

FOLLOW UP COVERAGE ASSESSMENT OF CMAM SERVICES

Rohingya Registered Refugee Camps and Makeshift
Settlements in Cox's Bazar, Bangladesh

November-December 2019



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ABBREVIATIONS

ATWG	Assessment Technical Working Group
BSFP	Blanket Supplementary Feeding Programme
CI	Confidence interval
CiC	Camp in Charge
Cin	A case in the programme
Cout	A case not in the programme
CMAM	Community Management of Acute Malnutrition
CNR	Child non-respondent
CNV	Community Nutrition Volunteer
ECHO	European Civil Protection and Humanitarian Aid Operations
EPI	Expanded Programme of Immunisations
FGD	Focus Group Discussion
GAM	Global Acute Malnutrition
KI	Key informant
KII	Key informant interview
LoS	Length of stay
LQAS	Lot Quality Assurance Sampling
MAM	Moderate Acute Malnutrition
MUAC	Mid-upper Arm Circumference
OTP	Outpatient Therapeutic Programme
RC	Registered Camp
Rin	A recovering case (i.e. a case that was SAM/MAM but who is still in the OTP/TSFP programme as they have not yet reached discharge criteria)
Rout	A Recovering case not in the programme (i.e. a case that has recovered from SAM / MAM without being admitted to an OTP/TSFP)
RUSF	Ready to Use Supplementary Food
RUTF	Ready-to-Use Therapeutic Food
SAM	Severe Acute Malnutrition
SARPV	Social Assistance and Rehabilitation for the Physically Vulnerable
SHED	Society for Health Extension and Development
SIDA	Swedish International Development Cooperation Agency
SMART	Standardised Monitoring and Assessment of Relief and Transitions
SLEAC	Simplified Lot Quality Assurance Sampling Evaluation of Access and Coverage
SQUEAC	Semi-quantitative Evaluation of Access and Coverage
SSI	Semi structured interview
TSFP	Targeted Supplementary Feeding Programme
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
WC	World Concern
WFH	Weight-for-height Z score
WFP	World Food Programme
WN	A well-nourished child
WSB	Wheat Soya Blend
WVI	World Vision International

EXECUTIVE SUMMARY

A coverage assessment was conducted in the Rohingya refugee camps in Cox's Bazar district in southern Bangladesh in November 2019. The coverage assessment was based on an "Adapted SQUEAC methodology" and set out to assess the treatment coverage of OTP and TSFP services. The assessment also aimed to identify the reasons for high and low coverage and to provide direction to nutrition partners on how to improve the service uptake of CMAM services. The methodology included an analysis of programme data from 109 OTP and TSFP facilities from the October 2018 to September 2019 period, a SLEAC survey, a qualitative investigation and a CNV survey.

The coverage assessment was the second coverage assessment to be completed in the camps. The first assessment took place in August 2018. The treatment coverage estimates from both assessments were as follows (95% confidence intervals are shown in brackets):

	August 2018	November 2019
OTP	27.7% (22.5-32.9%)	76.9% (72.1-81.7%)
TSFP	34.1% (31.9-36.4%)	61% (57.5-64.6%)

Coverage of OTP services was disaggregated across five SLEAC zones. The SLEAC survey indicated that OTP coverage in all five zones fell in the "**Moderate**" classification range (60-90% coverage).

Coverage of TSFP services was disaggregated across 32 camps / merged camps and was found to vary considerably ([Figure 13](#) displays the TSFP coverage results on a map):

- One camp fell in the **High** coverage range (>90% coverage)
- 15 camps fell in the **Moderate** range (60-90% coverage)
- 16 camps fell in the **Low** range (<60% coverage)

The increases in coverage can be attributed to a number of changes to the context of the camps and to the OTP and TSFP treatment modalities. These include:

- Increased geographical coverage of TSFP services
- Increased experience of implementing partners operating OTPs and TSFPs
- Improvements to the coordination of CMAM in camps
- Increase to the MUAC cut-off point used during community screening from 125mm to 135mm (i.e. all children with a MUAC less than 135mm are referred to the nearest nutrition facility for full anthropometric measurement)
- Introduction of RUSF for treatment of MAM (from WSB++ in 2018)
- Revision of the SAM treatment protocols to be in line with the 2013 WHO guidelines

The 2019 coverage assessment also found that community awareness about malnutrition and about available nutrition services in camps had improved compared to the 2018 assessment. This can be attributed to enhanced community outreach services

(including house-to-house screening and sensitisations). A survey completed with 178 CNVs indicated that nearly all CNVs were established in their roles and were motivated to serve the community.

The SLEAC surveys identified 39 SAM cases who were not enrolled in the OTP and 300 MAM cases who were not enrolled in the TSFP.

- For both programmes, the most common reason why non-covered cases were not in the programme was because “**Children were enrolled in the incorrect programme**” (accounting for 46% of non-covered OTP cases and 48% of TSFP cases). This was due to inaccurate anthropometric measurements at facility level.
- The second most common reason (for both programmes), was “**Carer not aware that the child was sick**” (accounting for 21% of non-covered OTP cases and 27% of TSFP cases).

Together these two reasons accounted for 66% and 78% of all responses for OTP and TSFP cases respectively. Other significant negative factors influencing coverage which emerged from the SLEAC surveys, the CNV survey and the qualitative investigation included:

- Carer refusal for their child to be measured or to go to the nutrition facility due to religious beliefs, cultural norms or previous rejection
- Long waiting time at facilities (particularly TSFP)
- Carer belief that their child can only be admitted to OTP or TSFP if they are referred by a CNV
- Belief that a cured child who has relapsed cannot be readmitted to a programme once discharged as cured
- Reluctance of carers to travel to stabilisation centres (if child is discharged CNR)
- Rejection by nutrition facility staff to admit children as it is the “wrong” admission day for their sub-block

The key findings of the coverage assessment were presented to nutrition sector partners following the completion of data collection. During the workshop, they worked together to plan activities to improve the coverage of OTP and TSFP services based on the following recommendations:

Quality of care in nutrition facilities	- Improve and monitor quality anthropometric measurements across all facilities - Support the workload of measurement teams in TSFPs / BSFPs
Community outreach	- Improve supervision of CNVs in order to reduce carer refusal - Conduct more sensitisations with religious leaders and traditional healers and birth attendants - Promote complementary feeding during sensitisations
Coordination between facilities	- Improve linkages and referral of cases between OTP, TSFP, BSFP and SC - Take steps to reduce double / triple registrations between camps

1. INTRODUCTION

1.1. BACKGROUND OF COVERAGE ASSESSMENT

This is a report summarising the findings and analysis of a coverage assessment of Community-based Management of Acute Malnutrition (CMAM) services in the Rohingya Refugee camps. This assessment was conducted during November 2019 and was the second coverage assessment to be conducted in the camps. The first was conducted in July-August 2018; the report from the 2018 survey is available to view and download [here](#).

The coverage assessment was implemented with the generous financial support of UNICEF, WFP, SIDA and ECHO and was planned and implemented by the Action Against Hunger Bangladesh Surveillance team with technical support from the Action Against Hunger UK Nutrition assessment team. The assessment was completed on behalf of the Cox's Bazar Nutrition Sector which is comprised of multiple implementing partners who support the Bangladeshi government with the implementation of SAM and MAM treatment and prevention services across the refugee settlements. The Nutrition Sector and several of these partners also provided team members to act as team leaders during the data collection phase of the assessment.

1.2. CONTEXT

During 2017 and 2018, extreme violence in Rakhine State, Myanmar, drove more than 700,000 Rohingya refugees across the border into Cox's Bazar district, Bangladesh. The people and Government of Bangladesh welcomed them with resounding generosity and open borders. The speed and scale of the influx was nonetheless a challenge, and the humanitarian community stepped up its support to mitigate a critical humanitarian emergency. More than two years later refugees in Cox's Bazar district remain forced to rely upon humanitarian assistance for their basic needs, living in congested camps and with limited access to clean sanitation and hygiene facilities.

