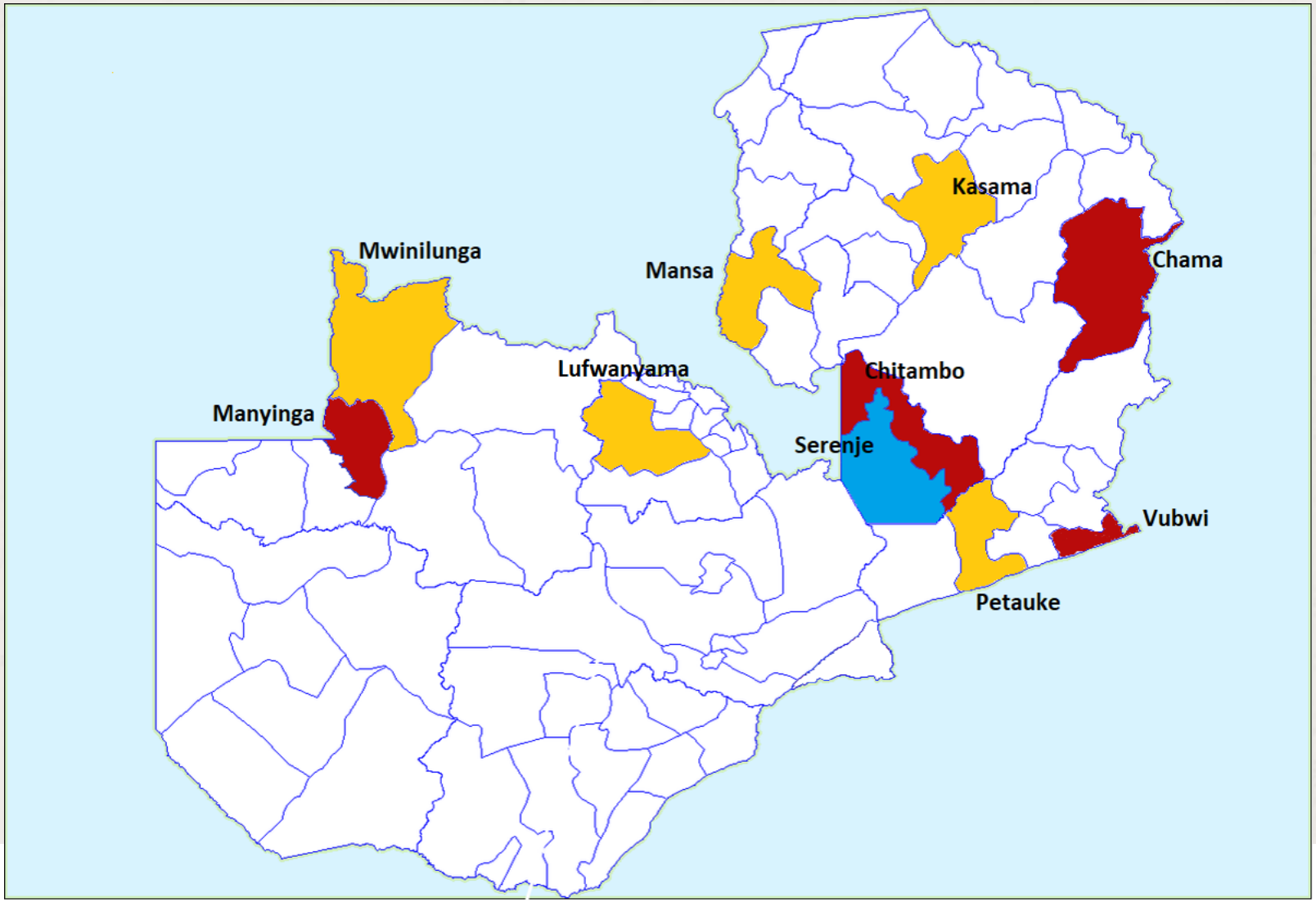
Health workers trained in severe malaria case management and ensured stock of Inj AS

Linkages between HFs & communities strengthened. Ongoing support given to CHWs by HF staff

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From pilot to scale-up phase



Pilot district

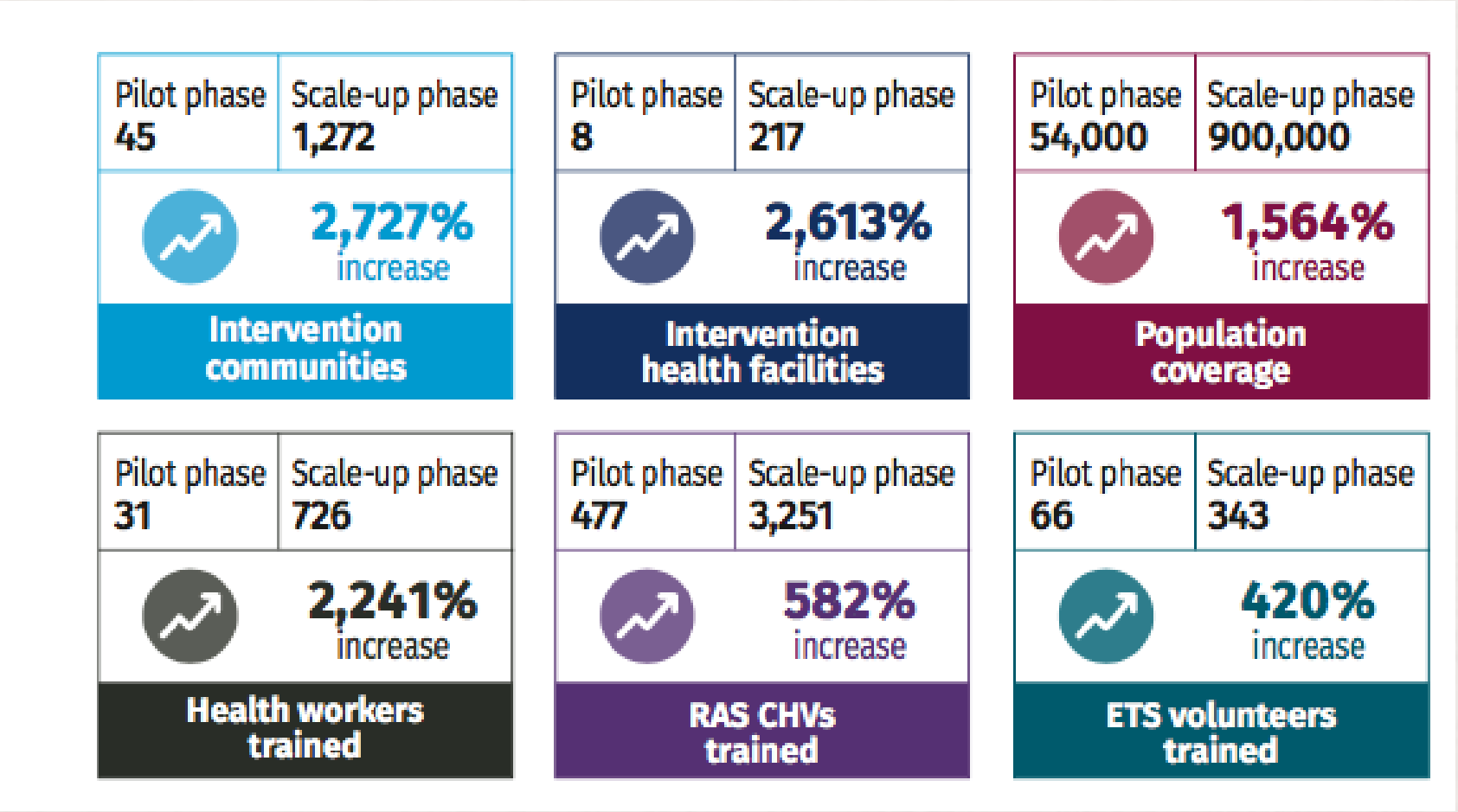
Scale-up: Phase 1

Scale-up: Phase 2

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From pilot to scale-up phase



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Results: RAS Recipients

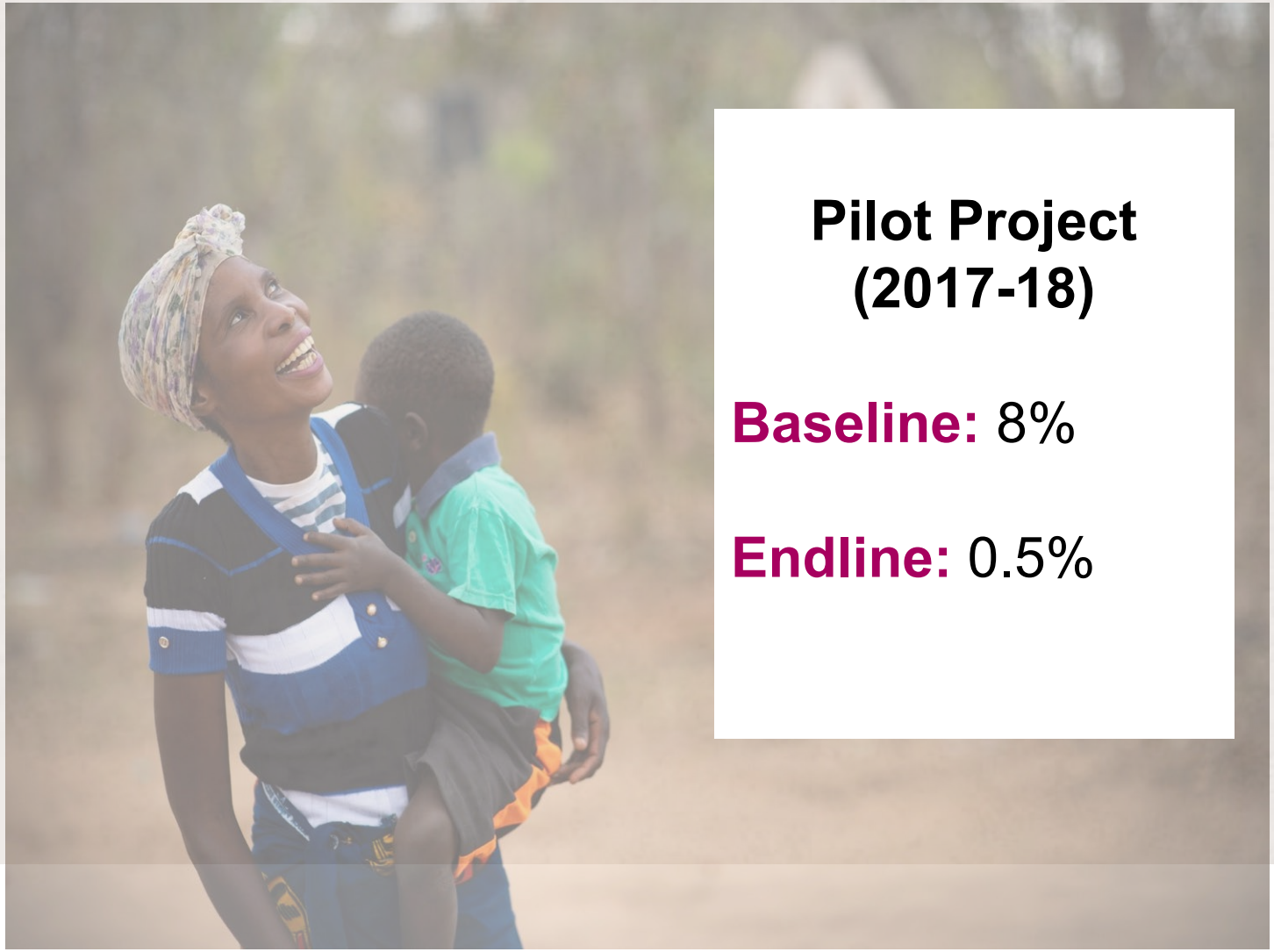


Pilot phase	Scale-up phase
1,215	12,310

913% increase

RAS recipients

Results: Case fatality rates



Pilot Project (2017-18)

Baseline: 8%

Endline: 0.5%

Scale-up intervention (2018-21)

Demonstration districts (x 2)

Baseline: 3.1%

Endline: 0.5%

Other districts (x8)

Baseline: 6.2%

Endline: 0.6%

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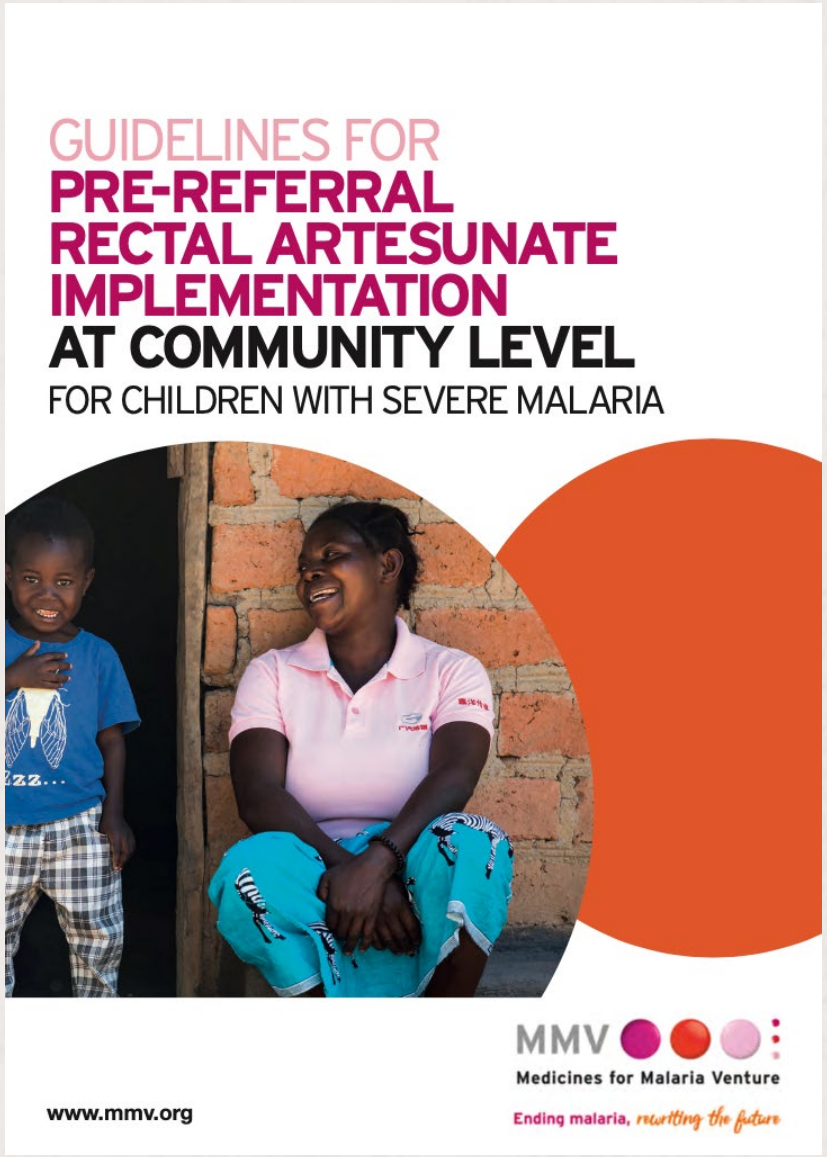
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Impact of MAM and MAM@Scale

- Interventions increased the availability of RAS and Inj AS for treatment of children with suspected severe malaria in intervention districts
- Over 13,500 children with suspected severe malaria were appropriately managed with RAS at community level and effectively referred
- Severe malaria case fatality rate among children aged < 1 to 5 years reduced significantly
- Intervention communities readily embraced the need for early identification and referral
- An emphasis on social inclusion helped ensure equity of access to RAS
- An effective partnership with the DHMTs and NMEC was central to the results achieved
- The interventions demonstrated that RAS can be effectively administered at community level by trained CHWs
- They also demonstrated that community-managed emergency transport systems support timely referral

Introduction to the Guidelines





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Introduction to the Guidelines

Background and rationale

- WHO 2023 RAS guidelines provide overarching guidance
  - Revisions to malaria treatment guidelines / EDL
  - Planning – roles and responsibilities
  - Commodity and supply chain management
- NMPs requested additional practical guidance on how to design and implement at local level in rural settings
- Considerable implementation experience in Zambia
- Aim is that the MMV guidelines will become a useful part of the toolkit used by countries implementing RAS
- MMV guidelines will be updated as more countries introduce RAS



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Introduction to the Guidelines

Main audience

- Ministries of Health in high burden malaria countries
- National malaria programmes
- Child health / iCCM personnel
- Sub-national health teams at provincial / state / district / local gov levels
- Development partners supporting roll-out of community RAS

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Introduction to the Guidelines

Development process

- Drafted by team from Transaid
- Broad range of stakeholders played key role in shaping guidelines
- Extensive peer review process (public health, malaria, community health systems and engagement, staff of national malaria elimination programmes)

Introduction to the Guidelines

Overview of content

- Selecting intervention sites
- Designing and delivering training to CHWs
- Designing community engagement and mobilization activities for RAS
- Designing severe malaria training for front-line health workers
- Designing patient transport systems to support rapid referral
- Addressing household and community barriers and delays to uptake
- Effective supportive supervision for CHWs
- Monitoring and evaluating RAS at community and health facility levels
- Planning and budgeting for a RAS intervention

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Introduction to the Guidelines

Approach

- Plain English
- Highly practical – ‘how to’
- Checklists – issues to consider
- Case studies
- Highlights for each sub-section
- Adaptable for different contexts
- Annexes – various resources



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Key Features and Innovations

- **Comprehensive** – cover all aspects of local level implementation
  - Selecting community sites, health facilities
  - Designing M&E for data collection and management
  - Complement WHO guidelines for RAS implementation

- Focus on the **crucial role of CHWs** in RAS implementation and the importance of appropriate training and effective supervision
  - Case management and community mobilisation (community awareness)
  - Detailing training resource and methodologies and how to make training accessible and transferrable to wider communities



Key Features and Innovations

- Highlight the importance of **bringing services close to communities** e.g. equipping lower-level health facilities to manage cases
  - Community members are able to detect signs of severe malaria
  - Quickly transfer to health facility without delay

- **Address the demand-side** - provide practical advice on empowering communities to address barriers and delays to treatment seeking
- Preventing delayed access to health services based on barriers
  - Lack of money
  - Lack of food
  - Lack of childcare
  - Gender-based violence

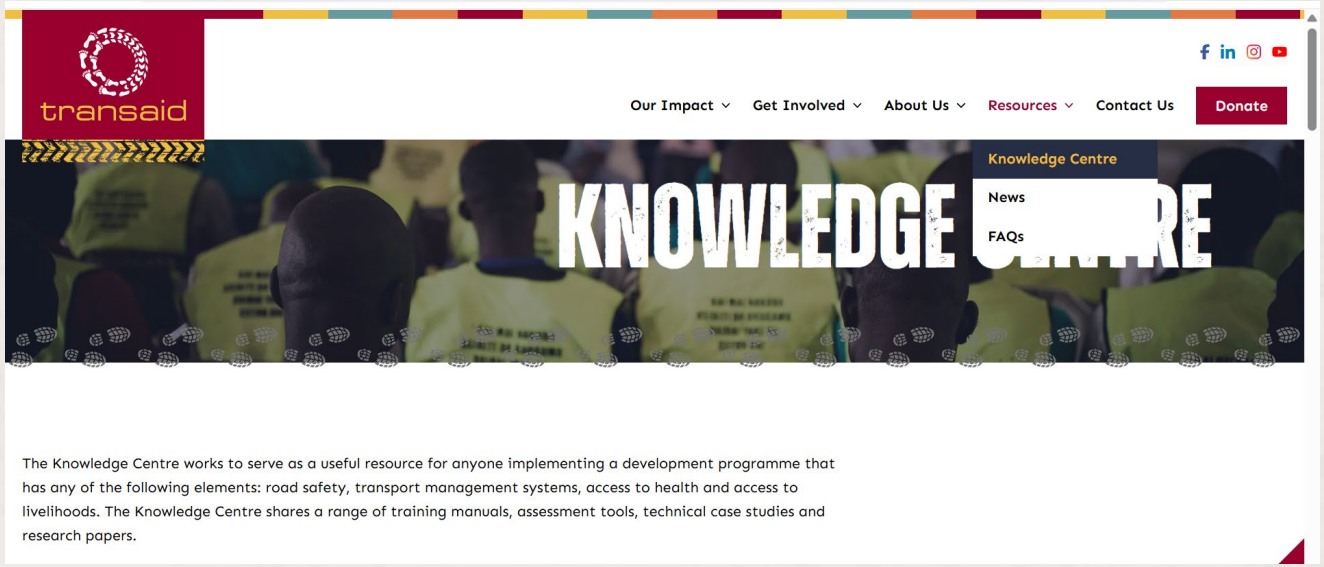
Key Features and Innovations

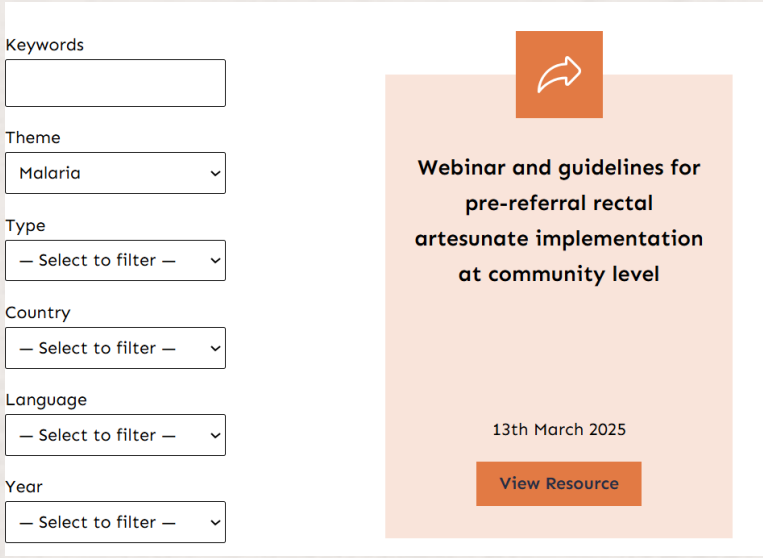
- Address **physical access barriers** – with focus on patient transport systems
  - Referral delays
  - Lack of affordable transport options
  - Reliable means of transport – assessment and management
  - Communities having emergency plans

