



Ntcheu District, Malawi

Post-Distribution Check-Up (PDCU)
At 24-months

DECEMBER 2017

REPORT

Prepared by: United Purpose
For: Against Malaria Foundation

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1. Executive Summary

This report represents the results of the 24 months PDCU conducted in December 2017. Data was gathered in all of the district's 39 Health Centre Catchment Areas (HCCAs). 162,934 households (HH) were randomly selected and visited unannounced. This check-up was carried out at 24 months after the distribution.

At 24 months post-distribution, sleeping space coverage with a viable net was 34%.

Net hang-up, condition and 'net present but not hung' information for each of the 39 HCCAs has been passed to Ntcheus's Malaria Coordinator (MC), the District Environmental Health Officer (DEHO) and District Health Officer (DHO) to assist in designing further potential targeted malaria intervention activities.

2. Background

Ntcheu District is one of Malawi's 39 districts and has a population of 724,511 people and 162,934 households. A universal coverage distribution of 424,436 nets was carried out from 20th October 2015 to 15th March 2016.

A Post-Distribution Check-Up survey (PDCU) is carried out at 6 months intervals after the distribution as an impact-monitoring tool of net usage and net condition hence this is a third after the distributions.

3. Results

Results and discussions.

- 8,253 randomly selected households were interviewed representing 93% of the targeted households
- 21,801 nets checked
- 7,403 nets were found to still be in hung use, representing 33.96%
- 1,116 AMF nets were present but not hung representing 5.12%
- 894 AMF nets were missing representing 4.10%
- 12,388 nets were found to have been worn out and not usable representing 56.82%.

See Appendix 2 for detailed results and findings.

Net Hung

Chikowa health facility recorded the highest number of nets hung by percentage since out of 173 received 88 were found to be in use representing 51%, while Namisu health Facility recorded the lowest percentage of nets found in use with 14% as out of 113 nets, 16 were found to be still in use.

Net present but not Hung

Muluma health facility had the highest number on nets that were found to be present but not being used, with 14% as the survey revealed that of 306 nets distributed 44 nets were present while Mikoke health facility registered a 0% net present but not hung as it recorded 0 nets of

234 nets received which was the lowest and Phanga health facility, registered a 0% net present but not hung as it recorded 0 nets of 183 nets received which was the lowest.

Missing Nets

Lakeview health facility had the highest number of nets recorded missing, with 9% as of the 373 nets received 32 nets were missing while Dzonzi-mvai health facility had the lowest missing nets as of 156 net received there were 0 nets missing representing 0%.

Nets worn out/not Usable

Doviko health facility had the highest number of nets that were found in a worn out or not usable state as out of 299 nets received 179 nets were found to be worn out representing 77% while Sharp valley health facilities had the lowest percentage of nets in not usable state of 43% since of 793 nets received they had 341 nets recorded respectively.

See Appendix 2 for detailed results and findings.

4. How the work was carried out and key decisions

Schedule

The PDCU planning began two months in advance of the PDCU taking place to ensure plans and resources were in place.

Planning

The PDCU team leader led the planning. See the PDCU-24 Planning document for details.

Budgeting

A budget was prepared using cost drivers for each cost item. This allowed strong estimating of costs and will allow a clear comparison between budget and actual costs. See PDCU-24 Budget vs Actual document.

Resource selection

There are 39 Health Centres (HCs) in Ntcheu District. Each has approximately 20 staff attached to each one, the majority being salaried Health Surveillance Assistants (HSAs).

From lessons learned from earlier PDCUs, it was decided to continue with the focused team of 20 data collectors rather than have a specific number of data collectors from each HCCA. This was based on the following reasons.

First, this would reduce the number of data collectors that would need to be monitored and trained. Second, we would be able to select reliable individuals whom we could trust to do a diligent and accurate job of collecting the data. Third, it would leave the majority of HSAs to carry on with the normal health tasks and duties. Fourth, by having the same people covering the whole exercise they will get acquainted to the task and reduce errors on data collection.

This meant the data collectors would spend less days collecting data with a day on each health facility rather than the one or several days if not many more data collectors were to be used. This was judged the preferable way of organizing and managing the data collection phase.

