Balaka District, Malawi

Post-Distribution Check-Up (PDCU)
At 18-months

September 2017

REPORT

Prepared by: United Purpose
For: Against Malaria Foundation

Contents

1. Executive Summary

This report represents the results of the 18 months PDCU conducted 14th to 8th 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 18 months after the distribution.

At 18 months post-distribution, sleeping space coverage with a viable net was 60%.

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

- 6,895 randomly selected households were interviewed representing 90% of the targeted households
- 16,167 nets checked
- 9,768 nets were found to still be in hung use, representing 60.42%
- 2,766 AMF nets were present but not hung representing 17.11%
- 1,290 AMF nets were missing representing 7.98%
- 2,343 nets were found to have been worn out and not usable representing 14.82%

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 3,387 received, 2,250 nets were found to be in use representing 66%, while Nandumbo health facility recorded the lowest percentage of nets found in use with 52% as out of 1145 nets, 597 were found to be still in use.

Net present but not Hung

Balaka health facility had the highest number on nets that were found to be present but not being used, with 22% since out of 3,387 nets recorded there were 734 nets found, whereas Utale 2 health facility registered the lowest percentage as out of 649 nets received, 62 nets were present representing 10%.

Missing Nets

Mwima facility had the lowest number of nets missing as out of 483 nets distributed it was leveled that 16 nets were missing representing, representing 3%. **Phalula** health facility had the highest number of nets recorded worn or not usable as out of 709 nets received, 92 nets were found to be present representing 13%.

Nets worn out/not Usable

The district had an overall of 14% of the nets worn out. By health facility, it was revealed that Ulongwe health facility had a highest number of nets worn out since out of 818 nets distributed 184 nets were found to be worn out representing 22% while Balaka DH had the lowest number of nets worn out as out of 3387 nets received 211 nets were found to be worn out representing 6%.

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-18 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-18 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 14th August 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

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 216 and 1,507 households were randomly selected from each of the selected 7 to 78 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-12) 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 $15,033
The actual cost was $12,673

Budget vs actual costs (USD)

ITEM	BUDGET COST	ACTUAL COST	DELTA
BRIEFING/ORIENTATION	224	154	-31.2%
DATA COLLECTION	14,076	11,270	-19.9%
DATA ENTRY	507	676	33.3%
MANAGEMENT	225	573	154.7%
TOTAL	US$15,033	US$12,673	-15.7%

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. 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

LIST OF HOUSEHOLDS PER HEALTH CENTRE

	Health Centre	Registered Households (HHs)	Total Registered Villages	% of Villages to visit	# of Villages to visit	# of villages after partitioning*	Households sampled	5% villages visited by supervisors	5% Households visited by supervisors
1	Balaka HC	27,267	135	35%	55	70	1,507	7	84
2	Chiyendausik	4,631	39	35%	15	15	266	2	24
3	Kalembo	9,625	45	35%	18	25	601	4	48
4	Kankao	8,204	84	35%	30	32	491	1	12
5	Kwitanda	7,894	71	35%	22	22	375	1	12
6	Mbera	15,266	189	35%	78	77	942	2	24
7	Mwima	9,042	59	35%	12	12	216	2	24
8	Namanolo	10,025	31	35%	7	14	355	0	0
9	Nandumbo	7,116	28	35%	12	17	447	2	24
10	Phalula	6,852	64	35%	20	20	324	1	12
11	Phimbi	7,205	83	35%	29	29	368	2	24
12	Ulongwe	5,465	26	35%	11	13	346	1	12
13	Utale 1	4,833	40	35%	21	21	355	4	48
14	Utale 2	5,260	39	35%	16	16	302	1	12
	TOTAL	128,685	933		346	383	6,895	30	360

	Mon	Tues	Wed	Thurs	Fri	Sat
Activity	August					
Orientation	14		14			
Data Collection		15	16	17	18	
	21	22	23	24	25	
	28	29	30	31		
	September					
					1	
	4	5	6	7	8	
Data Entry	29th August - 12 September					
Report Writing	13th - 15th September					

Appendix 2 - Detailed PDCU-18 results (1 page)

PDCU: 18 month PDCU

Sort by: Location

		Households		Forms Signed		Sleeping Spaces		People		AMF Nets									
										Nets Received	Hung		Present not hung		Missing		Worn out/ not usable		M + WO
Region	Target	#	%	#	%	#	#/hh	#	#/ss	#	#	%	#	%	#	%	#	%	%
		6,271		6,232	99	15,340	2.45	28,698	1.87	16,167	9,768	60.42	2,766	17.11	1,290	7.98	2,343	14.49	22.47
Balaka Hc		1,291		1,282	99	3,273	2.54	5,861	1.79	3,387	2,250	66	734	22	192	6	211	6	12
Chiyendausiku		244		243	100	581	2.38	1,049	1.81	634	401	63	112	18	57	9	64	10	19
Kalembo		543		543	100	1,387	2.55	2,551	1.84	1,556	908	58	270	17	159	10	219	14	24
Kankao		486		470	97	1,085	2.23	1,965	1.81	1,124	615	55	182	16	87	8	240	21	29
Kwitanda		336		332	99	821	2.44	1,604	1.95	829	542	65	109	13	52	6	126	15	21
Mbera		875		875	100	2,192	2.51	4,123	1.88	2,344	1,430	61	493	21	194	8	227	10	18
Mwima		196		196	100	475	2.42	904	1.90	483	311	64	60	12	16	3	96	20	23
Namanolo		281		279	99	750	2.67	1,409	1.88	800	485	61	96	12	67	8	152	19	27
Nandumbo		424		423	100	1,047	2.47	2,040	1.95	1,145	597	52	203	18	112	10	233	20	30
Phalula		303		303	100	680	2.24	1,332	1.96	709	389	55	92	13	89	13	139	20	32
Phimbi		349		345	99	785	2.25	1,510	1.92	832	452	54	139	17	77	9	164	20	29
Ulongwe		334		334	100	837	2.51	1,596	1.91	818	460	56	121	15	53	6	184	22	29
Utale 1		323		323	100	792	2.45	1,517	1.92	857	533	62	93	11	82	10	149	17	27
Utale 2		286		284	99	635	2.22	1,237	1.95	649	395	61	62	10	53	8	139	21	30