

**NATIONAL MALARIA CONTROL PROGRAM
ROTARIANS AGAINST MALARIA
MADANG PROVINCE
JANUARY 25TH – FEBRUARY 26TH 2024**

QUARTER ONE FIELD TRIP REPORT

Malaria Coordinator: Brenda Fisaura
Destination: Madang Province
Date travelled from Lae to Madang: 25th January 2024
Date Returned to Port Moresby: 26th February 2024
Nights away from the office: 32 nights

Vehicle Use: Program Vehicle LBW 233
PHA Driver attached: Peter Soalili

RAM Officers engaged: Winni Rambayipma (Provincial Malaria Officer)
Purpose of Travel: Q1 Health Facility Supervisory Visit, distribution of RDTs/ACTs & ANC nets



L-R: PDCO Mr. Walgun, RMC Brenda Fisaura, PMS Winnie Rambayipma, HMMOs Judith Demie and Edna Curtis

OBJECTIVE:

This is the first quarter trip of 2024, to carry out the routine Malaria Health Facilities Supervisory visits and Drug Distribution in Madang Province.

The main objectives;

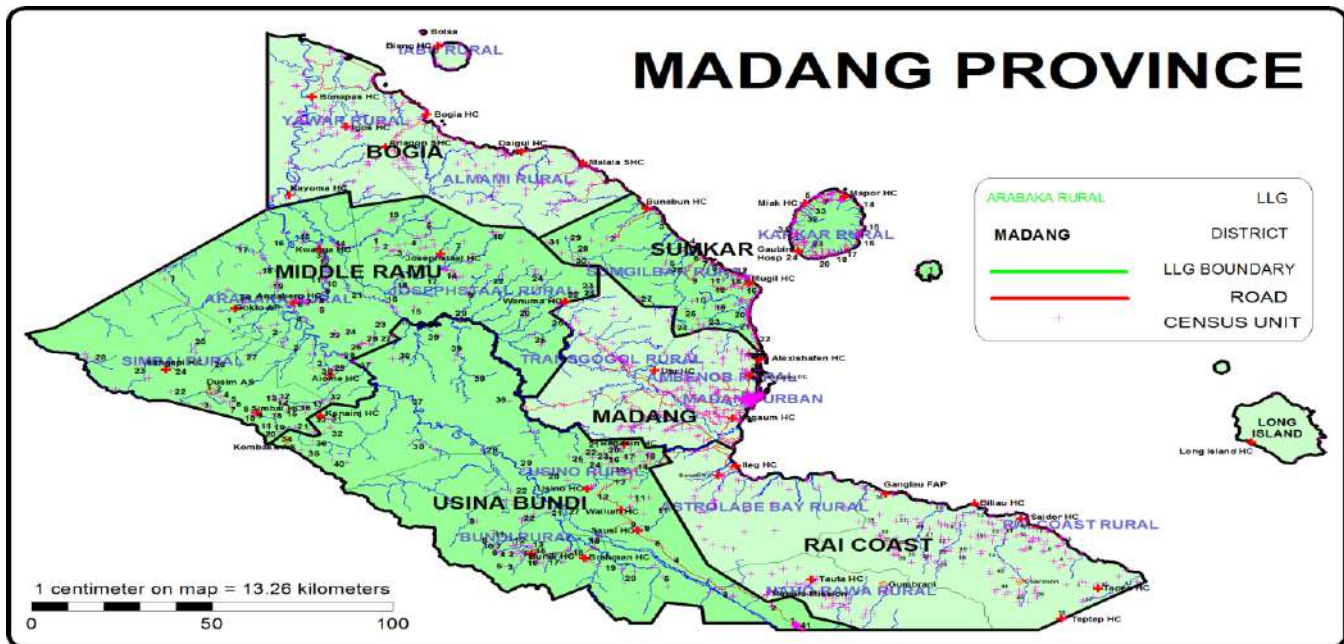
- Visit all accessible HF's and ensure that there is adequate supply and **NO STOCK OUT** of Malaria Rapid Diagnostic Test (mRDT) kits, Artemisinin-based Combination Therapy (ACT), Primaquine (PQs) and other malaria commodities including Antenatal Care (ANC) nets in all HF's,
- Ensure that all Malaria suspected cases are correctly tested and diagnosed and complete treatment is given to those positive confirmed cases as per National Malaria Treatment Protocol. And that all data is recorded and Reported timely on the National Health Information System (NHIS),
- Ensure that inaccessible HF's still receive their share of malaria commodities based on reports and consumption needs despite not been visited,
- Strengthen Continuous Quality Improvement (CQI) activities in the province

1. BACKGROUND INFORMATION OF MADANG PROVINCE

Madang province is divided into six main districts (Madang, Sumkar, Bogia, Middle Ramu, Usino Bundi and Rai Coast) and currently having a total of forty-five registered functional health facilities which provide health services to the entire population. There are also aid posts, clinics and community health posts located in the catchments which operate directly under the main health centres. The health care service delivery is provided by a combination of government, private facilities, church facilities and Non-Government Organisations (NGO).

Geography is a major challenge in terms of accessibility to the health facilities. The two main difficult to reach districts in Madang province are Middle Ramu and Rai Coast, where 80-90% of health facilities are only reachable by air or long hours of boat ride and tracking which depends heavily on the weather conditions. Other difficulties include poor road infrastructure especially in the inlands of Bogia and Usino Bundi districts during wet season. Refer to map of Madang below.

Figure 1. Map of Madang Province



2. DISCRPTIONS OF FACILITIES IN EACH DISTRICTS

Madang District

There are total of 9 reporting facilities in Madang district currently. They are all accessible by road and are functioning. These facilities include Alexishafen HC, Jomba UC, Madang HP, Madang Town UC, Utu SC, Yagaum HC, Danben SC, Baitabag SC and Sisiak UC. All facilities were visited during this quarter and the malaria commodities were supplied accordingly.

Sumkar District

Sumkar district has 7 reporting and currently functioning facilities. Two facilities, Mugil HC and Bunabun SC is accessible by road. The remaining 5 facilities are accessed by sea. Kulubob SC, Mapor SC, Miak SC and Gaubin SC is on Karkar Island and Bagabag SC is on Bagabag Island which is south-west from Karkar Island. All facilities were visited and stocks replenished.

Bogia District

This district has a total of 8 registered reporting facilities. Currently 7 facilities (Ariangon SC, Bieng SC, Bogia HC, Bunapas SC, Hartzfeldhaven SC, Malala SC and Igos SC) are functioning. Kaiyoma SC is currently unmanned therefore temporarily closed. There are still no officers assigned to this facility. Bieng SC is the only facility on Manam Island otherwise the rest is accessible by road. It takes more than 3 hours to reach these facilities from the PHA and so the team travels to Bogia station and overnight in order to visit the facilities on time and conduct work efficiently. This quarter, all the facilities were reached and malaria commodities were supplied.