- Mainstream a focus on **gender and social inclusion** to address health inequities
  - Emphasis on gender balance in CHW recruitment
  - Male involvement
  - Identify socially excluded individuals and households
  - Ensuring everyone in the community is reached and included

Where to obtain the Guidelines

- Guidelines available on the Knowledge Centre on Transaid's website www.transaid.org
- Guidelines also available on Severe Malaria Observatory at www.severemalaria.org





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Thank you for listening



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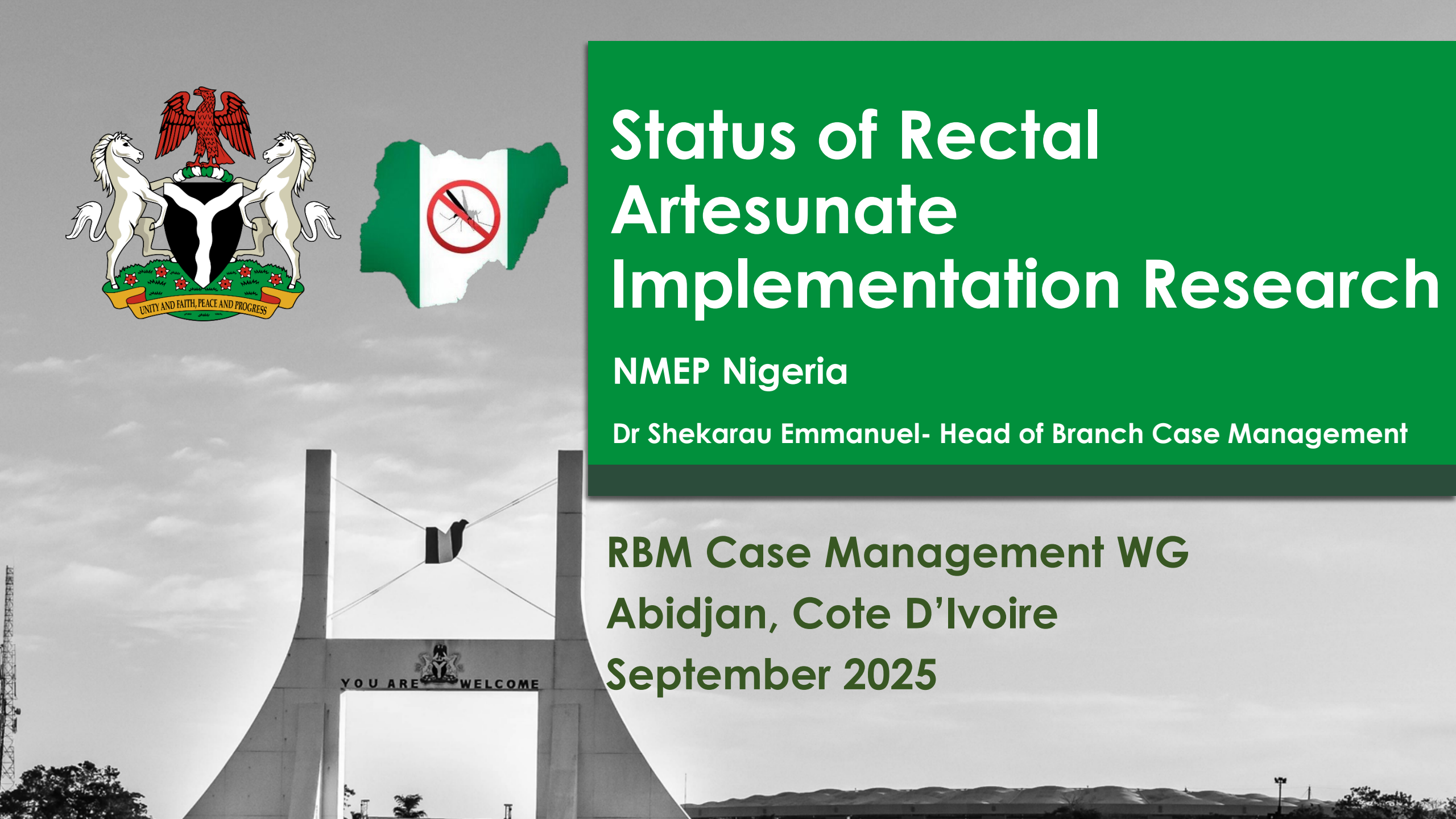
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Rectal artesunate implementation research study in five States in Nigeria

Emmanuel Shekarau, NMEP Nigeria



Status of Rectal Artesunate Implementation Research

NMEP Nigeria

Dr Shekarau Emmanuel- Head of Branch Case Management

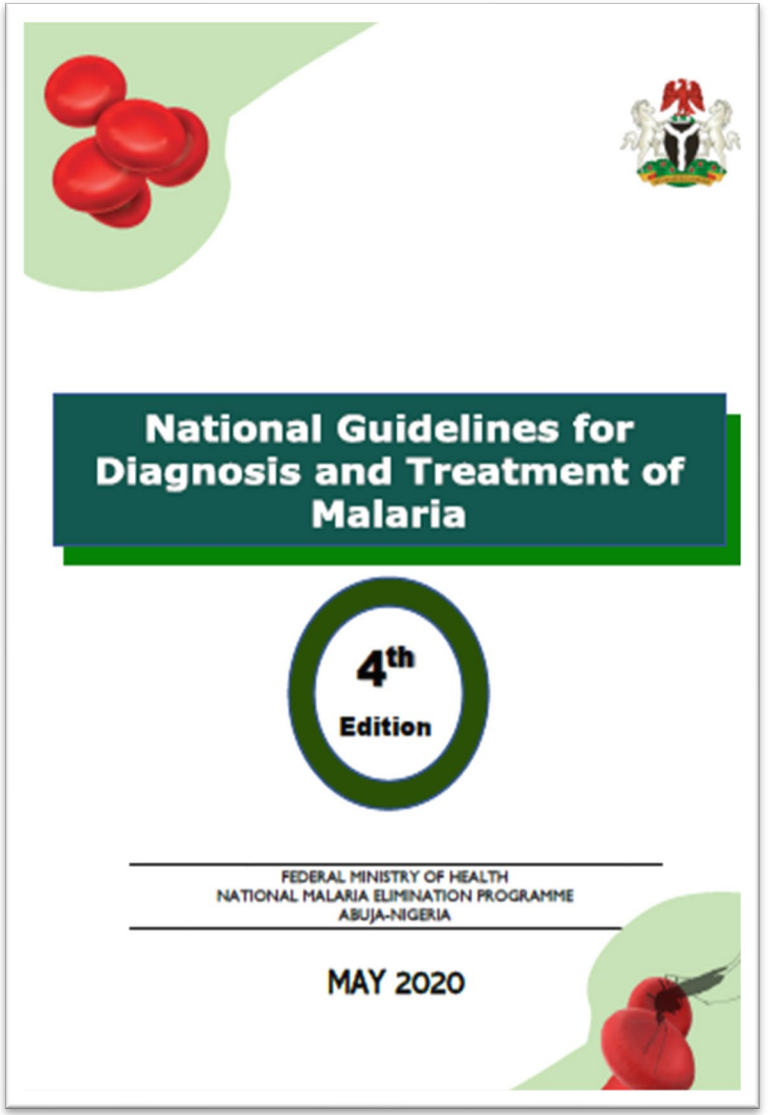
RBM Case Management WG
Abidjan, Cote D'Ivoire
September 2025

Outline

- Introduction
- Study Aims and Objectives
- Methodology
- Baseline Assessment Findings
- Status of Deployment
- Key Observation and Lessons Learnt
- Next Steps
- Conclusion

Introduction

- The Nigerian National Guidelines recommends **Rectal Artesunate Suppository for pre-referral treatment at community and PHC level for children under 6 years.**
- This aligns with the WHO guidance which aims to reduce mortality, particularly in remote area.
- The CARAMAL study in Nigeria, DRC, and Uganda aimed to guide RAS scale-up but faced challenges that limited its ability to measure impact on malaria mortality.
- Weak referral systems, suboptimal supply chains, and an ambitious 18-month timeline hindered outcomes, as many children did not reach facilities for complete treatment post-RAS.
- These findings underscored the need for context-specific strategies to maximize RAS effectiveness.
- Consequently, **With a clear understanding of the lessons learnt from the CARAMAL project and WHO guidance**, the NMEP commissioned implementation research on the deployment of RAS within the Nigerian context



Study Aim and Objectives

Aim/Goal

To demonstrate operational feasibility of an integrated implementation of rectal artesunate as a pre-referral treatment for severe malaria to drive reduction in malaria - related mortality in children.

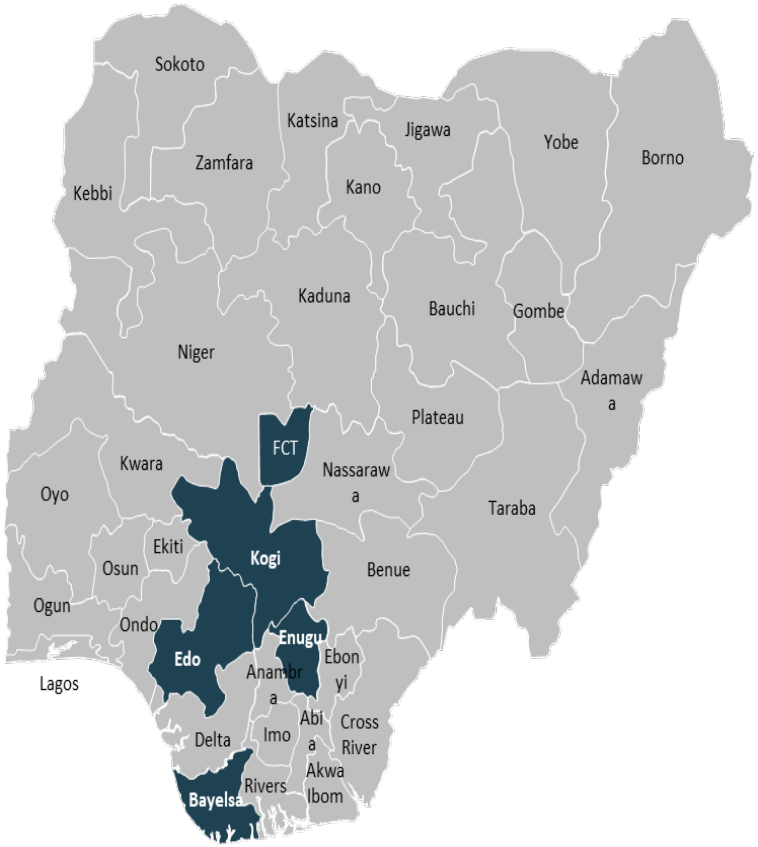


Objectives

- Identify factors influencing health-seeking behaviors from the onset of illness to initial healthcare contact.
- Evaluate the existing infrastructure, processes, and systems for severe malaria care to establish baseline gaps.
- Implement RAS program tailored to local needs and health system contexts.
- Assess the feasibility and outcomes of this tailored RAS program.
- Explore the perspectives of beneficiaries, knowledge users, and policymakers on the program's deployment and sustainability.
- Measure changes in healthcare access before and after the RAS program implementation.

Methodology

Map Showing the 5 selected States in Nigeria

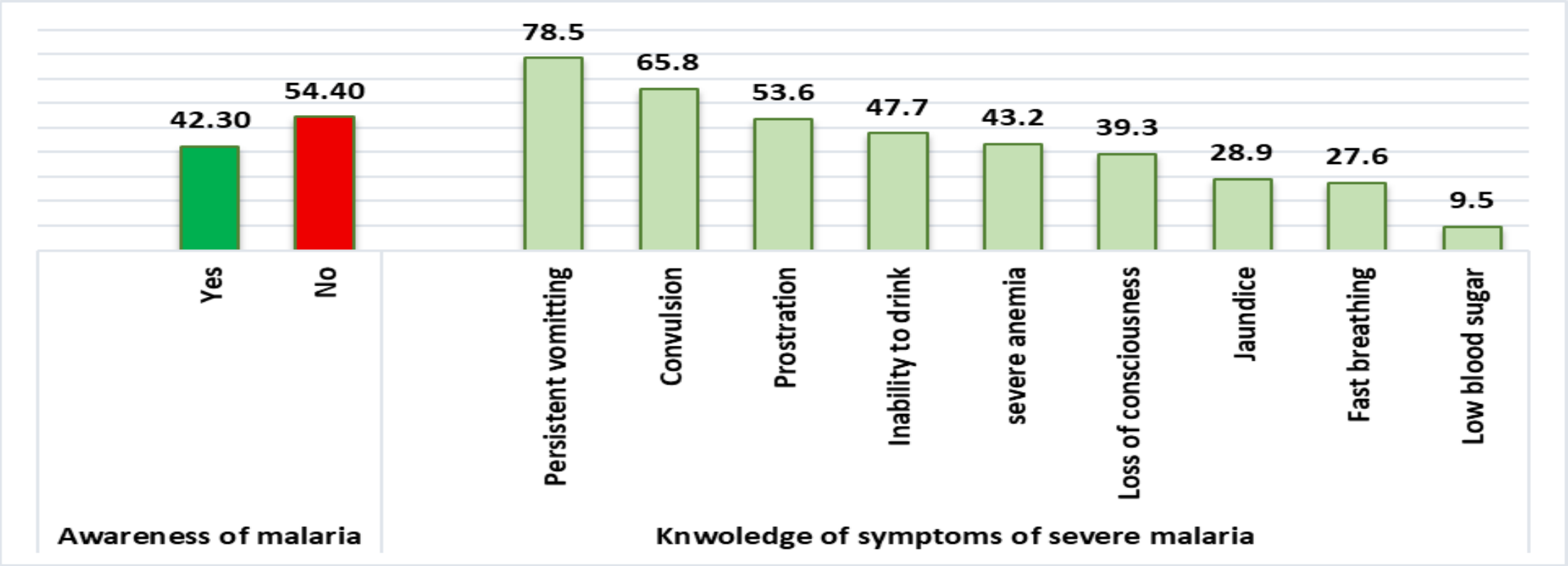


Phases	Activities
Phase One – Baseline/ Needs Assessment	▪ Map LGAs and communities with high burden of severe malaria ▪ Conduct a situational analysis ▪ Collect baseline data on the incidence of suspected severe malaria, diagnosis, treatment referral, referral completion, and treatment outcome. ▪ Conduct Focused Group Discussions (FGDs) ▪ Conduct Key Informant Interviews
Phase Two – Intervention/ Programme Implementation	▪ Design RAS implementation pathway and map interventions based on the 5 CoC framework and WHO guidance ▪ Conduct study site selections ▪ Engage State and community actors and relevant stakeholders ▪ Facilitate last-mile delivery and pipeline maintenance of procured RAS ▪ Leverage existing community health workers' structure ▪ Build the capacity of CORPs and HCWs ▪ Establish patient surveillance system (PSS) ▪ Track and monitor data on all U5 children enrolled in the PSS ▪ Deploy a human-centered design approach ▪ Conduct rigorous routine monitoring and supervision
Phase Three – Evaluation, Knowledge Translation, and Dissemination of Findings	▪ Conduct outcome evaluation of the intervention ▪ Conduct Focused Group Discussions (FGDs) ▪ Conduct Key Informant Interviews ▪ Document key learnings, best practices and limitations ▪ Routinely present implementation updates at national and sub-national ▪ Support the NMEP to translate learnings from the implementation research to inform development of a country-specific RAS scale up plans.

Major Findings from Baseline Assessment

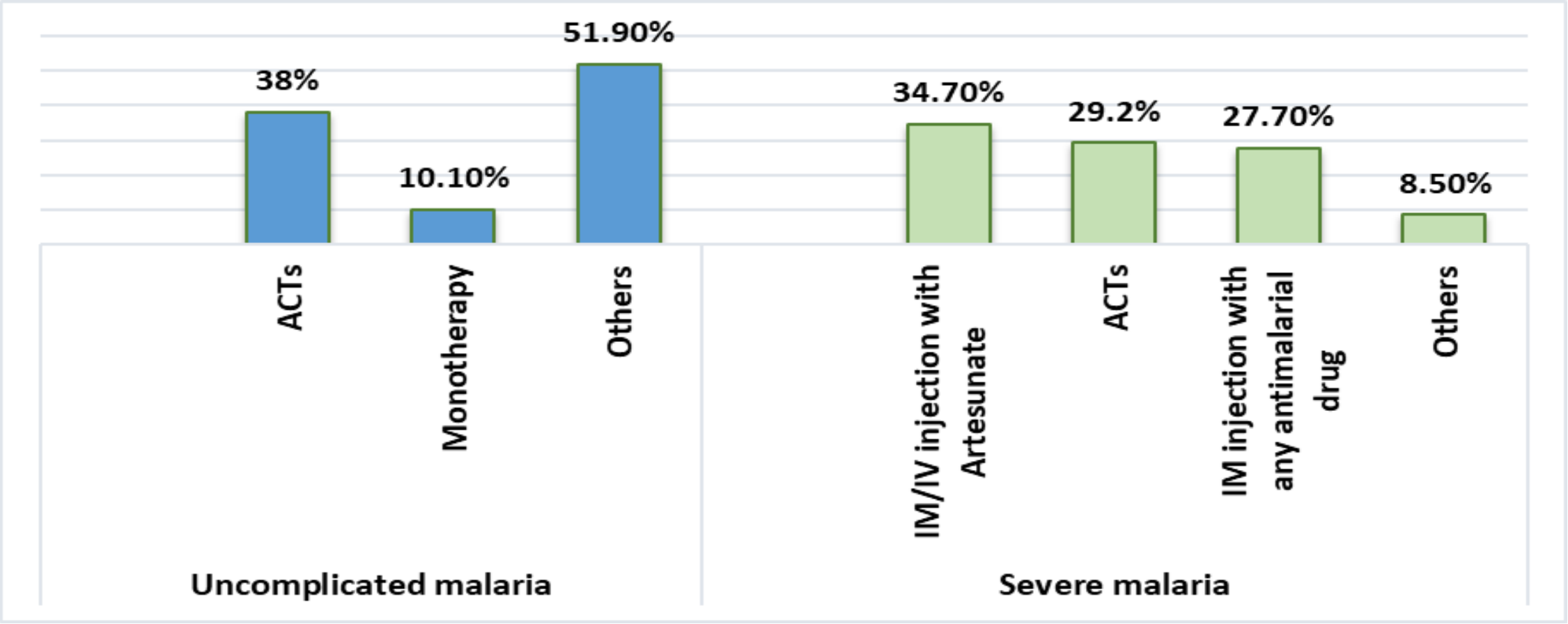
Primary Findings (Knowledge and Awareness)

Awareness and knowledge of severe malaria



Primary Findings (Knowledge and Awareness)

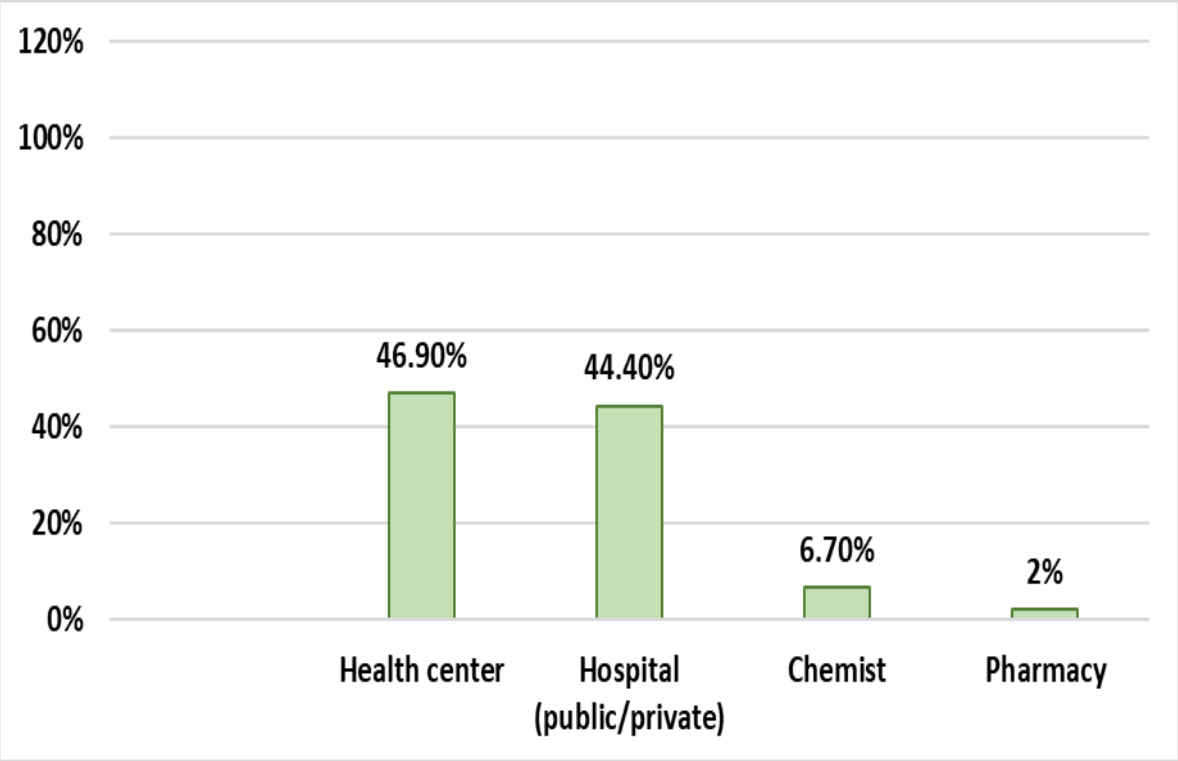
Knowledge of treatment of malaria (uncomplicated vs severe malaria)



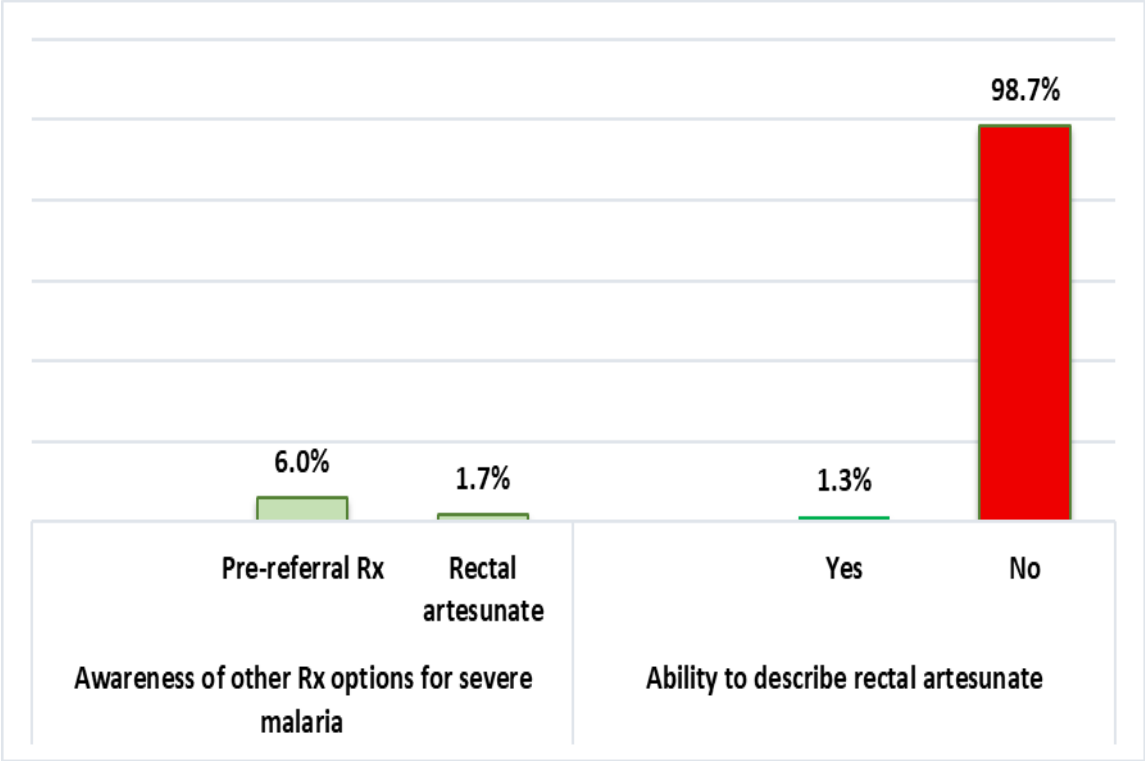
- Knowledge gaps exist in differentiating appropriate treatments: while 38% recognized ACTs for uncomplicated malaria, over half cited "other" options.
- For severe malaria, only a third identified artesunate injections correctly, while many still mentioned ACTs or non-specific antimalarial injections — reflecting limited awareness of correct treatment protocols.