Orientation and training

Given the limited number of people involved in collecting data and supervising, this was a relatively simple and focused task. An orientation and training session took place on 4th December 2017, conducted by UP and MOH Staff (Malaria Coordinator (MC) and Assistant District Environmental Health Officer (ADEHO)).

Supervisors: There were 2 supervisors. The briefing familiarized the supervisors with the overall project, objectives, timing and specific responsibilities.

Data collectors: There were 20 data collectors involved in collecting data, selected from within the district. The orientation included detailed explanation of the survey objectives and the logic behind the survey form (net condition, type of nets, what sleeping spaces are, what is meant by hung nets and noting hung nets against AMF nets received) as well as having the data collectors pre-test exercise in order to fill in sample forms and ask questions to ensure their understanding of what information should be collected and how.

Village selection and household selection

Ntcheu district has 39 health facilities. It was decided to collect data from 5% of households in all HCCA where we carried out the distributions; this meant a different number of households in each HCCA as per individual health facility populations.

Between 66 and 682 households were randomly selected from each of the selected 3 to 34 villages, depending on the HCCA, with the villages also selected at random.

Villages were randomly selected using the village lists generated from the pre-distribution and distribution work for the 20th October 2015 to 15th March 2016 AMF-funded universal coverage LLIN distribution. A random number table was used to select the villages.

Data collection

20 data collectors and 2 supervisors from the District Health Office were involved in the PDCU. The supervisors were responsible for checking the data collection exercise at the same time monitoring how the data was being collected as per requirement.

All the data collectors involved gathered at a days' designated health facility before each being deployed to selected villages. Once the data collection was complete, the data collectors submitted completed forms to their assigned supervisor who was responsible for checking the forms for obvious errors or omissions, including a lack of householder signature, before delivering the forms to the data entry team.

From the selected households, both men and women households heads were interviewed upon giving consent and signing on the form to indicate acceptance. Each data collector was assigned a village under the health center on which data collection was planned for that particular day, guided by their assigned supervisor. Each data collector visited 20 households per day.

Data collection checking

Supervisors were required to visit 5% of the households in their area to check the accuracy of the data collectors' work and had to check all the completed forms submitted to them before submitting them to the Project Manager. The sampled visited households were also chosen at random so the work of all data collectors was checked.

Data entry

There were two data entry clerks with knowledge in basic computing. The data entry clerks were also exposed to a questionnaire orientation where they were briefed on the forms and introduced to the online web links and how to enter the data on the electronic form, make editions and post the data. The data entry clerks were assigned specific health facilities in order to facilitate their performance monitoring.

Data was entered into a database via a web interface created by AMF. An internet connection was required for this work.

Data entry checking

It was important to monitor and check the work of each data clerk at an early stage to correct any lack of understanding and monitor errors.

Improvements in the data entry interface since the last PDCU carried out in the district (Ntcheu PDCU-18) by AMF meant the data entry proceeded with almost no errors. This reduced the error-checking phase to almost nothing.

5. Finances

The budget was \$19,094

The actual cost was \$16,853

Budget vs actual costs (USD)

ITEM	BUDGET COST	ACTUAL COST	DELTA
BRIEFING/ORIENTATION	256	175	-31.6%
DATA COLLECTION	15,841	13,815	-12.8%
DATA ENTRY	567	531	-6.3%
MANAGEMENT	2,431	2,332	-4.1%
TOTAL	US\$19,094	US\$16,853	-11.7%

6. Lessons learned

The operational elements that went well were:

- All the selected villages were visited.
- There was a positive response from the LLIN beneficiaries at community level.
- The survey form was short with only one page, which was ideal for the data collectors and the respondents

- Local community leaders and household heads allowed the data collectors to enter their households to see the hung nets and check the condition they were in.
- Management support and commitment towards the activity by United Purpose and District Health staff was very encouraging, hence the timely execution of the exercise.
- The data collectors, supervisors and drivers were committed to collecting the data.

7. Acknowledgements

Special acknowledgement should be made to the Ntcheu District Health Management Team and the Malaria Coordinator (MC) Mr. Nicholas Mwamlima and the Assistant Environmental Health Officer (AEHO) Mr. Rudolph Banda in particular, for tirelessly making this initiative a success. Despite their busy day-to-day schedule they allocated their time and efforts to the successful execution of the survey. This team worked even beyond normal working hours just to accomplish the mission and meet the timelines.