Middle Ramu District

Middle Ramu District is located south-west of Madang Province and is a very challenging district in terms of accessibility. It takes more than 6 hours to reach anyone of the registered functioning facilities in the district. There are total of 8 reporting facilities, Aiome HC, Annaberg HC, Josephstaal HC, Kwanga SC, Sangapi SC, Simbai HC, Wanuma SC and Katiati SC. Sangapi and Simbai SCs are fly out areas. Malaria burden is not so much an issue due to being located in the higher altitudes. Their drugs are consigned through MAF from Madang to Simbai HC and to Sangapi SC. Aiome, Annaberg and Kwanga SHC are accessed through more than 6hours boat rides whilst Josephstaal, Wanuma and Katiati SC are through deteriorated road that takes more than 6 hours by vehicle to reach as well from PHA. For this quarter, all mentioned facilities collected their quarter one supplies at the Provincial Medical Transit Store.

Usino Bundi District.

This district has a total of 8 reporting facilities which are currently functioning. The facilities are Begesin SC, Brahman SC, Bundi HC, Gusap HC, Ramu Sugar SC, Sausi HC, Walium SC and Usino SC. Out of these facilities Begesin and Bundi are inaccessible due to deteriorated road condition which makes it impassable during wet season. It takes more than 2 hours to reach these 2 facilities so their supplies are always picked up by the health facility staffs in town. The rest of the facilities are road accessible even though it takes 3 -4 hours to reach by road. The team usually spends a night at Usino district to complete all accessible facilities. All 6 accessible facilities were visited this quarter and malaria stocks were replenished. The two inaccessible facilities have received the quarter 1 supplies as well for this year.

Raicoast District

There are total of 6 facilities (Saidor HC, Teptep SC, Ileg SC, Tapen SC, Biliau SC and Bawak SC) currently functioning. Of these 6 facilities, Bawak and Ileg SC are easily accessible by road between 2 to 3 hours' drive. Ileg SC can also be accessed by sea for less than 2 hours. For this quarter only Bawak SHC was visited but Ileg SC was not visited because of continuous rain which led to flooded banks. Two attempts on different dates were made but still during those dates the river was too strong to cross over. Saidor and Biliau SC can be accessed by boat but it takes 3-4 hours to reach them. Both can be visited if the sea is not rough. This quarter the weather did not permit the team to visit the two said facilities. However, their Q4 supplies were picked up in town by the officers.

Tapen SC on the other end can be reached by taking 2-3 hours' boat ride from Madang town to Malalamai and then whole day trekking. This quarter supplies were packed and OIC picked up and tracked with the supplies up to the facility with the help of local trackers. Teptep SC however is inaccessible from Madang Province. It is through MAF flights that serves the route to Teptep SC from Lae Morobe Province that the Malaria team in Lae assist to consign commodities on the said flight. Teptep is situated at a higher altitude and that is why the malaria burden is very low. Drugs are only supplied when the stock on hand is low and most times only two times in a year the stocks are being supplied. The OIC of Teptep HC have travelled into Madang and confirmed to pick up his Q1 supplies.

3. SUMMARY OF SUPERVISORY 2024 Q1 HEALTH FACILITY VISIT

Table1. Distribution of Health Facilities in the Province, their accessibility and the dates the team visited.

DISTRICT	HEALTH FACILITY	AGENCY	ACCESSIBILITY STATUS	ACCESSIBILITY	DATE OF VISIT
BOGIA	ARIANGON SC	Catholic Health	Accessible	Road	09/02/24
BOGIA	BIENG HSC	Catholic Health	Accessible	Road then Sea	10/02/24
BOGIA	BOGIA HC	Government	Accessible	Road	10/02/24
BOGIA	BUNAPAS HC	Government	Accessible	Road	09/02/24
BOGIA	HARTZFELDHAVEN HC	Government	Accessible	Road	27/01/24
BOGIA	MALALA SC	Catholic Health	Accessible	Road	27/01/24
BOGIA	IGOS SC	Government	Accessible	Road	09/02/24
MADANG	ALEXISHAFEN HC	Catholic Health	Accessible	Road	05/02/24
MADANG	JOMBA UC	Government	Accessible	Road	26/01/24
MADANG	MADANG HOSPITAL	Government	Accessible	Road	07/02/24
MADANG	MADANG TOWN UC	Government	Accessible	Road	26/01/24
MADANG	UTU SC	Catholic Health	Accessible	Road	06/02/24
MADANG	YAGAUM HC	Lutheran Health	Accessible	Road	06/02/24
MADANG	DANBEN SC	Government	Accessible	Road	29/01/24
MADANG	BAITABAG SC	Lutheran Health	Accessible	Road	29/01/24
MADANG	SISIAK UC	Government	Accessible	Road	14/02/24
MIDDLE RAMU	AIOME HC	Government	Inaccessible	Road then river	Not visited
MIDDLE RAMU	ANNABERG HC	Catholic Health	Inaccessible	Road then river	Not visited
MIDDLE RAMU	JOSEPHSTAAL HC	Catholic Health	Inaccessible	Road	Not visited
MIDDLE RAMU	KWANGA HSC	Catholic Health	Inaccessible	Road then river	Not visited
MIDDLE RAMU	SANGAPI HSC	Nazarene Health	Inaccessible	Air	Not visited
MIDDLE RAMU	SIMBAI HC	Government	Inaccessible	Air	Not visited
MIDDLE RAMU	WANUMA HSC	Government	Inaccessible	Road	Not visited
MIDDLE RAMU	KATIATI HSC	Catholic Health	Inaccessible	Road	Not visited
RAICOAST	SAIDOR HC	Government	Inaccessible	Sea than road	Not visited
RAICOAST	TEPTEP HSC	Government	Inaccessible	Air	Not visited
RAICOAST	ILEG SC	Government	Accessible	Road	Not visited
RAICOAST	TAPEN HSC	Lutheran Health	Inaccessible	Road or Sea	Not visited
RAICOAST	BILIAU SC	Lutheran Health	Inaccessible	Sea	Not visited
RAICOAST	BAWAK HSC	Government	Accessible	Road	12/02/24
SUMKAR	BAGBAG HSC	Lutheran Health	Accessible	Road then Sea	15/02/24
SUMKAR	BUNABUN SC	Government	Accessible	Road	30/01/24
SUMKAR	GAUBIN HC	Lutheran Health	Accessible	Road then Sea	15/02/24
SUMKAR	MIAK HC	Government	Accessible	Road then Sea	16/02/24
SUMKAR	MUGIL HC	Catholic Health	Accessible	Road	30/01/24
SUMKAR	MAPOR SC	Lutheran Health	Accessible	Road then Sea	16/02/24

SUMKAR	KULUBOB/KAVAILO SC	Government	Accessible	Road then Sea	16/02/24
USINO BUNDI	BEGESIN HC	Lutheran Health	Inaccessible	Road	Not visited
USINO BUNDI	BRAHMAN SC	Government	Accessible	Road	01/02/24
USINO BUNDI	BUNDI HC	Government	Inaccessible	Road	Not visited
USINO BUNDI	GUSAP HC	Government	Accessible	Road	01/02/24
USINO BUNDI	RAMU SUGAR LTD SC	Government	Accessible	Road	01/02/24
USINO BUNDI	SAUSI SC	Evangelical Brotherhood Church (EBC)	Accessible	Road	02/02/24
USINO BUNDI	WALIUM HC	Government	Accessible	Road	03/02/24
USINO BUNDI	USINO HC	Government	Accessible	Road	03/02/24

Table 2. Shows the coverage rate for both accessible and overall facilities in Madang Province.

