THE REPUBLIC OF UGANDA
MINISTRY OF HEALTH

Malaria in Pregnancy

Presentation to:
Busoga Health Forum

By

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Presentation outline:

- Background/introduction , recommended reduction strategic actions and performance framework 2021-2025.
- Updated standard guidelines for Malaria in pregnancy prevention and management.
- Malaria in Pregnancy Indicator performance progress updates.
- Challenges /gaps.
- Proposed solutions and innovations.

Background/introduction , recommended reduction strategies and performance framework 2021-2025

Background

- Malaria in Pregnancy is still a public health burden & significantly contributes to : Maternal & perinatal morbidity, disability &deaths.
- It leads to maternal anaemia, increased risk for PPH, pre-term labour, foetal wastage through abortions &still births, intrauterine growth restriction, prematurity and low birth weight.
- Out of the 33.8M pregnancies in SSA ,11.6M(34%)were exposed to Malaria infection in 2020.
- The prevalence of Malaria in Pregnancy in East and Southern Africa was- 22%(lowest) while West & central African regions were rated at 39.8% and 39.4% respectively.
- Globally Malaria in Pregnancy contributed to10,000 maternal deaths, 100,000 new-born deaths annually in 2017, 11% of these were from SSA. The 20% of still births were from SSA and 872,000 (11%) of the total LBW babies in 2018 were due to MIP.
- In 2020/21 ,Uganda recorded approximately 16.5% ,0.3%-0.5% and 0.5% as MIP cases , admissions/severe MIP and deaths respectively.
- It has been documented that children whose mothers suffered from Malaria in Pregnancy tend to be challenged by the negative cognitive effects.

Recommended interventions for Malaria in Pregnancy reduction.

WHO recommends a three pronged approach for prevention and control of Malaria in Pregnancy and its effects;

1) Intermittent Preventive treatment of Malaria in Pregnancy (IPTp) with Sulfardoxine pyrimethamine(SP).

- *To significantly reduce Malaria in pregnancy and its effects the target coverage with at least 3 doses of IPTp should be >85%.*

2) Distribution and use of Long-lasting insecticidal treated mosquito nets(LLINs).

- *The target coverage for ownership and use should be> 85% in-order to impact fully reduce Malaria in Pregnancy & associated effects.*

3) Prompt diagnosis and treatment of Malaria in Pregnancy.

- *The target coverage for testing and appropriate treatment is >85%.*

Malaria in Pregnancy Performance Frame work- 2021 -2025

Indicator	Baseline			Targets				
	Year	Value	Source	2020/ 2021	2021/ 2022	2022/ 2023	2023/ 2024	2024/2025
Percentage of Pregnant Women attending ANC with Malaria	2019	17	DHIS2	12	**9**	7	5	3
Percentage of Pregnant women who have received three or more doses of IPTp	2019	41	MIS	50	**58**	68	75	80
Percentage of Pregnant women attending ANC who have received at least three doses of IPTp	2019	40	DHIS2	49	**58**	67	76	85
Proportion of pregnant women sleeping under an ITN the previous night	2019	65	MIS	70	**75**	80	85	90
Percentage of Facilities reporting more than one day of SP stock out in a month	2019	10	DHIS2	5	**4**	3	3	2
Percentage of Pregnant mothers attending ANC receiving LLINS	2019	42	DHIS2	50	**60**	70	80	90
Malaria in pregnancy deaths per 100,000 population of pregant women	2019	18	DHIS2	10	**7**	6	3	1

Updated standard guidelines for Malaria in pregnancy prevention and management.

Prevention of malaria in Pregnancy - IPTp

Recommended ANC Contact

Contact No	Gestation age in wks	ITN/IPT p-SP Dose
Contact 1:	0 – 12	ITN
Contact 1a:	13 – 16	IPTp – Dose 1
Contact 2:	20	IPTp – Dose 2
Contact 3:	26	IPTp – Dose 3
Contact 4:	30	IPTp – Dose 4
Contact 5 :	34	IPTp – Dose 5
Contact 6:	36	No SP, if last dose received <1 month ago
Contact 7:	38	IPTp-SP dose 6 (if no dose in past month)
Contact 8:	40	No IPTp

Alternatives to IPTp-SP

Category	Reason / Rationale
Pregnant women living with HIV/AIDS	Continue with or initiate Cotrimoxazole 960mg daily. **Rationale:** *HIV positive pregnant women are among the special groups recommended to receive daily Cotrimoxazole for prophylaxis against Malaria and other opportunistic infections as soon as they know they are pregnant until 6 weeks after delivery.* **NOTE:** HIV positive women receiving Cotrimoxazole prophylaxis **should not** be given monthly SP because Cotrimoxazole also protects against Malaria. Both CTX & SP are Sulphonamides and if given together may lead to toxicities. Code CTX as received IPTp
Women with sickle cell Disease	Give 10mgs /kg Chloroquine weekly **Rationale:** *Because they are on daily high dose Folic acid (5mgs), this reduces the efficacy of SP rendering it less effective as a preventive drug.*

Treatment of malaria in pregnancy

As with the general population, always start by assessing severity of illness(presence of danger signs and then confirm presence of malaria with microscopy or malaria RDT

Management of uncomplicated malaria

Patient Assessment

i. History taking
ii. Physical examination
iii. Testing

Management includes;

i. Using effective anti-malaria drugs

Order	Recommended
1st line	Artemether/Lumefantrine
2nd line	Dihydroartemesinin/ Piperaquine or oral Quinine

ii. Relieve symptoms such as headache and fever

Management of severe malaria

Severe malaria presents with positive malaria test result plus clinical or laboratory life threatening conditions

Treatment is with IV or IM Artesunate as in all adults.

If Artesunate is not available, use Inj. Artemether or IV Quinine

In addition to treating the malaria, manage the complications

Some of the severe malaria Complications include;

Respiratory Distress	Hypoglycemia
Severe Dehydration/shock	Acidosis
Cerebral Malaria	Threatened Abortion
Renal failure	Convulsions *(R/O Eclampsia)*
Severe Anaemia	Hemoglobinuria

NOTE: Review the steps of reconstituting Artesunate for IV and IM

For details on management of the severe malaria complications, refer to IMM manual, 2018

Note : All pregnant women attending ANC1 should be tested for Malaria ,those that test positive should be started on treatment and during subsequent visits only those with complaints should be subjected to a test, the positive ones started on treatment.

