



# NATIONAL MALARIA CONTROL PROGRAM



## Post Discharge Malaria Chemoprevention

### Uganda's Experience





## Introduction

- **Malaria is still among the leading causes of mortality and morbidity**
- **30% to 50% of the outpatient visits, 15% to 20% of the admissions and 16 deaths per day country wide**
- **Globally,**
  - 3<sup>rd</sup> highest contributor to the global malaria cases at 5% ( 2022 World Malaria Report)
  - 5<sup>th</sup> highest contributor to the global malaria deaths in at 3%

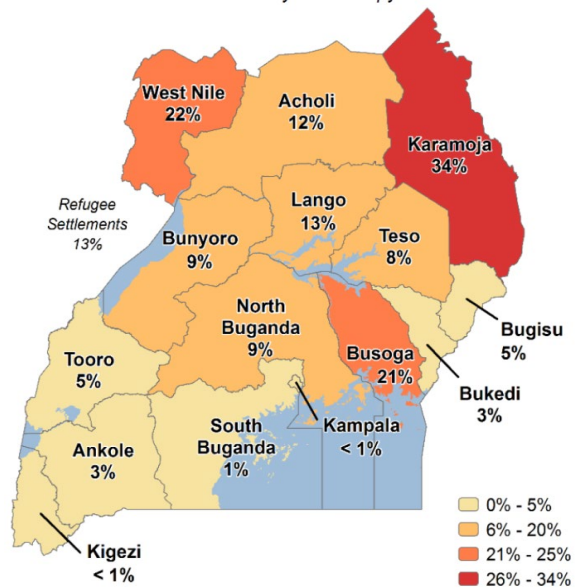




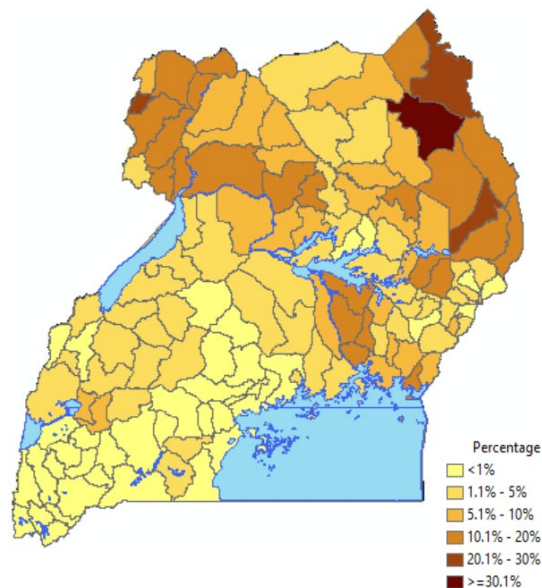
# Malaria stratification and mapping

## Spatial distribution of malaria parasite prevalence in (UMIS 2019)

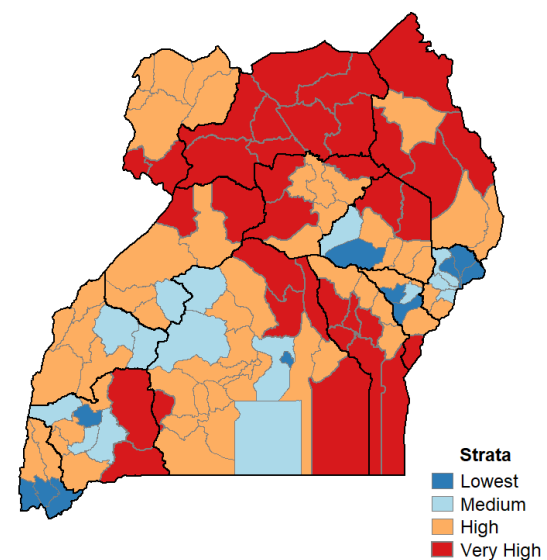
Percentage of children age 0-59 months who tested positive for malaria by microscopy



District – level parasitaemia distribution



Composite map





## 2021-2025 UMR&E SP Vision , Goal and Strategic Objectives

**Vision:** A “Malaria-free Uganda” to enable social economic transformation in line with vision 2040

### **Goal**

By 2025, reduce malaria infection and morbidity by 50% and malaria related mortality by 75% of 2019 levels.