Based on the UNHCR population factsheet published in September 2019, the total population of the registered and makeshifts camps was 905,822 individuals¹. This population was split amongst 32 makeshift and 2 registered camps with populations ranging from 5,000 to 50,000 individuals. This does not include refugees living in the host communities.

1.3. NUTRITION SITUATION

A nutrition survey² was conducted in the registered and makeshift camps during October 2019 using the SMART methodology. The estimated rates of moderate and severe acute malnutrition are shown in Table 1.

¹ UNHCR refugee population factsheet, updated 30th September 2019)

² Emergency Health and Nutrition Assessment Round 4 (report to be finalised)

Table 1: SAM, MAM and GAM rates, Nutrition survey, October 2019

	Makeshift camps	Nayapara Registered Camp	Kutupalong Registered Camp
Severe Acute Malnutrition (based on WHZ score)	0.9%	0%	1.3%
Moderate Acute Malnutrition (based on WHZ score)	10.1%	13.3%	10.8%
Global Acute Malnutrition (based on WHZ score)	10.9%	13.3%	12.1%

1.4. ACUTE MALNUTRITION TREATMENT SERVICES

A total of 109 acute malnutrition treatment and prevention services were operating across the camps at the time of the survey including:

- 58 Outpatient Therapeutic Programme (OTP) facilities
- 51 Targeted Supplementary Feeding Programme (TSFP) and Blanket Supplementary Feeding Programme (BSFP) facilities

Out of these, there were 28 “integrated” facilities where the same partner delivered OTP and TSFP services from the same facility. Six implementing partners delivered OTP and TSFP / BSFP services (ACF, Concern Worldwide, SHED, Save the Children, TdH and SARPV) and three implementing partners delivered only TSFP and BSFP services (BRAC, World Concern Media and World Vision International).

The primary target population for the OTP and TSFP services (and the target population for this assessment) is children aged 6-59 months who are SAM or MAM.

1.5. RESULTS FROM 2018 COVERAGE ASSESSMENT

During the 2018 assessment, a SLEAC assessment was conducted across five geographic zones of the camps in order to classify and, where possible, estimate the coverage of OTP and TSFP services.

Coverage was classified on a three-tier scale as follows:

- Low : 0-60%
- Moderate: 60-90%
- High: 90-100%

The assessment classified OTP and TSFP programme coverage as **low** for all zones assessed. The overall coverage of the OTP programme for all camps combined was estimated to be **27.7% (95% CI: 22.5-32.9%)** and TSFP programme coverage was **34.1% (95% CI: 31.9-36.4%)**; both were significantly lower than the SPHERE standard for camp settings (90%).

The poor coverage results found in the Cox's Bazar refugee settlements were attributed to a number of factors.

- The recent establishment of some nutrition programmes in the camps at the time of the assessment meant that community outreach activities had only been operating in some camps for 3-4 months. While OTP services had been operating since the influx in August 2017, at the time of the first assessment in August 2018, TSFP and BSFP services were still being rolled out.
- The possible perception by carers that they do not consider their child to be "sick", even if they are showing symptoms of acute malnutrition
- Decreased quality of care in nutrition centres and coordination challenges between nutrition partners
- The relatively low "MUAC cut-off" of 125mm in use at the time of the assessment. The anthropometric results from the assessment indicated that 29% of SAM cases and 65% MAM identified would have been missed during regular screening in communities as their MUACs were equal to or greater than 125mm.

1.6. EVOLUTION OF CONTEXT IN CAMPS

Since the coverage assessment in August 2018 (known henceforth as the "Baseline assessment"), there have been a number of important changes both to the context of the camps and to CMAM treatment which have potentially affected the coverage of CMAM treatment services. These include:

Geographical coverage of CMAM services: Between the baseline assessment in 2018 and the follow up survey in 2019, the geographical coverage of CMAM facilities had increased across the camps, without a major increase in the target population.

As such, it would be expected that a greater proportion of the target population was accessing care. The table below summarises the increases in the number of CMAM facilities between the August 2018 and November 2019.

Table 2: Number of CMAM facilities during baseline and follow up coverage assessments

Type of facility	Baseline (August 2018)	Follow up (November 2019)
Stabilisation centres	3	5
OTP	57	56
TSFP/BSFP	28	51

Increased experience of implementing partners of operating OTPs and TSFPs: At the time of the baseline assessment, many OTP and TSFP facilities had been recently opened by implementing partners. With the exception of the integrated facilities operated by ACF in the registered camps, all other facilities had been open for less than 12 months with many in the makeshift camps operating for 6 months or less.

Furthermore, many of the national implementing partners (SHED, SARPV and BRAC) had limited experience of delivering CMAM services to the Rohingya or host communities.

By November 2019, all OTP and most TSFP facilities were well established. Out of the 51 TSFP facilities operating in October 2019, 18 new facilities had opened between February and June 2019. However, they were all opened by existing implementing partners and so they had had at least four months to admit MAM cases from their catchment areas prior to the coverage assessment.

General improvements to coordination of CMAM in camps: During the 15 months following the baseline assessment, partners improved coordination between facilities at camp level, particularly with regards to community outreach and to the catchment areas of the different facilities. The nutrition sector organised several workshops with the partner field staff to discuss the catchment areas leading to proper demarcation and coordination of nutrition activities in the field. Therefore it is unlikely that there are any sub-blocks in the camps which do not have Community Nutrition Volunteers conducting regular screening using MUAC tapes.

Increase of MUAC cut-off point during community screening (125mm to 135mm): During the baseline assessment, a MUAC screening cut-off of 140mm was used during case finding (meaning that all children aged 6-59 months who had a MUAC of less than 140mm received full measurement to calculate the Weight for height Z-score). The findings of the coverage assessment indicated that a large number of SAM and MAM cases were being missed owing to the fact that, at the time, a MUAC cut-off of 125mm was used during regular community screening. As such, after the baseline assessment, the MUAC cut-off used by Community Nutrition Volunteers (CNV) was increased permanently to 135mm which led to an increase in the number of SAM and MAM cases identified.

Introduction of RUSF for treatment of MAM: At the time of the baseline assessment in 2018, WSB++ (wheat soya blend) was being provided for the treatment of MAM cases in the TSFPs as the treatment for acute malnutrition. However, by the end of 2018, treatment for MAM had been changed to Ready to use supplementary food (RUSF).

Revision of the SAM treatment protocols to be in line with the 2013 WHO guidelines: From June 2019, the Nutrition Sector revised the OTP treatment guidelines to be in line with the WHO global guidelines for the treatment of SAM.

Prior to June 2019, children were discharged from the OTP and transferred to TSFP when they had reached MAM status for two consecutive visits. After June 2019 when following the WHO global guidelines, children were discharged from OTP when they had reached well-nourished status and transferred to TSFP (for four additional weeks in the TSFP to ensure that they did not relapse following discharge).

Timing of coverage assessment: The timing of a coverage assessment can have an impact on the final coverage estimate of treatment services due to access challenges (or lack of).

The baseline coverage assessment was completed in August 2018, soon after the end of the monsoon season. As such, in some camps, poor access due to muddy paths and roads could have affected coverage negatively.

The survey in 2019 was completed in November. While there was a period of rain at the start of data collection, overall, access in camps was better than in 2018. Improvements to the infrastructure in the camps (roads and paths) also may have influenced coverage positively in 2019.

1.7. OBJECTIVES OF ASSESSMENT

Objective of assessment

The overall objective of the 2019 coverage assessment was to assess the coverage of OTP and TSFP services, identify areas of high and low coverage and identify the reasons for high and low coverage in order to set out recommendations to improve the service uptake of CMAM services.

