



## QUARTER 4-2024 MONITORING & EVALUATION ON MALARIA PROGRAM AND DRUG DISTRIBUTION REPORT WESTERN HIGHLANDS PROVINCE

Activities implemented in conjunction with the Western Highlands PHA staffs & the District Health Staffs.

Funded by the Global Fund through the Rotarian Against Malaria.

1<sup>st</sup> of December to 10<sup>th</sup> of December 2024



PMS (Ms. Salome Minar) signed the ANC LLIN delivery docket with the Malaria Eradication Officer for Jiwaka PHA at Kurumul, Jiwaka PHA yard before loading the ANC LLIN stocks for WH PHA.

*Q4-2024 Field Trip Report compiled by Ms. Agatha Gola-RMC*

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## EXECUTIVE SUMMARY

Unlike previous visits, this 4<sup>th</sup> quarter visit was short and brief. It was a 10-day visit for the Regional Malaria Coordinator to Western Highlands Province. However, the Provincial Malaria Supervisor continued the visit after the RMC's departure to POM office.

A total of 28 health facilities were visited out of the 46 reporting health facilities. Three (3) facilities are closed, 15 were unable to physically visit due to higher risk of car theft in Dei and Baiyer District.

**The main purpose of this visit is to;**

- distribute mRDTs, ACTs, Primaquine tablets and Antenatal Long- lasting insecticidal Nets to all reporting health facilities,
- do active stock rotation of antimalarial from one health facility to another, i.e. from low consumption rate to high consumption rate,
- run continuous quality initiative trainings to health facility's OIC and staffs/trainees where needed,
- check on Health Facility Malaria Registers and Antenatal bed net registers & collect,
- stocktake on all malaria commodities at the health centres and replenish where necessary,
- monitor medical supply stock cards for mRDT, ACTs, Primaquine tablets and update,
- check on how well the malaria data is entered into the e-NHIS tablet and whether all sections under malaria is correctly reported,
- malaria data verification and validation through the use of Monthly Malaria Report against the raw data in the reporting tools at the facility,
- coach OICs on how to enter malaria data correctly and completely under malaria sections of the e-NHIS tablet
- make sure e-NHIS monthly reports are sent on time and
- make sure intermittent preventative treatment in pregnancy (Fansidar prophylaxis for antenatal women) is implemented and documented in the ANC Registration book,
- issue new A3 size ANC Register Book to facilities that don't have it and
- liaise with Remote Sensing Team to solve discrepancies found in the e-NHIS tablet with regards to Malaria Program and also the general use and function of the tablet.

**BACKGROUND OF WESTERN HIGHLANDS PROVINCE**

Western Highlands Province is one of the seven provinces of Highlands Region and is the largest of all. Its capital is Mount Hagen. The total population according to the 2011 National Census was 362 850, which is a densely populated Highland province compared to others. It covers an area of 4299 km<sup>2</sup>.

Much of the land areas in Mul-Baiyer and Dei Districts are plain and the climate is warm.

Economy in the province is mainly generated through subsistence farming and Small-Medium Enterprises. General mindset of the inhabitants is business minded, self-reliant and goal oriented through perseverance.

Infrastructure is improving unlike before, however, some parts of Province still have deteriorating roads and bridges which hindered the health facility visits. Communication through mobile phones in few places in the province is difficult and unreachable due to poor network coverage. Unlike before due to the current political issues and infights in the province which pose a risk or prevent us from reaching the desired destination.