Appendix 1 - Health Areas and households visited

DATA COLLECTION PLAN											
List of villages per health Facility											
	HEALTH CENTRE	1	2	3	4	5	6	7	8	9	10
	BILILA	Chinkondenji	Katoleza	Majiga 1	Tambala	Akubalira 2	Chapola	Chauluka 3	Gada 2	Hawa	Kalata
1		Kalumba	Kamakoko	Khomera 1	Kuminga 1	Kuminga 2	Lazaro	Livalo	Livalo chabwera	Majiri	Mauyana
2	BIRIWIRI	Mkutumula 1	Mkutumula 2	Mlambwadza	Mtalika	Chinsothe					
		chipusile 1	Daudi	Kamuuzeni 1	chingawa	Chipula	Galeta	Kambebe	Kasamba	katsalambande	Ntambalika
		Chawanje 2	Chawanje ADMARC	Chikadya 1	Chimwala	Hoda	Kalolo	Kanyoza 1	Kapasule	Mawira	Mkhwangwany
3	BWANJE	Mnkhwani 3	Mose	Mphoola 1	Mwadzaangati	Nankhombe	Njuli	Nkhwani 4	Nkhwani 5	Pendanyama	Thokozani
		Yosefe 2									
4	CHAMPITI	EMOSI	Malinda	Maluku	Mpulula	njolomole	Nsamanyada	Phikani			
5	CHIGODI	Chipojola	Dzoole	Gidion	Kancholo	Lazaro	Magombo	Thondoya 1	Zintambira		
6	CHIKANDE	Austain	Chibalala 2	gomile	kateza	magombo	majere	Mapondela	Mateketa	mpoya	Namboya
7	CHIKOWA	John	njezama	Zidana							
8	CHIOLE	Chimwaye	Kamwendo 1	Kanyemba	mkolimbo	Zioya					
9	DOVIKO	Doviko	Kabango 2	Sawo	William						
10	DZONZI MVAI	Dzonzi-Mvai	Kamuuzeni	Zidana							
		Chimwala	Jingo	Pendantama	Binya	Chingwalu	kaimaima	KALIMWAI	Kamiza	kamkwindo	KANZANGAZA
11	DZUNJE	Khwangwala	majuwa	Ndadzala	tavekenji	ching'ombe	Hawilani	Malonda	Mmemo	Mthinda	Saiwa
		Siliya									
12	GOWA	Chauluka	Chembekeza	Galeta	Kamwaza	Makala	Makhoyo	Mwalo 1	Nzangaya	Zimenyana	
13	KALIMANJIRA	bemerani	Kalimanjira 2	Kalimanjira 3	kaweya	SANDE	TAPANI 1	willson			
14	KAMPANJE	kampanje2	Kampanje3	Kanjuzi	Kaziputa	Mabena	Mitchi				
		Chatchuka	Chawoyoka	chizuzu 2	Chizuzu I	Gwaza	Kalipande 2	kambadya	Kumbuwa	Mathotho	M'manja
15	KANDEU	Muuso 1	Muuso 3	Thuta	tofu						
16	KAPENI	James	Kabango	Kamwamba III	Kapulula	Malenga	Mbemba				
		chinkwende	Chiotcha	Chipezayani	chisasa	Ganya 3	Kambale	Kambewa 2	Kampheko 2	mafuwa	masautso
		Matsatsa	Mchokera	mdzodzo	Mitongwe	Mtambalika 2	mtete	Mtovonya	ndasauka	njelema 1	Ntunda
		Tachitire	Thunga 1	Tiekane	Zenengeya	Chikhumba	Dzinyenyero	Khungule	Kupsamtima	masese 2	Mbululu
17	KASINJE	Mfuti	Ndalusa	Samuel	Thundu						