Primary Findings (Knowledge and Awareness)

Knowledge of appropriate place for treatment of severe malaria



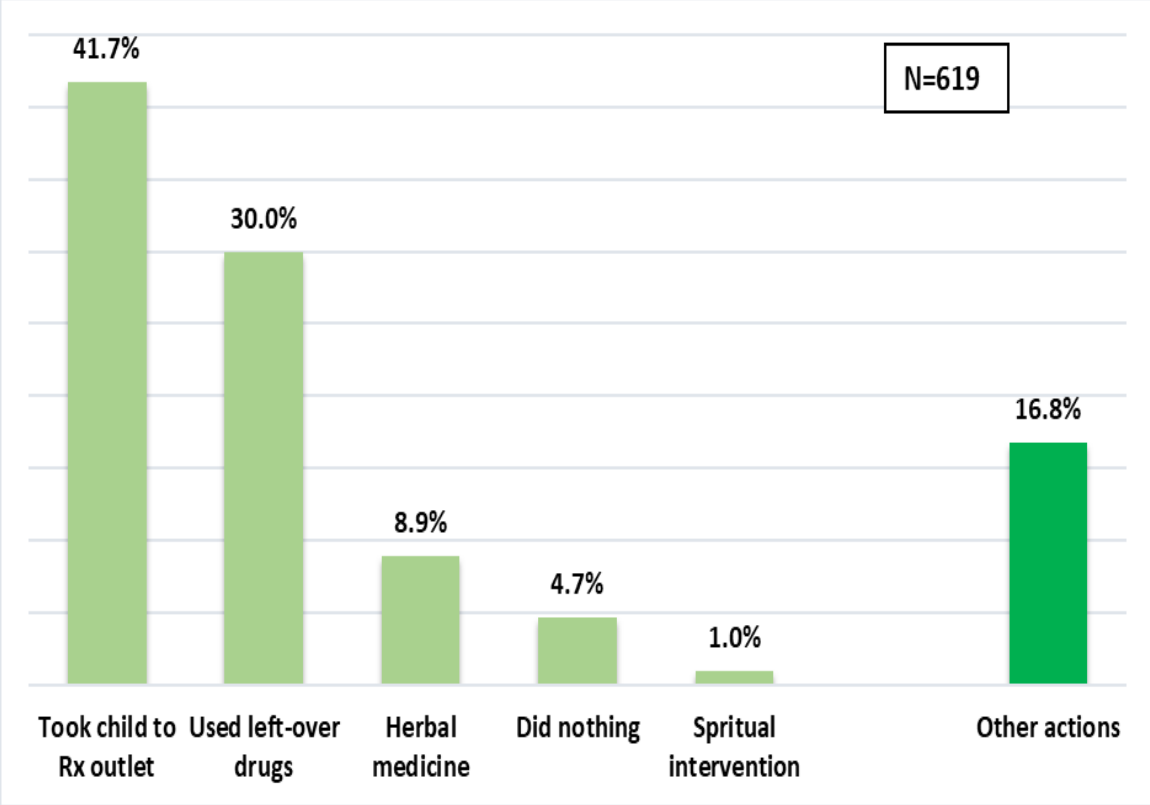
Knowledge of other treatment options for severe malaria



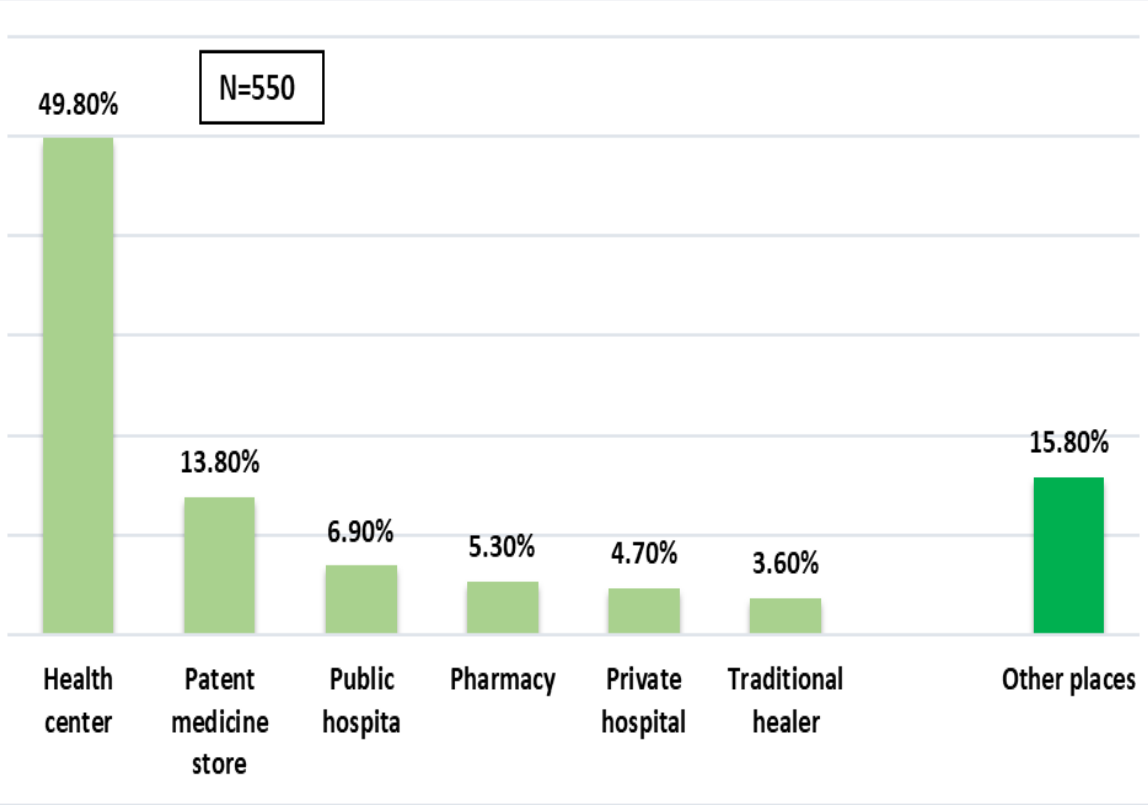
- Most respondents (about 90%) identified health centers or hospitals as the right place for severe malaria treatment, but knowledge of specific treatment options was very low.
- Almost all participants (98.7%) were unable to describe rectal artesunate, underscoring the near absence of awareness of this pre-referral intervention.

Primary Findings (Care-Seeking Behavior)

Initial actions taken to treat symptoms of severe malaria



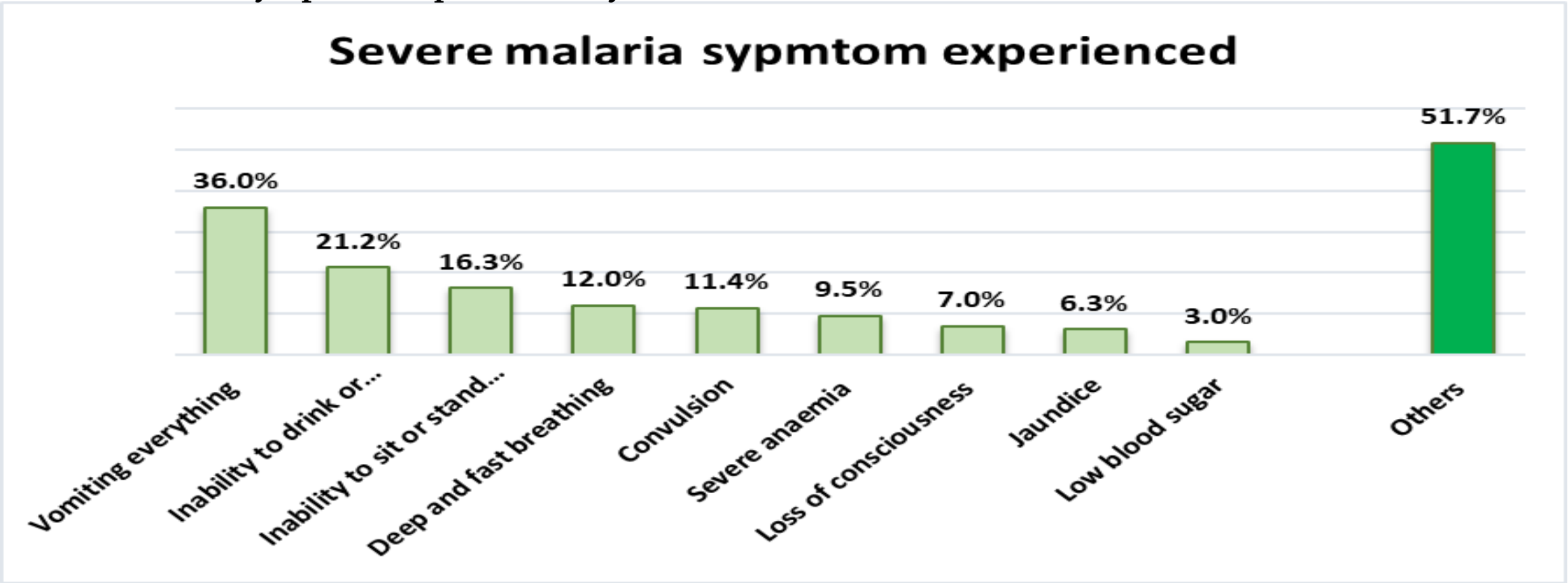
Place where child was initially taken for treatment



- When symptoms appeared, the most common first actions were taking the child to a treatment outlet (41.7%) or using leftover drugs (30%).
- Nearly half of children were first taken to health centers (49.8%), but a notable proportion sought care at informal points- medicine stores (13.8%) or “other places” (15.8%), highlighting mixed care-seeking patterns.

Primary Findings (Severe Malaria Symptoms)

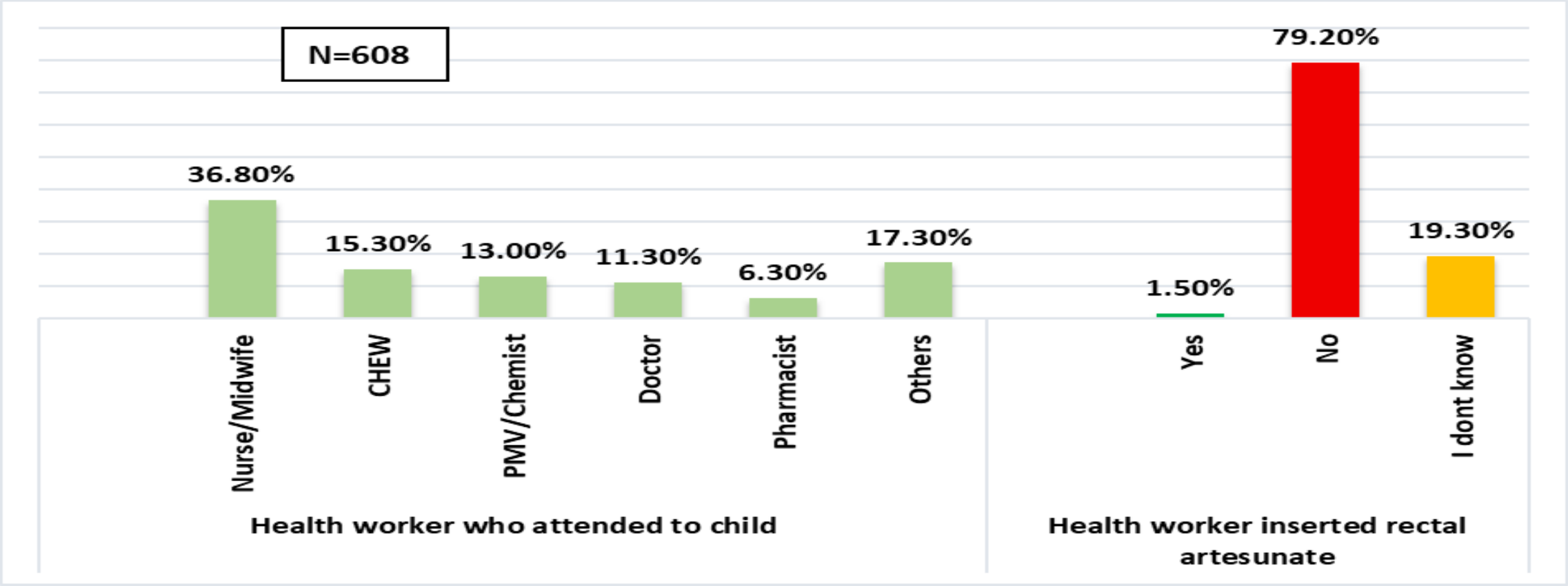
Severe malaria symptoms experienced by children in last six months



- Vomiting, inability to drink, or sit/stand were the most frequently reported severe malaria symptoms in children, with convulsions and deep/fast breathing also noted.
- However, over half (51.7%) fell into an “other” category.

Primary Findings (Care-Seeking Behavior)

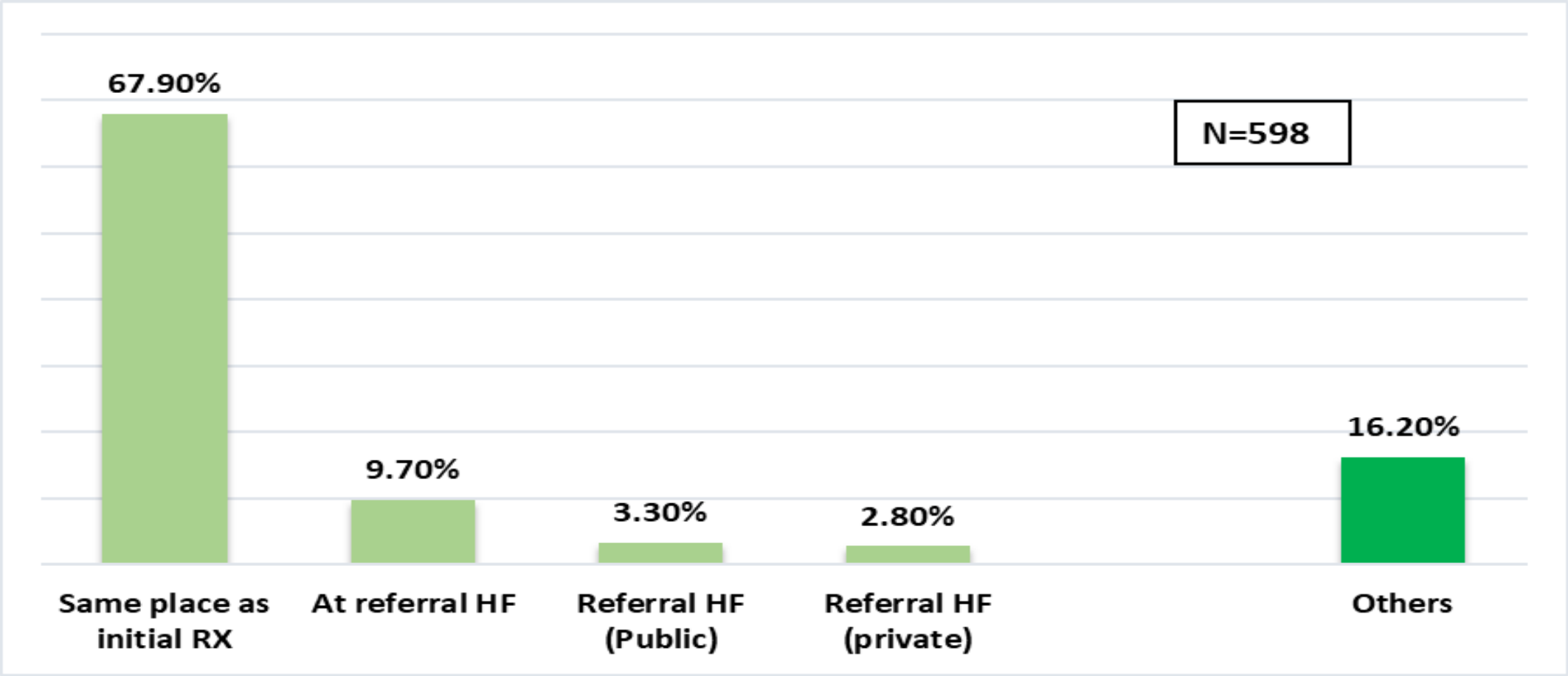
Category of health workers that initially attended to children with severe malaria (n=608)



- Most children with severe malaria were first attended by nurses/midwives (36.8%) or CHEWs (15.3%), but **RAS use was almost non-existent (only 1.5%),** highlighting a critical gap in frontline case management.