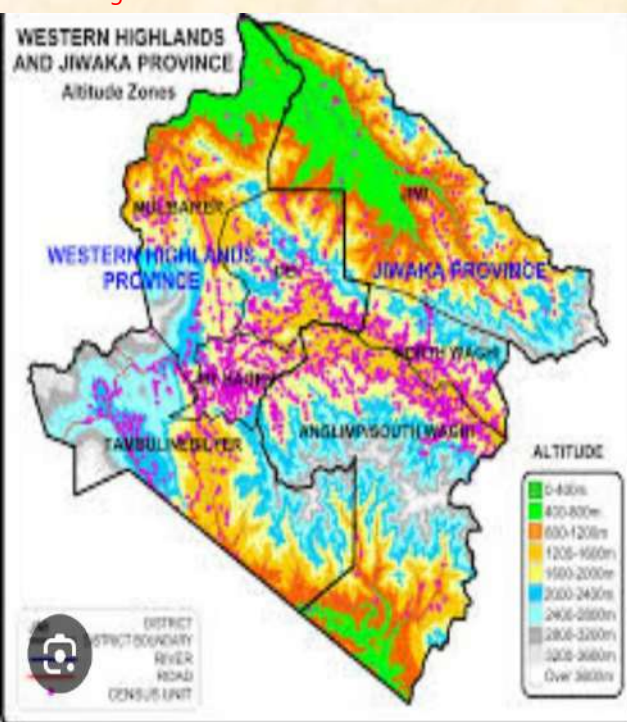
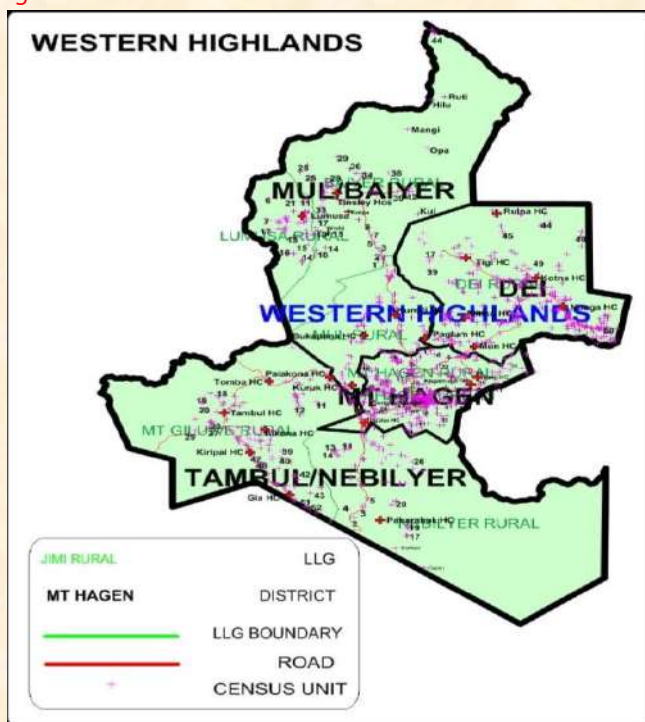
Tribal fights in the Dei district subsided, however, opportunists are still taking advantage of Government and NGOs’ vehicles and car theft is still alarming in this particular District which prevented us from visiting all the health facilities in that district when using Malaria Program Vehicles. It is much safe to visit health facilities with Hire vehicle and local drivers.

Malaria incidence in the province strongly depends on the altitude. Places located in the low altitudes of 900m and below especially in the low plains of parts of Dei district (Ruty Valley & Rulna) and Mul-Baiyer district (Tinsley Valley) have a lot of positive malaria cases registered. These were found to be locally transmitted according to malaria registers as well as discussions made with staffs from the health facilities of these malarial zones. However, due to the climate change as a result of global warming, places situated at higher altitudes are also having malaria infections both locally and imported cases as evident in the Health Facility Malaria Registers.

The province consists of 4 districts namely; Mul-Baiyer, Dei, Mount Hagen and Tambul-Nebilyer District and has a total of 46 coded health facilities which all are accessible by road.