Recommended Specific treatment for Uncomplicated Malaria

First Line: Treatment schedule for Artemether/Lumefantrine (AL)

Weight (Kg)	Age	Day 1	Day 2	Day 3
<14	Birth to 3 years	1 tablet at 0 hours then 1 tablet at 8 hours	1 tablet twice (12 hourly)	1 tablet twice (12 hourly)
15-24	3 to 7 years	2 tablets at 0 hours then 2 tablets at 8 hours	2 tablets twice (12 hourly)	2 tablets twice (12 hourly)
25-34	7 to 12 years	3 tablets at 0 hours then 3 tablets at 8hours	3 tablets twice (12 hourly)	3 tablets twice (12 hourly)
>35	12 years and above	4 tablets at 0 hours then 4 tablets at 8 hours	4 tablets twice (12 hourly)	4 tablets twice (12 hourly)

Preferred 2nd line: Dosing schedule for Dihydroartemisinic / Piperaquine

Body weight	Product description	Day 1 dose	Day 2 dose	Day 3 dose
25 - < 36 Kgs	Dihydroartemisinin/Piperaquine(40mgs/320mgs)	2 Tablets	2 Tablets	2 Tablets
36 - < 60 Kgs	Dihydroartemisinin/Piperaquine (40mgs/320 mgs)	3 Tablets	3 Tablets	3 Tablets
60 - < 80 Kgs	Dihydroartemisinin /Piperaquine (40mgs/320mgs)	4 Tablets	4 Tablets	4 Tablets
> 80 Kgs	Dihdroartemesinin Piperaquine(40mgs/320mgs)	5 Tablets	5Tablets	5 Tablets
60 - < 80 Kgs	Dihdroartemesinin Piperaquine(40mgs/320mgs)	2 Tablets	2 Tablets	2 Tablets
> 80 Kgs	Dihdroartemesinin Piperaquine(80mgs/640mgs)	2.5 Tablets	2 Tablets	2 Tablets

Treatment of severe Malaria in Pregnancy

The components of effective management for severe Malaria in Pregnancy include:

- ❑Triage
- ❑Resuscitation
- ❑Comprehensive patient assessment: Clinical assessment (history taking & physical examination) and Laboratory/radiological assessment.
- ❑Appropriate patient monitoring.
- ❑Patient referral.
- ❑Follow up and linkage back into ANC.
- ❑Management of other causes of fever.

Triage: Categorize patients according to disease severity

a) Emergency category

- Per vaginal bleeding.
- Severe Pallor.
- Obstructed airway -Noisy breathing.
- Cold extremities, clamy skin, slow capillary return and low B.P
- Current or ongoing episode of convulsions.
- Woman in Labour.
- Unconsciousness.
- Cyanosis.
- Severe respiratory distress (Nasal flaring, head nodding chest indrawing).
- Very slow skin pinch.
- Sunken eyes.