Specific objectives

- To analyse facility level programme data to identify camps with potential low and high coverage
- To classify the coverage of TSFP services on a three tier scale at camp level
- To classify the coverage of OTP services across multiple neighbouring camps
- To conduct a qualitative investigation in certain camps and health facilities to investigate reasons for high, moderate and low coverage
- To elaborate recommendations and activities to improve service uptake of CMAM services in the camps

2. METHODOLOGY

Coverage assessments set out to measure the *treatment coverage* of CMAM programmes. The treatment coverage of a CMAM programme refers to the proportion of children eligible for treatment for SAM or MAM who are actually receiving treatment.

Coverage is one of the key principles of the CMAM operating model. If coverage is high then it can be an indication that a high proportion of children in the programme are being successfully treated through to cure. The coverage of a CMAM programme is also a key indicator of the effectiveness of the community outreach component of the CMAM programme. The most commonly used methodologies used by nutrition programmes to assess treatment coverage are SQUEAC³ and SLEAC⁴.

In July/August 2018, a mixed-methods approach was used to assess the treatment coverage of CMAM services in the camps. The assessment included the following steps:

- SLEAC surveys in five SLEAC zones of the Cox's Bazar camps to classify coverage of SAM and MAM treatment services for children aged 6-59 months
- A qualitative investigation in the camps of Cox's Bazar to gather detailed information from communities on the primary factors influencing the coverage of CMAM services.

In preparation for the 2019 coverage assessment, Nutrition Sector partners expressed their wish to conduct a coverage assessment which presented more detailed camp-level coverage data in order to identify areas of weakness in the uptake of CMAM services.

As such the following approach was proposed and then used by the ACF Bangladesh Surveillance team to assess the coverage of CMAM services in the camps in November 2019:

Title: Coverage assessment

Summary of method: A mixed methods approach to provide detailed camp by camp assessment of coverage of OTP and TSFP services using programme data analysis, SLEAC surveys and qualitative data collection.

Key steps:

- **Collection and analysis of facility-level programme data** for the period of October 2018-September 2019 in order to identify and map camps with potentially high and low OTP and TSFP coverage.
- **Implementation of SLEAC surveys** in each of the makeshift and registered camps in order to:
 - Classify TSFP coverage on a three tier scale at camp level;
 - Classify OTP coverage across multiple, grouped camps (based on the same SLEAC zones used during the 2018 coverage assessment)

³ Semi-quantitative evaluation of access and coverage

⁴ Simplified LQAS (Lot Quality Assurance Sampling) Evaluation of Access and Coverage

- Estimate coverage of OTP and TSFP services across all of the camps
- Rank barriers and boosters to coverage of TSFP and OTP by camp and overall
- Implementation of a **qualitative investigation** in communities and health facilities in a selection of camps to elaborate on the root causes of poor service uptake

Detailed methodologies for each of the steps followed in addition to sample sizes achieved are included in [Annex 1](#).

3. RESULTS

3.1. INTRODUCTION

The three steps of the 2019 coverage assessment in the camps yielded a large amount of data. The data collected addressed the objectives of the survey in addition to supplementary outputs which can be analysed at camp, facility or sub-block level (depending on the data).

[Annex 10](#) summarises the data collected during each step of the Adapted SQUEAC assessment methodology, the outputs of the data analysis completed and the level of disaggregation for each of the outputs.

The results section of this report presents the top-level results and, where relevant, camp level results in line with the specific objectives of the assessment. However detailed analysis of results is possible with the datasets from the assessment.

The results and findings are presented in the following order:

1. Programme data analysis findings
2. Qualitative investigation findings
3. SLEAC survey results
4. CNV survey results

3.2. PROGRAMME DATA ANALYSIS

This section provides a summary of key trends of OTP and TSFP programme data overall and by camp for the October 2018 to September 2019 period. The purpose of this analysis is to identify and, if possible explain, data trends over time.

Facility level data was submitted by implementing partners. Therefore it is possible to conduct detailed analyses of OTP and TSFP data by facility, by implementing partner and by camp as needed using the data analysis sheet in excel (shared with the Nutrition Sector Information Management Officer).

Stock availability

Stock availability of RUTF and RUSF was **very good** for the period assessed for all facilities.

- Partners reported that all OTPs had 100% availability of RUTF during the 12 months.
- RUSF availability was 99.9% overall. Two TSFP facilities (both run by SHED) reported a shortage of RUSF for just one week in Camps 17 and 7 (in June and August respectively).

Human resources availability

There were some reported human resources (HR) shortages in nutrition facilities during the assessed period (detailed below). However, overall, HR availability in both OTP and TSFP facilities exceeded 95% HR availability for the period.

HR availability in OTPs was lowest in October 2018 (81%). In TSFPs it was lowest in April 2019 (86%).

Details of staff shortages were as follows:

OTP:

- Some shortages in Terre des Hommes (TDH) OTPs between October 18 and January 2019
- Occasional shortages in SARPV's OTPs throughout the period

TSFP:

- Shortages in the newly opened TSFPs run by Save the Children International (SCI) from April onwards (Camps 15, 17, 20, 25 and 27)
- Shortages in SARPV's TSFPs from May onwards (Camps 15+22)
- Shortages in World Concern (WC) Media's TSFPs in March and April
- Shortages in World Vision International's (WVI) TSFP in Camp 10 from April-June
- Occasional shortages in all of BRAC's TSFPs throughout the period

Where staff shortages were reported, during the programme data analysis workshop, implementing partners informed the assessment team that the shortages were caused by **delays in recruitment** and/or **high staff turnover**.

Community outreach availability

Implementing partners reported monthly screening figures for each of the facilities for which they were responsible. This was analysed in order to assess community outreach availability for the October 2018 to September 2019 period.

[Figure 1](#) shows the monthly screening figures over time for all OTP and TSFP facilities combined. The chart also includes the population of children aged 6-59 months in the camps as a "target" figure for screening. This is included as each child under 5 should be screened by CNVs in the community at least once a month by each of the programmes.

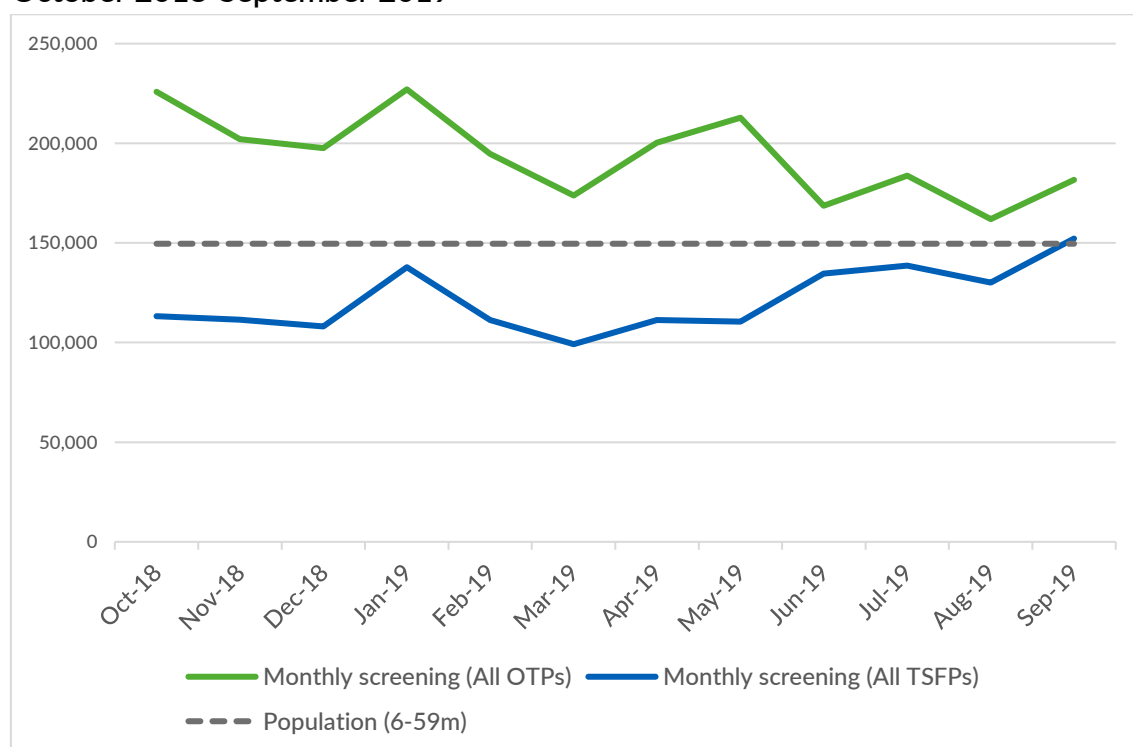
Higher screening figures were reported by OTPs than TSFPs throughout the period. This can be attributed to the fact that, at the start of the analysis period, there were fewer TSFPs operating (34 in October 2018 and 51 by September 2019). There was a therefore a gradual increase in the screening figures reported by TSFPs after May 2019. During the data analysis workshop, some partners also attributed the lower TSFP figures to the fact that in some TSFP / BSFP facilities, screening was only conducted at facility level (and therefore was not reported in the monthly screening figures).