Fig 1. Shows the boundaries of 4 Districts for WH Province

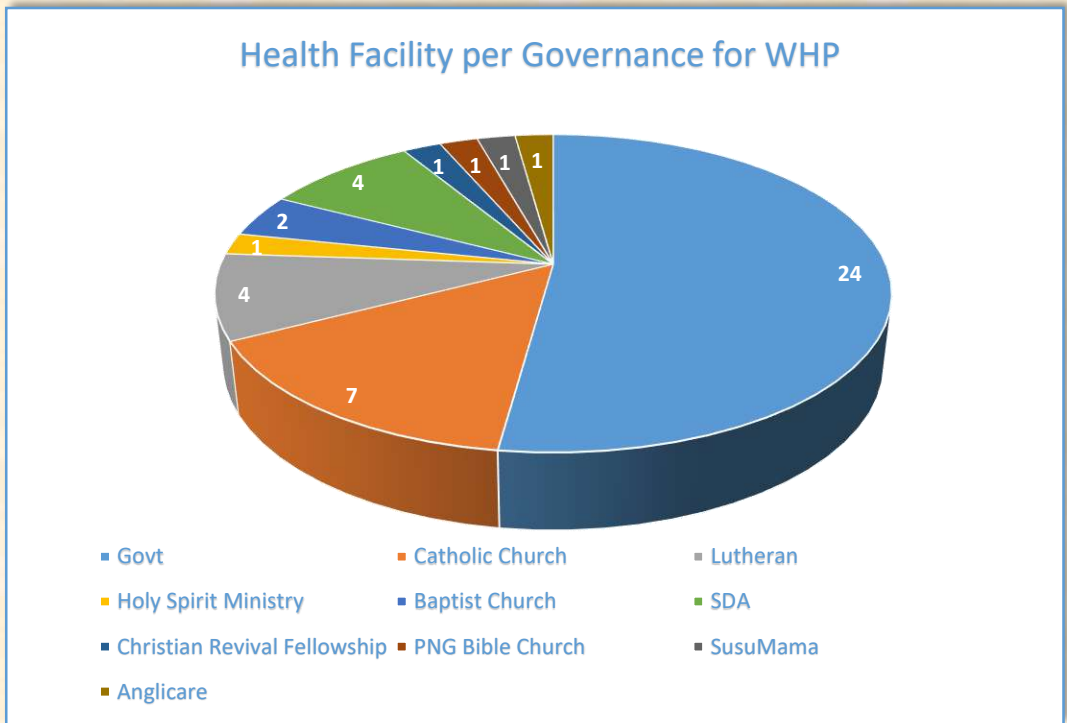
Fig 2. Shows the altitude zone for WHP.



**HEALTH SERVICES IN WESTERN HIGHLANDS PROVINCE**

Western Highlands Province has a total of 46 reporting health facilities. Of the 46 reporting health facilities and as per the District, Hagen Central has 12 reporting health facilities, Mul Baiyer has 15, Dei has 8 and Tambul Nebiliyer has 11. All these 46 health facilities are accessible by road. It is governed by both the Western Highlands Provincial Health Authority(Government) and Church Agencies.

Graph 1. shows the breakup of the 46 reporting health facilities as per the governance.



• **Government/Wester Highlands Provincial Health Authority**

The Government runs 52% (24 hfs) of the total reporting health facilities. These facilities are the Mt. Hagen General Hospital, Hagen Urban Clinic, Bukapena HC, Trolga HSC, Tambul HC, Alkena HSC, Paiakona HSC, Wakanom CHP, Kwinga CHP, Nengil CHP, Poi CHP, Nunga HSC, Pagli CHP, Kagamuga Urban Clinic, Tentenga HC, Baisu UC, Tipulga HSC, Atenga CHP, Tsinjipai CHP, Kombo CHP, Kanimerata CHP, Sanap CHP, Wagbel CHP and Ogelbeng CHP.

• **Catholic Health Services**

It is the second highest organization that runs 15%(7 hfs). The facilities under this are; Kuruk HSC, Kumdi HSC, Keripia HSC, Koibuga HSC, Rulna HSC, Mun HC and Rebiamul Urban Clinic.

• **Lutheran Health Services**

LHS runs 4 health facilities (9%) and they are Gia HSC, Kotna HC, Mukapeng CHP and Tiki HSC.

• **Seventh Day Adventist**

SDA also runs 4(9%) health facility and these are Togoba HC, Paglum HSC, Tomba HSC and Mitiku HSC.

• **Baptist Church**

Baptist Church runs 2(5%) health facility which are Tinsley HC and Laprambo CHP.

• **Holy Spirit Ministry**

This agency runs only 1(2%) health facility which is Bagl HSC.

•**Christian Revival Fellowship**

CRF also runs 1 health facility (2%) which is the Simbimale HSC in Baiyer District.

•**PNG Bible Church**

This agency also runs only 1(2%) facility which is the Pabarabuk HSC in Nebiliyer District.

**•SusuMama Organization**

This NGO runs only 1 clinic (2%) and that is SusuMama Urban Clinic in Hagen Town.