	Quarter 1
Total number of HFs	45
Total Accessible Facilities	31
Total Inaccessible Facilities	14
Total Accessible Facilities Visited	30
Total Facilities Visited	30
% Coverage (Accessible)	97%
% Coverage (Total Facilities)	67%

As per the summarized table above, the target for this quarter was to visit all 31 accessible facilities. Unfortunately, due to situation beyond our control we could not reach the target set and as a result this gives an overall coverage rate of 67% of total facilities visited and 97% coverage rate for accessible facilities in the Province.

Table 3: Pan for hard to reach facilities

No.	Health Facility	Q4 supplies status	Reasons for not conducting a single facility visit
1	Kaiyoma SC	Facility currently unmanned so no supplies allocated	No staffs available - more than 6 hours travel to reach the facility
2	Aiome HC	Health facility staff picked up Q1 supplies already when travelled in to town and followed up on AMS supply at the transit store	Inaccessible: Travel 3 -4 hours by road from Madang town to the boat dock area. Then 6 hours travel by boat to the Aiome station boat docking area. Another 30 minutes car ride to the HC
3	Annaberg HC	Health facility staff picked up Q1 supplies already when travelled in to town and followed up on AMS supply at the transit store	Inaccessible: Travel 3 -4 hours by road from Madang town to the boat dock area. Then 6 hours travel by boat. Very expensive to do a single visit. Expense will be less if there is any integrated patrol activities with the PHA
4	Josephstaal HC	Q1 supplies already picked up from Medical Transit store	Inaccessible: Travels 6-7 hours to reach the facility. Road condition very bad. Almost impassable during the wet season
5	Kwanga SC	OIC picked up Q1 supplies already	Inaccessible: Travel 3 -4 hours by road from Madang town to the boat dock area. Then 6 hours travel by boat. Very expensive to do a single visit. Expense will be less if there is any integrated patrol activities with the PHA
6	Simbai HC	Q1 supplies consigned through MAF and OIC received.	Inaccessible: Can only be visited with small planes.

7	Wanuma SC	OIC has been notified. He will pick up the Q1 supplies as he's currently in town	Inaccessible: Travels 6-7 hours to reach the facility. Road condition very bad. Almost impassable during the wet season
8	Katiati SC	Q1 supplies already picked up from Medical Transit store	Inaccessible: Travels 6-7 hours to reach the nearest facility which is Josephstaal and then track for 3-4 hours. Road condition very bad. Almost impassable during the wet season
9	Saidor HC	Q1 supplies already picked up from Medical Transit store	Inaccessible: 3 -5 hours to travel by sea. Due to law and order issues the team did not manage to visit at any one time
10	Teptep SC	OIC is in town. Q1 supplies are packed and staff will pick up when set to travel out	Inaccessible: Can only be visited with small planes.
11	Tapen SC	Q1 supplies already picked up from Medical Transit store by the Officer in Charge	Inaccessible: 5-6 hours' boat ride then whole day trekking.
12	Biliau SC	Q1 supplies already picked up from Medical Transit store	Inaccessible: 3 -5 hours to travel by sea. Due to law and order issues the team did not manage to visit at any one time
13	Begesin SC	Q1 supplies already picked up from Medical Transit store by the Officer in Charge	Inaccessible: 3-4 hours' car travel the and hour trekking. Currently the road has collapsed. Needed road maintenance.
14	Bundi HC	Q1 supplies already picked up from Medical Transit store by the Officer in Charge	Inaccessible: 6-7 hours travel by car going up a mountain. Road condition deteriorated and very risky
15	Sangapi SC	Q1 supplies consigned through MAF and OIC received.	Inaccessible: Can only be visited with small planes.

4. RDTs AND ACT SUPPLIES PROCURED REPORT

This quarter, the 4-month GF supplies for Madang Province were consigned on time into the Province. Total of 44 cartons of ACTs only were received in perfect condition on the 31/01/2024.

Table 4: Provided below is the receiving quantity. RDTs were not supplied due to sufficient stock on hand.

CARTON #	NUMBER OF CARTONS	ITEM	QUANTITY PER CARTON (box)	TOTAL QUANTITY	TOTAL IN BASIC UNITS (blisters)	BATCH #	SOURCE	EXPIRY DATE
1	1	ACT 12	48	48	1440	72541781/6	GF	02/2025
2 TO 16	15	ACT 18	24	360	10,800	7254366	GF	01/2025
17 TO 42	26	ACT 24	24	624	18,720	7254366	GF	01/2025
43	1	ACT 18	4	4	120	7254366	GF	01/2025
		ACT 24	16	16	480	7254366	GF	01/2025
44	1	ACT 12	33	33	990	72541781/6	GF	02/2025
		ACT 16	18	18	540	7254175	GF	12/2024

Table 5: Quantity distributed per facility

DATES	DESCRIPTION	RDT	ACT 6	ACT 12	ACT 18	ACT 24	PQ 7.5mg	PQ 13.2 mg
04/01/2024	BUNABUN HSC	0	0	0	0	24	0	0
04/01/2024	LONG ISLAND	0	0	5	0	8	0	0
04/01/2024	BOGIA	0	0	0	0	48	0	0
04/01/2024	BOTOLA	80	5	10	7	24	0	0
09/01/2024	JOMBA U/CLINIC	80	0	0	0	0	0	0

12/01/2024	ALEXISHAFEN	80	14	14	8	24	0	0
15/01/2024	ARONIS A/POST (Mugil Catchment)	40	0	0	0	0	0	0
15/01/2024	RD FISHING (Alexishafen Catchment)	80	0	0	0	24	0	0
15/01/2024	TAUTA HSC	40	0	5	0	5	0	0
16/01/2024	SAIDOR HC	120	0	0	0	0	0	0
16/01/2024	HARTZFELDHAFEN	120	0	10	0	24	0	0
16/01/2024	BOGIA	160	0	0	0	0	0	0
16/01/2024	MALALA	120	0	10	0	11	0	0
16/01/2024	SISIAK U/CLINIC	80	0	0	0	0	0	0
18/01/2024	GAI A/POST (Walium Catchment)	0	0	6	0	0	0	0
18/01/2024	ARIANGON	40	0	6	0	24	0	0
19/01/2024	TOKAIN A/POST (Bunabun Catchment)	40	0	0	0	0	0	0
26/01/2024	Madang Urban Clinic	80	0	0	0	0	0	0
27/01/2024	HARTZFELDHAFEN	0	10	10	0	10	0	0
27/01/2024	MALALA	0	9	0	0	24	0	0
29/01/2024	MODILON HOSP	40	4	4	0	9	0	0
29/01/2024	DANBEN	80	10	10	0	15	0	0
30/01/2024	BUNABUN HSC	40	10	10	0	8	0	0
30/01/2024	MUGIL	40	10	10	0	10	0	0
30/01/2024	IGOS	40	10	10	0	10	0	0
31/01/2024	BOGIA	80	10	10	24	48	0	0
31/01/2024	BAGABAG	0	3	3	0	3	0	0
31/01/2024	UTU	80	10	10	24	24	0	0
01/02/2024	Madang Private Surgery	0	3	3	3	5	0	0
01/02/2024	Yagaum	80	4	18	24	48	0	0
01/02/2024	BRAHMAN	40	5	5	6	24	0	0
01/02/2024	GUSAP	80	10	12	24	24	0	0
01/02/2024	RAIL	0	3	5	8	24	0	0
02/02/2024	SAUSI	0	7	6	8	24	0	0
03/02/2024	WALIUM	80	5	5	8	24	0	0
03/02/2024	USINO	80	7	7	10	24	0	0
05/02/2024	ILEG	40	6	6	7	12	0	0
06/02/2024	IMR	160	10	10	24	24	0	0
07/02/2024	MODILON HOSP	80	15	20	24	48	0	0
07/02/2024	BILLIAU	80	3	10	8	19	0	0
09/02/2024	ARIANGON	40	5	5	8	12	0	0
09/02/2024	IGOS	40	5	5	8	12	0	0
09/02/2024	BUNAPAS	40	5	5	10	12	0	0
09/02/2024	AIOME	40	3	3	8	10	0	0
10/02/2024	BIENG	80	10	10	10	24	0	0
12/02/2024	BAWAK	80	12	12	24	24	0	0
13/02/2024	ANNABERG	40	3	3	10	12	0	0
13/02/2024	SAIDOR HC	80	6	6	8	24	0	0
13/02/2024	ALEXISHAFEN	80	0	0	0	0	0	0
13/02/2024	LSON CLINIC	10	1	2	0	5	0	0
13/02/2024	JOSEPHSTAAL	40	6	6	10	12	0	0
14/02/2024	SISIAK U/CLINIC	40	10	10	5	24	0	0
14/02/2024	ALESSANDRO (DWU) CLINIC	40	5	5	1	8	0	0
14/02/2024	SANGAPI HC	40	4	4	4	4	0	0
15/02/2024	KATIATI	40	5	5	10	12	0	0