There were peaks of screening (especially in OTPs) in January 2019 and May 2019. The increase in the number of children screened in January 2019 is attributed to the resuming of services in the camps after the election period in Bangladesh where there

was a limited number of staff and camps in December. There was also a drop in screening during March and April. The peak in screening reported by OTPs in April and May 2019 can be attributed to a number of partners implementing screening campaigns at the time. A Nutrition Action Week also took place during March 2019.

Overall, based on the target of screening each child once a month, the data indicates that screening reported by OTPs exceeded target, and TSFP was slightly below target. However, in principle, because CNVs refer cases to TSFPs even if they were employed by a partner implementing an OTP (and vice-versa), the lower TSFP screening totals should not be a cause for concern.

Figure 1: Combined OTP and TSFP screening totals of children aged 6-59 months, October 2018-September 2019



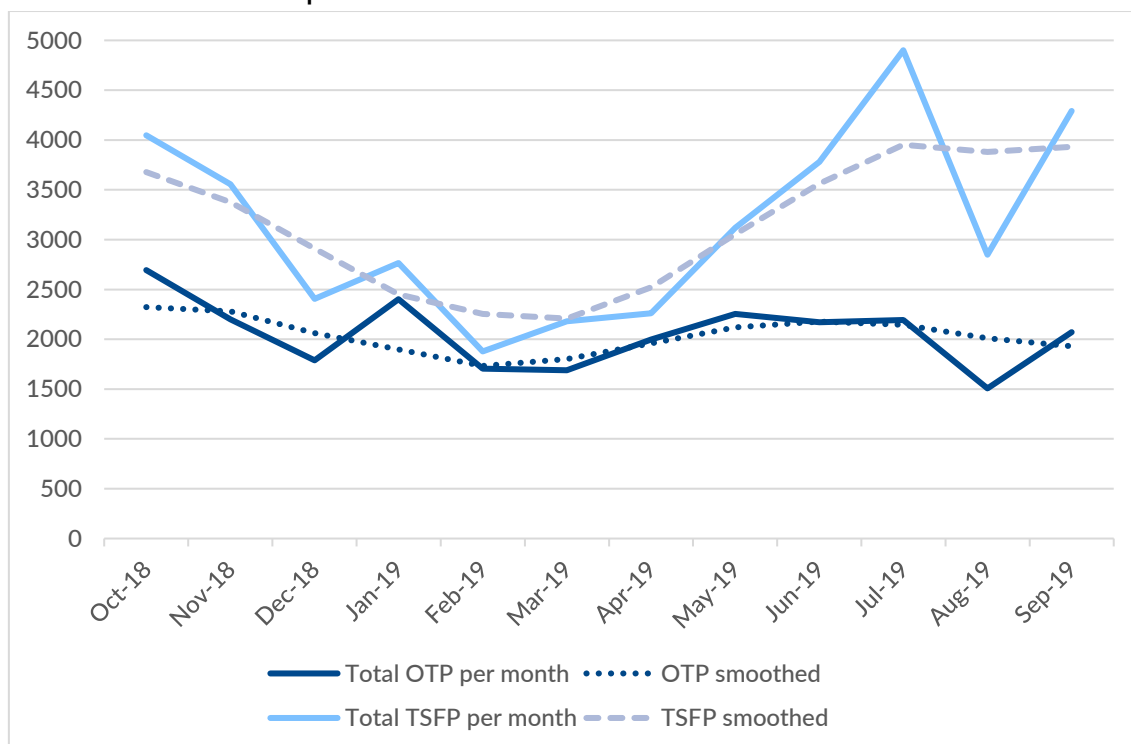
[Annex 4](#) summarises the totals reported by all facilities by camp in comparison with the population of children aged 6-59 months.

Some camps reported much higher screening totals than others. This can be attributed to double counting (particularly where integrated facilities operated). But overall, in comparison with the total population of children aged 6-59 months in each of the camps, in *most* camps at least one of the programmes (normally the OTP), the screening target was reached or exceeded for the period (each child in camp was screened at least once a month). Exceptions to this were Camps 11 and 26 where screening totals were comparatively low for the period.

New enrolments

[Figure 2](#) shows total new enrolments over time for OTP and TSFP along with the new enrolments of both smoothed over time using the M3A3 technique⁵.

Figure 2: New enrolments to OTP and TSFP (children aged 6-59 months) between October 2018 and September 2019



Monthly OTP admissions remained fairly consistent during the period, ranging from a high of 2,674 in October 2018 to a low of 1,507 in August 2019. Meanwhile, TSFP admissions varied significantly during the year from a low of 1,878 in February 2019 to a high of 4,901 in August 2019.

Peaks in admissions of both OTP and TSFP were seen in January 2019 (due to increases in screening following the Bangladesh elections in December) and from May to July 2019 (likely as a result of the monsoon rains). TSFP admissions increased most significantly in June and July as a result of the opening of 15 new facilities in the first half of 2019. Both programmes saw dips in admissions during August, which can be attributed to the Eid holidays during this month.

Total OTP admissions for the period were 24,671 and TSFP admissions were 38,035.

Considering the prevalence of MAM is higher than the prevalence of SAM (approximately 10.1% for MAM compared to 1% for SAM), it should be expected that TSFP admissions are higher than OTP admissions. However, SAM admissions are exceptionally high considering such a low prevalence of SAM. With a prevalence of 1%,

⁵ New enrolments overtime are smoothed using the M3A3 technique. This involves smoothing raw data by calculating moving medians of 3 and then moving averages of 3 to show seasonality and trends over time

one would expect the SAM caseload⁶ to be around 5,000 per year for ALL camps. So SAM admissions are approximately five times higher than expected.

Total TSFP admissions were in line with expected admissions. Based on a prevalence of 10.1%, the MAM caseload is estimated to be approximately 53,000 for all camps combined. Actual new enrolments (38,000) accounted for around 72% of caseload. If coverage is around 60%, this indicates that actual new enrolments are slightly higher than expected, but overall as expected.

At the end of the investigation, the team summarised the most likely causes of the exceptionally high OTP admissions (Table 3). For each reason, *Evidence* and likely *Impact* have been ranked as *Low*, *Medium* or *High*.

Table 3: Potential reasons for high OTP admissions

REASON	EVIDENCE	IMPACT
Admission errors by NF staff: Poor measurement of MUACs in health facilities and tightening of MUAC tape so that child falls within admission criteria of OTP Evidence: ~54% of new enrollments were recorded as being within MUAC admission range for July-Sept 2019 period (for OTP and TSFP). However the SMART survey in October 2019 found that just 30% of acutely malnourished children were acutely malnourished by MUAC.	High	Medium / High
Double / Triple enrolment: Carers registering their children in multiple OTPs to benefit from extra rations.	Medium	Low
High relapse rate for OTPs	Medium	Low
Management pressure to admit more cases: Nutrition facility staff intentionally admitting high numbers of OTP cases to reach "target" performance rate. Evidence: - One facility admitted to it during investigation⁷ - Short Average Length of stay before cure in some facilities (more details below)	Medium	Medium / High

New enrolments by camp

There was great variation in the number of admissions to OTP and TSFP by camp during the period. Given that the total populations of camps vary considerably, a variation in the total admissions by camp is not surprising. However it is possible to compare actual admissions with "expected admissions" based on population. This can be done by comparing the *percentage of the target population in each camp* as a proportion of the total target population across all camps with the *percentage of admissions* (of OTP and TSFP) in that camp as a proportion of all admissions. This has been done in Figure 3.

