



**Balaka District, Malawi**

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

**February 2018**

**REPORT**

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**For: Against Malaria Foundation**

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## **1. Executive Summary**

This report represents the results of the 24 months PDCU conducted 14<sup>th</sup> to 8<sup>th</sup> September, 2017. Data was gathered in all of the district's 14 Health Centre Catchment Areas (HCCAs). 128,685 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 49%.

Net hang-up, condition and 'net present but not hung' information for each of the 14 HCCAs has been passed to Balaka'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**

Balaka District is one of Malawi's 28 districts and has a population of 590,131 People and 128,685 households. A universal coverage distributions of 278,237 LLINs was carried out between March and June 2016, and was followed by a mop-up distribution of 53,226 in October 2016. In total, 331,463 LLINs were distributed.

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.**

- 5,507 randomly selected households were interviewed representing 81% of the targeted households
- 14,307 nets checked
- 7,049 nets were found to still be in hung use, representing 49.27%
- 1,029 AMF nets were present but not hung representing 8%
- 1,069 AMF nets were missing representing 7.4%
- 5,160 nets were found to have been worn out and not usable representing 36%.

See Appendix 2 for detailed results and findings.

### **Net Hung**

**Balaka** health facility recorded the highest number of nets hung by percentage since out of 2,499 received, 1486 nets were found to be in use representing 59%, while Phalula health facility recorded the lowest percentage of nets found in use with 35% as out of 725 nets, 256 were found to be still in use.

### **Net present but not Hung**

Balaka and Kalembo health facility had the highest number on nets that were found to be present but not being used, with 10% each since out of 2,499 nets recorded there were 247 nets found for Balaka and out of 1059 nets recorded there were 102 nets present but not hung for Kalembo, whereas Ulongwe health facility registered the lowest percentage as out of 530 nets received, 14 nets were present representing 3%.

### **Missing Nets**

Phimbi and Mbera facilities had the lowest number of nets missing as out of 628 and 2,051 nets distributed respectively it was revealed that 31 and 158 nets were missing representing, representing 6%. Chiyendausiku and Nandumbo health facilities had the highest number of nets recorded worn or not usable as out of 584 and 990 nets received, 61 and 102 nets were found to be present representing 10% respectively.

### **Nets worn out/not Usable**

The district had an overall of 36% of the nets worn out. By health facility, it was revealed that kankao health facility had a highest number of nets worn out since out of 1010 nets distributed 521 nets were found to be worn out representing 52% while Balaka DH had the lowest number of nets worn out as out of 2,499 nets received 600 nets were found to be worn out representing 24%

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 14 Health Centres (HCs) in Balaka 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 4<sup>th</sup> February 2018, 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**

**Balaka** district has 14 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 264 and 1430 households were randomly selected from each of the selected 12 to 65 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 March 2016-October 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 (Balaka 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 \$14,928

The actual cost was \$(TBD)

ITEM	BUDGET COST	ACTUAL COST	DELTA
BRIEFING/ORIENTATION	222	TBD	-%
DATA COLLECTION	13,978	TBD	-%
DATA ENTRY	503	TBD	-%
MANAGEMENT	224	TBD	-%
<b>TOTAL</b>	<b>US\$14,928</b>	<b>US\$TBD</b>	<b>-%</b>