15/02/2024	GAUBIN RH	80	10	10	5	24	0	0
16/02/2024	KULUBOB	80	10	10	5	24	0	0
16/02/2024	MAPOR	40	10	10	4	25	0	0
16/02/2024	MIAK	40	10	10	5	24	0	0
16/02/2024	MUGIL	80	10	10	0	24	0	0
21/02/2024	TAPEN	40	5	5	10	12	0	0
21/02/2024	SIMBAI	40	4	4	4	4	0	0
21/02/2024	BRAHMAN	80	0	0	0	0	0	0
22/02/2024	HARTZFELDHAFEN	40	2	10	0	12	0	0
22/02/2024	BEGESIN	0	0	10	0	14	0	0
23/02/2024	BUNABUN HSC	80	0	14	0	10	0	0

This quarter few facilities reported nil stock of ACTs and RDTs and this was confirmed during the facility visit but the stocks ran out for only less than 2 weeks. There was sufficient buffer stock available at the Provincial Medical Transit Store but responsible health staffs at the facility level did not request for stock replenishment on time. Most of the remaining facilities in the Province had few stock available (less than a week's supply) upon the team's visitation. All facilities were supplied with 1 to 2 months' supply of stock. Due to poor accountability of drug use at all facilities as well as critical stock of GF ACTs the supplies are cut down so we can monitor the usage thoroughly.

5. SUMMARY OF FINDINGS

a) Stock Situation

- **Stock Management**

Most of the facilities visited are not up to date in keeping stock cards maintained despite continuous emphasis on the importance of keeping track of commodities. Updating stock cards are often seen as an extra work load to maintain. Only a few facilities such as Baitabag Clinic, Jomba Clinic, Madang Urban Clinic, Bunabun HC, Hartzfeldhaven SC, Bogia HC, Gaubin District Hospital, Kulubob SHC, Miak HC, Usino SC, Walium HC and Rail Clinic are constantly maintaining stock cards.

No stock rotation was done as all stocks supplied were used on time. However, there were found to be no malaria injectable on the shelves in many facilities. Almost all facilities have not received the main orders from AMS in the past 4-5 months. However, there were no major stock out of ACTs in the facilities. Modilon Hospital only were not replenished with ACTs sooner due to outstanding NHIS monthly reports for the past 5 months. Due to poor performance in submission of monthly NHIS reports, the malaria team are advising facilities with this poor performance to step up or supplies will be reduced. This has indeed resulted in few facilities performing poor in the past taking responsibility and improving.

- **Antenatal Care Nets**

The continuous LLIN distribution to vulnerable group includes; ANC, boarding schools, prisons and displaced populations. The distribution of LLINs to all antenatal clinics in Madang is ongoing and the team ensures that each distribution is consistent without disruption. Accountability of the nets distributed to pregnant ladies at the facility level is still an issue. The team have since taken a step in ensuring that facilities requesting for new bales of nets should do so with submission of the antenatal registers to confirm and account for previous nets issued out before any new stock of bales can be supplied.

The opening balance for this year 2024 is **4,448 nets (89 bales of 50 nets each and 46 loose)**. From January up till current, the team have distributed a total of **1,650 nets (33 bales)**. The current stock on hand at the end of RMC Q1 visit was **2,798 nets (56 bales of 50 nets each and 46 loose nets)**. All nets are expected to be distributed to all facilities providing ANC service by mid this year.

No boarding schools were supplied with nets this year as currently there is limited stock of LLINs available. Once new stock is being supplied then boarding colleges as well as prisons will be included.

b) Intermittent Preventative Treatment in Pregnancy (IPTp)

Intermittent Preventative Treatment of malaria in pregnancy with Sulfadoxine-pyrimethamine (Fansidar) is the current ongoing prophylaxis as per World Health Organization (WHO) guidelines. All facilities providing antenatal care are supplying pregnant woman with a total of 3 doses of Fansidar during antenatal care, spaced one month apart after 16 weeks of being pregnant till delivery.

The first dose only however is captured in the ANC Care Register Book at all clinics. The rest of the doses instead are not recorded in the clinic (facility's) register book but instead in the individual client's book thus it is difficult to track the doses given to pregnant woman. Currently in all facilities visited there is sufficient stock of Fansidar still available.

c) Malaria Microscopy

There are only 6 facilities, Modilon Hospital, Yagaum HC, Alexishafen HC, Ramu Sugar SC, Gusap HC and Gaubin SC whom are performing Malaria Parasite Slides Examination in the Province. Madang District has 3 facilities, Usino Bundi district has only 2 facilities and Sumkar District with only 1 facility but this facility is on Karkar Island. Bogia District, Raicoast District and Middle Ramu District have no microscopy for MPS and this is a challenge for cases which needs confirmation with MPS. There is obviously a decline in Malaria Parasite Slides (MPS) performance due to non-availability of reagents at the facility level but it can also be said that more testing is done with RDT thus microscopy has reduced. Only few cases with continuous fever with a negative result from RDT are usually further tested using the MPS.

All staffs performing MPS at these mentioned facilities do take part in the External Quality Assurance (EQA) program in which they are expected to send required number of slides every quarter to Central Public Health Laboratory (CPHL). There is however poor feedback response from CPHL to provide timely competency rate of each staff thus few staffs competency is always questioned.