⁶ Caseload was calculated with a correction factor of 2.5 and a coverage of 100%

⁷ During the qualitative investigation in Camp 7, the team supervisor was told by an OTP supervisor (from OTP 20) that his management encourage him to increase admissions (see [Annex 5](#) for more information)

Figure 3: Percentage of new enrolments to OTP and TSFP compared to all OTP and TSFP enrolments

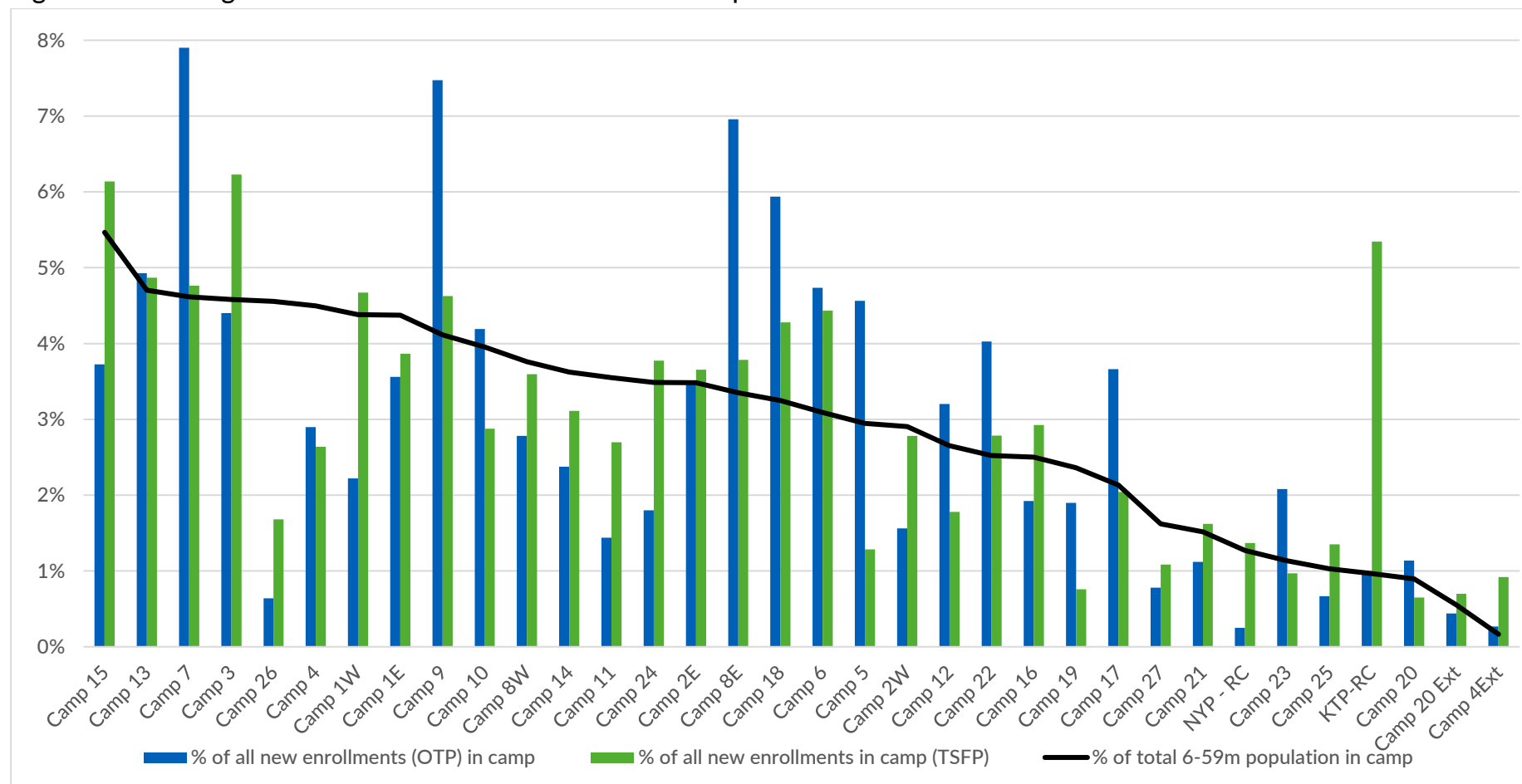


Figure 3 indicates that “expected” admissions by camp varied considerably in comparison with actual admissions (particularly with regards to OTP admissions).

For example, Camp 7 contains 4.6% of the total population of children aged 6-59 months. The TSFP services in the camp have admitted 4.8% of all TSFP admissions during the period indicating that TSFP admissions are as largely as expected in the camp. However 7.9% of all OTP admissions have been admitted in Camp 7 during the period – 3% more than would be expected.

This method of analysis enables teams to gather an *indication* of camps which may have higher or lower coverage however it will not provide an exact picture. In the camps of Cox’s Bazar, the population can move between camps and children can be admitted to nutrition services in the neighbouring camp if they want (for example, if a household is located on the border between camps and the facility closest to them is in the neighbouring camp, they can go to this facility rather than the one in their own camp). Also it assumes that prevalence is consistent across all camps, which is not necessarily the case.

Table 4 summarises camps where new enrolments were high or low in comparison with expected admissions.

Table 4: Summary of camps where new enrolments were high and low in comparison with expected admissions

	OTP	TSFP
Exceptionally high admissions	Camps 7, 8E, 9 and 18	Nayapara RC
High admissions	Camps 5, 6, 17 and 23	Camps 3, 6 and 18
Low admissions	Camps 1W, 2W, 4, 11, 24 and 27	Camps 4, 5, 12 and 19
Exceptionally low admissions	Nayapara RC and Camp 26	Camp 26

The possible explanations for the variations in actual admissions in comparison with expected admissions are explored in more detail in [Annex 5](#).

MUAC measurements at admission

The analysis of MUAC measurements at admission was conducted in order to assess the timeliness of admissions. If the majority of cases admitted to an OTP or TSFP are admitted close to the admission criteria for the programme (<115mm for OTP and <125mm for TSFP), this indicates that cases are identified and admitted early.

In Cox’s Bazar, the period assessed was July to September 2019. Figures 4 and 5 show the results for OTP and TSFP respectively. This includes cases admitted by ALL admission criteria (including by weight for height Z-score, MUAC or oedema or by combination of the criteria).

