



## A RAPID ASSESSMENT OF SEVERE MALARIA CASE MANAGEMENT PRACTICES AND CONSTRAINTS IN ANGOLA

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# Background & Rationale



- In 2018, malaria accounted for an estimated 405,000 deaths, with 95% of these deaths occurring in Africa (WHO, 2019)
- WHO milestone to reduce malaria related deaths by 40% by 2020 requires a greater focus on severe malaria case management (OMS, 2015)
- Severe malaria case management affected by demand related (patients) and supply related (health care provision) factors.

## In Angola...

- Malaria is still the leading cause of death, medical consultations and work or school absenteeism.
- WHO estimated 7 million malaria cases and 13,000 deaths in 2018 (WHO, 2019) → 4% of malaria deaths worldwide
- Incorrect Case management of simple malaria patients associated with lack of training and drugs stock outs (Plucinski et al, 2017)
- Little information about severe malaria case management available in Angola → Severe Malaria Workshop in Luanda in May 2019 → Need to design and implement this assessment

# Methodology



A **cross sectional study** was conducted in three Angolan provinces: **Cuando Cubango, Luanda and Uíge** using **quantitative and qualitative data sources**.

## Focus group discussions

- Community members x 25



## Interviews

- Health facility managers x 21
- Health workers x 44
- Patients and caregivers x 38
- Community health workers (ADECOS) x 12
- Decision makers and managers x 12

# Health workers distribution, knowledge and practices



## Scarce and unequal distribution of HW in Angola

- Luanda's health facilities have the largest proportion of health workers (76%), followed by Uíge (15%) and then Cuando Cubango (9%);
- Within the HF visited, 65% of HW were nurses and 6% doctors;
- The proportion of doctors and graduated nurses is concentrated in Luanda and urban districts of Cuando Cubango and Uíge; -> Scarcity of health workers in remote rural areas;



## Insufficient training on Severe Malaria Case Management

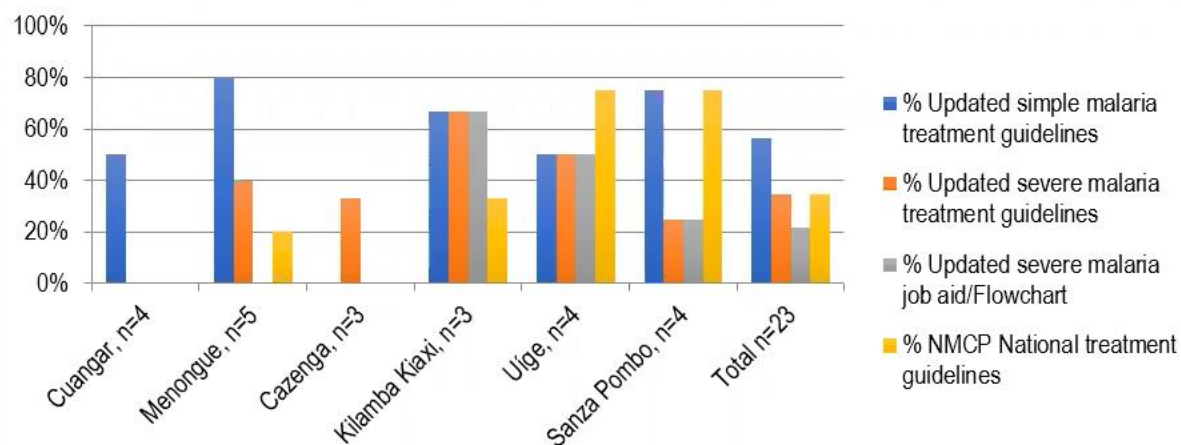
- Only 22% reported to have received any Severe Malaria Case Management training;
- More than 50% of HW were trained in Malaria Case Management, only less than 25% had specific training in resuscitation/ live saving care support;