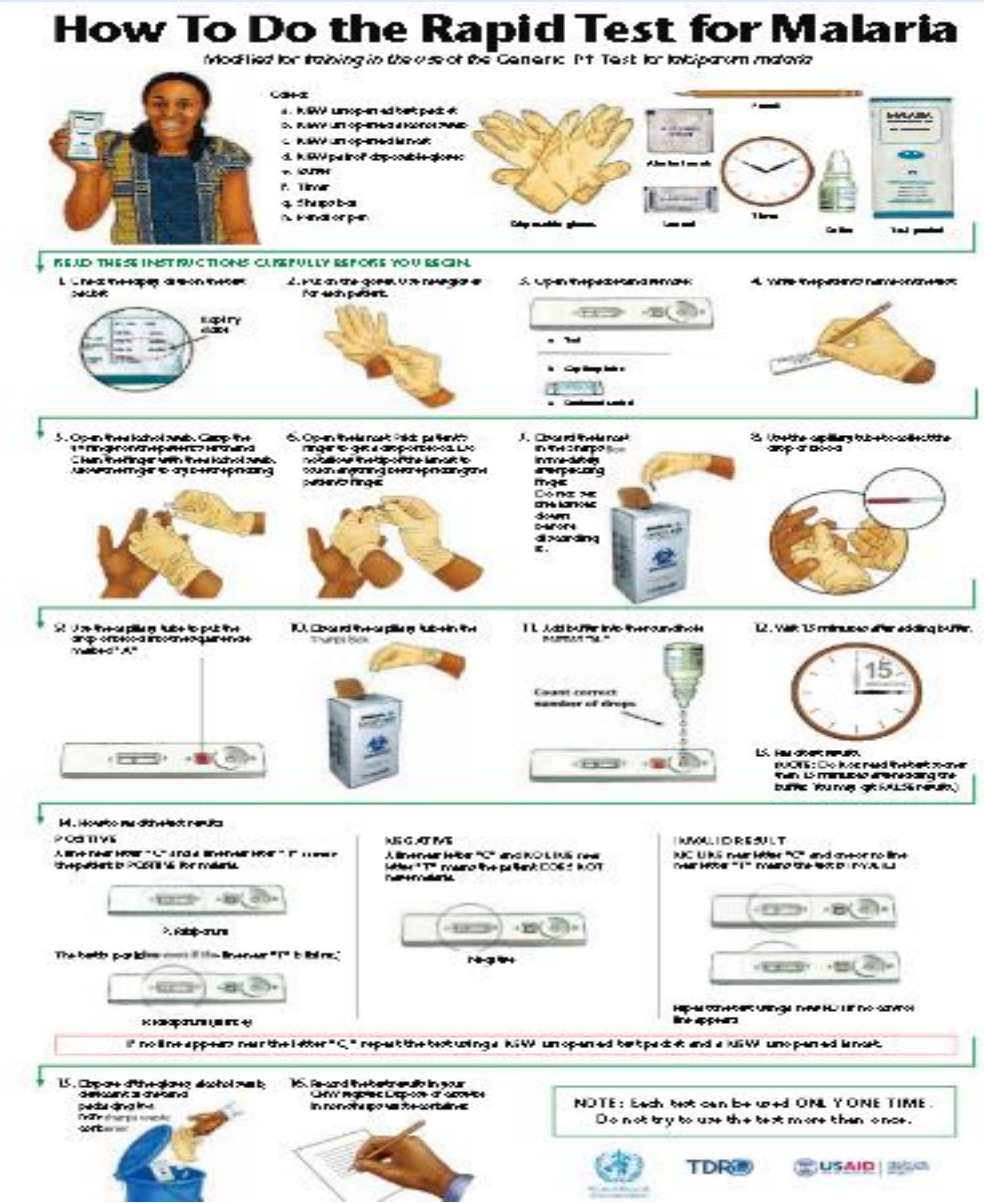
b) Priority category

- Oedema involving both feet.
- Mild to moderate respiratory distress.
- Referrals.
- Prostration (extreme weakness).
- History of convulsions in the past 2 days.
- Restlessness.
- Dehydration.
- Trauma, Burns or poisoning.
- Temperature above 39^0C.
- Altered level of consciousness.
- Vomiting all feeds.
- Inability to feed.

C: The women in this category must have no dangers and therefore can safely wait.

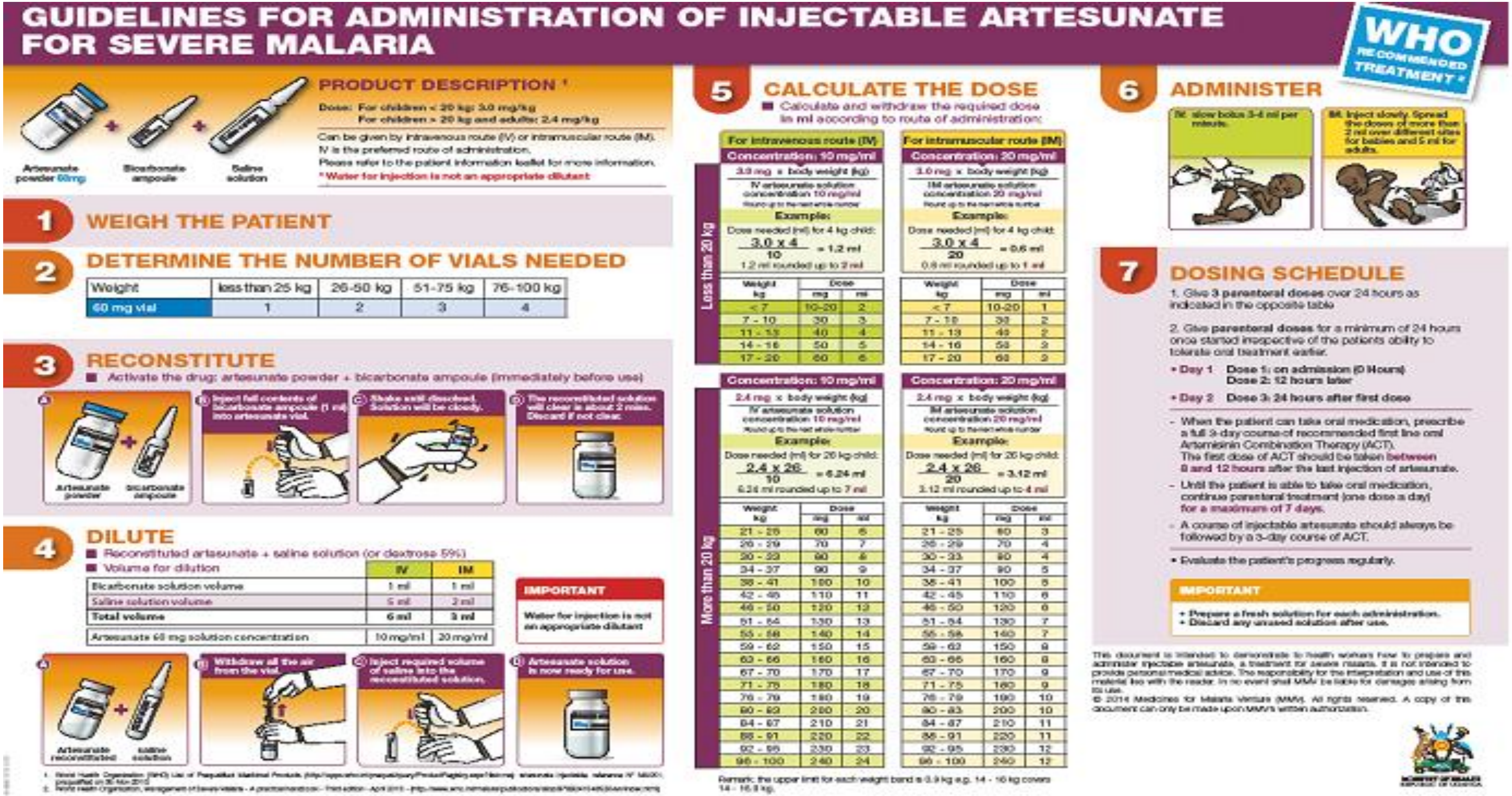
Laboratory diagnosis

There are two recommended testing methods used to test for malaria are Microscopy and Malaria Rapid Diagnostic Test



7	Test	Reason
1.	Microscopy	• Quantify parasites especially during patient monitoring. • Typing malaria parasites
2.	Urinalysis	• Detect proteins especially for women with convulsions.
3.	Complete blood cell count or Hb estimation	• Diagnosis and grading of anemia. • Diagnosis of other comorbidities
4.	Random blood sugar	• To make a diagnosis of Hypoglycemia or gestational diabetes
5.	Renal functional tests	• Diagnosis of acute renal failure
6	Blood culture and CSF analysis	• Diagnosis of septicemia or meningitis
7.	Serum electrolytes	• Diagnosis of electrolyte imbalance or metabolic acidosis

Specific treatment for Severe Malaria in Pregnancy



GUIDELINES FOR ADMINISTRATION OF INJECTABLE ARTESUNATE FOR SEVERE MALARIA

WHO RECOMMENDED TREATMENT [2]