Figure 4: MUAC measurements at admission for OTPs in all camps, July-September 2019 (median value is indicated in red)

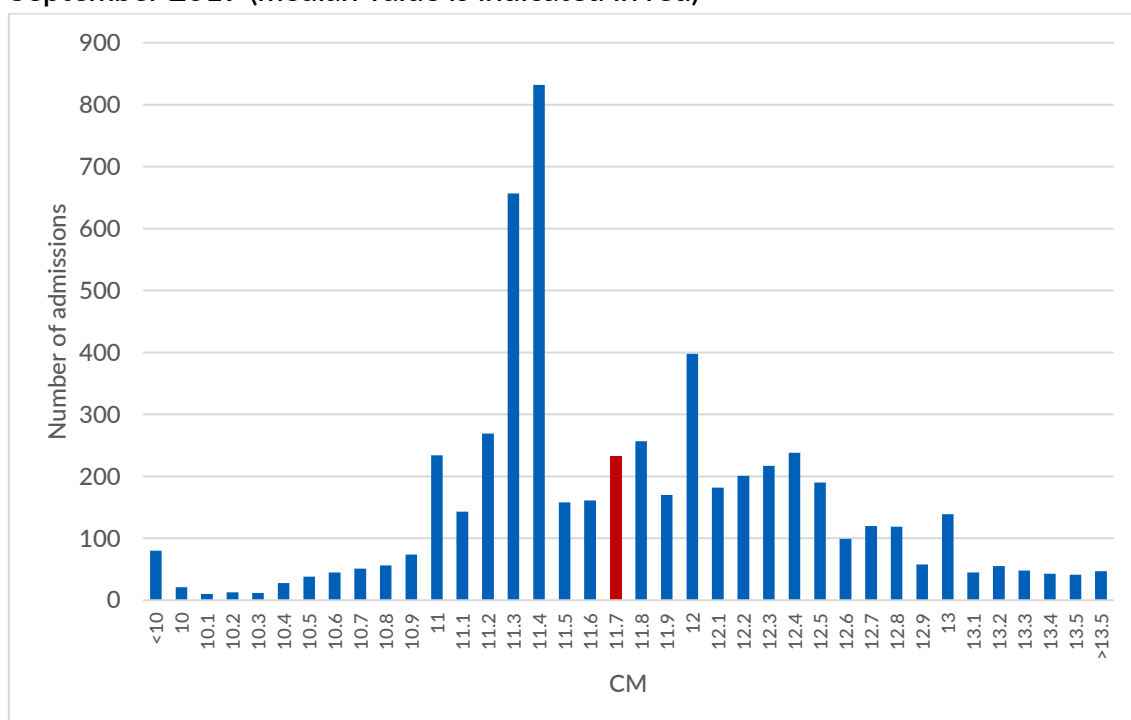


Figure 5: MUAC measurements at admission for TSFPs in all camps, July-September 2019 (median value is indicated in red)

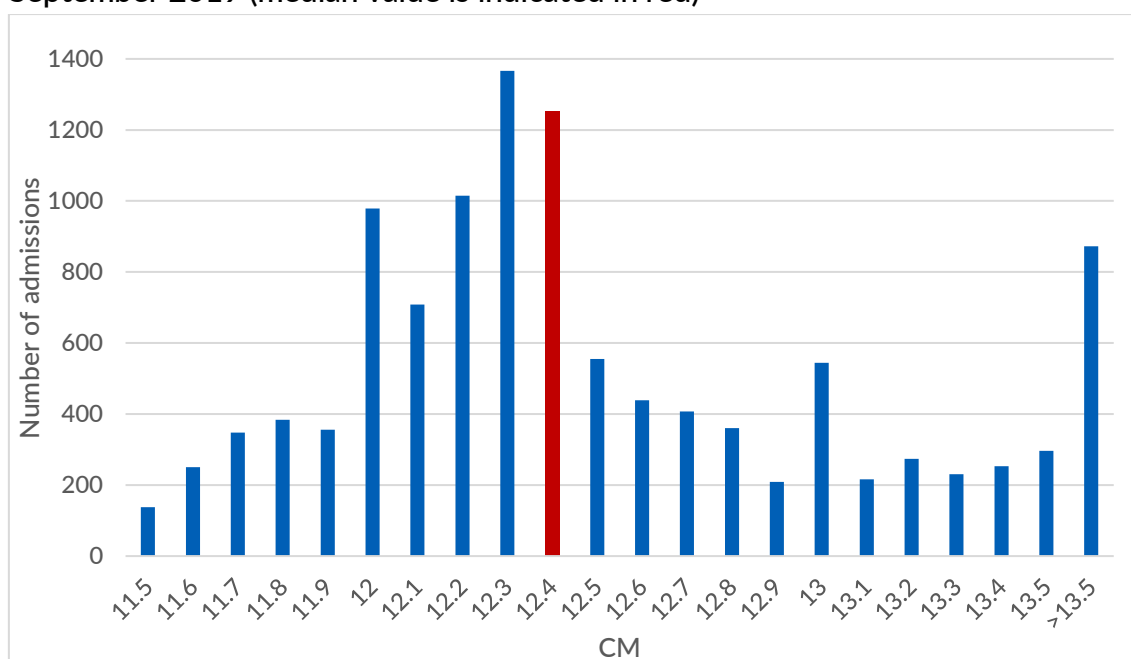


Figure 4 shows that, during the three months assessed, the most common MUAC measurement at admission recorded for children admitted to OTPs was 11.4cm and that approximately half of all admissions were recorded with MUAC measurements of less than 11.7cm and half with measurements greater than 11.7cm.

Meanwhile Figure 5 shows that the 12.3cm was the most common MUAC measurement at admission for TSFP cases, and that half of admissions were admitted with a MUAC of less than 12.4cm and half with a MUAC greater than 12.4cm.

Both datasets therefore indicate that admissions are timely. However, looking at this data in isolation is misleading. Rounds 1-3 of the SMART surveys in the refugee camps (which took place in 2017 and 2018) indicated that, out of all GAM cases identified, during successive surveys, 67% were ONLY GAM by WFH Z-score.

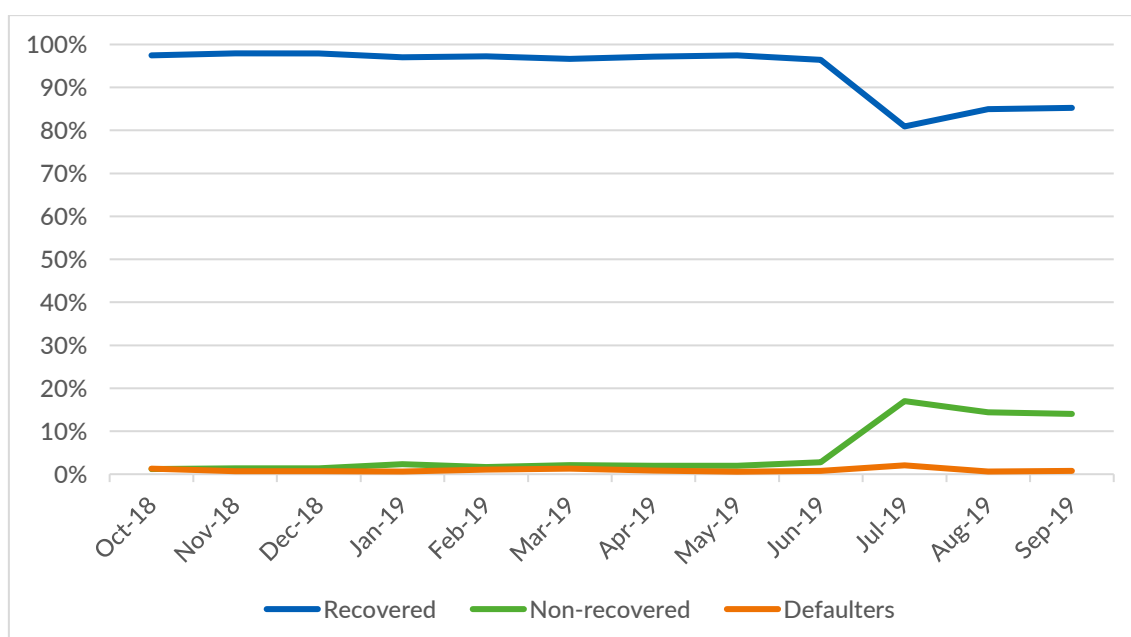
Considering the charts above represent all admissions to OTPs and TSFPs, it is therefore surprising that such high proportions of OTP admissions and TSFP admissions were admitted with MUAC measurements equal to or below the relevant admission criteria. Out of 5,781 OTP admissions, 44% were admitted with MUAC measurements less than 11.5cm; out of 11,453 TSFP admissions, 59% were admitted with MUAC measurements of less than 12.5cm.

The charts therefore indicate that while admissions to OTP and TSFP appear to be timely (there are few cases with very low MUAC measurements at admission), the quality of MUAC measurement may be poor. Again there is significant variation between facilities and between camps which can be reviewed in the programme data database. Key observations at camp and facility level are summarised in [Annex 5](#).