Primary Findings (Care-Seeking Behavior)

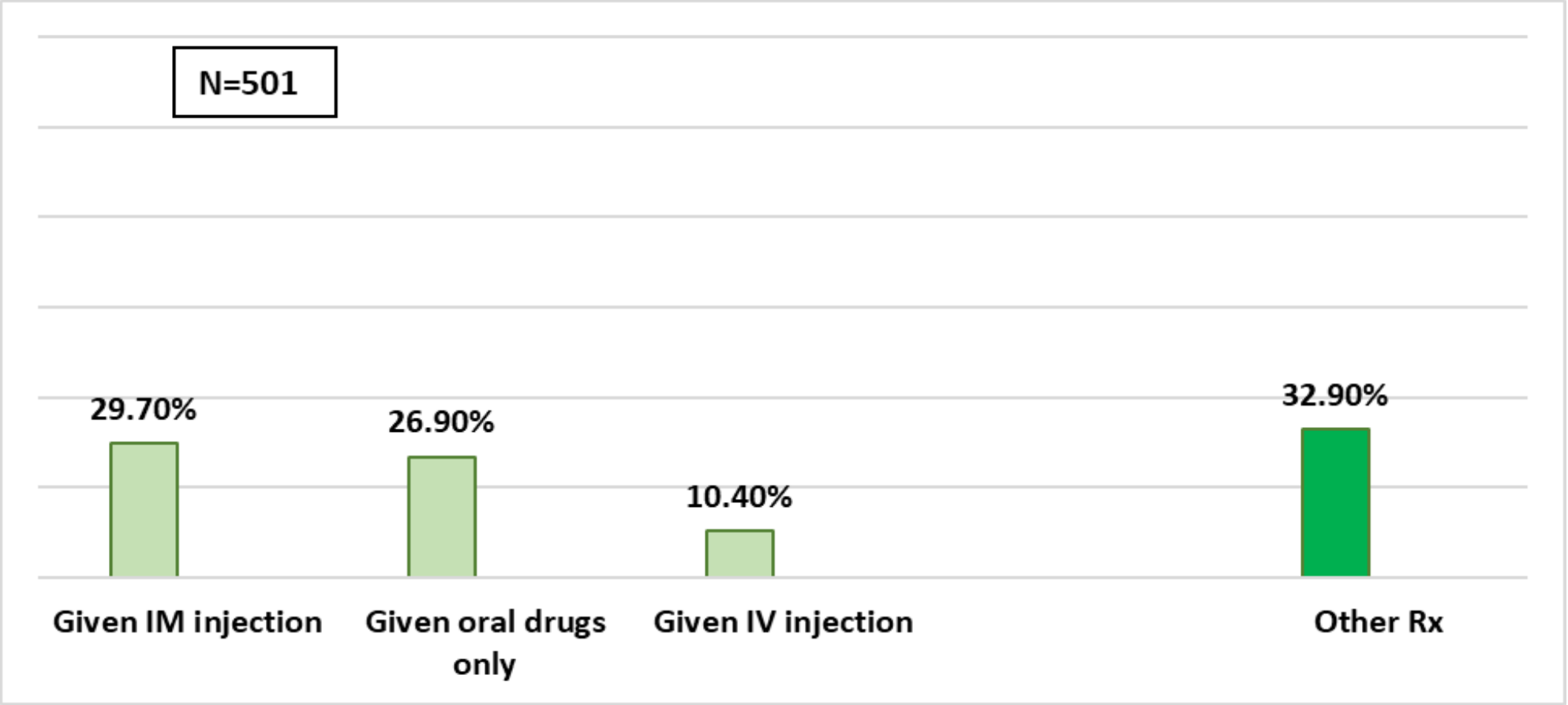
Where Rx was eventually sought



- Nearly 68% of children remained at the same facility where initial treatment was sought, with very few accessing designated referral facilities, **underscoring weak referral linkages in severe malaria management.**

Primary Findings (Treatment Journey)

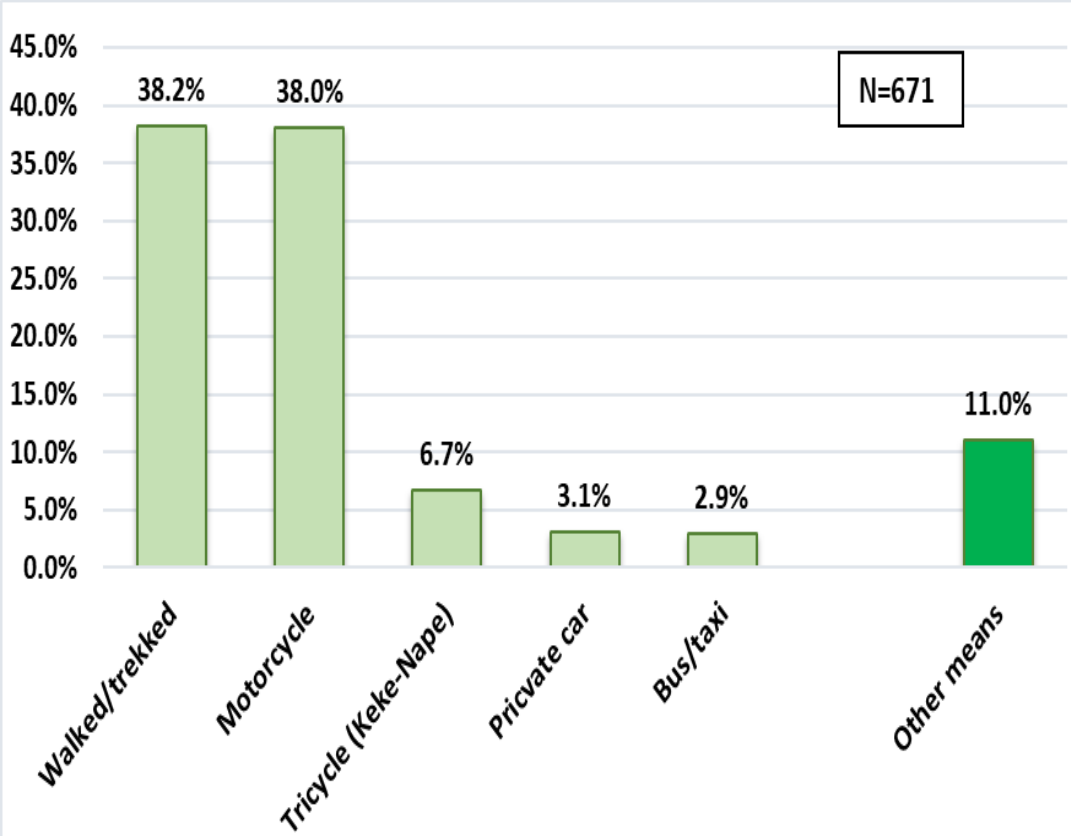
Treatment received by child at referral center



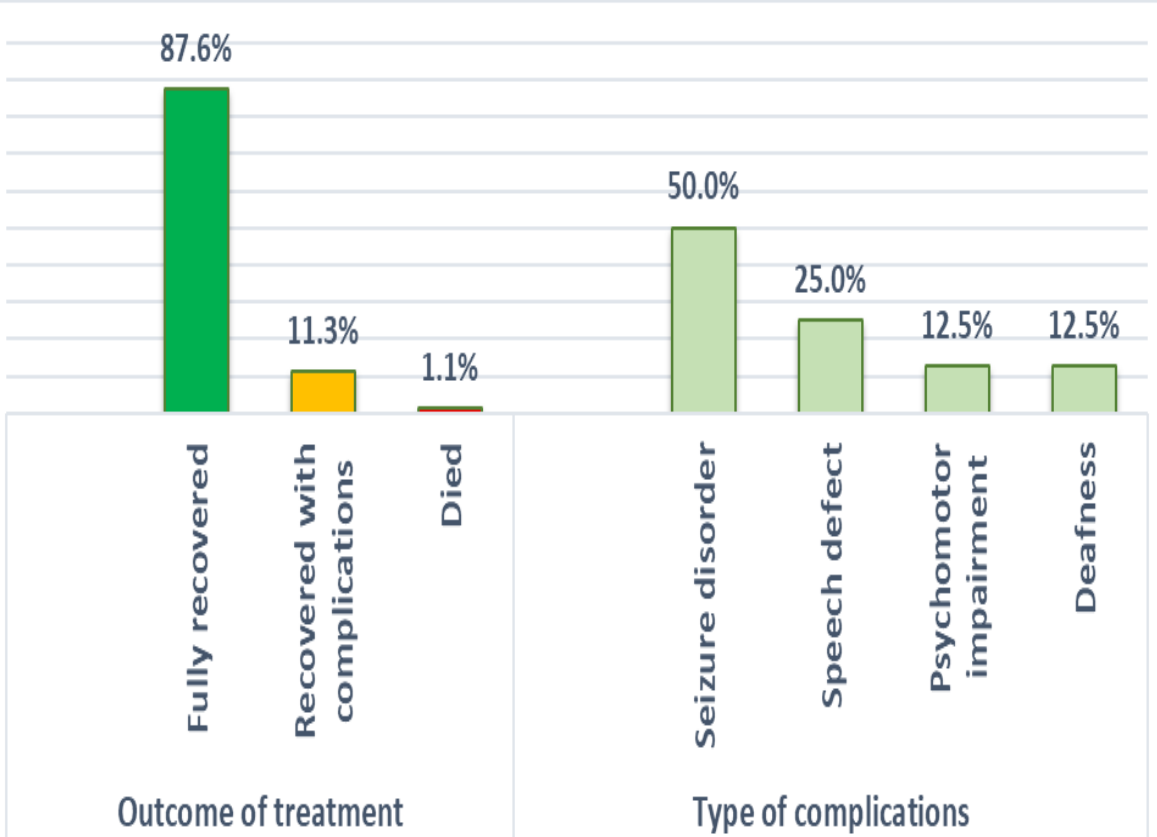
- Children at referral centers received varied treatments, IM injections (29.7%), oral drugs (26.9%), and IV injections (10.4%) with no standardized treatment pathway and a third receiving “other” treatments, reflecting inconsistency in case management.

Primary Findings (Treatment Journey)

Means of transport to referral center



Outcome of severe malaria treatment



- Most families relied on walking (38.2%) or motorcycles (38.0%) to reach referral centers, pointing to transport barriers; while 87.6% of children recovered, 11.3% recovered with complications (notably seizure disorders at 50%), and 1.1% died, revealing gaps in timely access and effective treatment.

Status of Deployment of Rectal Artesunate

RAS Utilization and Referrals by State

State	Qty utilized	No of referrals	No of completed referrals
Edo**	224	224	224
Kogi	161	161	161
Enugu	1407	1145	1003
Bayelsa	1561	1561	723
FCT	333	326	122
Total	**3,686**	**3,417**	**2,233**

Highlights on Utilization and Referrals

State	Highlights
Edo	▪ RAS utilization good, especially in Ovia South-West ▪ CHW confident on service delivery ▪ Recommend rapid assessment and intensified supervision ▪ All referred cases were completed in both LGAs ▪ This indicates effective referral follow-up and community-to-facility linkage ▪ Sustained coordination between CHWs and health facilities critical to success
Kogi	▪ RAS utilization is higher in Lokoja, but still below 50% ▪ Referral completion rates are encouraging in both LGAs, indicating good referral follow-through ▪ Need for enhanced follow-up systems, community sensitization, and transport/logistics support
FCT	▪ RAS utilization is suboptimal across LGA. Health workers strike in FCT affected kickoff ▪ Referral completion rates are suboptimal in both LGAs, indicating potential barriers in referral follow-through ▪ Need for enhanced follow-up systems, community sensitization, and transport/logistics support

Highlights on Utilization and Referrals

State	No of completed referrals
Enugu	▪ RAS stockpile is high in both LGAs and some utilization, especially in Nkanu West. ▪ Udenu outperforms Nkanu West across all service delivery metrics. ▪ A number of uncompleted referrals, signaling urgent follow-up and system gap. ▪ Likely gaps in CHW engagement, referral tracking, or community demand.
Bayelsa	▪ RAS utilization is encouraging across LGAs. A number of challenges initially affected commencement ofdeployment ▪ Referral completion rates are suboptimal in both LGAs, indicating potential barriers in referral follow-through ▪ Need for enhanced follow-up systems, community sensitization, and transport/logistics support

Key Observation and Lessons Learnt

Knowledge and Awareness	▪ Caregivers and even many health workers have **limited awareness of severe malaria and its appropriate treatment.** ▪ **Knowledge of rectal artesunate as a pre-referral treatment is almost absen**t, with confusion between treatment options for uncomplicated and severe malaria ▪ Mistrust of health workers, misconceptions about RAS, and conspiracy theories hinder acceptance, particularly in some states
Care seeking behaviour	▪ Families often **begin treatment at home using leftover medicines or informal outlets**. ▪ Nearly half of children with severe malaria are first taken to health centers, but most remain at the same facility rather than completing referral, reflecting weak referral linkages
Health System Utilization and Bottlenecks	▪ **RAS utilization remains low across states**, with stockpiles available **with inadequate utilization by community health workers mainly due to weak demand.** ▪ Referral systems face bottlenecks: refusals when symptoms improve post-RAS, poor transport access, costs at referral centers, distance and poor access to referral centres, procedural delays, and stockouts of injectable artesunate
Community Support Mechanisms	▪ Communities sometimes pool resources or rely on informal transport for referrals, but these mechanisms are inconsistent and insufficient. ▪ While most children who reached referral facilities recovered, delays and inconsistent treatment practices resulted in complications in 11% of cases and mortality in 1%

Next Steps

01

REFERRAL SYSTEMS

Continue to encourage and work with Ward Health Committees to establish sustainable community-based transport arrangements.

02

SOCIAL BEHAVIORAL CHANGE

Intensify SBC through continuous community sensitization and CHW House to house visits

03

TRUST & AWARENESS

Carry on engagement with community leaders, LGA/District officials and State Gatekeepers to increase awareness and trust through health education,

04

FINANCIAL PREPAREDNESS

Leverage on the continuous community sensitization to educate caregivers to make arrangements on out-of-pocket expenditure

05

COMMODITY SECURITY

Ensure commodity security by escalating stockout issues to the Ministry of Health and SMEPs to maintain uninterrupted supplies of injectable artesunate.

06

COMMUNITY ENGAGEMENT

Leverage community support structures (e.g., ward health committees) to reinforce demand generation and local solutions for transport and cost barriers.

CONCLUSION

RAS remains a highly cost-effective intervention to prevent the progression of severe malaria cases to death. Nigeria has prioritized its rollout and is committed to addressing the challenges that threaten effective implementation, ensuring that no child is denied timely, lifesaving care.

Acknowledgements

- Federal Ministry of Health (FMOH)
- National Malaria Elimination Programme (NMEP)
- National Primary Health Care Development Agency (NPHCDA)
- World Health Organization – (WHO- TDR)
- World Health Organization – (WHO- Nigeria
- United Nations Children's Fund (UNICEF)
- Medicines for Malaria Ventures (MMV)
- Clinton Health Access Initiative (CHAI)
- CEMROD – University of Ilorin, Kwara State
- State Ministries of Health (Bayelsa, Edo, Enugu, Kogi and FCT)
- State Malaria Elimination Programme (Bayelsa, Edo, Enugu, Kogi and FCT)
- Collaborating Institutions (Niger-Delta University, University of Benin, Nnamdi Azikwe University, Federal University Kogi State, and Federal Medical Centre Keffi)


THANK YOU FOR
LISTENING

Back-up slides

Qualitative Findings

Focus	Insights
Awareness and Knowledge of Severe Malaria	• It was widely recognized by the participants as a major health issue and is perceived as one of the major causes of child mortality in their communities and caused by mosquito and poor sanitation • Despite the considerable awareness of severe malaria among the study participants, there exists limited knowledge of its danger signs
Management of Severe Malaria	• Care-seeking for severe malaria often combines traditional and orthodox practices. Reported methods include cooling with wet towels, steaming with guava or eucalyptus leaves, and administering herbal concoctions. • In some cases, caregivers turn to native doctors when children present with '**strange**' symptoms.
Awareness of RAS	• Awareness of RAS is extremely low among caregivers and health workers across all five study states. • Most participants reported never seeing RAS; only a few in Edo State were aware, but lacked knowledge of dosage, administration, and eligibility.

Qualitative Findings

Focus	Insights
Potential Facilitators of RAS Acceptance	• **Edo State:** Key drivers identified include health education, endorsement by health workers and community leaders, and integration of RAS into malaria protocols with frontline worker training. • **Bayelsa State**: Potential drivers include training and supporting volunteers, ensuring constant RAS supply, raising awareness, and engaging communities in implementation, insertion of local herbs rectally
Potential Barriers	• Enugu: Reported barriers include route of administration, mistrust of health workers, and misconceptions/conspiracy theories linked to low awareness of RAS. • FCT: The main barrier identified was the cost of the suppositories.
Existing Community Support during Emergency	• Bayelsa: Communities sometimes pool money for child transport to referral facilities; in riverine areas, boats are used alongside motorcycles, tricycles, and vehicles. • Edo State: Community leaders/politicians occasionally provide emergency transport support; neighbors and friends with vehicles are also called upon.

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17 September 2025

Health-seeking & -caring behavior & clinical effectiveness of RAS within an iCCM approach (preliminary results SEMA ReACT)

Jean-Pierre Van geertruyden, University of Antwerpen



SEMA ReACT

SEVERE MALARIA IN REMOTE AREAS
CLOSING THE EVIDENCE GAP

14th Annual Workshop

RBM Case Management Working Group

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

17th September 2025

Prof Jean-Pierre Van geertruyden
Consortium Coordinator SEMA ReACT

University of Antwerp
GHI | Global Health Institute

Project funded by

Schweizerische Eidgenossenschaft
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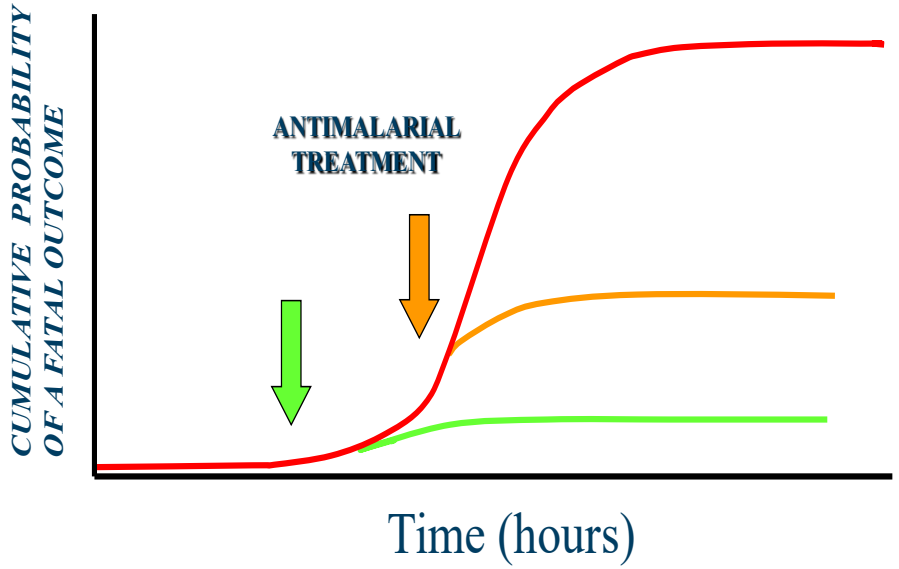
Federal Department of Economic Affairs, Education and Research EAER
State Secretariat for Education, Research and Innovation SERI

EDCTP

Funded by the European Union

Background and rationale: WHY!

- **Malaria mortality U5 SSAfrica: ~483K/year.**
- **Timely access to effective antimalarial therapies can make a difference between life or death**
  - Complete treatment with pre-referral rectal artesunate (RAS), followed by injectable artesunate and 3 days treatment with ACTs) leads to an observed 96% reduction in mortality
- **Though recommended by WHO for years,**
  - RAS deployment very limited,
- **Strengthening PHC is beyond remit of national malaria programs**
- **(Remote) & socially deprived communities may be without access to higher-level medical facilities**
  - timely referral is practically not feasible.



Need to evaluate the accessibility, feasibility and efficacy of alternative treatment modalities for patients in remote settings where referral cannot (or should not) be completed

Hypothesis

- **Deployment of rectal artesunate (RAS) in the CHW drug kit (iCCM)**
  - Improves access to formal health care
    - By community members who would have otherwise sought care from elsewhere
  - May indicate a decreased U5 mortality at population level

Impact

- **"RAS + ACT"**
  - Can be implemented in remote areas in children 6 months to 5 years
  - Has a 97% (CI95:92-100%) effectiveness (similar as "RAS + Injectable artesunate+ACT")

Implementation
Effectiveness

- **Deployment of amoxicillin in the CHW drug kit (iCCM)**
  - Improves access to formal healthcare
    - By community members who would have otherwise sought care from elsewhere
  - May indicate a decreased U5 Mortality at population level
    - → for both malaria and other diseases!

Kapolowe, DRCongo

- ~100 kilometres from Lubumbashi, the provincial capital
- Population primarily engages in agriculture, fishing,and artisanal mining







Nchelenge, Zambia

- Rural district, Luapula province, northern part of Zambia on the eastern shore of Lake Mweru
- Population: 233,636,most depend on fishing as main source of livelihood (April-November)
- Farming on a small scale (November-March)(maize and cassava)







Study population

- **Children 6 –59 months of age living in Kapolowe (DRC) & Nchelenge (Zambia)**
  - With a suspected diagnosis of severe malaria, confirmed by a rapid diagnostic test, or
    - Non-severe malaria, confirmed by a rapid diagnostic test or
    - Non-malaria severe disease

- **Other target groups for FGDs, IDIs include**
  - Parents of U5 at risk of severe malaria
  - WHO's Global Malaria Program, NMCPs, funders and implementers
  - Communities and nations where severe malaria deaths in small children continue to occur unabated (in rural regions)

- **Both sites are expected to recruit the required number of study participants based on malaria transmission and experience with previous studies**

Implementation by MoH

Implementation (CHWs, Health Facility Workers)

Introduce the SEMA ReACT project.

Equip CHWs and facility staff with practical skills in iCCM case management for malaria, pneumonia, and diarrhoea.



Provide training on the use, administration, and safety monitoring of RAS, ACT, & amoxicillin within the SEMA ReACT intervention.

Reinforce documentation practices for all study-related activities.