**•Anglicare**

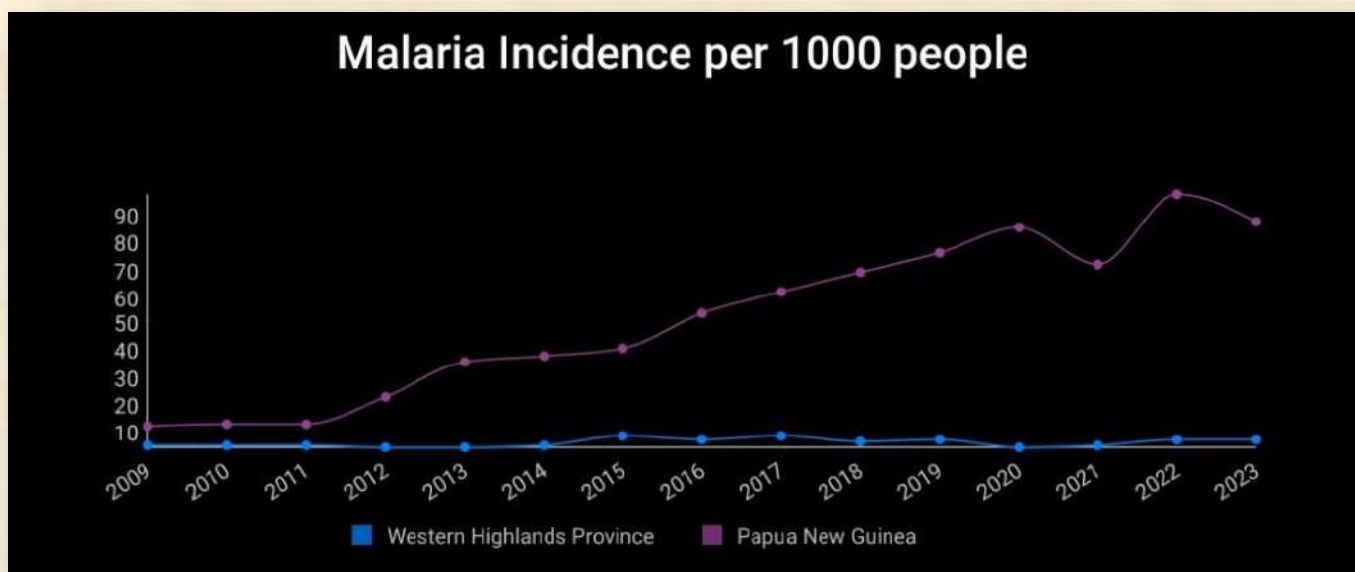
Anglicare also runs only 1 Clinic which is the Newtown Anglicare Urban Clinic.

**AID POSTS**

Western Highlands Province has 57 Aid Posts of which 7 are inactive while the 50 are active or functioning.

From observations, data analyses and interrogation with the OICs of reporting health facilities, most of the monthly reports from Aid Posts reach them late after submission of reports. One of the way forwards to capture all reports is to further introduce e-NHIS tablet to Community Health Posts and Aid Posts.

**Graph 2. Malaria prevalence rate for Western Highlands Province compared to the rest of PNG from 2009-2023.**



**Source: e-NHIS Western Highlands Province Health Indicators.**

**PURPOSE OF VISIT**

The purpose of this visit is to;

- distribute mRDTs, ACTs, Primaquine tablets and Antenatal Long- lasting insecticidal Nets to all reporting health facilities,
- do active stock rotation of antimalarial from one health facility to another, i.e. from low consumption rate to high consumption rate,
- run continuous quality initiative trainings to the Mt. Hagen General Hospital, health facility’s OIC and staffs/trainees where needed,
- check on Health Facility Malaria Registers and Antenatal bed net registers & collect,
- stocktake on all malaria commodities at the health centres and replenish where necessary,
- monitor medical supply stock cards for mRDT, ACTs, Primaquine tablets and update,
- check on how well the malaria data is entered into the e-NHIS tablet and whether all sections under malaria is correctly reported,
- malaria data verification and validation through the use of Monthly Malaria Report against the raw data in the reporting tools at the facility,
- coach OICs on how to enter malaria data correctly and completely under malaria sections of the e-NHIS tablet

- make sure e-NHIS monthly reports are sent on time and
- make sure intermittent preventative treatment in pregnancy (Fansidar prophylaxis for antenatal women) is implemented and documented in the ANC Registration book,
- issue new A3 size ANC Register Book to facilities that don't have it and
- liaise with Remote Sensing Team to solve discrepancies found in the e-NHIS tablet with regards to Malaria Program and also the general use and function of the tablet.