Programme discharge criteria

For the programme data analysis, implementing partners reported the number of children discharged as cured, non-responder and defaulter during the October 2018 to September 2019 period. This is summarised over time in Figures 6 and 7 for OTP and TSFP respectively. It should be noted that children who were discharged as deaths were not requested for the purposes of this exercise. Therefore the charts do not provide a complete summary of all programme discharges over time.

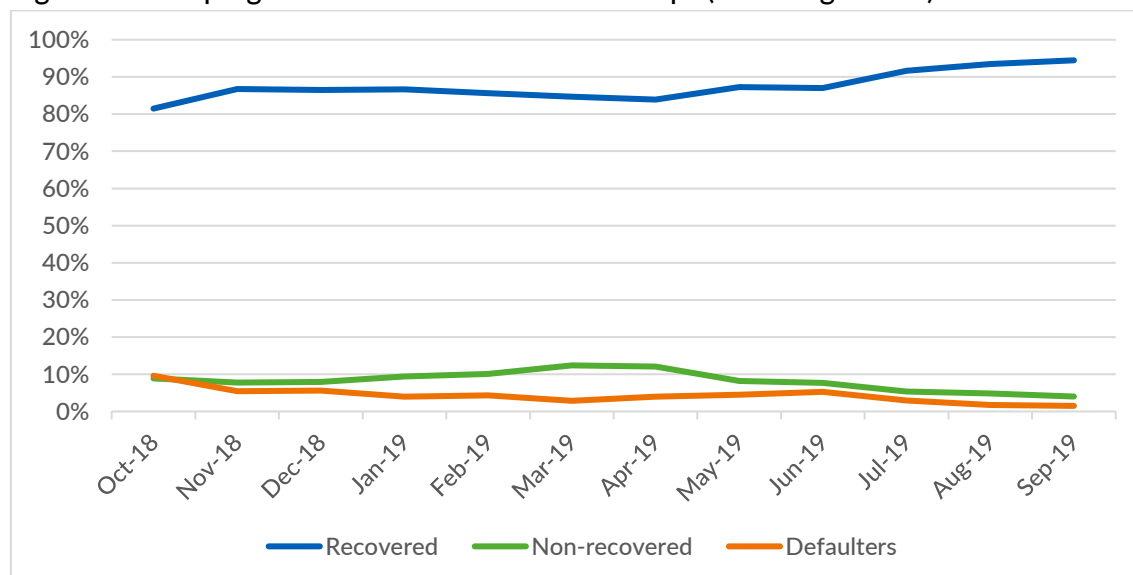
Figure 6: OTP programme exits over time in all camps (excluding deaths)



OTP programme exits adhered to Sphere standards between October 2018 and June 2019. The average cure rate never dropped below 80.9%. July 2019 saw a steep increase in the percentage of children discharged as non-responders (2.8% in June to 17% in July). The non-responder rate remained high in August and September. Despite this increase, the cure rate remained within Sphere standards, even with the increased non-responder rate.

The increase in non-responders was attributed to the introduction of the “extended” protocol for the treatment of OTP cases. Before June 2019, OTP cases were discharged from OTP after they had reached MAM status for two consecutive visits. However after June 2018, OTP cases were required to remain in the OTP until they had reached well-nourished status for two consecutive visits. However, the maximum permitted length of stay in the OTP was not changed (it remained 12 weeks). This therefore resulted in a peak in the number of OTP cases discharged as non-responders in July, August and September. The majority of these cases would have been admitted to their nearest TSFP after an assessment at a stabilisation centre.

Figure 7: TSFP programme exits over time in all camps (excluding deaths)



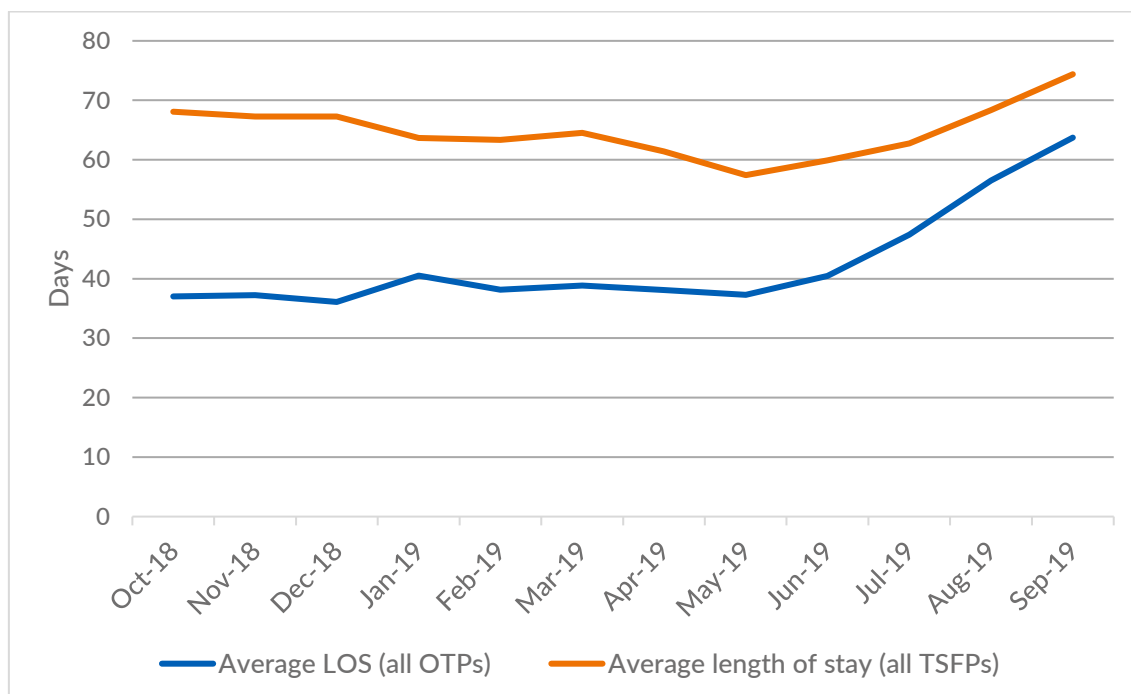
Overall programme exits for TSFP also adhered to Sphere standards for the period. Cure rate increased during the period from 82% in October 2018 to 94.5% in September 2019. The average cure rate was reduced in some camps. Camp 24 was the only camp to report a cure rate of less than 75% for the period assessed (73.5%) and four other camps reported cure rates of less than 80% for the period (Camps 7, 11, 12 and 18).

Non-responder rate averaged 9-10% during the period assessed, with peaks in March and April. During the qualitative investigation, non-responder case studies were completed to determine common causes of non-response. Often it was attributed to carers failing to provide supplementary food for their child whilst enrolled in the TSFP. This is discussed more in [Section 3.3](#).

Length of stay before cure

Partners reported average length of stay (LoS) before cure by facility for OTP and TSFP. The results for all camps are summarised in Figure 8.

Figure 8: Average lengths of stay before cure, all camps



The average LoS before cure in OTPs was approximately 37 days between October 2018 and May 2019 before increasing gradually to 64 days in September 2019. This was due to the change to the WHO SAM treatment protocol in June 2019.

However the average LoS before cure in some camps remained short (<35 days) even after the introduction of the new protocol which suggested that the implementing partners in these camps had not implemented the extended protocol. These included Camp 2E (SARPV OTP), Camp 9 (SHED OTP) and Camp 15 (SCI OTP).

The average LoS in TSFPs varied from 57-74 days between October 2018 and September 2019. There was a slight increase in the average LoS from May to September 2019 owing to longer lengths of stay being reported in some camps. Partners reported particularly long lengths of stay (>80 days) in the May to September period in Camps 1E (ACF), Camp 4 SARPV and WVI), Camp 6 (WC) and Camp 27 (SCI).

Camp and facility level results are elaborated in more detail in [Annex 5](#).