All microscope at each facility are in good condition and there are sufficient reagents and slides available during our visit.

d) Malaria School Surveys

This year the school surveys will be conducted again and the Provincial Malaria Supervisor will be taking the lead in this. This survey will be conducted in both the dry and wet season targeting a total of 12 schools. Two schools in each of the districts will be surveyed. The schools to be surveyed will be the same ones surveyed last year as they are the selected sentinel sites for the ongoing survey. The surveys for this year will be conducted in April and in October

6. Home Based Management of Malaria (HMM)

There are a total of 16 reporting facilities with the CMV program currently running under. These facilities are Brahman HC, Walium HC, Usino SC, Sausi SC, Bawak SC, Hartzfeldhaven SC, Bogia HC, Malala HC, Mugil HC, Bunabun SC, Baitabag SC, Igos SC, Ariangon SC, Bieng SC, Mapor SC and Kulubob SC. Since the introduction of the HMM program in 2020;

- There is currently 177 Community Malaria Volunteers operating as of 2023 Q4 visit report (Both active and inactive)
- A total of 41 volunteers have dropped out from the last supervisory visit in November 2023

This year 2024, a target of 150 volunteers will be trained before the end of June. This target was from last year 2023 but was not achieved therefore prioritized for this year. Currently no supervisory visit for this quarter has been done as yet, but the plan is still underway for the visits to be conducted before the end of this quarter.

Although HMM program has had a tremendous effect on the disease burden in the catchment areas that this program has been rolled out, it is the tracking of HMM datas in the NHIS that is seen to be an issue. Most particularly;

- Individual CMV datas that are submitted late to facility OICs long after the facility submits its monthly NHIS report is often not monitored/ included and in most cases the datas are not captured eventually.
- There is no field in the NHIS specifically for CMV datas thus we cannot see the actual data from CMVs alone and from facility itself as well.

7. Hospital Visit

In PNG almost all of the Hospitals have issues in maintaining consistent reporting of malaria datas. Modilon Hospital is one of the facilities performing very poorly in completeness and timeliness of reporting monthly NHIS reports. This quarter the team did the usual routine visit to all wards to check up on malaria reporting tools and assess datas collected

- Medical Records

The in-charge of Medical records with her team are always on their toes every end of the month to collect all reports from each sectional heads to compile overall NHIS report however there is still issues as most sectional heads do not submit report on time thus it contributes to the delay in completing the NHIS reports on time to submit to the PHIO. The required date of NHIS submission is every 7th of the new month, however

Modilon Hospital always submits late. The malaria team are now supplying the required quarterly supplies to the Hospital if no outstanding NHIS reports are noted.

- Laboratory

The laboratory is performing both MPS as well as RDT. Both the register books were available and the data are entered correctly for each patient tested. All reagents as well as slides are available for testing and there was no major stock out. The white and yellow pages of previous months were collected during the visit. The monthly summary reports are always sent on time to the Medical Records.

- Pharmacy

The pharmacy is kept tidy with well displayed drugs on the shelves however the space is very small and often cartons take up the space between the rows for officers to access drugs freely and safely. Stock take is done and drugs are kept in order. The only issue noted is the late submission of monthly summary report to the Medical records for NHIS compilation. This quarter visit the Medical Records officers were constantly following up on the outstanding missing months reports in order to compile and complete the outstanding reports for previous more than 2 months' reports. The malaria team are now supplying the required quarterly supplies to the Hospital if no outstanding NHIS reports are noted.

- Wards

All wards visited that perform RDT in their unit includes Antenatal Care Clinic, Paediatric Ward, Accidents & Emergency, Children's Out Patient Department, Gynaecology ward, Obstetric Ward and Intensive Care Unit except for Medical Ward and Surgical ward as these two wards do not perform any RDT because all blood works are done only at the Laboratory.

- Accidents & Emergency Department had no Malaria Register Book available during our visit on the work station. Officers on duty explained that OIC must have locked it in the drawer, unfortunately during the day all RDTs performed were not recorded at all. This revealed that even officers performing RDT do not seem to care or realise that data not recorded is data lost.
- Gynaecology ward visit revealed also poor malaria data recording. Officers on duty together with resident HEOs and Resident Doctors were given a run through on the importance of data recording.
- The only unit that is performing well amongst all the rest is Children's Outpatient Department. COPD is following the malaria treatment protocol and up to date in recording the malaria data.

8. Continuous Quality Initiative (CQI) Training

This quarter the objective was to conduct a CQI training on the Malaria Program for OICs of facilities in Bogia District as well as for both Lutheran Nursing College and Gaubin Community Health Workers School. Unfortunately, this objective was not reached. Both Nursing Schools Principals were contacted and they welcomed the proposed training however the dates were postponed because students were still registering and Q1 visit for Madang ended.

The District Health Manager for Bogia District however did not respond to all possible communication established by both the Provincial Malaria Supervisor together with the Provincial Disease Control Officer regarding the CQI training thus the malaria team agreed to postpone all trainings to Q2 to enable all responsible district managers to be sensitized on CQI in order for them to work closely with the team to allow the training to be conducted without issues at the district level.

Even though CQI is yet to be conducted the continuous onsite refresher training with one to one staffs on duty at facilities during the visits is mandatory. Facility staffs are regularly provided with up dated treatment protocol as well as identifying discrepancies with NHIS malaria data reporting and discussing those with the appropriate staffs. Most often issues discussed are on

- Importance of stock card maintenance and how to fill it up
- Updating ANC LLIN registers and account for nets provided to the clinics
- Up to date with the updated treatment protocol
- Monthly NHIS reporting discrepancies noted.