PRODUCT DESCRIPTION [1]

Artesunate powder 60mg + Bicarbonate ampoule + Saline solution

Dose: For children < 20 kg: 3.0 mg/kg
For children > 20 kg and adults: 2.4 mg/kg

Can be given by intravenous route (IV) or intramuscular route (IM).
IV is the preferred route of administration.
Please refer to the patient information leaflet for more information.
* Water for injection is not an appropriate diluent

1 WEIGH THE PATIENT

2 DETERMINE THE NUMBER OF VIALS NEEDED

Weight	less than 25 kg	26-50 kg	51-75 kg	76-100 kg
60 mg vial	1	2	3	4

3 RECONSTITUTE

- Activate the drug: artesunate powder + bicarbonate ampoule (immediately before use)

A. Artesunate powder + bicarbonate ampoule
B. Inject full contents of bicarbonate ampoule (1 ml) into artesunate vial.
C. Shake until dissolved. Solution will be cloudy.
D. The reconstituted solution will clear in about 2 mins. Discard if not clear.

4 DILUTE

- Reconstituted artesunate + saline solution (or dextrose 5%)
- Volume for dilution

	IV	IM
Bicarbonate solution volume	1 ml	1 ml
Saline solution volume	5 ml	2 ml
Total volume	**6 ml**	**3 ml**
Artesunate 60 mg solution concentration	10 mg/ml	20 mg/ml

IMPORTANT
Water for injection is not an appropriate diluent

A. Artesunate reconstituted + saline solution
B. Withdraw all the air from the vial.
C. Inject required volume of saline into the reconstituted solution.
D. Artesunate solution is now ready for use.

5 CALCULATE THE DOSE

- Calculate and withdraw the required dose in ml according to route of administration:

Less than 20 kg

For intravenous route (IV) — Concentration: 10 mg/ml

3.0 mg x body weight (kg) / IV artesunate solution concentration 10 mg/ml
Round up to the next whole number

Example:
Dose needed (ml) for 4 kg child:
$\frac{3.0 \times 4}{10} = 1.2$ ml
1.2 ml rounded up to 2 ml

Weight kg	Dose mg	Dose ml
< 7	10-20	2
7 - 10	30	3
11 - 13	40	4
14 - 16	50	5
17 - 20	60	6

For intramuscular route (IM) — Concentration: 20 mg/ml

3.0 mg x body weight (kg) / IM artesunate solution concentration 20 mg/ml
Round up to the next whole number

Example:
Dose needed (ml) for 4 kg child:
$\frac{3.0 \times 4}{20} = 0.6$ ml
0.6 ml rounded up to 1 ml

Weight kg	Dose mg	Dose ml
< 7	10-20	1
7 - 10	30	2
11 - 13	40	2
14 - 16	50	3
17 - 20	60	3

More than 20 kg

Concentration: 10 mg/ml

2.4 mg x body weight (kg) / IV artesunate solution concentration 10 mg/ml
Round up to the next whole number

Example:
Dose needed (ml) for 26 kg child:
$\frac{2.4 \times 26}{10} = 6.24$ ml
6.24 ml rounded up to 7 ml

Weight kg	Dose mg	Dose ml
21 - 25	60	6
26 - 29	70	7
30 - 33	80	8
34 - 37	90	9
38 - 41	100	10
42 - 45	110	11
46 - 50	120	12
51 - 54	130	13
55 - 58	140	14
59 - 62	150	15
63 - 66	160	16
67 - 70	170	17
71 - 75	180	18
76 - 79	190	19
80 - 83	200	20
84 - 87	210	21
88 - 91	220	22
92 - 95	230	23
96 - 100	240	24

Concentration: 20 mg/ml

2.4 mg x body weight (kg) / IM artesunate solution concentration 20 mg/ml
Round up to the next whole number

Example:
Dose needed (ml) for 26 kg child:
$\frac{2.4 \times 26}{20} = 3.12$ ml
3.12 ml rounded up to 4 ml

Weight kg	Dose mg	Dose ml
21 - 25	60	3
26 - 29	70	4
30 - 33	80	4
34 - 37	90	5
38 - 41	100	5
42 - 45	110	6
46 - 50	120	6
51 - 54	130	7
55 - 58	140	7
59 - 62	150	8
63 - 66	160	8
67 - 70	170	9
71 - 75	180	9
76 - 79	190	10
80 - 83	200	10
84 - 87	210	11
88 - 91	220	11
92 - 95	230	12
96 - 100	240	12

Remark: the upper limit for each weight band is 0.9 kg e.g. 14 - 16 kg covers 14 - 16.9 kg.

6 ADMINISTER

IV: slow bolus 3-4 ml per minute.

IM: Inject slowly. Spread the doses of more than 2 ml over different sites for babies and 5 ml for adults.

7 DOSING SCHEDULE

1. Give **3 parenteral doses** over 24 hours as indicated in the opposite table

2. Give **parenteral doses** for a minimum of 24 hours once started irrespective of the patients ability to tolerate oral treatment earlier.

- Day 1 **Dose 1: on admission (0 Hours)**
  Dose 2: 12 hours later
- Day 2 **Dose 3: 24 hours after first dose**

- When the patient can take oral medication, prescribe a full 3-day course of recommended first line oral Artemisinin Combination Therapy (ACT). The first dose of ACT should be taken **between 8 and 12 hours** after the last injection of artesunate.
- Until the patient is able to take oral medication, continue parenteral treatment (one dose a day) **for a maximum of 7 days.**
- A course of injectable artesunate should always be followed by a 3-day course of ACT.

- Evaluate the patient's progress regularly.