Implementation design

KAPOLOWE STEP WEDGE



16 health facilities (HF)
Training
Sensitisation
Supply
Piloting

8 HF control → 8 Health Facilities RAS → 8 Health Facilities RAS/AMOXY → 8 Health Facilities RAS/AMOXY

8 HF control → 8 Health Facilities control → 8 Health Facilities RAS → 8 Health Facilities RAS/AMOXY

1-5 months (Phase 1) → **1-6 months (Phase 2)** → **1-6 months (Phase 3)** → **1-3 months (Phase 4)**

NCHELENGE STEP WISE



24 health facilities (HF)
Training
Sensitisation
Supply
Piloting

12 HF control → 12 Health Facilities RAS → 12 Health Facilities RAS/AMOXY

12 HF control → 12 Health FacilitIes RAS → 12 Health Facilities RAS/AMOXY

1-6months (Phase 1) → **1-6 months (Phase 2)** → **1-6 months (Phase 3)**

Primary research objectives & endpoints

Implementation evaluation

To evaluate feasibility of provision of rapid treatment of severe malaria with RAS in children 6 months to 5 years not able to access a referral health facility, by a community health worker or in health facility where there is no injectable artesunate available

The **time taken of initiating treatment** among children 6 months to ≤5years with severe malaria and/or not able to take oral treatment that seek health care from the CHW or other HF system as primary first contact

Clinical effectiveness evaluation

To evaluate the **recrudescence rate of RAS plus ACT treatment** for patients 6 months to 5 years in areas where referral for follow-up treatment with injectable artesunate is not feasible, **compared to outcomes obtained after full referral is completed.**

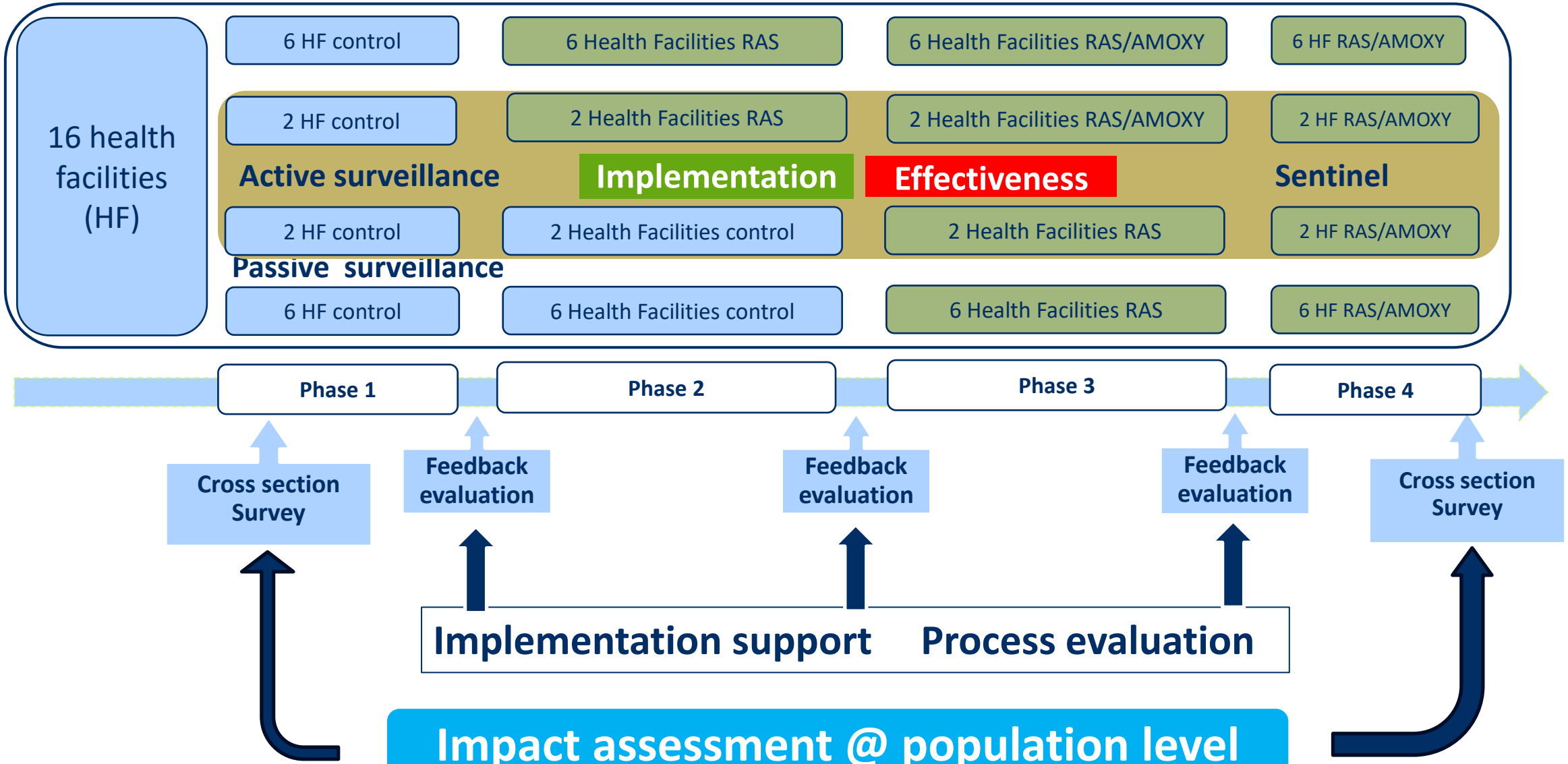
28-day PCR-corrected cure rate, in patients 6 months to 5 years in areas where referral for follow-up treatment with injectable artesunate is not feasible, **compared to outcomes obtained after full referral is completed**

Impact evaluation (@ population level)

To evaluate the impact of reinforcing the iCCM on access to the formal health care system .

Proportion of sick children 6 months to ≤5 years at population level that went to the formal health system during the last 6 months including suspected (severe) malaria

Data collection designs



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NCHELENGE STEP WISE

24 health facilities (HF)
Training
Sensitisation
Supply
Piloting

12 HF control

12 HF control

12 Health Facilities RAS

12 Health Facilities RAS/AMOXY

12 Health FacilitIes RAS

12 Health Facilities RAS/AMOXY

1-6months (Phase 1)

1-6 months (Phase 2)

1-6 months (Phase 3)

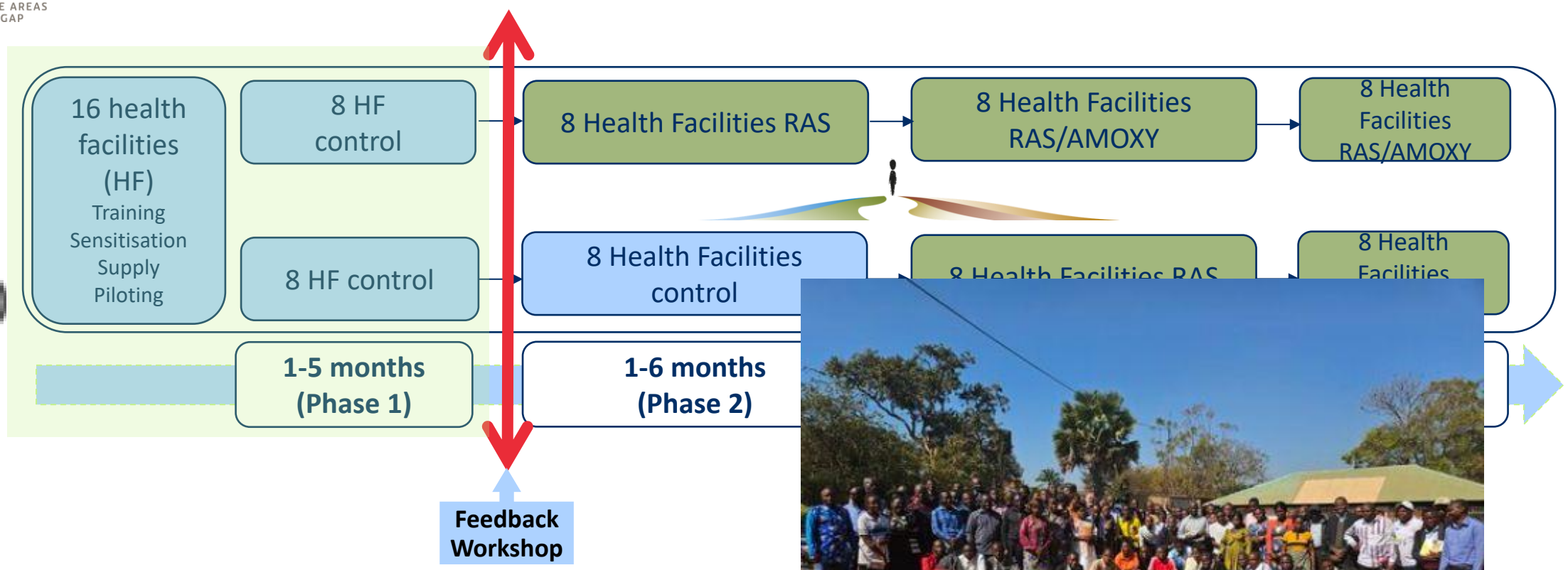
Feedback Workshop

Process evaluation



Kapolowe feedback workshop 1

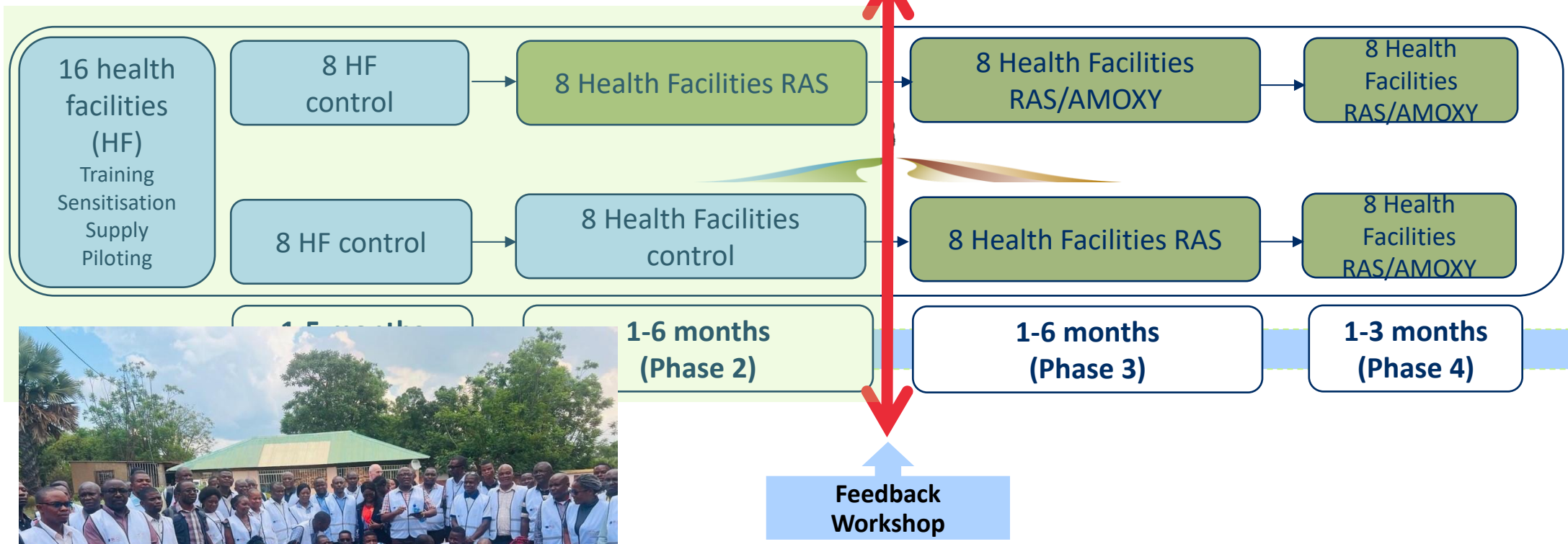
KAPOLOWE STEP WEDGE



Process evaluation

Kapolowe feedback workshop 2

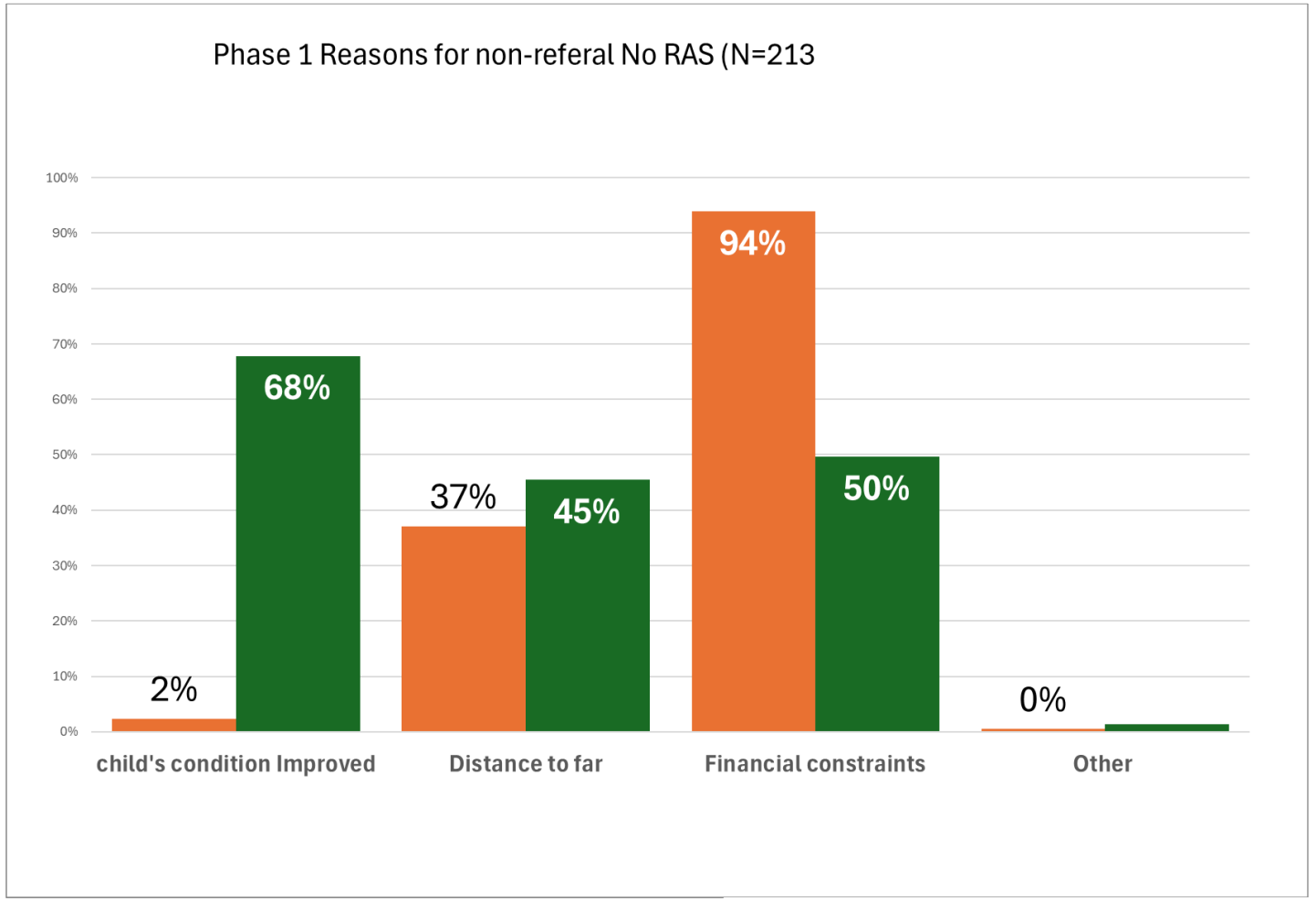
KAPOLOWE STEP WEDGE





Process evaluation

Kapolowe implementation evaluation phase 2 **Reasons for non-referral** (07/2024-02/2025)



* Multiple answers possible

Kapolowe feedback workshop 3

KAPOLOWE STEP WEDGE



16 health facilities (HF)
Training
Sensitisation
Supply

8 HF control

8 Health Facilities RAS

8 Health Facilities RAS/AMOXY

8 Health Facilities RAS/AMOXY

8 Health Facilities control

8 Health Facilities RAS

8 Health Facilities RAS/AMOXY

6 months (Phase 2)

1-6 months (Phase 3)

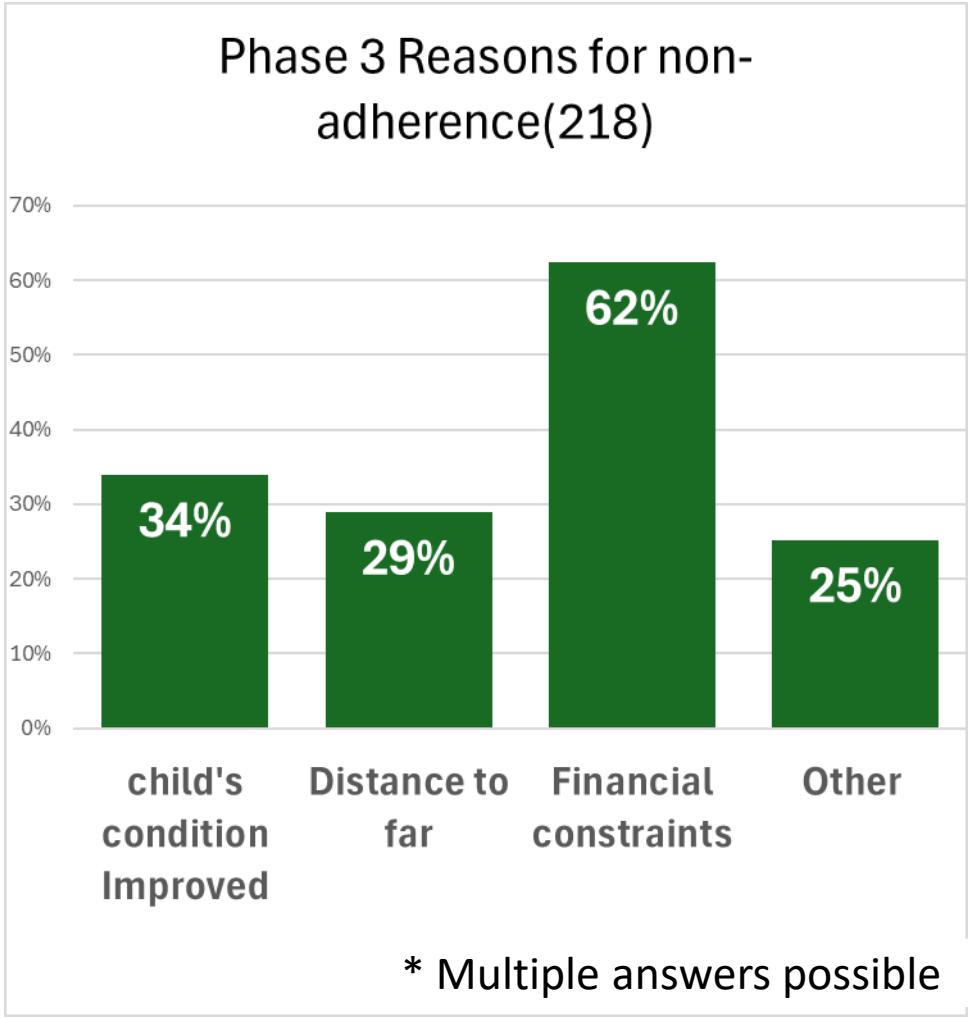
1-3 months (Phase 4)

Feedback Workshop

Process evaluation

Kapolowe implementation evaluation

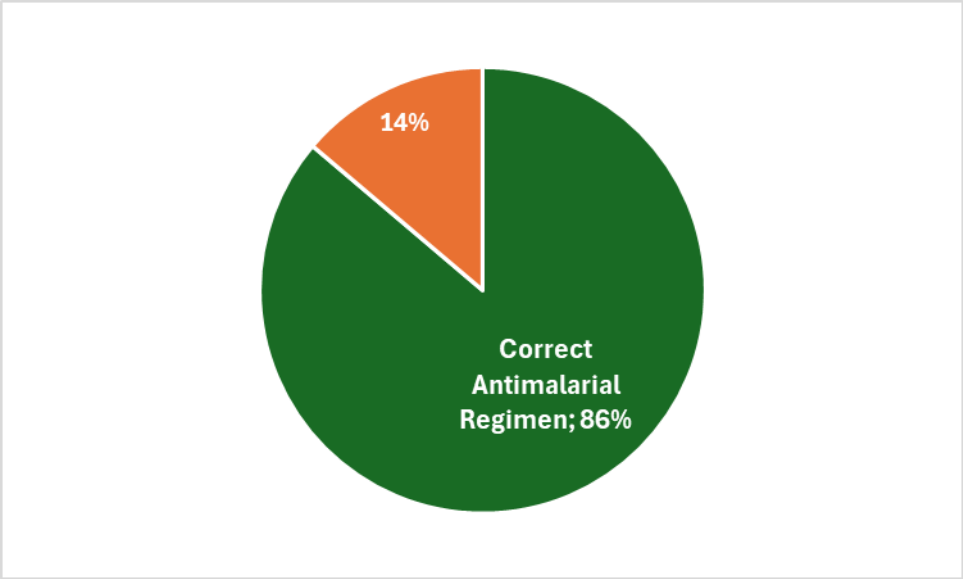
Phase 3 **Reasons for non-referral** (02-07/2025)



* Multiple answers possible

Kapolowe implementation evaluation
Adequate malaria regimen

- **86% follow a full adequate malaria regimen**
- **Significant improvement between phase 2 & 3**



RAS + ACT
RAS + Inj AT + ACT
RAS + Inj Q + ACT
RAS + any Inj + ACT
RAS + AMOX + ACT

Key findings RAS implementation

- **Implementation of RAS did not affect health seeking behavior** (for severe malaria)
  - **Pre-contact informal treatment** remained around **75%**
  - **Time to care** stayed consistent at approximately **3 days**
  - Although **referral rates** remained unacceptably low, they **increased by 5%** following RAS implementation (P< 0.05)
  - **Reasons for non-referral extend beyond the remit** of the Ministry of Health and the national malaria program

- **Implementation of RAS affects affect health caring behavior** (for severe malaria)
  - **Informal treatment at contact** drastically reduced from >90% t**o nearly 0%** for severe malaria (P<<0.01)
  - **Informal treatment after contact** virtually **disappeared f**or severe malaria (P<<0.01)
  - **86% o**f patients receiving RAS were given an **efficacious malaria treatment r**egimen (including ACT)
  - **96%** of patients receiving ACT after RAS **adhered** 100% to the treatment
  - Some patients sought informal ACT treatment to complete the RAS regimen

Implementation of RAS within an iCCM approach strengthens the health system and presents an opportunity to further strengthen it!