## **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. Patrick Bonogwe and the Assistant Environmental Health Officer (AEHO) Mr. Mtakaira 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																						
		VILLAGES																				
Health Centre	#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1	Balaka HC	65	Ambali	Chigwembere	Chikuse	Chimatiro	Ching'amba	Chipala	Chipinga	Chipote	Chiuja	Chiwala	Dinala	Golowa	Hanjahanja	James	Kabango	Kachikuni	Kadondo	Kandegwe B	Kandengwe A	Kapire
			Kapire A	Kaumphawi	Kaumphawi 2	Khoswe	Kusigala	Lufeyo	Lupanga	Magombela	Magombo	Majiga 2A	Major	Malakata 2	Maliwata	Malula B	Matola	Mbatamila	Mchenga 2	Mchilakwenda	Mchisa	Mdedza
			Mgwawanyem	Mlandula	Mmanga	Mpezeni	Mpinganjira	Mpinganjira	Mponda C	Muloya	Ndoya	Ng'onga	Ngaliche	Ngonje	Ngomano	Nkhalango	Ntenje	Petrol	Phalula	Sawali	Simoni	Sosola A
			Tembo	Ukalanga	Uli	Kalembela	Somo															
2	Chiyendausiku	12	Kaipakunja	Kalulu	Kapito	Mathuwa	Msamanyada	Saiwa 3	Tambala	Chifodya	Chikhwasa	Kanjobvu	Kumtere	Zioya								
3	Kalembo	22	Batumeyo	Chikoko	Chingale	Chitseko	Chiundu	Kansiyeni	Kaphuka	Kuntiani	Masambuka	Mkweta	Mogoya	Mpango	Mpemba	Mponda	Msuwo	Namwela	Nankumba	nsaliwa	Nsulu	Salimu
			Sande	White																		
4	Kankao	19	Siliya	Bwemba	Chimbalanga	Chimpakati	Chimphonda	Chingagwe	John	Kodo	Kuyele	Maganga	Manjanja	Mgoza	Mitchaya	Mitochi	Mzito	Namikombe	Ntondeker	Rabson	Sakaiko	
5	Kwitanda	18	Bisani	Chimwala	Chipoyo	Eliasi	Henry	Kamaliza	Kaniche	Kumbanga	Lazalo	Mahowa	Mikael	Mkungula	Mpembedza	Mwandama	Sitima	Taka	Thamangiwa	Thapaniwa		
6	Mbera	38	Chiwalo	Jenya	Kalambo	Koronga	Mbalu	Alimchisa	Chembera	Chiganga	Chiliman	Chipatala	Golliat	Kachenga	Kamoto	Kampasule	Kimu	Kumpinda	Makupe	Mateya	Mboga	Mfundenzi
			Mgambo	Mkwatula	Moyo	Mpambe	Mtumbwe	Ngwangwa	Nyalugwe	Palira	Sela	Simbota	Sitima	Thunga	Chikalogwe	Chimkwita	Chisasiko	Misomali	Mpoto	Mgwira		
7	Mwima	22	Chalumbwa	Chibweya	Chileka	Mbela	Bokosi	Chabwera	Chagunda	Chitalo 1	Chopi	Kadzuwa	Kampango	Kimu	Lukongolo	Magombo	Mpata	Mponda	Mtenga	Namaya	Namonde 2	Nkanongwa 2
			Ofesi	William																		
8	Namanolo	24	Mdala 1	Chiloboto	John wasili	Katapira	Matembera	Mdala 2	Mpata	Msamati 1	Msamati 2	Mtimbuka	Mwawa	Namwera	Njale	Wala	Chapita 2	Chilembwe	Disi	Kalambo	M'manga 1	M'manga 2
			M'manga 3	N'gombe	Ntonya	Thukuta																
9	Nandumbo	17	Bimbi	Chipapa	Gopole	Kalako	Kamwana	Kasenjera	Ligwangwa	Maela	Mgulula	Milala	Mkota	Namungumi	Nandumbo	Ndembwe	Nyangwa	Nyanyika	Tambala			
10	Phalula	16	Chaima	Chandikola	Chigonamdow	Chikaoneka	Chiwengana	Kamvetsa	Kumkwawa	Limbani	Lindadi	Mazenga	Mpambira	Mpitanjala	Mthawitsa	Tchona	Tsite	Vuvuta				
11	Phimbi	17	Chimimba	Chingele	Janken	Kamva za ana	Katuli	Lupembe	Manda	Njirayagoma	Ntaja	Nyambi	Tepani	Yasini	Zidyana 2	Matipani	Mereka	Mgomwa 1	Mgomwa 2			
12	Ulongwe	13	Chigwenembe	Chikolongo	Chimdikiti	Chingwalungwa	Kabiyo	Kunena	Makalani	Mkamwana	Ndembwe	Ng'ombe	Ngwalu	Simbinde	Sugar							
13	Utale 1	12	Chambo	Hau	Jeden	Makoloje 2	Mbiya	Nkaya	Sato	Sidreck	Kadammanja	Makoloje 2	Mofolo	Ndimbule								
14	Utale 2	13	Chigaga	Chitsinkha	Chiwere	Kumwinje	Magombo	Malopa	Mereka	Sitima	Chilanga	Chiwaya	Dodoma	Misomali	Time							
TOTAL																						