IMPORTANT
- **Prepare a fresh solution for each administration.**
- **Discard any unused solution after use.**

MINISTRY OF HEALTH

1. World Health Organization (WHO) List of Prequalified Medicinal Products ... artesunate injectable ... prequalified on 30 Nov 2010
2. World Health Organization, Management of Severe Malaria - A practical handbook - Third edition - April 2012

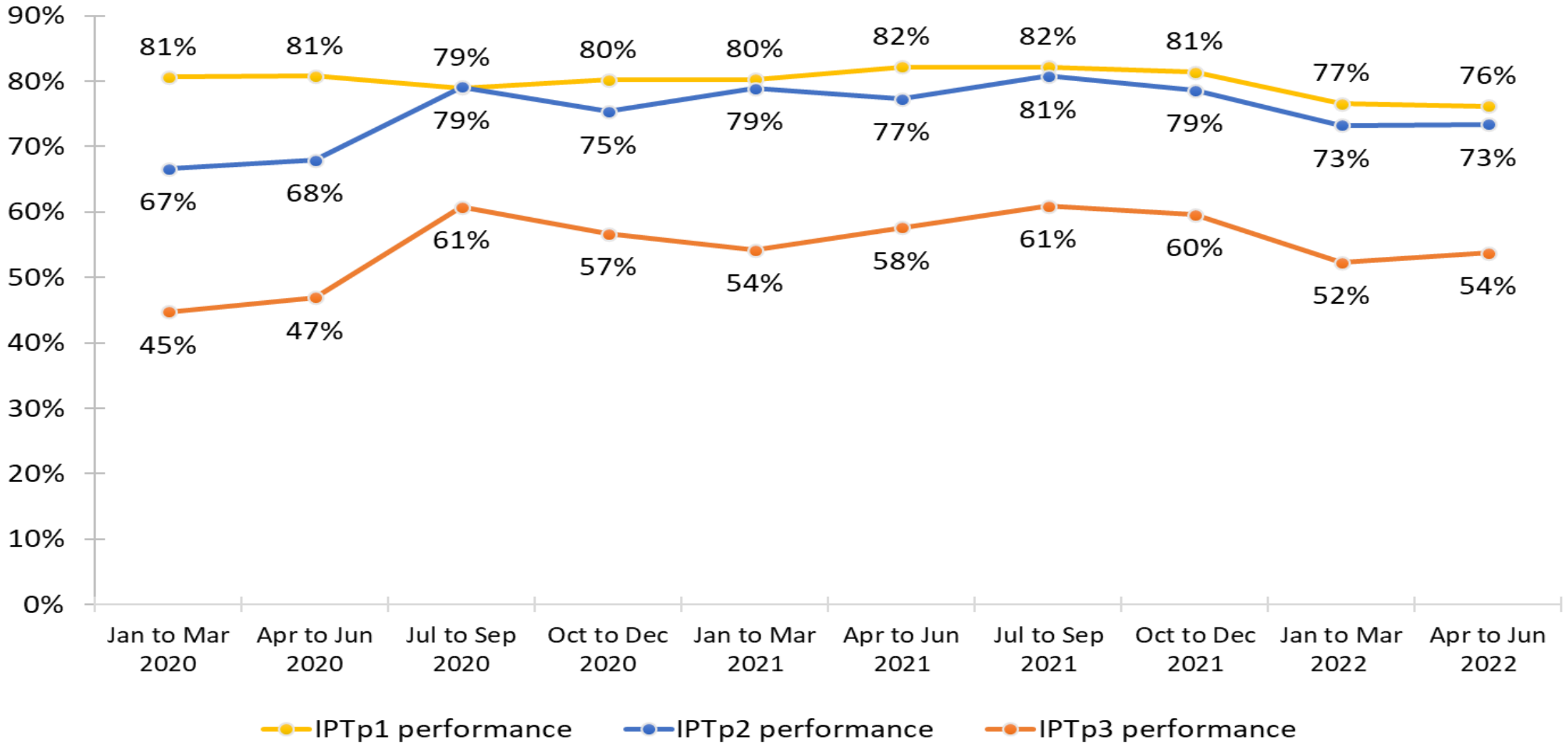
Follow up

1. **General follow up schedule is day 7 ,14,28 and monthly for 6 months if the patient has no problems.**
2. **In case of new or persistence of symptoms ,the mother should return immediately.**
3. **Align the follow up plan with the ANC contacts schedule.(Refer to the GOAL oriented antenatal care protocol)**

Trimester	Follow up	ANC contact schedule	Actions
1st Trimester (0 -12 weeks	Day 7,14 and 28 then Monthly for 3 months if less than 4 weeks of gestation Monthly for 2 months if less than 8 weeks of gestation. Monthly for 1 month if less than 12 weeks of gestation.	• Contact 1: up to 12 weeks. • Align the follow up visits with the scheduled ANC Contacts.	• Quick check for presence of severe Malaria neurological sequalae(Hearing loss, reduced vision &limb weakness • If any is present, refer for further assessment and specialized care. • Do routine ANC assessment and care for that contact • Provide treatment persistent /new symptoms.
2nd Trimester(13 – 28 weeks)	• Day 7,14,28: do this follow up visits between 13 weeks and 24 weeks • Intergrate subsequent monthly follow-up visits into the ANC contacts at 20 weeks and 26 weeks.	• Align the monthly follow up visits to contacts 2 and 3 . • Contact 2: at 20 weeks • Contact 3: 26weeks	• Do the recommended follow up assessment and care. • If the follow up visit has been integrated into the ANC routine package ,do both the follow up and ANC assessment and care.
3rd Trimester(>28 weeks)	• Day 7.,14,28: do this between 28 weeks and 32 weeks. • Intergrate monthly follow up visits into contacts 6 and 8.	• Plan to have contacts with the mother at 31 weeks,32 weeks and at 34 weeks(contact 5). • Align the monthly follow up visits to contacts 6 and contact 8	• Do the recommended follow up assessment and care. • Provide routine ANC assessment and care

Malaria in Pregnancy Indicator performance progress updates

IPTp – performance –National:



IPTp – performance per region

Region	IPTp1		IPTp2		IPTp3	
	Jan to Mar 2022	Apr to Jun 2022	Jan to Mar 2022	Apr to Jun 2022	Jan to Mar 2022	Apr to Jun 2022
Acholi	74%	73%	70%	68%	52%	51%
Ankole	75%	76%	76%	78%	60%	66%
Bugisu	75%	72%	75%	74%	51%	51%
Bukedi	73%	74%	79%	87%	54%	55%
Bunyoro	80%	77%	77%	76%	50%	47%
Busoga	77%	76%	68%	67%	45%	46%
Kampala	63%	67%	52%	53%	35%	37%
Karamoja	78%	75%	72%	72%	51%	57%
Kigezi	81%	79%	83%	83%	63%	64%
Lango	67%	68%	67%	67%	50%	52%
North Central	81%	80%	78%	76%	52%	55%
South Central	78%	77%	75%	72%	49%	49%
Teso	79%	82%	73%	76%	56%	59%
Tooro	82%	83%	77%	80%	59%	65%
West Nile	80%	78%	75%	75%	62%	61%
National	**77%**	**76%**	**73%**	**73%**	**52%**	**54%**

IPTp Coverage

<=40%

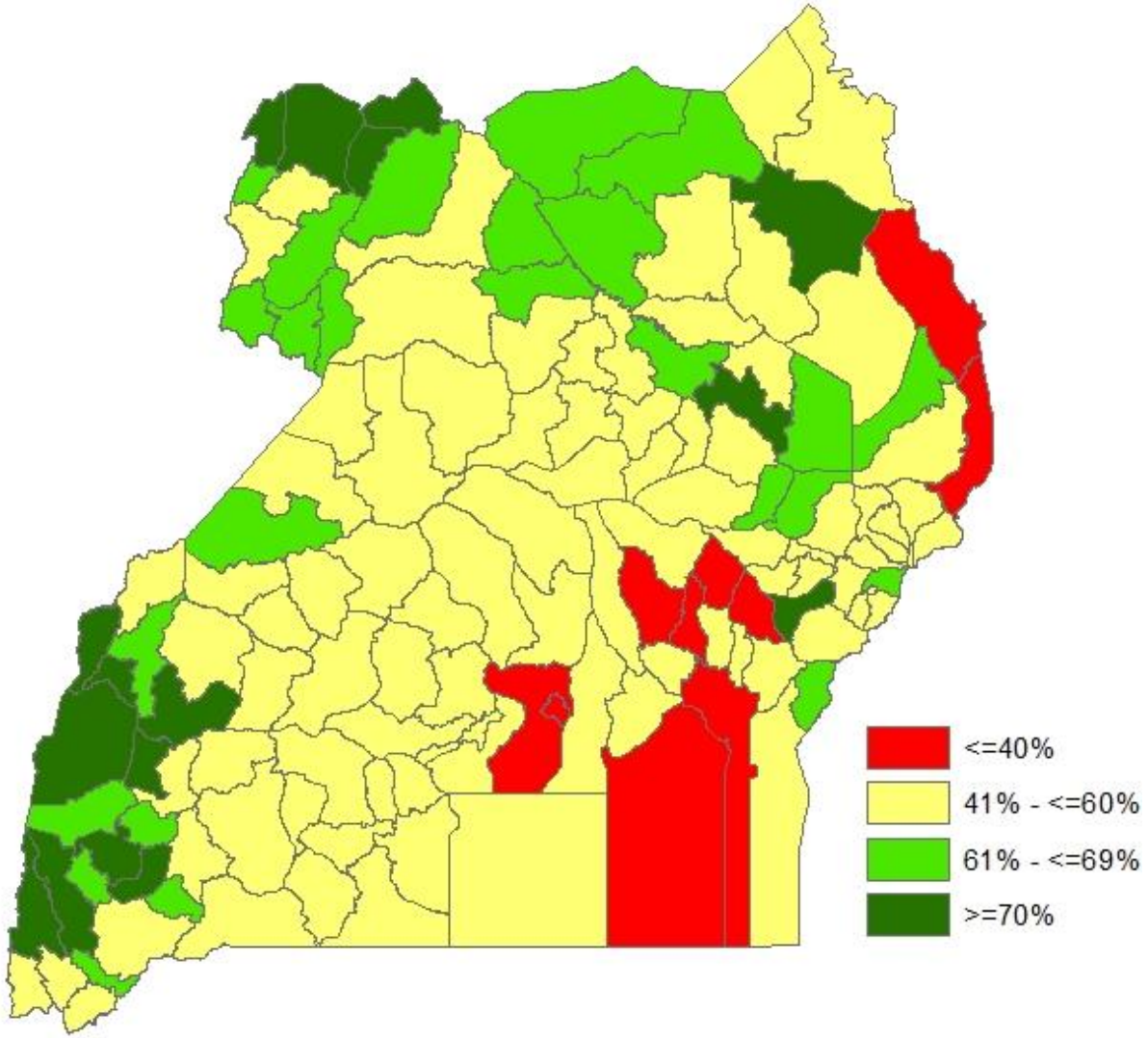
41%-60%

61%-69%