Perspectives

- **Nchelenge results**
- **Kapolowe phase 4**

- **Impact evaluation**
  - Access to care & population based mortality Data
  - # deaths & sequela averted by RDTs + RAS + ?+ACTs to children U5 with severe malaria @ population level

- **Implementation evaluation**
  - Long term impact on health seeking behaviour
  - Long term impact on referal

- **Clinical effectiveness evaluation**
  - Day 28 Adequate parasitological and clinical response (PCR-corrected)
  - Impact on parasite resistance markers & multiplicity of infections (MOI)

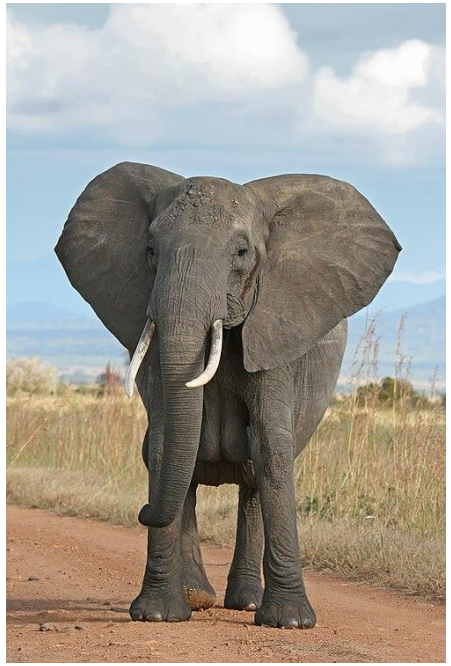


Perspectives

- **Health Management Information Systems (HMIS)**
  - How to measure impact of rolling out RAS?
  - **Captures OPD & IPD malaria data**

- **Sustainability**
  - Post–SEMA ReACT?
    - Implementation : whole district & all stakeholders are exposed
  - **Commodities? (during & after the project)**





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CLOSING THE EVIDENCE GAP

ZAMBIA NATIONAL MALARIA ELIMINATION CENTRE

PNLP

University of Antwerp
GHI | Global Health Institute

MMV
Medicines for Malaria Venture

SCIENTIA SPLENDET ET CONSCIENTIA

NATIONAL INSTITUTE FOR MEDICAL RESEARCH

Funded by
the European Union

EDCTP

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Federal Department of Economic Affairs, Education and Research EAER
State Secretariat for Education, Research and Innovation SERI



- **Thank You**
  - Merci
    - Asante Sana





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17 September 2025

Defining the next generation of severe malaria treatment: A target profile

Stephan Duparc, MMV



SEVERE MALARIA: Target Product Profile

Dr Stephan Duparc - CMO
Medicines for Malaria Venture

RBM CMWG-14
Abidjan, 17 Sept 25

MMV
Medicines for Malaria Venture

Severe Malaria TPP published 8 June 2024

Achan *et al. Malaria Journal* (2024) 23:174
https://doi.org/10.1186/s12936-024-04986-z

Malaria Journal

PERSPECTIVE

Open Access

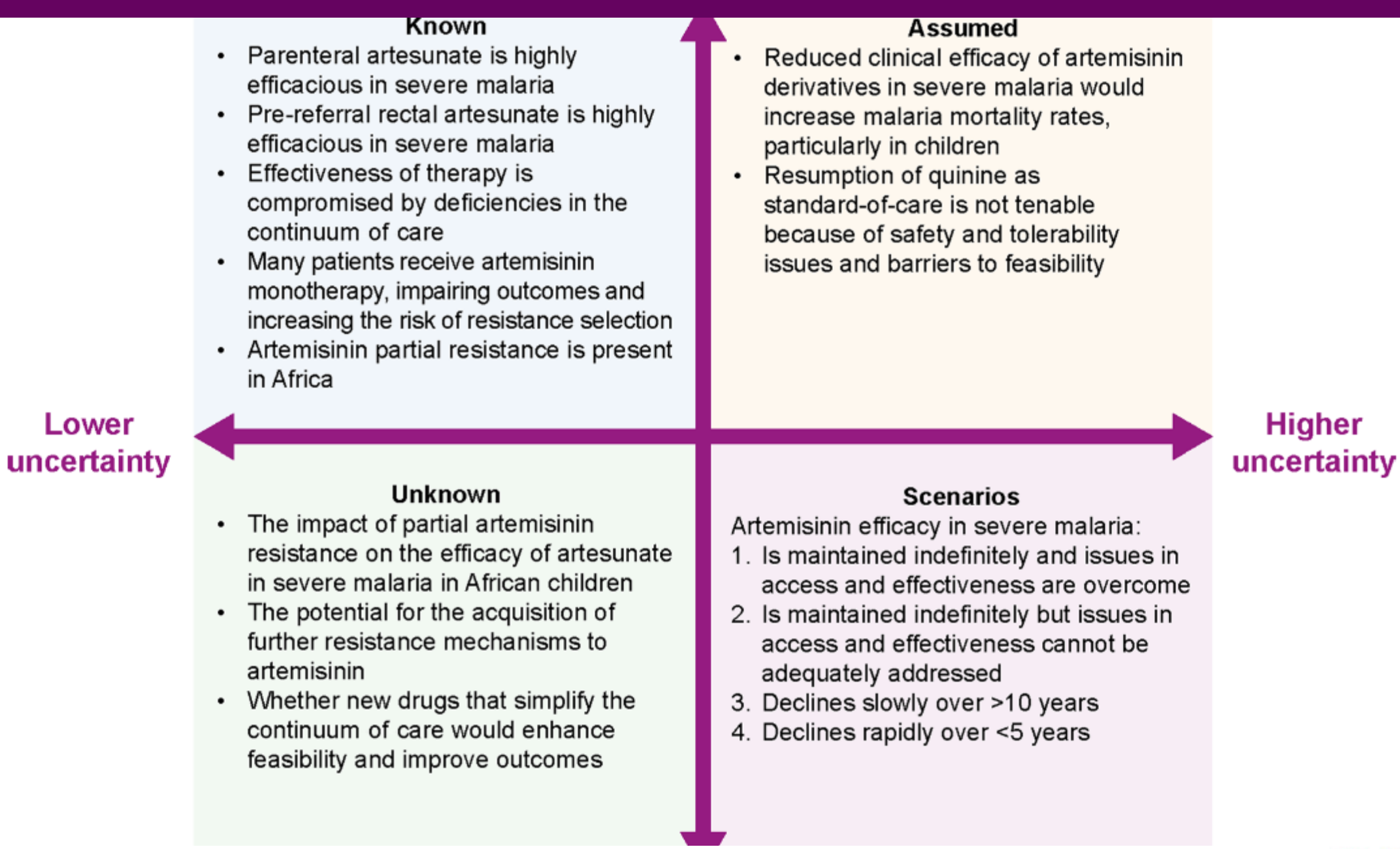
Defining the next generation of severe malaria treatment: a target product profile

Jane Achan[1], Aïssata Barry[2], Didier Leroy[3], George Kamara[4], Stephan Duparc[3], Wiweka Kaszubska[3], Preetam Gandhi[5], Bénédicte Buffet[3], Patrick Tshilab[6], Bernhards Ogutu[7], Terrie Taylor[8], Sanjeev Krishna[9,10,11,12], Naomi Richardson[13], Hanu Ramachandruni[3*] and Hans Rietveld[3*]

MMV Medicines for Malaria Venture

Proposed Strategies for New Treatments

- Development of new drugs to treat severe malaria requires the adoption of combination therapy as a goal
  - Reformulation of currently available antimalarials
  - Investment in new compounds
- The most advanced partners can be those that are already approved for the treatment of uncomplicated malaria, such as pyronaridine (already used in China for treating severe malaria)
- A long-acting partner drug may simplify the continuum of care by negating the need for follow-up oral medication
- Any new treatments should preferably be available as both parenteral and rectal formulations
- New treatments should be developed at least through Phase 2, so that they can rapidly be deployed in the event of artemisinin failure


Known
Parenteral artesunate is highly efficacious in severe malaria
Pre-referral rectal artesunate is highly efficacious in severe malaria
Effectiveness of therapy is compromised by deficiencies in the continuum of care
Many patients receive artemisinin monotherapy, impairing outcomes and increasing the risk of resistance selection
Artemisinin partial resistance is present in Africa
Assumed
Reduced clinical efficacy of artemisinin derivatives in severe malaria would increase malaria mortality rates, particularly in children
Resumption of quinine as standard-of-care is not tenable because of safety and tolerability issues and barriers to feasibility
Lower uncertainty
Higher uncertainty
Unknown
The impact of partial artemisinin resistance on the efficacy of artesunate in severe malaria in African children
The potential for the acquisition of further resistance mechanisms to artemisinin
Whether new drugs that simplify the continuum of care would enhance feasibility and improve outcomes
Scenarios
Artemisinin efficacy in severe malaria:
1. Is maintained indefinitely and issues in access and effectiveness are overcome
2. Is maintained indefinitely but issues in access and effectiveness cannot be adequately addressed
3. Declines slowly over >10 years
4. Declines rapidly over <5 years

Target Product Profile – 1

Parameter	Minimum Essential	Ideal
Indication	Severe malaria caused by *P. falciparum*	Severe malaria caused by *P. falciparum* and any *Plasmodium* species or mixed infection
Use population – injectable	Children of all ages OR Adults and adolescents, including use in pregnancy (all trimesters)	*Same as minimum essential* AND Patients living with HIV and other chronic infections
Use population – rectal	Children of all ages	*Same as minimum essential*

Target Product Profile – 2

Parameter	Minimum Essential	Ideal
Formulation/ presentation	Formulated to achieve rapid distribution (injectable and/or rectal) Injectable formulation with minimal simple reconstitution prior to dosing Feasible volume like that of injectable artesunate	Ready-to-use injectable formulation in a pre-filled syringe or a blow-fill-seal device Injection volume lower than that of injectable artesunate
Dosing regimen – injectable	2 – 3 times daily administration for the first 24 h until an oral ACT can be administered Dosing adjusted for patient weight	Once- or twice-daily administration (without the need for oral ACT treatment)
Dosing regimen – rectal	Single dose	*Same as minimum essential*

Target Product Profile – 3

Parameter	Minimum Essential	Ideal
Duration of treatment	Equivalent to current therapy including 3-day follow-up with oral ACT	Reduced treatment duration without the need for oral ACT follow-up
Continuum of care	Equivalent to current recommendations	Simplification by eliminating any step, e.g., rapid cure without the need for oral follow-up treatment
Parasite stage of action	At least one component with good potency against ring-stage parasites	Both components with good potency against ring-stage parasites and other erythrocytic stages with or without activity against gametocytes

Target Product Profile – 4

Parameter	Minimum Essential	Ideal
Parasite clearance kinetics	At least one component with immediate onset of action At least one component with parasite clearance kinetics equivalent to artesunate	Both components with immediate onset of action Both components with parasite clearance kinetics equivalent to artesunate One component with parasite clearance kinetics superior to artesunate

Target Product Profile – 5

Parameter	Minimum Essential	Ideal
Susceptibility to resistance	Active against known drug resistant clinical isolates Low propensity of the combination for resistance selection Resistance marker known and no cross resistance with pre-existing resistance mutations	Active against known drug resistant clinical isolates and laboratory generated drug-resistant parasites No selection of resistance mutations with the combination
Safety	No severe drug-related adverse effects No need for post-treatment cardiac monitoring Non-inferior to artesunate for risk of delayed hemolysis	No risk of delayed drug-induced hemolysis

Target Product Profile – 6

Parameter	Minimum Essential	Ideal
Drug-drug interactions	Minimal drug interactions manageable with dose adjustments	No clinically significant drug interactions
Shelf-life of the drug product	≥2 years at ICH zone IVa/IVb conditions	≥3 years at ICH zone IVa/IVb conditions
Cost of treatment course	Price comparable to the standard of care	Price equivalent or lower than the standard of care

Most compounds in the MMV portfolio kill as fast as quinine

Molecule	PCT Half-life (/h)	Setting	Comments
Cipargamin	1.0	Patients (*Pf*)	
Artesunate	2.3	Volunteers	Slows to 7 h with Kelch13
Artefenomel	3.6	Volunteers	Slows to 4-6 h with Kelch13
Ganaplacide	4.6	Thai Patients (*Pf*)	
Pyronaridine	5.1	Volunteers	Similar for amodiaquine and chloroquine
MMV533	6.4	Volunteers	
ZY19489	7.1	Volunteers	
Quinine	7.3	Thai Patients	From Malaysia 1958
M5717	(3.5)	Volunteers	Biphasic 48 h lag phase; second phase
Atovaquone-Proguanil	(12)	Volunteers	Biphasic 48 h lag phase; first phase



THANK YOU

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MMV
Medicines for Malaria Venture

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To End Malaria

17 September 2025

Malawi post discharge practice

Agnes Banda Mapala, NMCP Malawi

POST DISCHARGE MALARIA CONTINUUM OF CARE (PDMCC)

Agnes Banda Mapala

Senior Disease control Officer, NMCP - Malawi

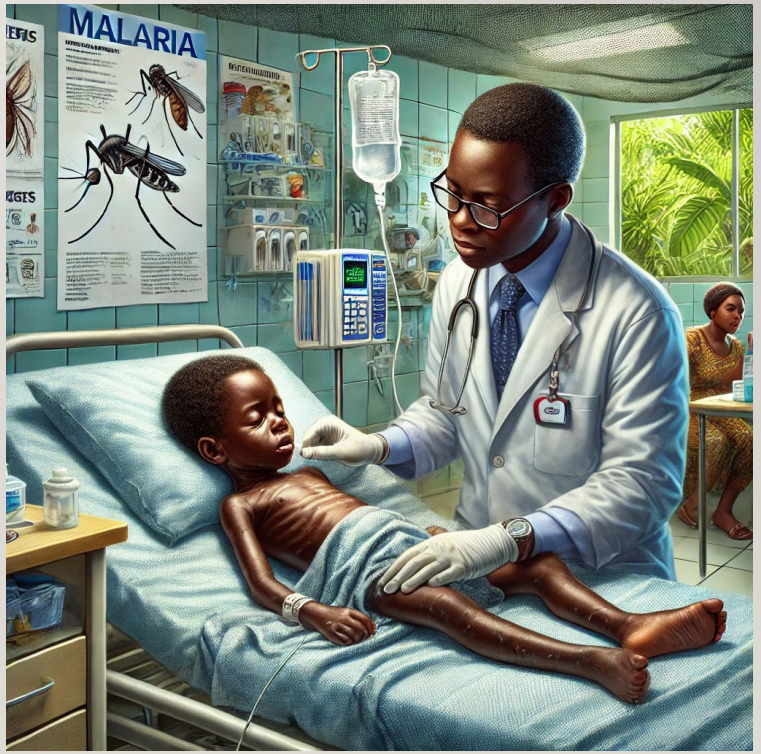
OBJECTIVES



- Post discharge burden after Severe Malaria in African Children
- Define Post Discharge Malaria Continuum of Care(PDMCC)
- Know the target group for PDMCC.
- Describe the delivery strategies of PDMCC.
- Understand the PDMCC medicine dosage and schedule
- Advice to caregivers

POST DISCHARGE BURDEN AFTER SEVERE MALARIA IN AFRICAN CHILDREN

- Severe malaria is a leading cause of pediatric hospitalization in Africa
- Advances in treatment save lives, BUT…
- Children discharged remain at high risk of:
- Recurrent malaria
- Severe anemia
- Death (up to 25% within 6 months post discharge)



DEFINITION OF POST DISCHARGE MALARIA CONTINUUM OF CARE

- PDMCC is the continuous administration of a full antimalarial treatment course at regular intervals to children admitted with severe malaria or severe anaemia.
- This treatment is given within 16 weeks, starting from the day of discharge.
- PDMCC is highly effective because it reduces the risk of severe malaria by 87%, severe anaemia secondary to malaria by 89% and readmissions or death by 70% (PDMC Consortium, https://doi.org/10.1186/s12936-023-04810-0)

TARGET GROUP FOR POST DISCHARGE MALARIA CONTINUUM OF CARE



- Children aged 6 months to 59 months diagnosed with Severe malaria and or Severe anaemia and Clinically stable, able to switch to oral medication

DELIVERY STRATEGIES

- There are three delivery strategies in PDMCC. These include:
- **Option 1: Community delivery: All medicines to mother:**
- The caregiver is given all 4 PDMCC courses at discharge from the hospital.
- The first dose of PDMCC will be given 8 hours after the last dose of parental artesunate and has to be given for the next 3 days. Then the caregiver is given 3 other courses which will be taken at home. Each course will be given to the child every 4 weeks

DELIVERY STRATEGIES …

Option 2: Community delivery – All medicines to HSA (Village Clinic)

- The caregiver gets monthly PDMCC supplies from the HSA who is given all PDMCC medicines at the village clinic level

- After every 4 weeks, the caregiver visits the HSA for a course of PDMCC medicines. Caregiver visits the HSA 3 times

- This will also involve a clinical review of the child and further referral if not well.

DELIVERY STRATEGIES …

Option 3: Health Facility delivery: All medicines at the nearest HC

- Caregiver is asked to return to the health facility for monthly PDMCC supply
- After every 4 weeks, caregiver will be visiting the nearest health facility for a course of PDMCC medicines
- Caregiver visits the health facility 3 times
- The child is reviewed and managed if not well.

UNDERSTANDING THE MEDICINES USED IN PDMCC

All children will receive Dihydroartemisinin piperaquine (DP). DP is preferred to AL as a choice of medicine in PDMCC because of its high efficacy rates, easiness of compliance and long half-life.

If a child develops severe malaria while on PDMCC, start the child on definitive treatment with injectable artesunate. When the child has improved, completed three mandatory doses, and can take oral medicine, switch to artesunate-amodiaquine.

DOSING AND DURATION BY USING TWO STREGTHS

Weight	Dihydroartemisinin + piperaquine dose (mg) given daily for 3 days	20 mg/160 mg tablet		40 mg/320 mg tablet	Duration
5 to < 8 kg	20 + 160	1 tab od	OR	1/2 tab od	3 days
8 to < 11 kg	30 + 240	1½ tabs od	OR	3/4 tab od	3 days
11 to < 17 kg	40 + 320	2 tabs od	OR	1 tab od	3 days
17 to < 25 kg	60 + 480	3 tabs od	OR	1½ tabs od	3 days
25 to < 36 kg	80 + 640	4 tabs od	OR	2. tabs od	3 days

ADVICE TO CAREGIVERS ON DISCHARGE

- Explain to the caregiver the purpose of giving PDMCC to the child after discharge. Ensure caregivers understand
  - The severity of the condition
  - The child is a high-risk case of readmission
  - The condition has a slow recovery rate
  - Adherence to treatment will prevent all above

ADVICE TO CAREGIVERS ON DISCHARGE

1

Give the medication every 24 hours till the child finishes the course.

2

Do not share the medication with others.

3

Store the medication in a dry, cool place and out of reach of children

4

Advise the caregiver to observe preventive measures of malaria (use of LLINs, malaria vaccine, environmental hygiene).

5

Ensure that follow-up visits are adhered to (documents dates in health passport as a reminder).

ADVICE TO CAREGIVERS ON DISCHARGE

Avoid high-fat foods three hours before or after medication for DP.

If the child vomits within 30 minutes after administration, re-administer the full dose. If the child vomits between 30 minutes and 1 hour after administration, re-administer half of the dose. In this case, the lost dose should be resupplied by the nearest facility or HSA.

Breastfeeding is not contraindicated, so continue breastfeeding normally.

Report any adverse reaction to the nearest health facility.

TAKE HOME MESSAGE

Every child surviving severe malaria deserves protection beyond discharge

PDMCC can: Sustain survival, Reduce malaria burden, Accelerate progress toward elimination

Together, let's close the survival gap by integrating PDMCC into our National Malaria Strategic Plans and source domestic resources for scale-up

Thank you for Your attention



Working Together for Better Post-Discharge Malaria Care

RBM Partnership
To End Malaria

17 September 2025

Using a continuous quality improvement approach to improve severe malaria management

Dr Gerald Rukundo, Uganda

The Republic of Uganda



Using the Collaborative Quality Improvement Approach to Improve Severe Malaria Management

Case Management RBM Meeting,2025

Gerald Rukundo, Uganda

Chase Malaria to Zero

The Republic of Uganda

Burden of Malaria in Uganda



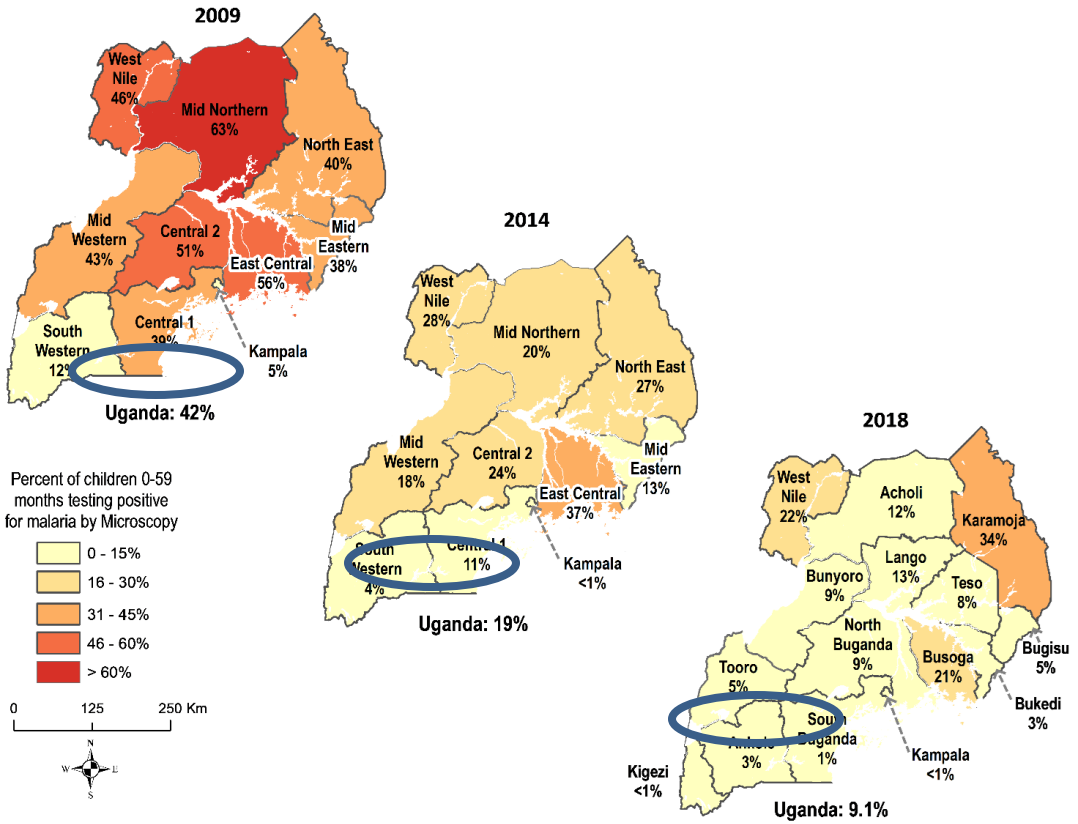
- **High disease impact:** Leading cause of morbidity and mortality in Uganda.
- **Economic toll:** Each episode costs a family approximately USD 9(3% of annual income).
- **Health facility burden:**
  - ❖ 33% of all Outpatient visits (OPD)
  - ❖ 22% of inpatient admissions
  - ❖ 11% of reported deaths