18	KATSEKERA	Biliati	Chauluka	DZING'ANDA	Joswa	kakhobwe 1	Kakhobwe 2	Kandoma 1	Kandoma 2	Nenani	Chabwera 2
19	LAKEVIEW	Chikhamwazi	Gulo	Kabwazi	Mphoyo	Njolomole 1	Thom				
20	LIZULU	Gambatula	Kachipeya	Kaiya	KALILOMBE	Maluza	MAPIRA	mzamani 2	Mzamani 3	Nkolimbo I	Zidana
21	MANJAWIRA	Chagoma	Kawala 2	Kunyingwi	Liphava	Manjawira					
22	MASASA	Chapita	kahumbe	kalima2	manyenje						
23	MATANDA	Chowamba	Goli	Chiwale	Kafumbata	Mtengowabondo	Jumbe 1	Thema			
24	MATCHEREZA	BILIWITA	GANGAWAKO	HOWA	matchereza II	NAMAGONA					
25	MIKOKE	Njunga 1	Nkonde 1	Nkonde 2	Tsikulamowa 1						
26	MLANDA	Balamu 1	Balamu 2	Mtambalika	Beka	Timote	yosefe				
27	MLANGENI	Donda	Julius	Kang'oma	Thanganyika	Waiyatsa					
		Chiluzi II	Chimpuza	Ching'amba	chitsuro	kadete	kadwala	Kamtsitsi	kansapato 1	Kansapato 2	Mtumba
28	MPHEPOZINAYI	Chibalala	edward	Kaudza 1	Mapazi	Matalala	Pamdule	potolani	Zuze		
29	MULUMA	Chakaniza	kadammanja	chimkwandala	Makwatha	ndombo					
30	MZAMA	Chimkonda	Dickson	dzamba	Kalonga	Madana	phalula	zawanda			
31	NAMISU	Banda	Bonongwe 2	Kanama							
32	NSIPE	Chingwalu	Hau	Kalipeta	kampepuza	Mbirimtengereni	Pheza	S. Zidana	galuakauwa	hambahamba	Saidi
		Sullo	Chikafa	Chikomba	Fulatila	kapalamula					
		Adamu	Alasala 2	chimutu 1	chinzakadzi	ellia	gomeleya 1	Goveya	Gumbi 1	Gumbi 2	Gwaza 1
33	NSIYALUDZU	gwaza 2	Hellani	K Malele	kauwa	Mberengwa	Mpakiza	Ngwangwa	Nsiyaludzu 1	Sabwera 2	siliya
		Tcheza									
		Sandalamu	Ben Chinseu	Ben Kadzilawa	chagwamomwe	Chimalizeni	DC'S	Dzoole 1	Dzoole 2	eneya 1	Eneya 4
		gomeza	gongonyo	gongonyo	gongonyo	kachimanga	kandota	Kanzingeni I	KASALE 2	Khangamwa	machila
34	NTCHEU D.H.	Mastimale	new lines	police lines	senior quarters	thewa	Zakutchire 2	Chibondo	zipirana	Kalumbu 1	Kalumbu 3
		Kanenedi									
35	NTONDA	Bwenje3	Chabwera2	Dambule1	Faiti	Lazalo	Londalonda	Matale			
36	PHANGA	Chigome	Kadzungu 2	Masese 1							
37	SENZANI	Chidokowe 2	Chimpini	Ebulo	MASUNDA 1	Masunda II	matale 2	Senzani I	Senzani II		
		Agabu I	Benes 1	Benes 2	Bizaliele	Chayera	Ching'amba 2	Kulanga I	Kulanga II	Mkuphe	motisa
38	SHARVALE	Ndembo	Pelekani	Saiti 2	Saiti II	Saiti Macheri I					
		Gochi 1	Gochi 2	kankhuni	Kavala III	Mafuta 1	Mdzawira 1	Saulosi	Willy	Bayani	Katsala 2
39	TSANGANO	Katsala Mbande	Mdzawira Phambala								