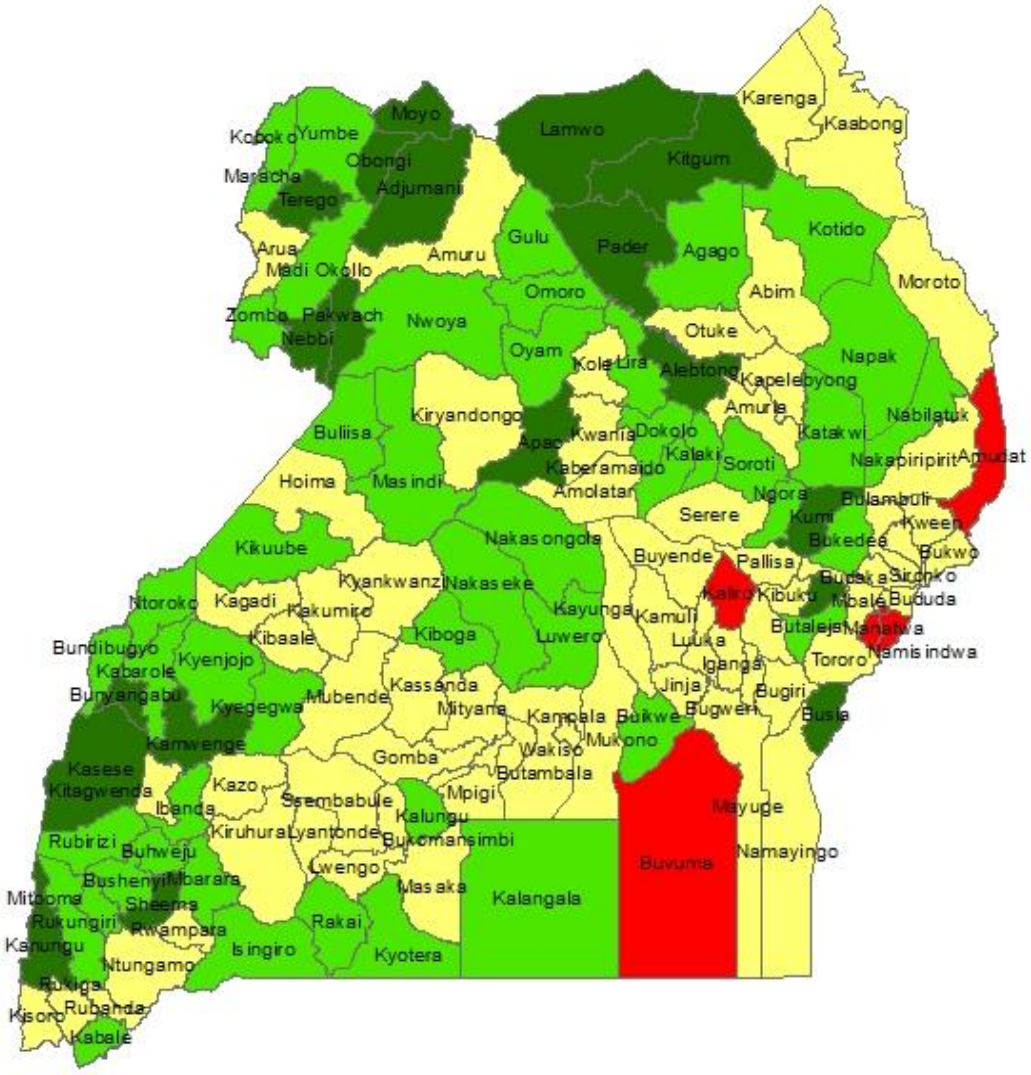
>=70%

IPTp 3 – performance per District

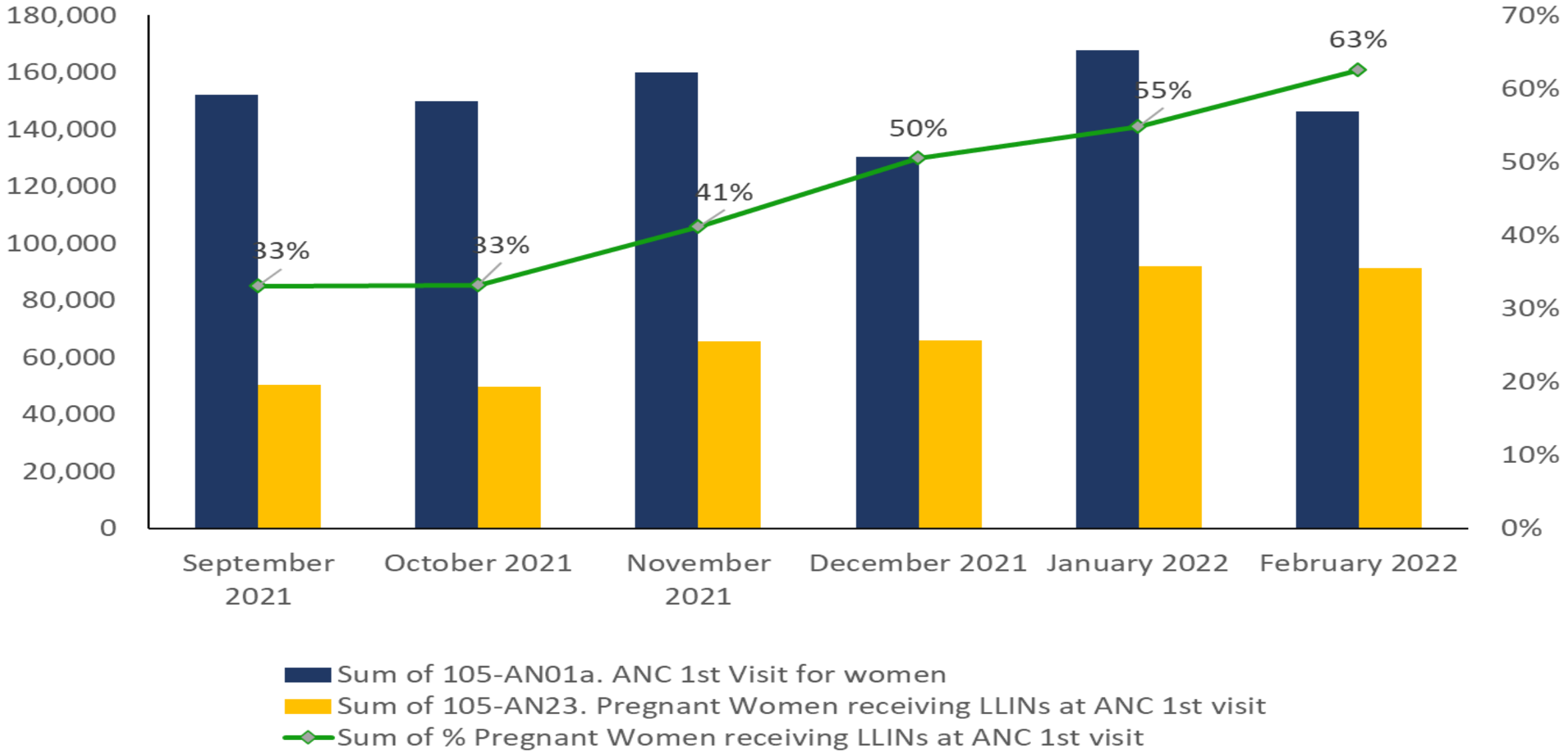
2020



2021



LLINs performance for Pregnant women - National



LLINs performance for Pregnant women – February 2022

Region	ANC 1st Visit for women	Pregnant Women receiving LLINs at ANC 1st visit	% Pregnant Women receiving LLINs at ANC 1st visit
Acholi	6,747	4,714	70%
Ankole	10,673	9,130	86%
Bugisu	6,929	3,075	44%
Bukedi	8,415	3,859	46%
Bunyoro	10,175	4,463	44%
Busoga	15,078	11,876	79%
Kampala	8,422	753	9%
Karamoja	4,122	2,691	65%
Kigezi	5,053	4,656	92%
Lango	9,247	7,859	85%
North Central	15,271	9,359	61%
South Central	15,016	6,203	41%
Teso	8,059	4,653	58%
Tooro	11,648	8,373	72%
West Nile	11,340	9,716	86%
National	**146,195**	**91,380**	**63%**