❖ **Global Context (2023)**

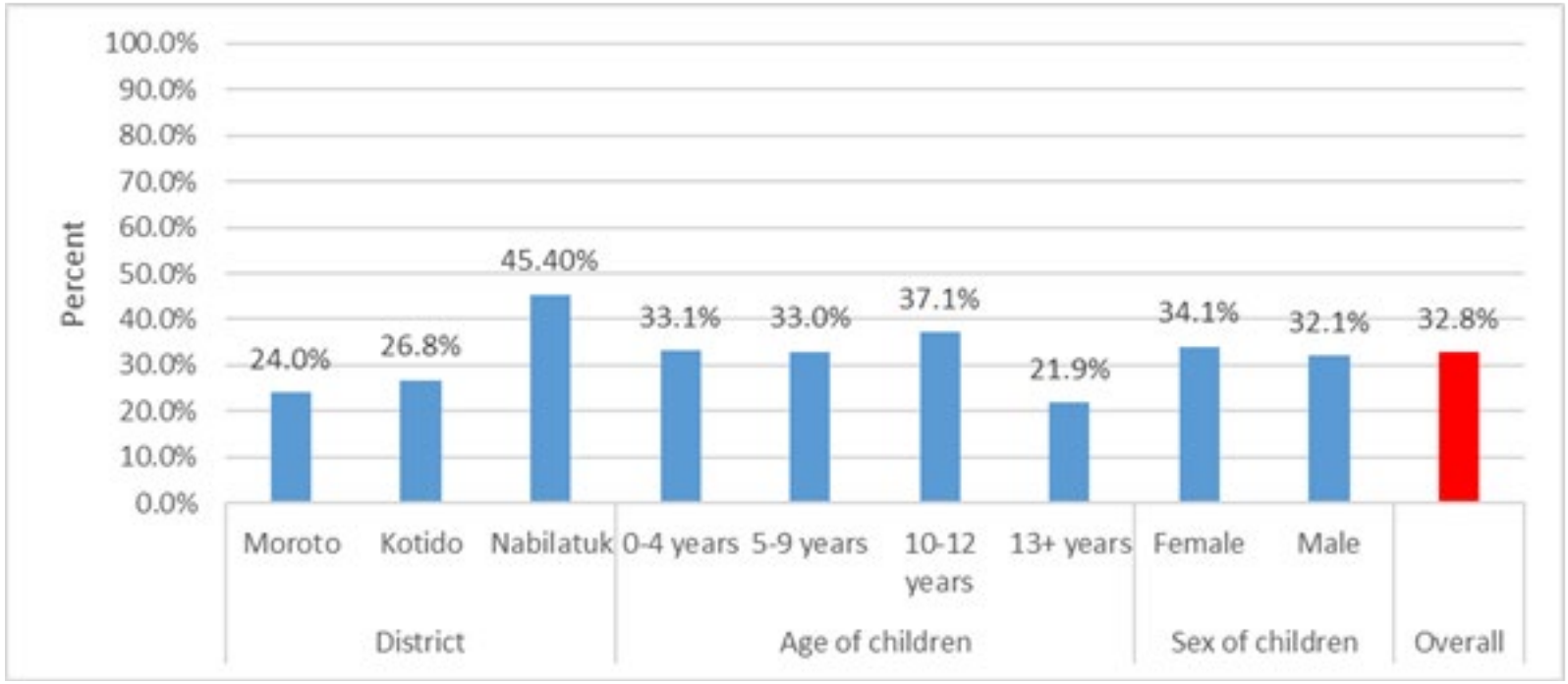
- ❖ 3rd highest contributor to global malaria cases (4.8%)
- ❖ 10th highest contributor to global malaria deaths (2.7%)

Chase Malaria to Zero

Progress made between 2009 to 2018 – Data Malaria Indicator Survey (Concluded 2024 MIS)



Shifting malaria burden to older children



Prevalence of malaria among children, based on microscopy (source baseline Malariometric study)

Malaria treatment policies

- **Treatment**
- ***Treatment regimens for uncomplicated malaria***
  - 1st line is an ACT, Artemether/Lumefantrine (AL)
  - Alternative 1st line is Artesunate/Amodiaquine (ASAQ)
  - 2nd line is Dihydroartemisinin Piperaquine (DHA-PPQ)
- **1st & 2nd line ACTs to be reviewed against results of Therapeutic Efficacy Studies.**

Severe Malaria

- **IV Artesunate use in all patients including infants and PW in all trimesters *Discharge all severe malaria cases on DP and give another dose on review after 1 month for 3/12 for chemoprevention(Prevention of malaria re-infection before full recovery from severe malaria effects).**
- **Quinine IV in absence of I.V artesunate**

Pre-referral Treatment

Pre-referral Treatment

- **IM Artesunate, Artemether or Quinine for children and adults where injectables are available.**

- **Rectal Artesunate for children below 6 years at community, HC II levels and where treatment for severe malaria is not available.**
- **Where referral is not possible, continue pre-referral treatment till patient is able to tolerate oral medication then complete dose of 1st line ACT.**

Health Facilities Assessment

- Health facility based and system data reviews for the identified areas of improvement showed an average performance of:
  - **Artesunate use (36%)**
  - **Complete community referrals (10%)**
  - **Mortality audits (23%)**
  - **Complication Management: <27% of complications were managed per guidelines.**
- Hospital Study (Mbale Regional Referral Hospital):
  - Only 13% of severe malaria patients were correctly treated per WHO guidelines.
    - Major gap: Artesunate administration (dosage & schedule compliance).

Rationale

- To contribute to UMRESP 2021-2025 goal of 50% and 75% malaria morbidity and mortality reduction respectively.
- Effective tools (Artesunate, guidelines, referral systems) exist but are underutilized.
- QI helps close implementation gaps, not just resource gaps.
- Build ownership among health workers hence improve accountability, reduce deaths.

Improvement Objectives (18-Month Implementation Period)

1. ***Correct Artesunate Use***
   - ***Increase from 36% → 95% in management of severe malaria cases.***
2. ***Complication Management***
   - ***Improve from 27% → 80% of severe malaria patients managed per guidelines.***
3. ***Community Referral***
   - ***Increase complete referrals by CHWs(VHTs) from 10% → 50%.***
4. ***Mortality Audits***
   - ***Raise proportion of malaria mortality audits from 23% → 80%.***

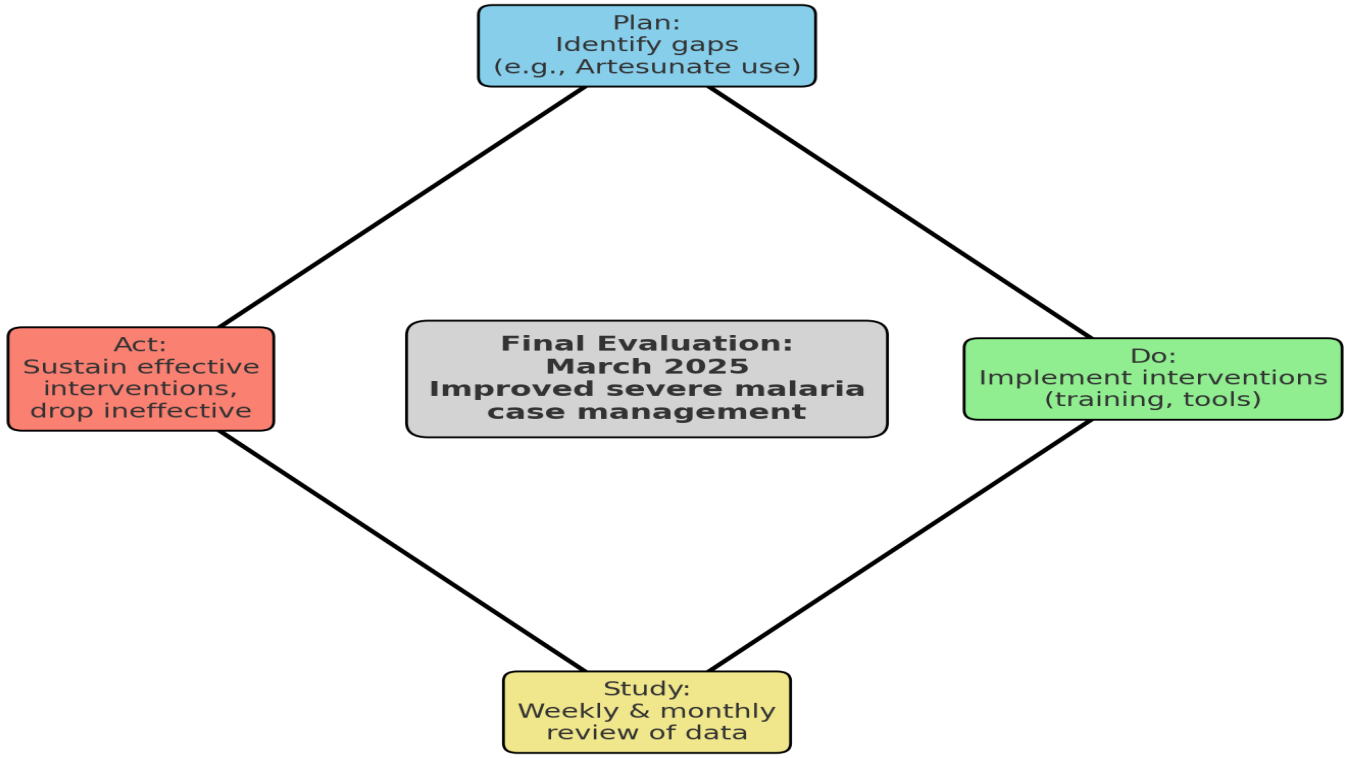
Methodology

- Selected 125 health facilities in PMI supported districts with:
  - High capacity for severe malaria admissions
  - Previously reported higher numbers of severe malaria-related deaths compared to other facilities in the same regions
- Held entry meetings with the district health teams
- Used PDSA cycles: Plan → Do → Study → Act

- Conducted a collaborative review of;
  - Inpatient registers
  - Patient admission files (Jan-June2023)
  - Mortality audit documents
  - Community referral documents
- Conducted problem analysis with health facility staff
- Engaged VHTs on community referrals
- Worked with health facility staff to identify potential solutions and interventions

- Implemented agreed interventions and reviewing indicators
- Monitored progress using documentation journals
- Identified and assigned district and regional coaches
- Held monthly learning sessions led by a CQI coach
- Agreed on new actions.

PDSA Improving Severe Malaria Management



Process Mapping (Current Workflow)

- Patient presents at health facility or is referred by VHT
- Triage & assessment (vital signs, **weighing,** diagnosis)
- Severe malaria diagnosis confirmed
- Treatment initiation (IV Artesunate given)
- Monitoring & complication management
- Documentation in charts and registers
- Mortality audit
- Referral feedback to community health worker (VHT)

GAPS IDENTIFIED

1. Correct Artesunate Administration

- Lack or faulty weighing scales
- Absence of patient treatment charts
- Data incompleteness on patient treatment charts

2.Poor management of complications

- Knowledge gap on complication management
- Failure to prioritize ordering of non-malaria commodities from central stores
- Lack of job aids

3. Mortality Audits

- Knowledge gap on death audits
- Lack of prioritization of audits

4. Community Referrals

- Lack of referral forms and registers
- Unclear feedback mechanisms to VHTs
- Knowledge gaps among VHTs

Each facility had a unique Gap which was prioritized during intervention identification

Considered Interventions

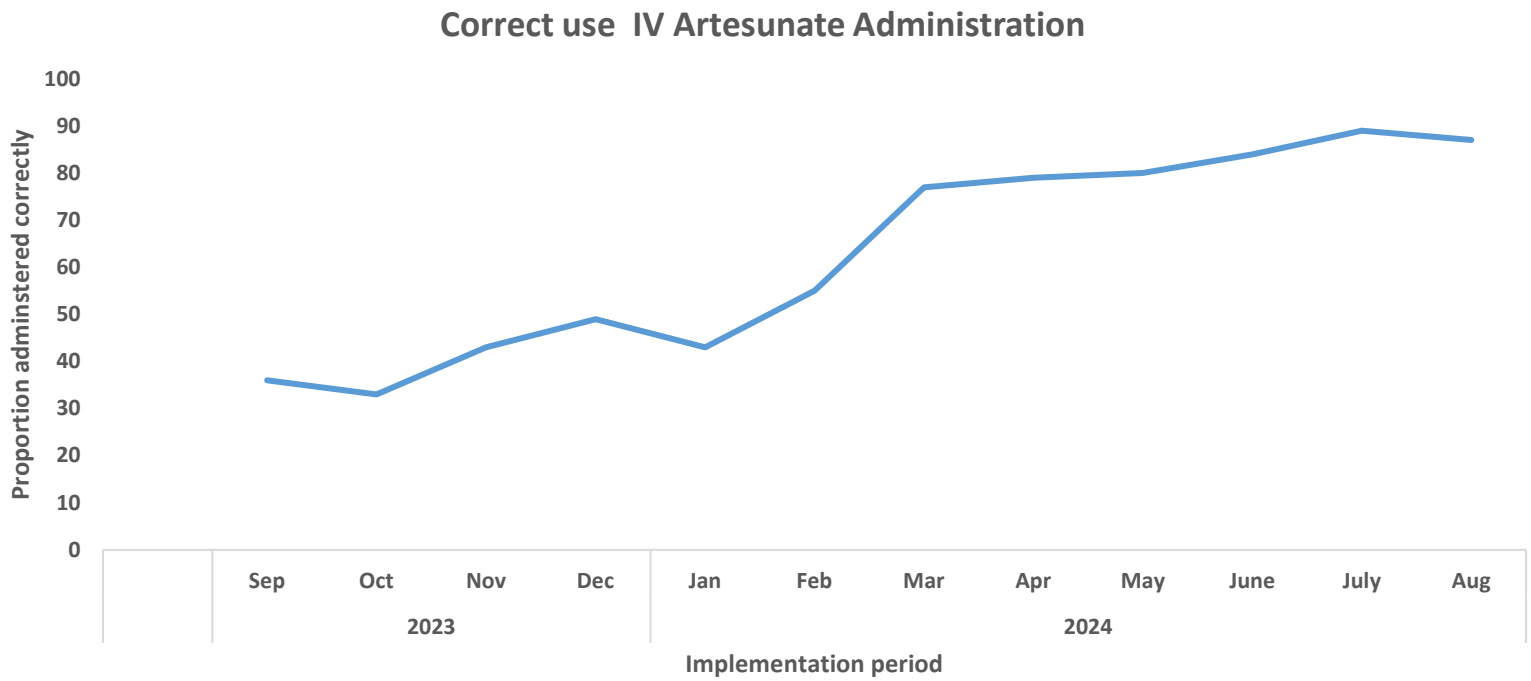
- Artesunate administration
  - Procurement of weighing scales using PHC funds
  - Printing and distribution treatment charts-Districts
  - Mentorship by district coaches
- Complications management
  - Distributed clinical guidelines and job Aids
  - Tasked facility in charges to stock non-antimalrial commodities
  - Mentorship by district coaches
- Death audits
  - Distributed death audits tools
  - Mentored staff

- Community referrals
  - Referral forms & Registers distributed
  - Rectal artesunate
  - Training VHTs on danger sign identification

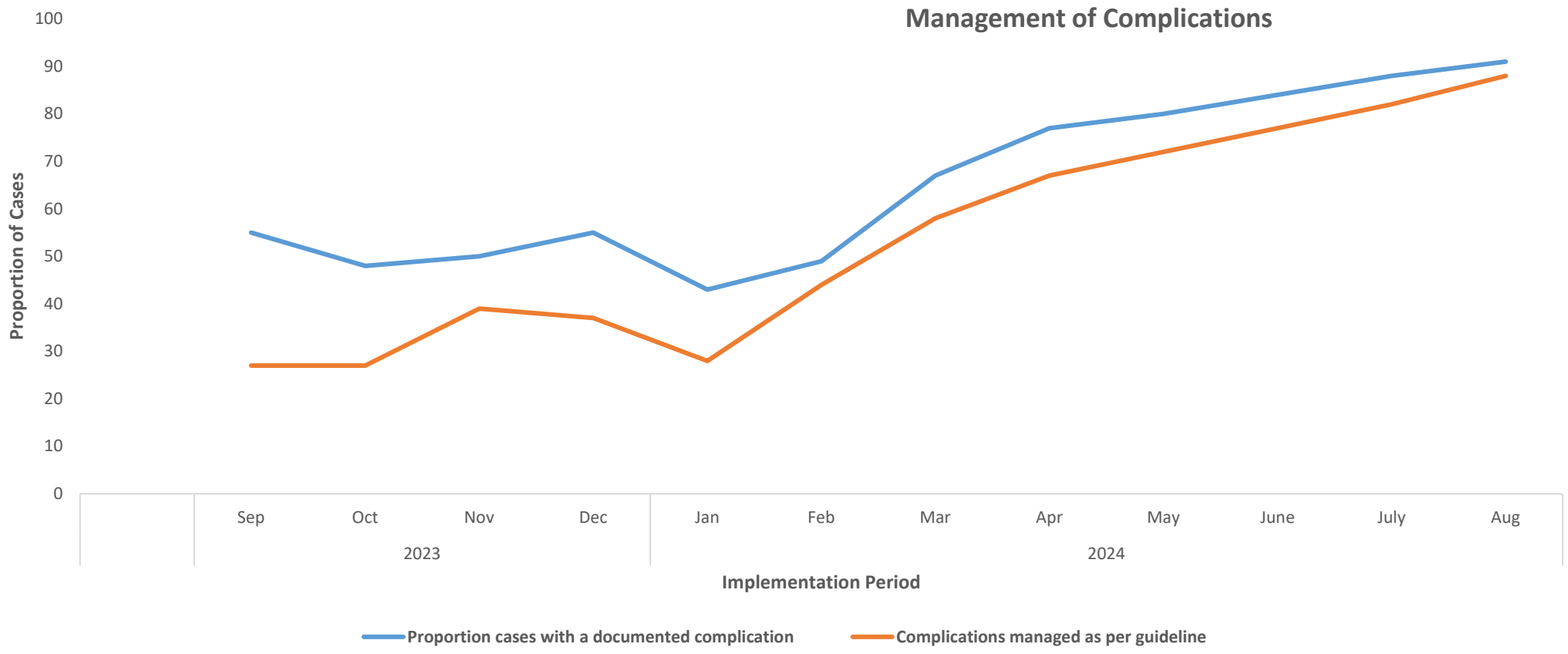
Intervention Monitoring

- Applied PDSA cycles to plan and test interventions
- Monthly data reviews
- Effective interventions sustained, ineffective ones dropped.
- Final evaluation: Improved management of severe malaria

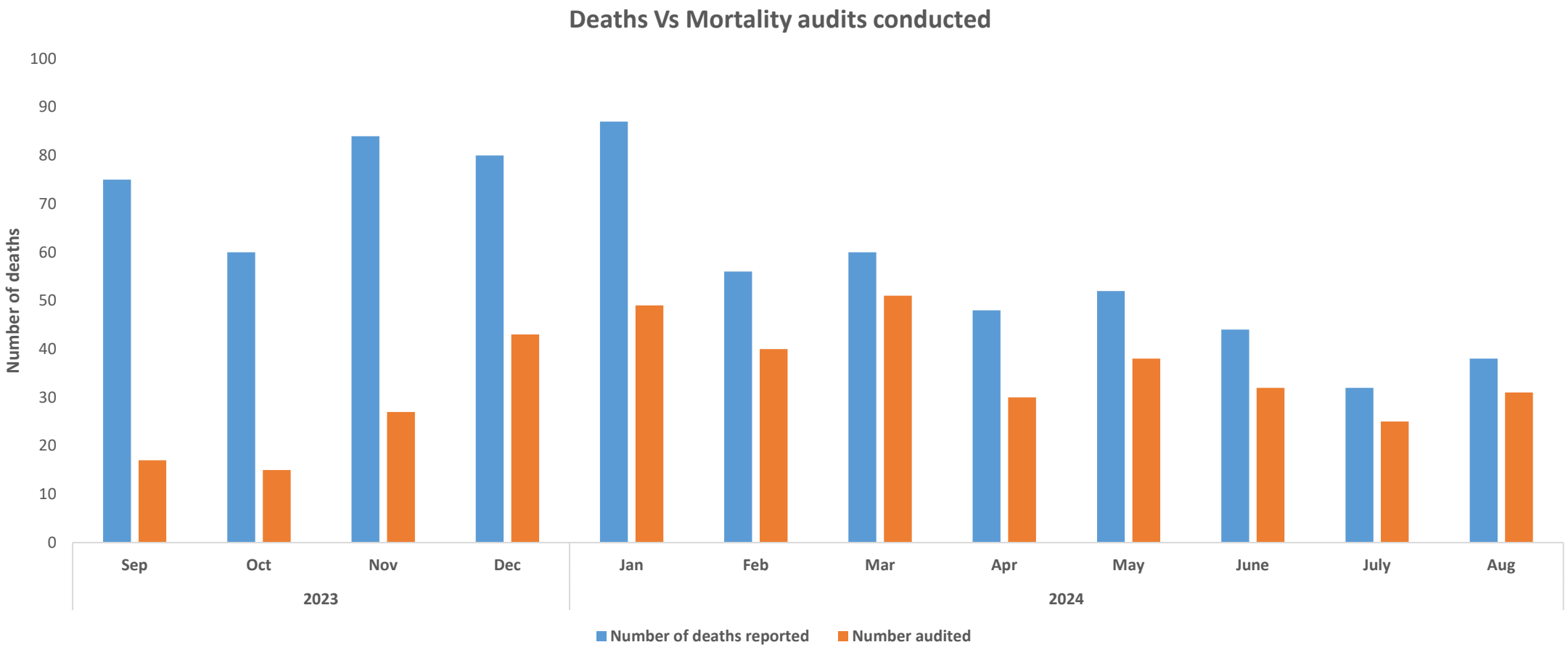
Improved Artesunate administration as per guidelines