9.MALARIA REPORTING TOOLS

Madang Province

MALARIA REPORT January to December 2023

Date Printed: 06/03/2024 11:13:21

Code	Facility	No of reports	OUTPATIENT		INPATIENT		DEATHS		Slides Examined			RDT Examinations			
			Clinical	RDT	Clinical	RDT	Clinical	RDT	No. Exam	+ve %	+ve % falcip	No. Exam	+ve %	+ve % falcip	Failed
130101	Ariangon SC	11	131	2360	0	1	0	0	0	0	0	3355	69.9	44.4	0.1
130102	Bieng SC	12	33	642	3	0	0	0	0	0	0	1878	59.1	43.0	0
130103	Bogia HC	11	378	6283	6	90	0	3	1	100	100	8724	78.0	67.0	0.2
130104	Bunapas SC	12	82	1752	2	2	0	0	0	0	0	2943	58.7	46.3	0.2
130105	Hartzfeldhaven SC	11	315	3651	0	0	0	0	0	0	0	4460	82.4	61.9	0.0
130106	Malala SC	12	80	5116	16	1	1	0	2	50.0	50.0	6922	69.1	59.7	0.8
130108	Igos SC	12	26	2390	3	1	0	0	0	0	0	2776	71.6	54.3	2.3
BOGIA District		81	1045	22194	30	95	1	3	3	66.7	66.7	31058	72.3	57.7	0.5
130201	Alexishaven HC	12	67	7089	24	9	0	0	227	57.7	42.7	10342	70.5	63.0	0.6
130203	Jomba UC	12	145	2433	0	0	0	0	88	96.6	93.2	5851	39.4	31.6	0.2
130204	Madang HP	11	1512	4166	240	218	24	14	10533	44.6	40.4	4087	32.6	26.2	0.1
130205	Madang Town UC	12	63	2813	0	0	0	0	136	96.3	94.1	8466	31.1	24.5	0.0
130206	Utu SC	12	0	6570	5	9	0	1	0	0	0	9513	69.1	55.0	0.3
130207	Yagaum HC	12	2	5350	78	228	7	0	2810	83.6	55.3	4111	88.3	73.3	0.0
130208	Danben SC	12	149	4367	0	0	0	0	0	0	0	8093	55.4	44.8	0.0
130209	Baitabag SC	12	58	10261	0	0	0	0	5	60.0	60.0	10601	61.7	49.5	0.1
130210	Sisiak UC	12	1055	4089	0	0	0	0	0	0	0	6318	63.7	48.4	0
MADANG District		107	3051	47138	347	464	31	15	13799	53.6	44.4	67382	57.6	47.0	0.2
130301	Aiome HC	11	53	382	0	0	0	0	0	0	0	735	43.5	34.3	0
130302	Annaberg HC	12	459	1913	0	3	0	1	0	0	0	3020	71.7	61.7	0.7
130303	Josephstaal HC	11	20	2262	2	59	0	1	0	0	0	2485	84.2	59.0	1.2
130304	Kwanga SC	11	67	1723	2	1	0	0	0	0	0	2963	64.1	54.5	0.1
130305	Sangapi SC	12	231	580	0	1	0	0	0	0	0	1023	52.1	37.0	0
130306	Simbai HC	12	164	194	5	3	0	0	0	0	0	253	74.3	19.8	0
130307	Wanuma SC	12	127	356	0	0	0	0	0	0	0	544	62.1	25.7	0
130308	Katiati SC	9	5	840	0	1	0	0	0	0	0	1189	67.9	50.1	4.0
MIDDLE RAMU District		90	1126	8250	9	68	0	2	0	0	0	12212	68.3	52.1	0.8
130402	Saidor HC	12	622	4663	17	56	0	0	0	0	0	5103	84.5	70.6	0.2
130404	Teptep SC	12	0	170	0	0	0	0	0	0	0	208	65.4	56.7	1.4
130405	Ileg SC	12	27	2915	1	1	0	0	2	100	100	3847	63.2	53.2	0.0
130406	Tapen SC	12	41	236	0	0	0	0	0	0	0	430	56.0	40.9	0
130407	Biliau SC	12	527	3657	5	23	2	0	1	100	100	4063	76.5	59.1	0.0
130408	Bawak SC	12	350	4467	1	11	0	0	1	100	100	4489	78.1	65.5	0.1
RAI COAST District		72	1567	16308	24	91	2	0	4	100	100	18140	75.7	62.2	0.1
130501	Bagabag SC	9	39	93	0	1	0	0	0	0	0	174	36.8	30.5	0.6
130502	Bunabun SC	10	495	3239	3	1	2	0	0	0	0	4740	64.8	51.4	2.1
130503	Gaubin SC	12	203	814	12	9	0	0	100	14.0	8.0	2461	33.0	25.5	0
130504	Miak SC	12	240	2327	16	20	0	1	0	0	0	3138	56.0	43.2	2.5
130505	Mugil HC	8	0	1268	10	2	0	0	0	0	0	2967	57.7	49.4	0.1
130506	Mapor SC	12	118	997	0	3	0	0	0	0	0	1564	70.8	57.8	0.4
130507	Kulubob SC	12	18	805	1	1	0	0	1	100	100	1993	65.6	36.4	0.5
SUMKAR District		75	1113	9543	42	37	2	1	101	14.9	8.9	17037	57.7	44.4	1.1
130601	Begesin SC	12	28	478	2	1	0	0	0	0	0	977	48.9	39.2	1.0
130602	Brahman SC	12	0	3499	0	2	0	0	0	0	0	7499	47.9	37.9	1.2
130603	Bundi HC	12	125	324	0	0	0	0	0	0	0	222	59.9	46.8	16.2
130604	Gusap HC	12	2151	2676	27	60	1	0	1817	45.3	23.8	5789	44.8	31.5	0.4
130605	Ramu Sugar SC	12	3676	1602	4	18	1	1	730	34.8	17.5	2669	38.8	25.8	0.5
130606	Sausi HC	12	655	2499	1	1	0	0	5	40.0	40.0	3912	61.9	48.8	0.2
130607	Walium SC	10	279	3988	0	0	0	0	0	0	0	4008	71.1	53.2	0
130608	Usino SC	11	422	1500	0	0	0	0	3	66.7	66.7	2632	68.3	53.7	0.5
USINO BUNDI District		93	7336	16566	34	82	2	1	2555	42.3	22.1	27708	53.8	40.8	0.7
Madang Province		518	15238	119999	486	837	38	22	16462	51.6	40.7	173537	62.3	49.6	0.5

Submission of monthly ENHIS/NHIS reports **on time** was an issue and is **still an issue** with all most all facilities. We are in the 3rd month of 2024 but there are still few facilities with outstanding monthly NHIS reports from 2023 yet to be uploaded as projected above. The datas projected are subjected to change thereafter when all outstanding reports are submitted.

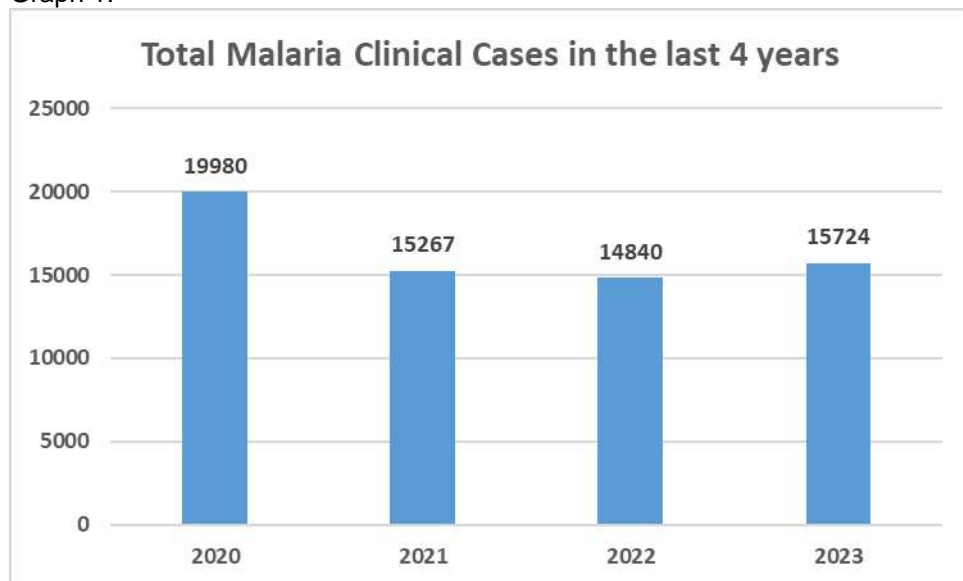
The daily entries of Malaria RDT datas on the ENHIS is still a struggle as most of the facilities have only single tablet used by all sections of the facility thus maintaining a consistent data entry is impossible.

10.MALARIA OVERVIEW

Malaria is a burden in Madang Province due to various reasons including the geographical setting, the weather pattern and also the vegetation makeup. The Malaria causing mosquito Anopheles is well known to live in humid conditions and rainfall areas in which Madang Province is ideal for.