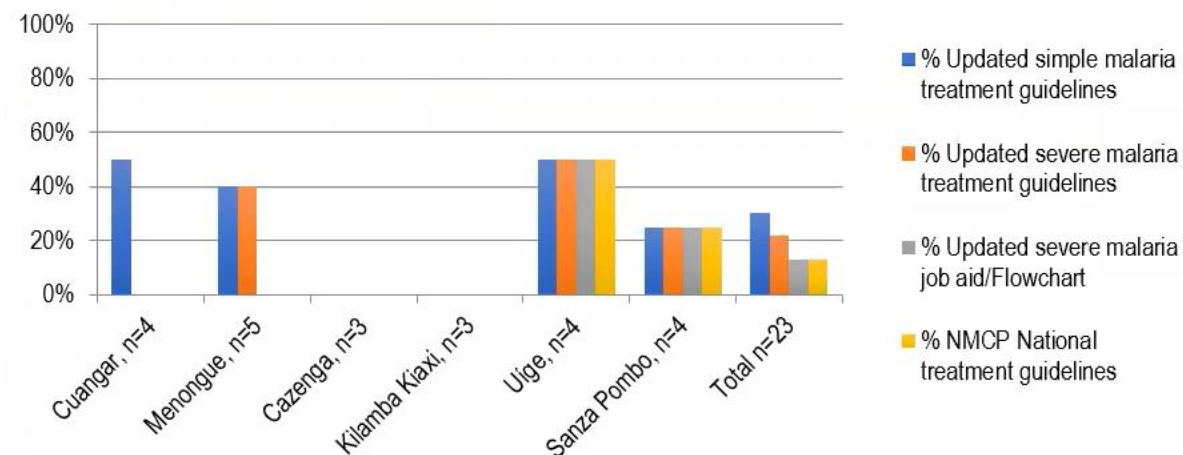
# Case management guidelines display and use

- Availability of the severe case management guidelines display in OPD and IPD was similar in both provinces, with 22% of the health facilities in Cuando Cubango and 38% in Uíge. In Luanda, 50% of the HF had guidelines in OPD but none had it on the IPD;

**% of Health facilities with available tools in the OPD**



**% of Health facilities with available tools in the IPD**



# Severe malaria diagnosis and treatment



## Diagnosis

- All HW interviewed were able to identify at least one severe malaria sign and symptom but that proportion fell when we look at those able to identify two or more signs and symptoms;
- The most frequent signs identified were Fever (73% of respondents), multiple convulsions (66%) and changes in state of consciousness (39%);

## Treatment

- Only half of the respondents identified Artesunate (in any form of administration) as the preferred first line treatment;
- Two thirds of HW identified intravenous as the preferred route (regardless the drug used), followed by intra-muscular (46%);
- Four HW (10%) from rural areas identified rectal artesunate as the preferred option;



# Drug supply chain and availability



- All health facilities had at least one severe malaria drug available in stock, at the day of the visit;
- Injectable artesunate was only available in nearly half of the surveyed health facilities; Rectal artesunate was rarely available in health posts (20%) and in health centres (50%);
- Drugs stocks were raised by interviewed and focus group participants;

N (% by type of HF)	Provincial Hospital	Municipal Hospital	Maternal Child centre	Health Centre	Health Post	Total
<b>Total HF</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>8</b>	<b>5</b>	<b>23</b>
<i>Injectable Artesunate 60mg</i>	1 (100%)	4 (100%)	2 (40%)	3 (38%)*	1 (20%)*	7 (70%)**
<i>Rectal Artesunate 50mg</i>	0 (0%)	2 (50%)	1 (20%)	1 (13%)	0 (0%)	4 (17%)
<i>Rectal Artesunate 100mg</i>	0 (0%)	3 (75%)	3 (60%)	4 (50%)	1 (20%)	11 (48%)
<i>Quinine 300mg</i>	0 (0%)	3 (75%)	4 (80%)	3 (38%)	0 (0%)	10 (43%)
<i>Injectable Quinine 600mg</i>	1 (100%)	3 (75%)	1 (20%)	4 (50%)	1 (20%)	10 (43%)
<i>Injectable Artemether 20mg</i>	0 (0%)	1 (25%)	0 (0%)	0 (0%)	0 (0%)	1 (4%)
<i>Injectable Artemether 40mg</i>	1 (100%)	2 (50%)	0 (0%)	2 (25%)	0 (0%)	5 (22%)
<i>Injectable Artemether 80mg</i>	1 (100%)	3 (75%)	2 (40%)	4 (50%)	2 (40%)	12 (52%)

*“Sometimes there the health centre is 3 months without drugs. The nurse is there, but there is no way... without drugs, there is no way he can work. Sometimes 3, 4 months without drugs” (GF 10, Cuando Cubango)*

*“For example, I am responsible for 8 health facilities but in a month I only receive the monthly report of 1 of them. For example, in January, I only received Savate. And then Luanda send only drugs for 1 health facility” (IDI 4, Cuando Cubango)*