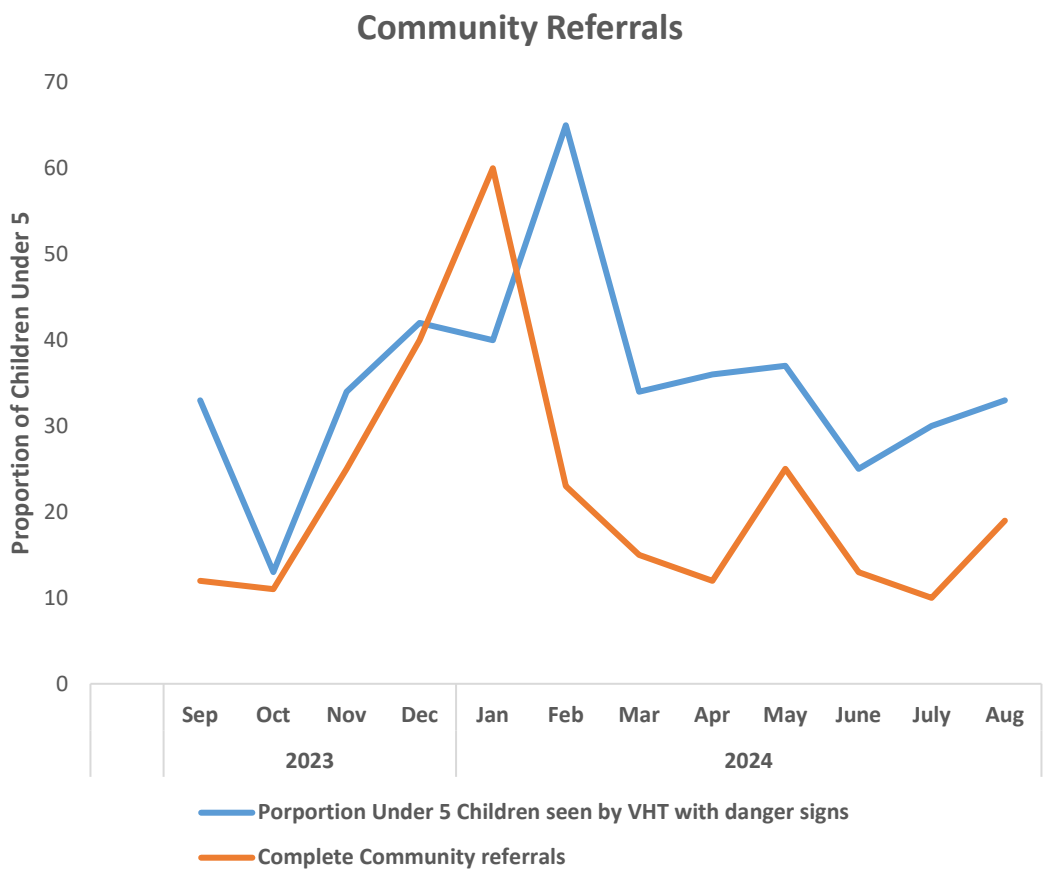
Improvement in complication management



Improved death auditing

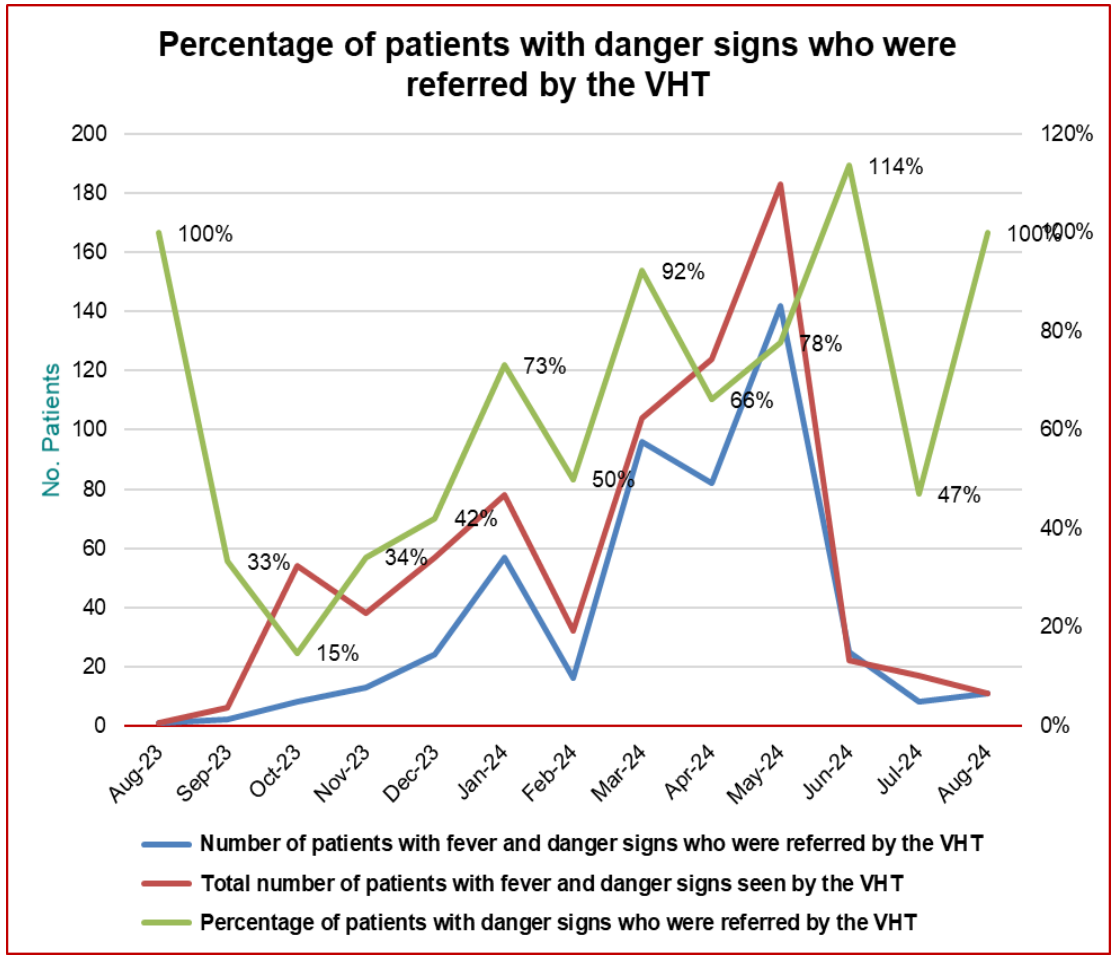


Community Referrals



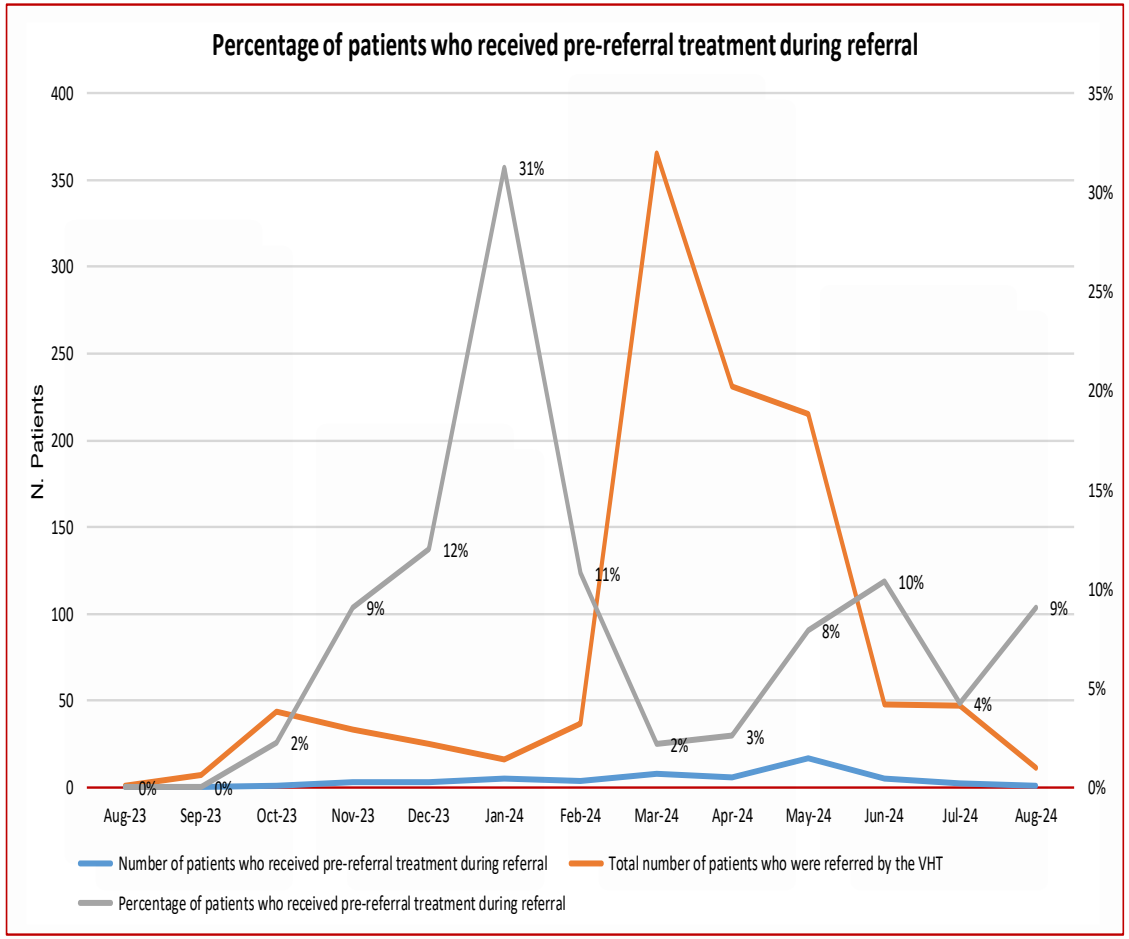
- Inconsistent referral completion
- Stock out of RAS
- Failure of the patient to arrive at the facility
  - Transport, distance,preferring another facility/private facility

Community referral



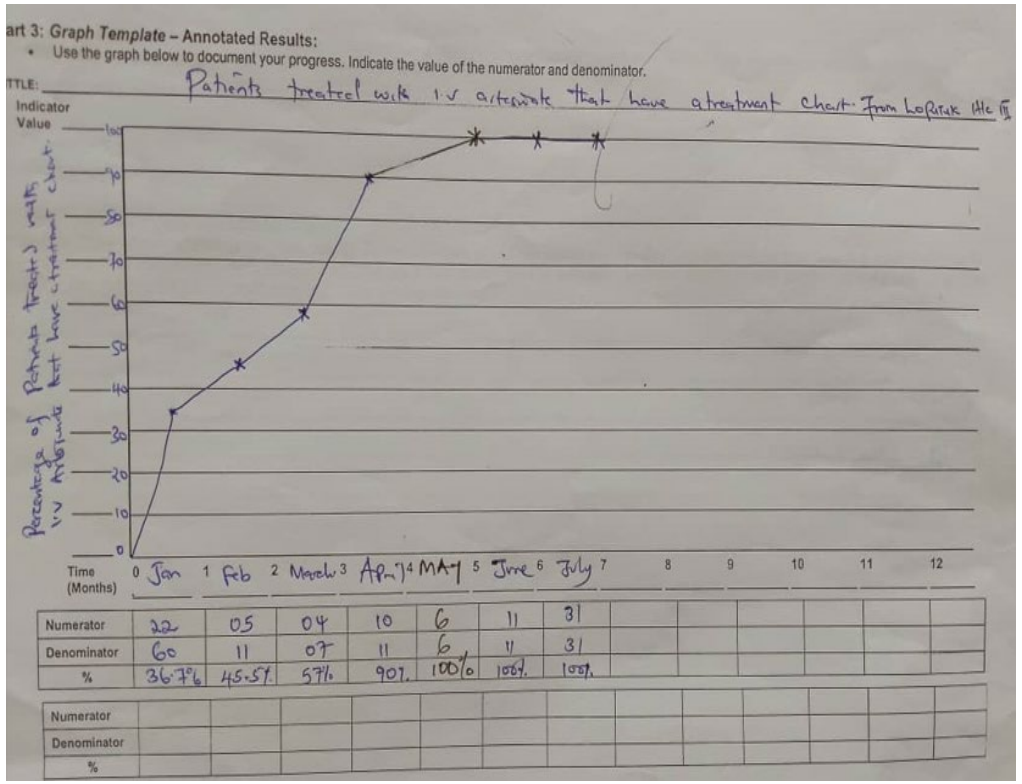
- One of the HFs
- VHT referral inconsistent
- Dependent of availability of RAS

PRE-REFERRAL TREATMENT BY VHTs



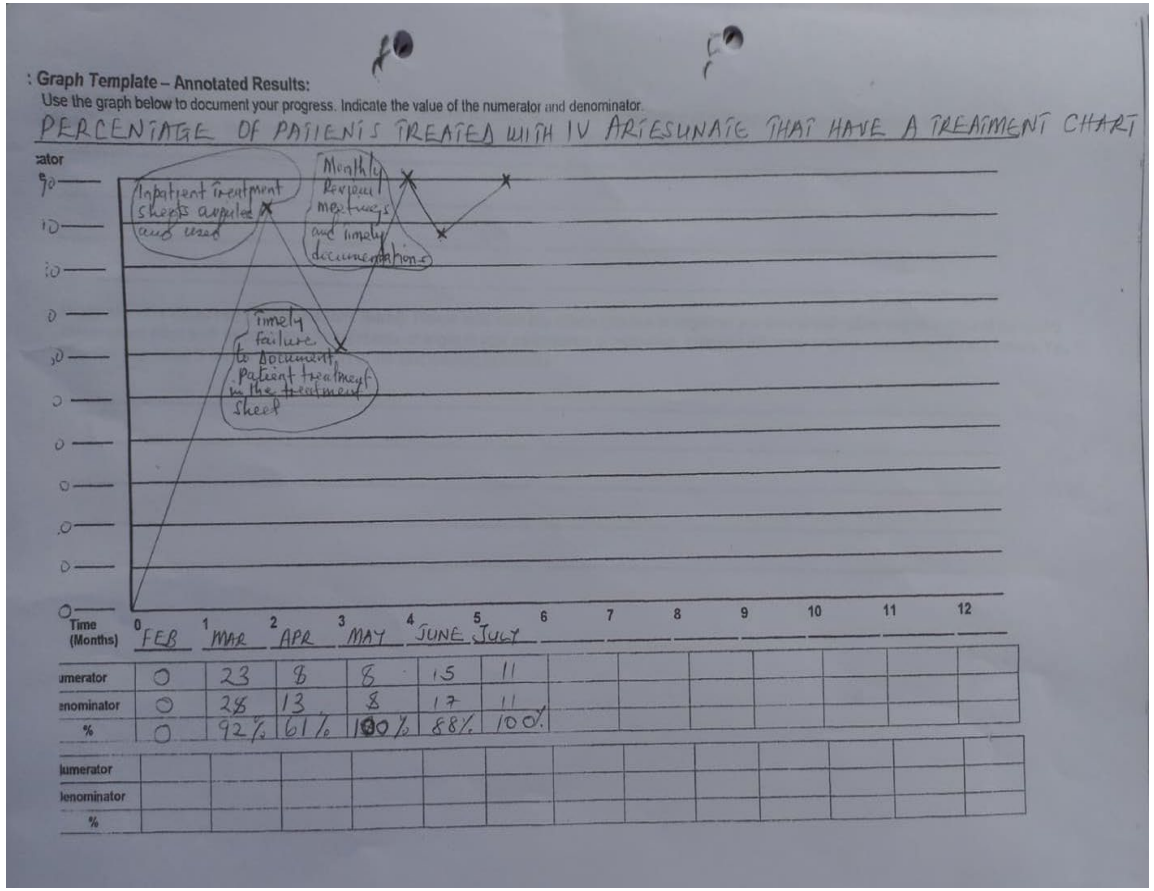
- Slight improvement Pre-referral treatment
- Current performance of 9%
- Attributed to RAS stock outs
- Failure to comply on use of artesunate

Data completeness in the treatment chart



- Observed sustained use of treatment charts for the last 3 months
- 100% performance in all other Artesunate use indicators

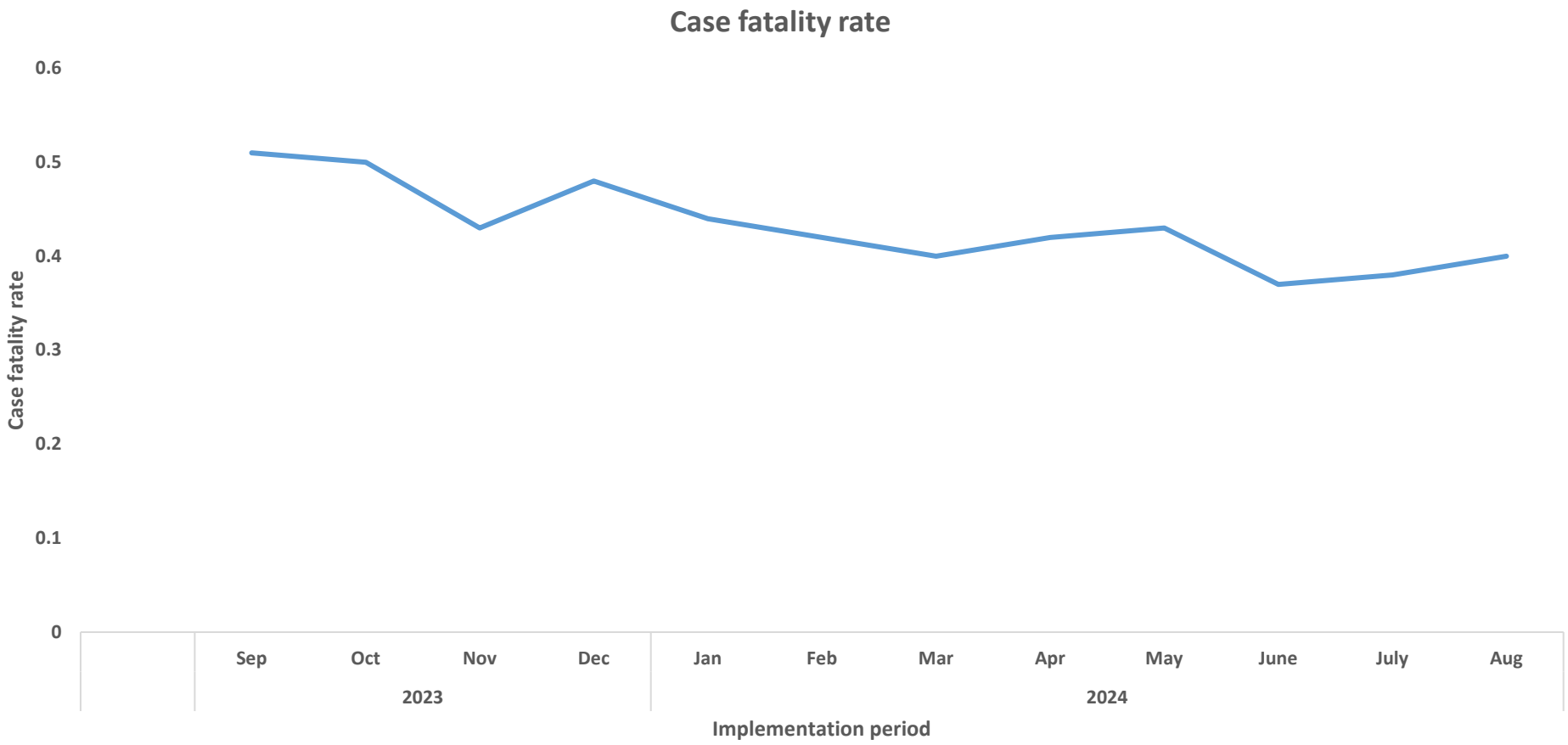
IV Artesunate Adminstration



- Filling of patient information to the treatment charts was not done in real time (April)

- This was addressed in the review meetings and an improvement was observed

Case Fatality Rate



Lesson learnt

- Continuous training & mentorship improved adherence to treatment guidelines.
- Availability of weighing scales and treatment charts is critical for correct dosing.
- Structured CMEs and clinical audits enhanced clinicians' capacity.
- Standardized job aids improved recognition and management of complications.
- Functional referral tools (forms/registers) increased accountability.
- Feedback mechanisms to VHTs strengthened linkages between community and facility.
- Regular death reviews revealed gaps in care and informed targeted interventions.
- Embedding audits into routine practice fostered a culture of learning and quality improvement

- Stock-outs of artesunate, fluids, or blood products limitation
- Overworked staff did not consistently follow guidelines
- Late arrival of severe cases from the community.
- Not all facilities fully adhered to QI practices.
- Health worker behavior and practice takes time to change.
- Low impact during high transmission period

Conclusion

- The QI project demonstrated that structured, data-driven interventions can significantly improve severe malaria case management.
- Strengthening clinical practices, referral systems, and mortality audits may lead to measurable gains in quality of care.
- Embedding QI approaches within routine health services fosters sustainability and continuous learning.

The Republic of Uganda



- Thank you for Listening
- Merci de votre attention

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RBM Partnership
To End Malaria

17 September 2025

Morning Break

RBM Partnership To End Malaria

17 September 2025

Group discussion: Practical aspects of severe malaria management

Moderators: Olugbenga Mokuolu and Kevin Griffith

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Video introduction

Video link: When the hospital is too far: saving lives from severe malaria in hard-to-reach areas

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Group discussion: Practical aspects of severe malaria management

17 September 2025

Improved transitions between uncomplicated and severe malaria and trade-offs and optimal strategies for severe malaria management in the context of reduced funding for malaria: Country approaches

Lead discussants:
Samah Abass (Sudan), Gerald Rukundo (Uganda), Mea Antoine Tanoh (Côte d'Ivoire), Jean-Claude Tembele (DRC), Dr Emmanuel Shekarau (Nigeria)