# Policy & Strategic Interventions

## 1.0 Case Management

**Policy Goal:** To significantly reduce morbidity and prevent mortality attributable to malaria and eventually interrupt transmission

### **Policy Objectives:**

- Early diagnosis and prompt, effective treatment of malaria.
- All suspected malaria cases are subjected to parasitological testing.
- Availability of quality assured diagnostics and malaria treatments.
- All cases are properly documented at all points of care.
- Provide testing and treatment for asymptomatic/low density malaria cases.





# 1.0 Case Management.....

## Diagnosis

- mRDTs shall be used at all levels of service delivery**
- Quality Assured Microscopy remains gold standard**





# Case Management...

## Treatment

### *Treatment regimens for uncomplicated malaria*

- 1<sup>st</sup> line is an ACT, Artemether/Lumefantrine (AL)
- Alternative 1<sup>st</sup> line is Artesunate/Amodiaquine (ASAQ)
- 2<sup>nd</sup> line is Dihydroartemisinin Piperaquine (DHA-PPQ)

## Severe Malaria

- IV Artesunate use in all patients including infants and PW in all trimesters
- Once the patient is able to tolerate oral medicines, administer course of DP under DOT at the facility or on Discharge
- IM Artemether or IV Quinine as an alternative in absence of Artesunate
- Follow up at day 7, 14 and 28





## Case management...

- ❑ Rectal artesunate for children below 6 years at community level, HC II levels and where treatment for severe malaria is not available- Dosage is 10mg/kg body weight. Each Suppository is 100mg
- ❑ Where referral is not possible, continue pre-referral treatment till patient is able to tolerate oral medication then complete dose of 1<sup>st</sup> line ACT







# Post Discharge Malaria Chemoprevention

- WHO recommendation: Children admitted to hospital with severe anaemia living in settings with moderate to high malaria transmission be given a full therapeutic course of an antimalarial medicine to reduce re-admission and death( 1<sup>st</sup>,2<sup>nd</sup> & 3<sup>rd</sup> months)





# Acknowledgement–Studies done in Uganda

- ❑ Malaria Chemoprevention in the Post discharge Management of Severe Anemia
- ❑ Economic Evaluation of post discharge malaria chemoprevention in preschool children treated with severe anemia in Malawi, Kenya and Uganda: A cost effective analysis





## Prior to WHO Recommendation

- ❑ Uganda & Kenya study: Three months of PDMC with the longer-acting drug dihydro-artemisinin piperazine (DP) reduced the risk of deaths or all-cause readmissions by 70% and hospitalised malaria episodes by 87% during the same period
- ❑ MOH adopted the recommendation
- ❑ Initial phase-one cycle of PDMC





# Current MOH Treatment Guidelines

- MoH adopted WHO PDMC recommendation
- Drug of Choice-Dihydro-artemisnin piperazine
- Targeted age groups-Children and adults
- Delivery Mechanism-Health facility as DOT





# Challenges

- ❑ Low completion rate of the three cycles

-Jan-Apr 2023: 1st dose on day 28/after 1 month = 21% ,2nd dose/after 2 months=09% and dose 3/3months = 5% (Follow up done in one of the facilities)

- ❑ Acceptability still low

- ❑ Low coverage

- ❑ Drug shortages (Current DP stock for 2<sup>nd</sup> line- uncomplicated malaria)





# Recommendations

- Best mode of delivery is through community health structures
- Community engagement to improve on acceptability & adherence
- Text reminders to caretakers or patients on when to return





## Assumptions for the next three years

- The assumptions for utilization of follow up services and hence up take of post discharge chemoprevention are as follows;
  - **2024: 1<sup>st</sup> dose on day 28/after 1 month = 25% ,2<sup>nd</sup> dose/after 2 months=10% and dose 3/3months = 5%**
  - **2025: 1<sup>st</sup> dose on day 28/after 1 month = 50% ,2<sup>nd</sup> dose/after 2 months=20% and dose 3/3months = 10%**
  - **2026: 1<sup>st</sup> dose on day 28/after 1 month = 75% ,2<sup>nd</sup> dose/after 2 months=50% and dose 3/3months = 20%**





Thanks for listening