LIST OF HOUSEHOLDS PER HEALTH CENTRE									
	Health Centre	Registered Households (HHs)	Total Registered Villages	% of Villages to visit	# of Villages to visit	# of HHs to visit (5%)	# of HHs/Village	Spares (1.5%)	Total number of HHs to select (6.5%)
1	BILILA H.F.	10,449	49	35%	25	550	22	175	725
2	BIRIWIRI H.F.	3,970	22	35%	10	220	22	70	290
3	BWANJE H.F.	9,135	38	35%	21	462	22	147	609
4	CHAMPITI H.F.	2,725	23	35%	7	154	22	49	203
5	CHIGODI H.F.	3,367	16	35%	8	176	22	56	232
6	CHIKANDE H.F.	4,275	28	35%	10	220	22	70	290
7	CHIKOWA	1,031	9	35%	3	66	22	21	87
8	CHIOLE H.F.	1,949	12	35%	5	110	22	35	145
9	DOVIKO H.F.	1,702	9	35%	4	88	22	28	116
10	DZONZI MVAI H.F.	1,034	8	35%	3	66	22	21	87
11	DZUNJE H.F.	8,672	43	35%	21	462	22	147	609
12	GOWA H.F.	3,669	25	35%	9	198	22	63	261
13	KALIMANJIRA	2,668	14	35%	7	154	22	49	203
14	KAMPANJE H.F.	2,583	17	35%	6	132	22	42	174
15	KANDEU H.F.	5,855	35	35%	14	308	22	98	406
16	KAPENI H.F.	2,582	22	35%	6	132	22	42	174
17	KASINJE H.F.	14,259	181	35%	34	748	22	238	986
18	KATSEKERA H.F.	3,951	21	35%	10	220	22	70	290
19	LAKE VIEW H.F.	2,294	11	35%	6	132	22	42	174
20	LIZULU H.F.	4,254	23	35%	10	220	22	70	290
21	MANJAWIRA H.F.	1,861	9	35%	5	110	22	35	145
22	MASASA H.F.	1,650	11	35%	4	88	22	28	116
23	MATANDA H.F.	2,325	13	35%	7	154	22	49	203
24	MATCHEREZA	1,745	15	35%	5	110	22	35	145
25	MIKOKE H.F.	1,733	11	35%	4	88	22	28	116
26	MLANDA H.F.	1,935	17	35%	6	132	22	42	174
27	MLANGENI H.F.	1,764	9	35%	5	110	22	35	145
28	MPHEPOZINAYI H.F.	7,552	47	35%	18	396	22	126	522
29	MULUMA H.F.	1,658	15	35%	5	110	22	35	145
30	MZAMA H.F.	2,994	20	35%	7	154	22	49	203
31	NAMISU	1,128	9	35%	3	66	22	21	87
32	NSIPE H.F.	6,091	36	35%	15	330	22	105	435
33	NSIYALUDZU H.F.	9,110	52	35%	21	462	22	147	609
34	NTCHEU D.H.,	12,379	61	35%	31	682	22	217	899
35	NTONDA H.F.	2,938	22	35%	7	154	22	49	203
36	PHANGA H.F.	1,220	12	35%	3	66	22	21	87
37	SENZANI H.F.	3,121	14	35%	8	176	22	56	232
38	SHARP VALLEY H.F.	6,497	34	35%	15	330	22	105	435
39	TSANGANO H.F.	4,809	24	35%	12	264	22	84	348
	TOTAL	162,934	1,037		400	8,800		2,800	11,600