LLINs Coverage			
	<=49%		**70%-79%**
	50%-69%		**>=80%**

Proportion of pregnant women with malaria – health facility data

Region	Jan-Mar 2021	Apr-June 2022	Jul-Sep 2022	Oct-Dec 2022	Jan-Feb 2022**
Acholi	**31.1%**	**27.9%**	**30.7%**	**29.9%**	**22.8%**
Ankole	4.6%	4.2%	2.7%	5.6%	5.9%
Bugisu	9.8%	12.1%	14.0%	14.9%	13.6%
Bukedi	**10.3%**	**13.2%**	**14.4%**	**28.6%**	**25.4%**
Bunyoro	15.1%	17.1%	15.0%	16.8%	16.9%
Busoga	**33.1%**	**37.6%**	**25.8%**	**31.6%**	**32.0%**
Kampala	4.2%	3.9%	3.7%	4.5%	4.2%
Karamoja	**18.3%**	**18.6%**	**23.5%**	**24.0%**	**16.8%**
Kigezi	1.5%	1.7%	2.3%	3.1%	2.6%
Lango	**19.7%**	**26.6%**	**23.3%**	**31.2%**	**23.1%**
North Central	12.7%	12.7%	11.5%	16.3%	11.1%
South Central	6.3%	6.6%	4.7%	7.2%	8.2%
Teso	**28.6%**	**36.9%**	**34.8%**	**33.7%**	**30.4%**
Tooro	8.1%	9.0%	7.4%	11.2%	9.4%
West Nile	**26.1%**	**34.1%**	**35.6%**	**32.9%**	**24.0%**
National	**15.6%**	**18.0%**	**16.2%**	**19.4%**	**16.5%**

Malaria in Pregnancy admissions and deaths

Region	2020			2021			Jan-June 2022		
	MiP Admissions	MiP Deaths	MiP Admissions Fatality Rate	MiP Admissions	MiP Deaths	MiP Admissions Fatality Rate	MiP Admissions	MiP Deaths	MiP Admissions Fatality Rate
Acholi	7,093	22	**0.3%**	6,503	9	**0.1%**	4,400	3	**0.1%**
Ankole	2,114	34	**1.6%**	1,860	4	**0.2%**	1,063	0	**0.0%**
Bugisu	2,917	6	**0.2%**	2,566	13	**0.5%**	1,656	5	**0.3%**
Bukedi	1,917	7	**0.4%**	5,371	21	**0.4%**	3,045	1	**0.0%**
Bunyoro	5,395	11	**0.2%**	4,129	10	**0.2%**	2,904	2	**0.1%**
Busoga	8,138	41	**0.5%**	9,617	13	**0.1%**	5,319	70	**1.3%**
Kampala	697	13	**1.9%**	608	8	**1.3%**	584	3	**0.5%**
Karamoja	2,629	8	**0.3%**	3,096	7	**0.2%**	1,386	1	**0.1%**
Kigezi	714	7	**1.0%**	804	1	**0.1%**	564	0	**0.0%**
Lango	8,057	16	**0.2%**	8,447	17	**0.2%**	5,301	1	**0.0%**
North Central	5,031	42	**0.8%**	3,986	22	**0.6%**	2,520	28	**1.1%**
South Central	2,831	43	**1.5%**	2,483	9	**0.4%**	1,978	16	**0.8%**
Teso	9,768	8	**0.1%**	9,747	11	**0.1%**	5,150	7	**0.1%**
Tooro	5,613	30	**0.5%**	5,546	14	**0.3%**	3,420	40	**1.2%**
West Nile	13,254	56	**0.4%**	14,307	64	**0.4%**	7,228	38	**0.5%**
National	**76,168**	**344**	**0.5%**	**79,070**	**223**	**0.3%**	**46,518**	**215**	**0.5%**

Challenges /gaps

1) The demand and utilization for ANC services is still sub-optimal.

- ANC1 attendance in the 1st trimester is 32.8% while the proportion of pregnant women that attend at least 4 times is 50%.

2) Programming and planning for Malaria ,including Malaria in Pregnancy at sub-national levels is not well done.

- Inadequate coordination& collaboration of /between actors at the sub-national level.

3) Imbalances in stocks for Malaria in Pregnancy preventive commodities(SP and LLINs.

4) Gaps in knowledge about the updated Malaria in Pregnancy guidelines by the frontline service providers.

5) Missed opportunity to document the mothers living with HIV that are on Co-trimoxazole yet they are also protected.

6) The attitude by community and health workers towards Malaria and Malaria in Pregnancy is poor, Prevention of Malaria is not prioritized.

Proposed solutions

1) Strengthened community engagement and involvement ;

- Introduce community intermittent treatment of Malaria in Pregnancy (c-IPTp).
- Pregnancy mapping ,linkage to ANC ,follow up and referral .
- Community sensitization on the importance of early ANC attendance and retention in ANC.

2) Promote practices that lead to high index of suspicion for pregnancy ,screening for pregnancy and linkage to ANC.

3) MIP prevention commodities ' stock monitoring and response by supporting timely redistribution.

4) Scaled up dissemination & reinforce use of Malaria in Pregnancy updated guidelines to & among all service providers including those in the private sector.

5) Encourage all health workers to capture and report information for mothers on Cotrimoxazole as part of IPTp.

6) Expedite the roll- out and adaptation of the new WHO ANC model.

THANK YOU

Questions are welcome