**Table 1. WESTERN HIGHLANDS PHA TEAM MET WITH:**

NAMES	POSITION	PHONE DIGITS	EMAIL ADDRESS
Salome Minar	Provincial Malaria Supervisor	73849037	Salome.minar@whhs.gov.pg
Sr. Nelly Newman	Provincial Family Health Coordinator	74551951	
Esther Kuya	Environmental Health Officer	71701979	

**TYPE OF TRANSPORT USED:**

**Table 2. Shows the vehicle used in the 4<sup>th</sup> quarter visit.**

Vehicle	Hire Vehicle
Vehicle Registration	CAU 559
Color	White
Type	Toyota Land Cruiser 5 Door & 10 seater
Registration Validity	
Safety Sticker Validity	
Duration of use	10 Days
Driver	Mr. Alphonse Ine
Contact	73478383

**HIGHLIGHTS OF Q4- 2024 RMC's VISIT**

**1. Health Facility Visits Summary for Quarter 4-2024.**

Table 3. shows the summary of the visit.

	Qtr 1	Qtr 2	Qtr 3	Qtr 4
<b>Total number HFs</b>	<b>46</b>	<b>46</b>	<b>46</b>	<b>46</b>
Total Number Accessible	33	33	33	33
Total Number Reached	38	36	40	28
% Coverage (Accessible)	115.2	109.1	121.2	84.8
% Coverage (Total HFs)	82.6	78.3	87.0	60.9

**2. Drug stock out situation:**

There were no major stock outs of mRDTs, ACTs & PQ in the 28 Health Facilities visited.

**3. Total mRDTs, ACTs & PQ distributed during Q4 visit:**

Table 4. Shows the total malaria commodities supplied to Western Highlands' health facilities during the 4<sup>th</sup> quarter visit.

Year	Quarter	Malaria RDT Kits	ACTs( blisters)	Primaquine Tablets
2024	4	8500 test kits	2000 blisters	20 000 tablets

#### 4. Update of Antenatal Long Lasting Insecticidal Nets.

RAM Net logistics delivered 3000 nets (60 bales) for WH PHA and is stored at the central storage container in Kurumul, Jiwaka PHA yard. So, during this visit, we got the whole 60 bales of nets to WH PHA and distributed to health facilities. Of the 60 bales, 57 bales were distributed while the balance of 3 are stored as the buffer stock for continuous distribution.

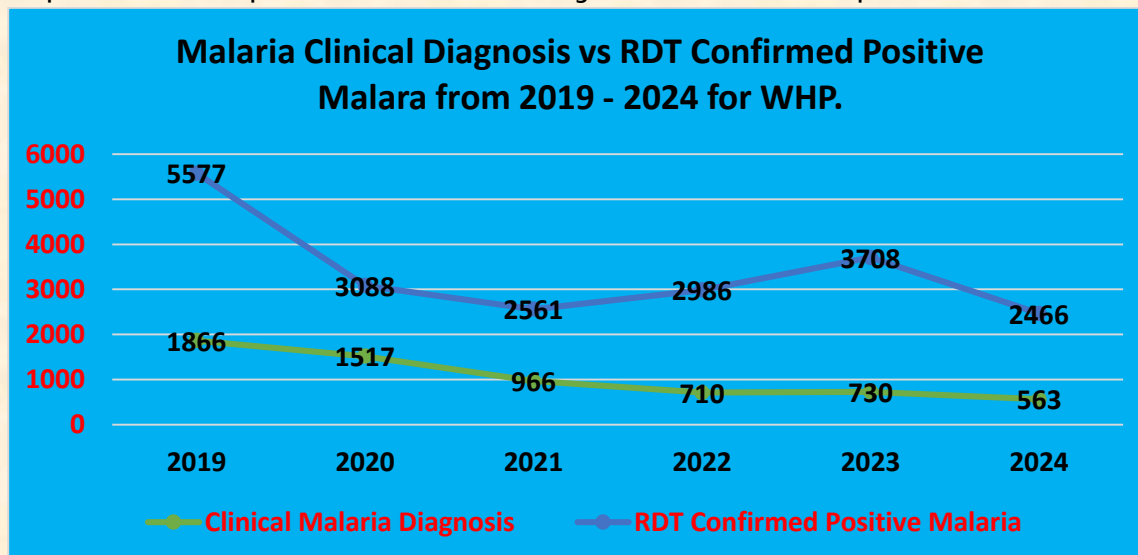
#### 5. Malaria Stock Update.