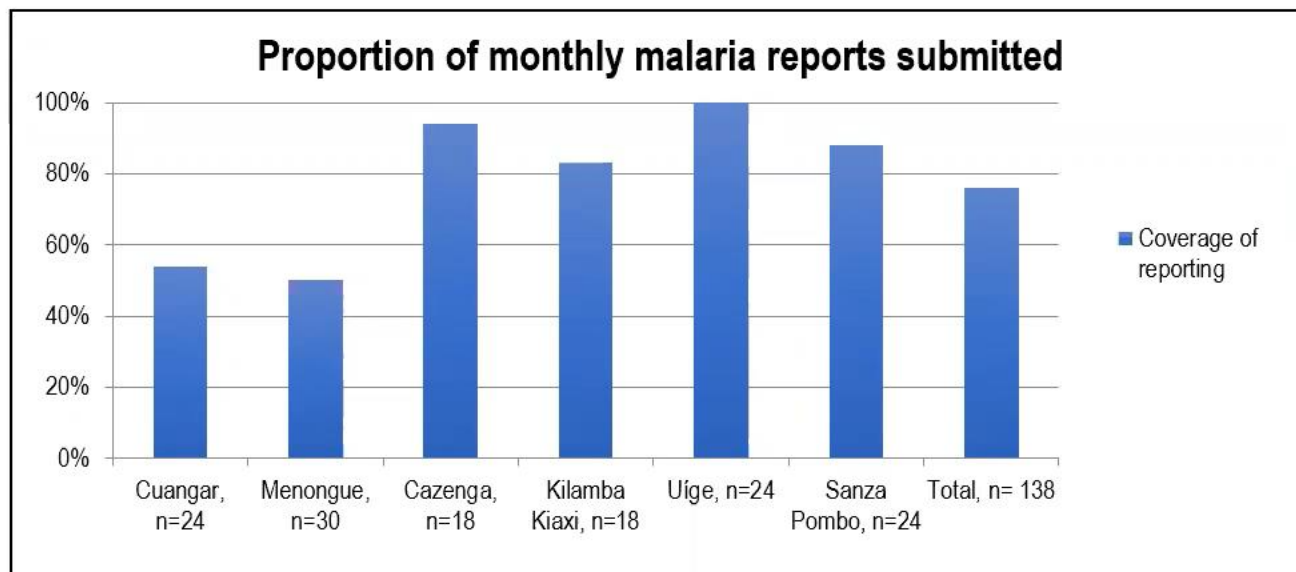
\* Even though Inj AS is not recommended for use at this level of health provision, we report the presence of this drug in stock in Health Centre and Health Posts visited

\*\* The 3 health centres and 1 health post were not considered as per national treatment guidelines they should not have these drugs. Calculation is done by dividing 7 health facilities allowed to administer this drug by 10 eligible health facilities.

# Data quality



- Only three quarters of the reports were submitted in the past 6 months;
- There is no specific severe malaria classification;



*“They don’t send the reports. Because of the distance. They only send it two or three months later. You only get the malaria cases from the headquarters because in the other health facilities... there is no transport to get those” (IDI 4, Cuando Cubango)*

*“I believe we could possibly study the chance, without increasing the report too much, of getting more data on severe malaria and its treatment” (IDI 11, Luanda)*



# Community perceptions, behaviours and practices



## Perceptions

*“The disease that is killing a lot here is malaria”  
(FGD 12, Cuando Cubango)*

*“Children are really overwhelmed with malaria. As we are talking, we have one there lying on the bed. He is not making it. He is in the health post, but is not improving” (FGD 23, Uíge)*

## Behaviours and practices

- Most patients and caregivers (71%) stated that they would walk to the nearest HF when seeking care. 97% identified the HF as the preferential place to seek care and 6% identified the ADECOs;
- 21% of respondents stated that they wait more than 1 day before seeking treatment when they suspect a child has malaria;
- The main constrains identified when seeking care was the lack of money to pay the drugs (46%), the distance to the HF (27%) and the lack transportation to reach the HF (32%);



# Recommendations

1. Review 2017 Case management guidelines for Doctors and nurses and distribute them across all levels of health care delivery to ensure adequate use of Artesunate in the management of severe malaria
2. Develop a training plan for malaria case management training ensuring all doctors and nurses are trained every three years on malaria case management including management of severe malaria cases
3. Conduct at least annual on-the-job supervision of HW malaria case management in all HF, to ensure the correct implementation of guidelines and appropriate case management of malaria cases
4. Distribute malaria guidelines and job-aids to every HF until mid 2021
5. Review HF triage systems and produce triage guidelines including specific advice and protocols for malaria testing and treatment
6. Develop a private provider engagement strategy in 2021 to ensure adherence to malaria case management guidelines and reporting of malaria cases into NMCP MIS
7. Review the drug quantification system
8. Develop formal protocols for local drug procurement
9. Review and improve malaria data systems
10. Strengthen community level health services and transport mechanisms to facilitate referrals

# Follow up steps



1. Survey report and recommendations shared with the Minister of Health in June 2020
2. Severe Malaria workshop in 29/30 September 2020 to draft an Action Plan with specific actions and defined timeframes
3. Translation of key recommendations into actions integrated into two main documents:
  1. Global Fund Concept Note Funding Request 2021-2023
  2. National Strategic Plan for Malaria Control 2021-2025

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