**LIST OF HOUSEHOLDS PER HEALTH CENTRE**

	<b>Health Centre</b>	<b>Registered Households (HHs)</b>	<b>Total Registered Villages</b>	<b>% of Villages to visit</b>	<b># of Villages to visit</b>	<b># of households sampled per village</b>	<b>Households sampled</b>	<b>5% villages visited by supervisors</b>	<b>5% Households per village visited by supervisors</b>	<b>5% Households visited by supervisors</b>
1	Balaka HC	27,267	135	35%	65	22	1,430	7	12	84
2	Chiyendausiku	4,631	39	35%	12	22	264	2	12	24
3	Kalembo	9,625	45	35%	22	22	484	1	12	12
4	Kankao	8,204	84	35%	19	22	418	1	12	12
5	Kwitanda	7,894	71	35%	18	22	396	3	12	36
6	Mbera	15,266	189	35%	38	22	836	2	12	24
7	Mwima	9,042	59	35%	22	22	484	4	12	48
8	Namanolo	10,025	31	35%	24	22	528	4	12	48
9	Nandumbo	7,116	28	35%	17	22	374	0	0	0
10	Phalula	6,852	64	35%	16	22	352	1	12	12
11	Phimbi	7,205	83	35%	17	22	374	0	0	0
12	Ulongwe	5,465	26	35%	13	22	286	2	12	24
13	Utale 1	4,833	40	35%	12	22	264	3	12	36
14	Utale 2	5,260	39	35%	13	22	286	2	12	24
	<b>TOTAL</b>	<b>128,685</b>	<b>933</b>		<b>308</b>		<b>6,776</b>	<b>32</b>		<b>384</b>

	<b>Mon</b>	<b>Tues</b>	<b>Wed</b>	<b>Thurs</b>	<b>Fri</b>	<b>Sat</b>
<b>Activity</b>	<b>FEBRUARY</b>					
<b>Orientation</b>	4					
<b>Data Collection</b>	5	6	7	8	9	
	12	13	14	15	16	17
	19	20	21	22	23	
<b>Data Entry</b>	<b>FEBRUARY</b>					
	26	27	28			
	<b>MARCH</b>					
				1	2	3
<b>Report Writing</b>	<b>5th - 9th MARCH</b>					

Appendix 2 - Detailed PDCU-24 results (x pages)

PDCU: 24 month PDCU | Sort by: Location

Region	Households		Forms Signed		Sleeping Spaces		People		AMF Nets										
	Target	#	%	#	%	#	#/hh	#	#/ss	Nets Received	Hung		Present not hung		Missing		Worn out/ not usable		M + WO
										#	#	%	#	%	#	%	#	%	%
		5,507		5,503	100	13,852	2.52	25,950	1.87	14,307	7,049	49.27	1,029	7.19	1,069	7.47	5,160	36.07	43.54
Balaka Hc		1,000		999	100	2,542	2.54	4,534	1.78	2,499	1,486	59	247	10	166	7	600	24	31
Chiyendausiku		209		208	100	511	2.44	958	1.87	584	303	52	33	6	61	10	187	32	42
Kalembo		384		384	100	946	2.46	1,835	1.94	1,059	577	54	102	10	97	9	283	27	36
Kankao		381		381	100	973	2.55	1,794	1.84	1,010	374	37	45	4	70	7	521	52	59
Kwitanda		344		344	100	794	2.31	1,506	1.90	839	432	51	56	7	59	7	292	35	42
Mbera		781		781	100	1,963	2.51	3,731	1.90	2,051	1,073	52	158	8	130	6	690	34	40
Mwima		393		393	100	928	2.36	1,852	2.00	957	480	50	48	5	69	7	360	38	45
Namanolo		407		407	100	1,081	2.66	1,965	1.82	1,144	516	45	68	6	84	7	476	42	49
Nandumbo		331		331	100	912	2.76	1,763	1.93	990	449	45	90	9	102	10	349	35	46
Phalula		291		291	100	770	2.65	1,341	1.74	725	256	35	42	6	61	8	366	50	59
Phimbi		268		268	100	611	2.28	1,174	1.92	628	302	48	31	5	39	6	256	41	47
Ulongwe		237		237	100	607	2.56	1,170	1.93	530	250	47	14	3	37	7	229	43	50
Utale 1		209		209	100	499	2.39	944	1.89	515	210	41	42	8	43	8	220	43	51
Utale 2		272		270	99	715	2.63	1,383	1.93	776	341	44	53	7	51	7	331	43	49