The RDTs, ACTs & Primaquine that were used for the distributions were from the Q3 -2024 buffer stocks and additional Q4 supplies from AMS/HAGEN (NDOH stocks).

	mRDT kits	ACT 6	ACT 12	ACT 18	ACT 24	PQ
<b>Buffer Stocks</b>	1125 kits	180 blisters	450 blisters	90 blisters	0 blisters	0 tablets
<b>Batch #</b>	H006B010D	HWE082248	B1APH004	HWE101337		
<b>Exp Date</b>	Sep-24	Nov-25	Oct-25	Nov-24		
	mRDT kits	ACT 6	ACT 12	ACT 18	ACT 24	PQ
<b>AMS/NDOH Stock</b>	10 325 kits	60 blisters	990 blisters	300 blisters	1950 blisters	50700 tablets
<b>Batch #</b>	H006C005D	3E02047	D1APH005	B1APH005	B1APH019	KE24147
<b>Exp Date</b>	May-25	Dec-25	Oct-26	Oct-25	Nov-25	Feb-27

#### MALARIA DATA UPDATES.

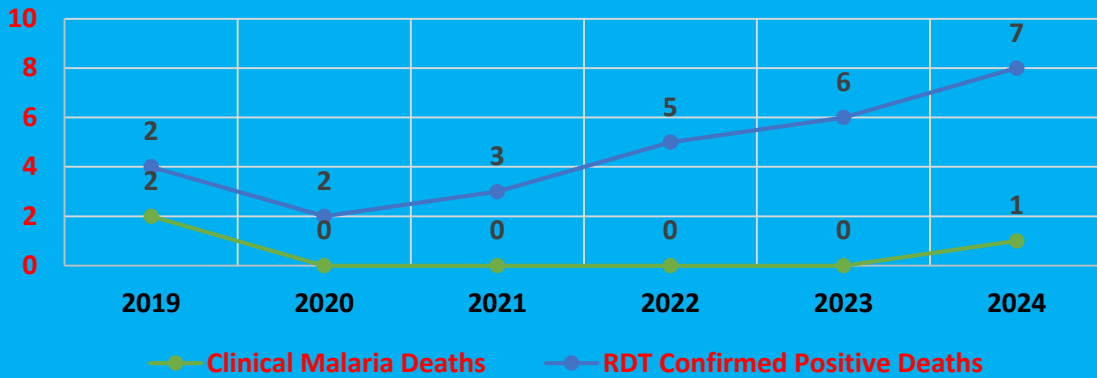
Graph 3. Shows a comparison of Malaria Clinical Diagnosis Vs Confirmed RDT positive Malaria Cases.



Source: e-NHIS Malaria Monthly Reports.

Graph 4. Shows a comparison between Malaria Clinical Deaths Vs Confirmed RDT Positive Deaths from 2020-2024.

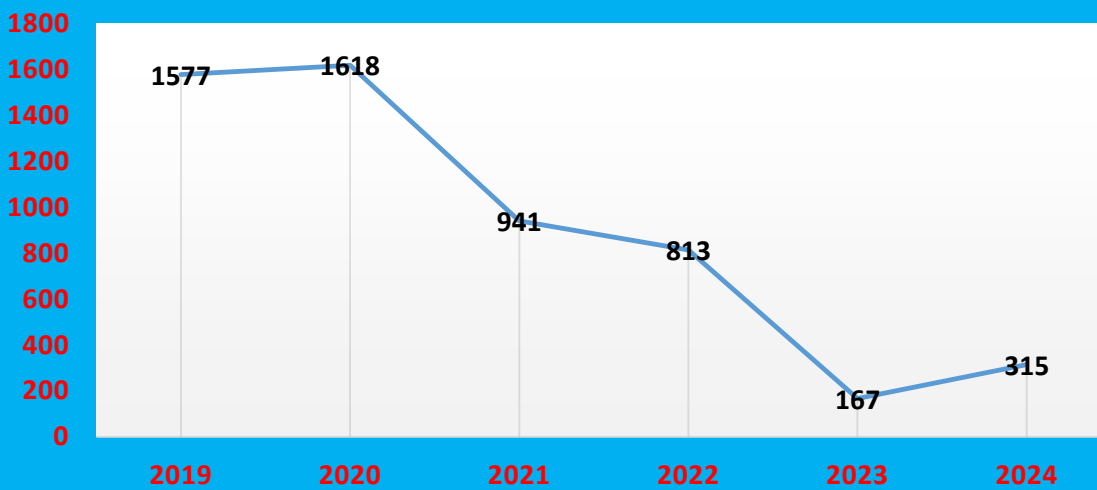
### Clinical Malaria Deaths vs RDT Confirmed Positive Malaria Deaths from 2019 - 2024 for WHP.