The graphs below show the trend of Malaria situation in the Province in the last 4 years (2020 – 2023) as per NHIS reports. **Source; ENHIS 06/03/2024 11:12:42**

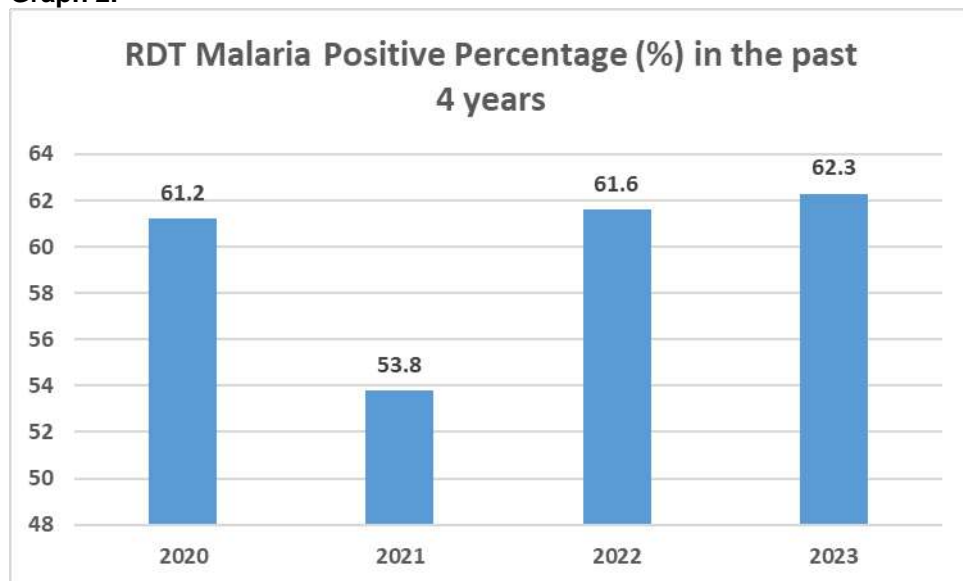
Graph 1.



Graph 1 shows that there has been a steady decrease in Clinically diagnosed Malaria cases between 2020 – 2022, however there was obvious increase in 2023.

The 2023 increase actually is a miss reporting from Rail Clinic. This issues were noted and discussed with the OIC responsible for completing monthly NHIS report.

Graph 2.



Graph 2 shows a peak positivity rate in 2022 and has since increased by 1% in 2023.

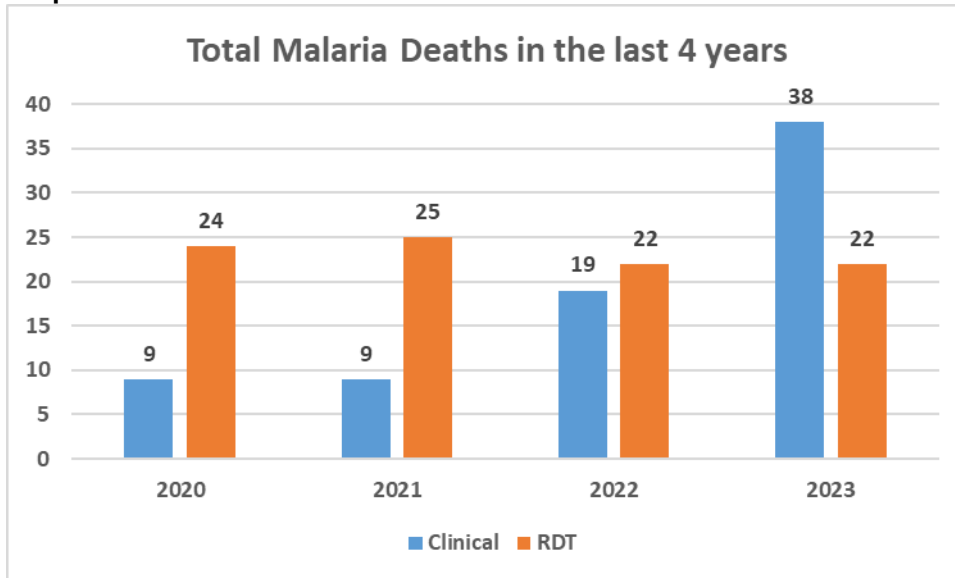
This could reflect an improvement in reporting coverage as well as the inclusion of the Home Management of Malaria (HMM) program in Madang since 2020. HMM program drastically increased testing and reporting of malaria cases from patients right in the remote communities who previously didn't have the access to any nearby HFs within at least 2-hours walking distance.

However, the sudden increase observed in 2022 could be caused by various contributing factors listed below:

- Malaria patients not completing treatment and hence being readmitted after 3-4 weeks' post-treatment,
- LLINs distributed towards the end 2020 may be losing their efficacy by the end of 2021, as well as most people staying up late into the night for various social activities and getting bitten by mosquitoes before finally going to bed,
- 2022 National General Elections had caused an influx of people travelling between provinces and districts thus co-infecting each other

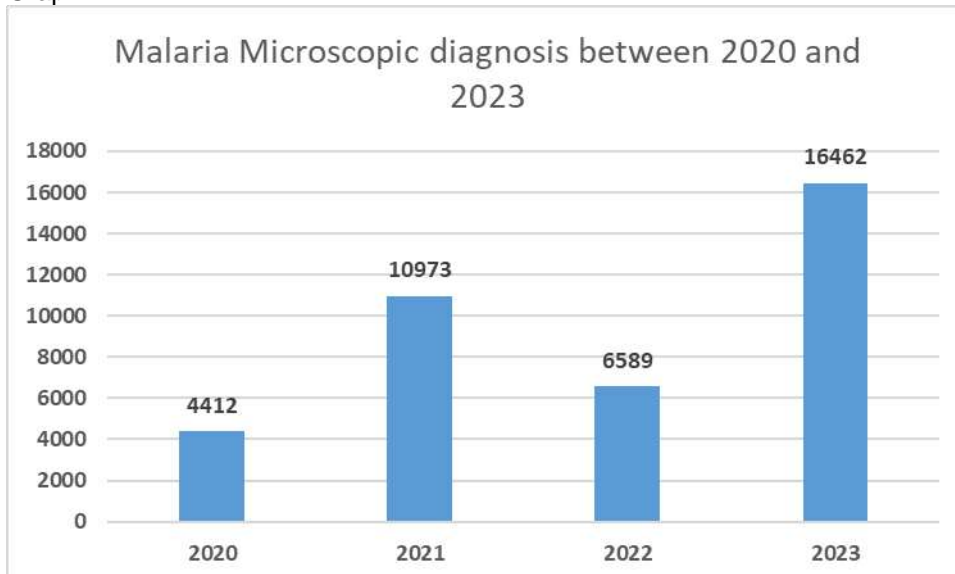
The reduction noted in 2021 could be the result of LLINs distributed in late 2020 and early 2021 which could mean that the net efficacy was still very effective.

Graph 3.



Graph3 shows the malaria deaths reported in the last 4 years. From the graph it can be noted that between 2020 to 2022 there were more RDT confirmed deaths than clinically confirmed but then by 2023, a turn over occurred. These clinical deaths could be from other disease and not from malaria.

Graph 4.



Graph 4 shows the total microscopy performed between 2020 and 2023. From the graph it can be seen that there is no steady performance of microscopy in the 4-year period. There are few factors that can conclude this

- Reporting tools are often not kept up to date thus obvious missing datas
- Availability of reagents or slides affecting the performance

11. PROGRAM VEHICLES

There are currently 3 program vehicles available in Madang for program activities. A new addition of BT50 Mazda was brought over from Lae during the start of Q1 visit. This vehicle will solely be used for HMM programs and the two Toyota land cruisers will be for malaria commodities delivery as well as facility visits.