Ntcheu 24 months PDCU - Timeline

No.	ACTIVITY	December				Jan	
		4	11	18	25	1	8
1	Briefing of enumerators and supervisors						
2	Data collection						
3	Data entry						
4	Report writing						

Appendix 2 - Detailed PDCU-24 results (1 page)

24 month PDCU		Location																			
Region	Households			Forms Signed		Sleeping Spaces		People		Nets Received		Hung			Present not hung		Missing		Worn out/ not usable		M + WO
	Target	#	%	#	%	#	#/hh	#	#/ss	#	#	%	#	%	#	%	#	%	#	%	
		8,253		8,242	100	20,601	2.50	37,401	1.82	21,801	7,403	33.96	1,116	5.12	894	4.10	12,388	56.82	60.92		
Bilira		537		537	100	1,288	2.40	2,349	1.82	1,372	460	34	51	4	53	4	808	59	63		
Biriwiri		208		208	100	572	2.75	967	1.69	606	207	34	6	1	7	1	386	64	65		
Bwanje		434		434	100	1,073	2.47	2,042	1.90	1,124	469	42	84	7	40	4	531	47	51		
Champitt		144		143	99	373	2.59	629	1.69	417	176	42	18	4	20	5	203	49	53		
Chigodi		170		170	100	409	2.41	765	1.87	400	114	29	18	5	11	3	257	64	67		
Chikande		207		207	100	531	2.57	1,002	1.89	497	174	35	26	5	24	5	273	55	60		
Chikowa		62		62	100	154	2.48	284	1.84	173	88	51	2	1	7	4	76	44	48		
Chiole		108		108	100	248	2.30	458	1.85	279	110	39	13	5	7	3	149	53	56		
Doviko		84		84	100	196	2.33	386	1.97	229	39	17	3	1	11	5	176	77	82		
Dzonzi-Mvai		62		62	100	178	2.87	283	1.59	156	46	29	3	2	0	0	107	69	69		
Dzunje		451		451	100	1,054	2.34	1,918	1.82	1,072	380	35	65	6	49	5	578	54	58		
Gowa		192		192	100	493	2.57	849	1.72	575	195	34	31	5	44	8	305	53	61		
Kalimanjira		151		151	100	374	2.48	689	1.84	355	92	26	3	1	12	3	248	70	73		
Kampanje		130		130	100	319	2.45	550	1.72	334	130	39	9	3	5	1	190	57	58		
Kandeu		296		296	100	758	2.56	1,375	1.81	772	280	36	46	6	13	2	433	56	58		
Kapeni		127		127	100	305	2.40	548	1.80	318	81	25	4	1	4	1	229	72	73		
Kasinje		709		706	100	1,827	2.58	3,420	1.87	1,974	742	38	103	5	91	5	1,038	53	57		
Katsekera		212		212	100	525	2.48	951	1.81	515	144	28	15	3	17	3	339	66	69		
Lakeview		117		117	100	357	3.05	564	1.58	373	79	21	31	8	32	9	231	62	71		
Lizulu		207		207	100	491	2.37	890	1.81	533	200	38	41	8	30	6	262	49	55		
Manjawira		104		104	100	263	2.53	491	1.87	282	92	33	8	3	3	1	179	63	65		
Masasa		81		81	100	178	2.20	332	1.87	221	82	37	4	2	7	3	128	58	61		
Matanda		150		149	99	320	2.13	652	2.04	339	133	39	16	5	20	6	170	50	56		
Matchereza		103		103	100	229	2.22	462	2.02	245	53	22	4	2	5	2	183	75	77		
Mikoke		87		87	100	232	2.67	403	1.74	234	96	41	0	0	9	4	129	55	59		
Mlanda		127		127	100	335	2.64	575	1.72	354	152	43	15	4	10	3	177	50	53		
Mlangeni		99		99	100	286	2.89	470	1.64	256	107	42	9	4	8	3	132	52	55		
Mphepozinayi		371		371	100	904	2.44	1,630	1.80	979	331	34	64	7	37	4	547	56	60		
Muluma		106		106	100	262	2.47	467	1.78	306	102	33	44	14	18	6	142	46	52		
Namisu		50		50	100	119	2.38	246	2.07	113	16	14	9	8	5	4	83	73	78		
Nsipe		320		319	100	777	2.43	1,410	1.81	833	307	37	70	8	63	8	393	47	55		
Nsiyaludzu		454		450	99	1,113	2.45	1,954	1.76	1,146	314	27	37	3	36	3	759	66	69		
Ntcheu D.H.O		559		559	100	1,542	2.76	2,610	1.69	1,642	653	40	92	6	70	4	827	50	55		
Ntonda		132		132	100	343	2.60	592	1.73	347	66	19	11	3	11	3	259	75	78		
Nzama		145		144	99	353	2.43	623	1.76	400	99	25	18	5	10	3	273	68	71		
Phanga		65		65	100	181	2.78	341	1.88	183	69	38	0	0	5	3	109	60	62		
Senzani		164		164	100	403	2.46	716	1.78	433	90	21	10	2	19	4	314	73	77		
Sharp Valley		293		293	100	692	2.36	1,299	1.88	793	309	39	89	11	54	7	341	43	50		
Tsangano		235		235	100	544	2.31	1,209	2.22	621	126	20	44	7	27	4	424	68	73		