Source: e-NHIS Malaria Monthly Reports.

Graph 5. Projects the Malaria Microscopy Data from 2020 – 2024.

### Malaria Microscopy Data from 2019-2024 for WHP.



Source: e-NHIS Malaria Monthly Reports.

#### UPDATE ON MALARIA TREATMENT PROTOCOL FOR PNG

- ✓ Single dose Primaquine for positive Pf cases is implemented.
- ✓ 14-day Primaquine after completion of ACT for Non-Pf & Mixed Infections is implemented.
- ✓ ACT in first trimester is disseminated to OICs and staffs. However, most of them requested for a formal circular from the NMCP-NDOH to confirm and implement.
- ✓ Well versed with the administration of Artemether 40mg & 80mg.
- ✓ Many staffs are now using Artesunate 60mg injection for severe positive malaria cases after several onsite trainings on how to dilute and administer for both intramuscular and intravenous. Trainings will continue for the benefit of all other new staffs and trainees.
- ✓ 3 doses of fansidar for Antenatal women is implemented and documented in the A3 size ANC Register Book.
- ✓ Doxycycline prophylaxis for inbound travelers is disseminated. However, as mentioned by staffs, not many people seek for prophylaxis. People just travel and only visit health facilities when they feel ill.

- ✓ Staffs are aware of the 2<sup>nd</sup> line treatment of Malaria, however, most of them are not using as they don't have case that require 2<sup>nd</sup> line treatment and
- ✓ the contra-indications of Primaquine tablet is disseminated and staffs are aware of these.

### ACHIEVEMENTS

1. Visited more than 80% coverage of accessible health facilities.
2. NO MAJOR STOCK OUT of ANTIMALARIALS in the main Hospital and peripheral health facilities visited.
3. Major improvement on misreporting of Drug shortages especially RDT, ACTs and Primaquine. This is achieved through ongoing CQI trainings and coaching on e-NHIS tablet.
4. Constant decline in Malaria Clinical Diagnosis since 2020 till current.
5. **Malaria microscopy data is peaking up after the CQI trainings this year.**
6. Recording of Intermittent Preventative Treatment in Pregnancy in A3 size ANC Register book for those facilities that are using the A3 size ANC Register book.
7. Much improvement on updating of medical supply stock cards.

### KEY CHALLENGES

#### Health Facility Visits

- ✓ Unable to visit the 8 health facilities in Baiyer District due to the disgruntled man from Baiyer stole the WH PHA vehicle. Higher risk to travel to Baiyer as the tension is still high and the threaten to steal PHAs' vehicles.
- ✓ Medical Supply stock cards not updated in some facilities.
- ✓ Poor accountability of RDTs, ACTs & Primaquine in some health facilities.
- ✓ Malaria RDT registers not fully entered into the e-NHIS monthly report
- ✓ Few health facilities have issues with accountability of Antenatal Long-Lasting Insecticidal Nets.

### RECOMMENDATIONS

#### PHA

1. WH PHA to take ownership and ready to take on the Malaria Program coming next year as per the transition plan.
2. PMS to actively coordinate Malaria Program in the Province.
3. PMS to monitor the Malaria Microscopic sites to make sure monthly data reporting is consistent to improve the Malaria microscopy data.

#### RMC

1. Continue to train the PMS on the Malaria databases.
2. Continue working with the PHIO to improve Malaria Data.
3. Continue CQI trainings to the District Health Facilities.

## ACKNOWLEDGEMENT

I would like to sincerely thank the following important people, Departmental heads, organization and business sectors for making this trip a success. My word of gratitude to the;

1. Nation Department of Health – National Malaria Control Program.
2. Rotary Against Malaria – Regional Malaria Coordinator Program.
3. Western Highlands Provincial Health Authority Team.
4. The District Health Team.
6. All the staffs of the 28 reporting Health Facilities visited.
7. The driver, Mr. Alphonse Ine for safe driving.

**Cheers to everyone in the Fight Against Malaria!**

**Field Trip Report compiled by;**

**Ms. AGATHA GOLLA – Regional Malaria Coordinator for Western Highlands Province.**