WAD 930.

MVIL Expiry date - 14/04/2024
Safety Sticker Expiry Date:
22/03/24
Current mileage: Not displayed
Odometer still not working
Running Condition: Not road
worthy. Awaiting Repair &
Maintenance



MAH 898

MVIL Expiry Date: 19/12/2024
Safety Sticker Expiry Date:
21/06/2024
Next service due millage: 5,000
KM
Running Condition: Satisfactory
Current mileage at the end of Q1
visit: 1,080 KM
PHA Casual Driver attached:
Peter Soalili



LBW 233

MVIL Expiry Date: 06/06/2024
Safety Sticker Expiry Date:
22/03/2024
Next service due millage:
90,000km
Running Condition: Satisfactory
Current mileage at the end of Q1
visit: 88,514km
PHA Casual Driver attached:
Peter Soalili

12. ACHIEVEMENTS

- Quarter 1 supplies arrived on time for distribution to facilities
- Successfully visited 30 out of 31 accessible facilities and supplied Q1 RDTs and ACTs accordingly.
- Successfully distributed Q1 commodities to all reporting facilities except 2 facilities. Staffs notified to pick up supplies
- Additional GF Funded vehicle to support Malaria Program activities
- Sensitization on the Malaria Program in the Province with Catholic Church Health Services and Lutheran Church Health Services with the respective managers and secretaries. Fully understands the program and confirm to work along well with the team to maintain the malaria burden in the Province.

13. CHALLENGES

- Bigger Health Facilities (HF) such as Bogia HC, Alexishafen HC, Modilon Hospital, Yagaum HC, Madang Urban Clinic and Gusap HC have only one ENHIS tablet to capture data on a daily basis. This is not practical and leads to data gap and inconsistency in day to day entry.
- Unable to track 2nd and 3rd doses of IPTP in pregnant ladies.
- Spike in malaria positivity rate related to patients not completing full course of malaria treatment
- Stock take in all facilities is very poor. Stock cards provided are not maintained and very difficult to track quantities distributed out to Aid Posts and CMVs.
- Continuous rain and strong winds has led to flooded river banks and strong sea currents that 3 facilities (Saidor HC, Biliau SC, Ileg SC) were not able to be visited this quarter during RMC visit.
- Aid Posts staffs continue to contact directly the malaria office to get quarter supplies reporting that the Reporting Health Facilities are not supplying them as per the existing pathway.
- Accountability of ANC LLINs is very poor in almost all facilities except Modilon Hospital, Town Clinic, Yagaum HC, Gusap HC, Kulubob SC, Brahman SC and Alexishafen HC. Due to this, all quantities

distributed to facilities each quarter is only a bale each thus the target distributed in a year is normally less than expected

14. RECOMMENDATIONS

- Remote Sensing / NMCP / RAM to consider giving additional tablets to these mentioned bigger facilities so can have enough time to enter daily registers/data. The facilities with high influx of patients that would benefit the most from an additional tablet at the facility level includes, Modilon Hospital, Bogia HC, Yagaum HC, Jomba Clinic, Madang Urban Clinic and Gusap HC
- Both PMS and RMC to instruct all ANC clinic during Q2 visit to start entering Fansidar doses 2 &3 in the ANC Register Book.
- School survey to be conducted between April and May for the wet season and October and November for the dry season. The Provincial Malaria Supervisor to take the lead in this.
- ALL malaria commodities – full supplies each quarter (RDT/ACT/PQs and ANC LLIN) to be distributed upon maintenance of stock cards otherwise the quantity will be reduced. This should enable the staffs to perform well in maintaining stock take and know the importance of this.
- CQI training to be implanted in Q2/Q3/Q4 and the Provincial Malaria Supervisor together with the assistance from PDCO to ensure that this training is rolled out.

15.ACKNOWLEDGEMENT

This 1st quarter supervisory visit to Madang Province has been great. Although there were issues beyond our control which inhibits the team to visit other planned facilities, the team continued on and ensured that all reporting facilities receive their quarterly supplies. Your support in one way or the other and practical advice have been greatly acknowledged for the successful completion of this visit. Many thanks to;

- The PHA Chief Executive Officer, Mr. Fidelis Waipma and Public Health Director, Dr. Martin Daimen and Mr Karoi Kamac and all pleasant staffs of Madang Provincial Health Office for always acknowledging our presence in the Province.
- The Madang Medical Transit Store Acting Manager Mr. Peter Bangan and all the pleasant staff for their continuous support and assistance from having to pack drugs to supplying facilities with assigned quantity of stock when malaria officers are not available to attend to officer's request on time.
- The hard working Malaria team at the PHA level. Mr. Walgun, Winni Rambayipma, Judith Demie and Edna Curtis for the continuous support all throughout the duration of Q1 visit which resulted in a positive outcome in the activities planned for.
- The PHIO's Office for successful integration of activities at the facility level.
- All hard working OICs and staffs of district health facilities in Madang Province
- The PHAs drivers, for without them the visits to the facilities would not have been successful
- Catholic Church Health Services for always assisting to collect supplies for Catholic Church run facilities in the Middle Ramu District and dispatch at their cost.

14. PICTURES



Facility visit to Hartzfeldhaven HC with the Provincial Information Office team



RAM team continues to support IMR team in Madang with RDTs & ACTs for continuous research in the field



Team tracking up to Bieng HC on Manam Island



Q1 stock received and stored at Medical Transit Store



Deteriorated road leading to Utu SHC



Flooded river banks leading to Ileg SC



Malaria Coordinator highlighting issues noted on malaria reporting tools at Sausi SC



Provincial Malaria Supervisor running through issues noted on ANC LLIN registers with staffs of Igos SC



Fallen tree blocking main road excess to Bawak HC



Program Vehicle LBW 233 and MAH 898 parked at Madang Resort



Unloading of Q1 supplies for Bieng SC on Manam Island



Home Based Management of Malaria Officer Edna Curtis highlighting issues on CMV program with Staffs of Bawak SC



Weighing of Q1 supplies for Simbai HC at MAF office



Malaria Team courtesy visit to the Health Secretary for Lutheran Church Health Service



Malaria Team of Madang together with PDCO Mr. Walgun brief meeting with the newly appointed Catholic Church Health Service Manager, Ms. Maureen Lesly



PMS Winnie Rambayipma confirm count on malaria datas at Sisiak Clinic with the SIC



Lae Malaria Coordinator Ms. Gima and Provincial Malaria Supervisor Ms. Dally hand of the new BT50 Mazda- MAH 898 to the Madang team at Ramu Sugar Station



Malaria Team of Madang had a debrief meeting on a Sunday before RMC departs for POM



Team visited Divine Word University



PMS and her team at Brahman. Gusap HC Ambulance assisted during Q1 visit to Usino Bundi District



Q1 visit to Mapor SC. PMS and RMC meet with staffs and ran through issues noted concerning reporting tools



PMS Winnie going through the ANC LLIN register with the Kulubob SC staffs



Q1 visit to Walium HC. Assistant PHIO Mr. Nunua discussing issues of monthly reporting with OIC of Walium HC



Flood river bank in Brahman. Ambulance driver checking the level before the car can cross over