3.3. QUALITATIVE INVESTIGATION FINDINGS

Introduction

This section summarises the findings of the qualitative investigation. The methodology in [Annex 1](#) summarises the steps followed during the qualitative investigation to record and then triangulate the findings. All positive and negative factors affecting coverage of CMAM programmes are summarised in [Annex 11](#) and all factors are relevant to OTP and TSFP.

The factors have been grouped according to the following themes:

1. Awareness, understanding and perception of malnutrition
2. Awareness, understanding and perception of nutrition programmes
3. Community outreach services
4. Quality of care in nutrition facilities
5. Other factors affecting coverage

Each factor is listed with the triangulation “scores”. These include:

- **% of Key informant (KI) groups:** this refers to the percentage of different types of key informants who mentioned this factor out of a total of 12 groups.
- **% of Key informants interviews (KIIs):** this refers to the percentage of KIIs where the factor was mentioned out of a total of 70 KIIs conducted
- **% of Locations:** this refers to the percentage of camps where the factor was mentioned out of a total of 14 camps visited

Additional findings from the qualitative investigations are included in Annex as follows:

- [Annex 6](#) lists **suggestions** made by key informants on how CMAM programmes could be improved and **Rohingya terms** for common childhood diseases and malnutrition
- [Annex 7](#) summarises the **case studies** completed with carers of cases who had been discharged as non-responders or defaulters and cases who had been admitted to the OTP with very low MUAC measurements.

Summary of findings

Awareness, understanding and perception of malnutrition

Overall, community members across all sub-blocks visited during the qualitative investigation demonstrated good knowledge and understanding about malnutrition. The majority of key informant groups confirmed that they recognised malnutrition as a disease and confirmed that the condition is not stigmatised in their community.

Misconceptions about malnutrition did exist in some communities. In 57% of sub-blocks visited at least one key informant cited a misconception about the cause of malnutrition (e.g. it is caused by ghosts / superstitious causes). In some cases, this led to stigmatisation of the child due to the belief that the condition was contagious. However this was rare; misconceptions were mentioned in less than 10% of key informants interviews.

Recognition of the symptoms of malnutrition was common across most key informant groups in all sub-blocks visited. However overall, in only 50% of KIIs were key informants able to provide an example of a symptom of malnutrition. In a few KIIs, key informants demonstrated misunderstandings about the symptoms of malnutrition (6%).

The majority of KI groups in most camps were able to list at least some of the causes of malnutrition and were able to identify it as a disease which could lead to death if not treated. However this information came out of a relatively small number of KIIs overall, indicating that while some groups are aware of the causes and effects of malnutrition, this is only representative of a small proportion of key informants. Further to this misunderstanding about the effects of malnutrition on a child's body were mentioned in all camps by around half of key informants.

In summary, community and facility-level sensitisations appear to have sensitised many community members about malnutrition, what causes it and what effects it has across the majority of camps. However sensitisations may not be reaching all community members. Compared to the qualitative investigation during the 2018 coverage survey the results present a similar picture of knowledge and understanding of malnutrition. However misconceptions about malnutrition causes and about the disease in general have reduced significantly; in 2018, in two thirds of KIIs, KIs stated that malnutrition was caused by ghosts and that it was a communicable disease; in 2019 this had reduced to just 7%.

Awareness, understanding and perceptions of nutrition programmes

Awareness and understanding of nutrition programmes is very good across all camps and across most KIs interviewed. At least one key informant in all camps visited knew who the target population of the CMAM programme were and most key informants understood that RUTF was for very sick children and RUSF was for sick children. Meanwhile less than 10% of key informants had no knowledge at all about the CMAM programme.

There was also strong evidence across all camps that the CMAM programme is appreciated by community members and by the carers of malnourished children. Nearly all carers interviewed stated that they appreciated the programme as the health of their children improved following treatment. This was echoed by many of the community members and other key community members.

Some key informants stated that RUTF or RUSF had caused diarrhoea, vomiting or coughing in their child. However these seemed to be isolated cases.

Overall, the findings indicate an improvement in comparison with the findings of the 2018 survey as a greater proportion of respondents in 2019 cited positive experiences with the CMAM programme.

Community outreach

Nearly all key informant groups in all camps confirmed that CNVs conduct regular screenings and sensitisations in their sub-blocks. Many KI groups also confirmed that

they appreciated the sensitisations provided by the CNVs. However sensitisations are not reaching as many community members that they could. This is confirmed by the fact that a relatively small percentage of KI groups (25%) and only 9% of all KIIs confirmed that sensitisations about CMAM were reaching other community members (eg groups of men, block leaders and adolescent girls).

The majority of CNVs confirmed that they were motivated by their work and that they had the necessary materials and support to complete a satisfactory job. Only 20% of CNVs confirmed that they were lacking the necessary tools and support.

Various community members (including carers of SAM and MAM cases, block leaders and traditional healers) confirmed that they promote the CMAM programme by referring sick children to the nearest facility or by helping organise sensitisations. While this is a relatively small percentage, it is an improvement in comparison with the 2018 survey results when there was minimal evidence of the community supporting case finding and referrals for the CMAM programme.

Quality of care in nutrition facilities

Nearly all carers of SAM and MAM cases stated that they were happy with the quality of care provided by facility staff. Community members (many of whom had children enrolled in the BSFP), also confirmed that they had positive experiences following visits to facilities. This was common across all sub-blocks and camps visited.

However, the most common complaint about the quality of care was that carers and community members were often required to wait for long periods before being seen by nutrition facility staff. This factor was cited by a third of all carers of SAM and MAM cases interviewed and in nearly half of camps visited by the investigation team. It was also cited a cause of default or absence from treatment in the case studies completed.

Approximately a third of KI groups also cited other negative experiences at nutrition facilities including staff not using appropriate Rohingya terminology and staff taking phone calls while treating their child. Other evidence indicated that the quality of sensitisation at the point of distribution was poor. For example the primary cause of some of the CNR cases was due to the carer sharing the product with other family members when the sick child failed to finish a complete ration (as opposed to putting the incomplete ration to one side for the child to finish later).

Similar negative factors also emerged during the 2018 qualitative investigation. However they were cited by carers less frequently during the 2019 investigation and overall, positive factors out-weighted the negative factors experienced by community members at facilities.

Other factors affecting coverage

The sale of RUTF and RUSF in local markets was a common negative factor which emerged during the 2019 qualitative investigation. Half of all KI groups mentioned that they had seen it in all but one of the camps visited. If a carer sells RUTF or RUSF instead of giving it to their sick child then the child's recovery time will be longer and there will

be a greater chance of the child being discharged as CNR. This can therefore affect the community's perception of the CMAM programme as they can stop believing that the programme is effective at curing children of malnutrition. The sale of RUTF and RUSF also strengthens the perception by communities that the treatment products are food items, rather than medicines reserved exclusively for malnourished children.

Some community members also highlighted that they face challenges in accessing nutrition facilities. In some camps, the muddy state of paths and roads was cited as a challenge, whilst in others, nutrition facilities were located at the top of a hill which dissuaded carers from visiting them. However this factor was rarely mentioned as a negative factor in KIs. A greater percentage of key informants cited that the close proximity of facilities was a positive factor influencing their decision to access or to continue treatment.

Finally, a small number of key informants stated that social norms prevent mothers from visiting facilities or from attending sensitisations. This was mentioned by relatively few key informants (mostly by CNVs) but it came out of interviews in half of the 14 camps visited so it appears to be a barrier which is common across many of the camps. More evidence of husband / family refusal came out during the SLEAC surveys and the CNV survey (see Section 3.5).

3.4. SLEAC SURVEY RESULTS

Introduction

This section summarises the findings and results from the SLEAC surveys conducted in the 32 camps (combined camps).

The section includes the following sub-sections:

- Anthropometric, age and gender results for all camps
- OTP coverage classifications by zone and for all camps combined
- TSFP coverage classifications by camp and for all camps combined
- BSFP coverage estimated by camp and for all camps combined
- Qualitative findings from interviews with covered cases
- Qualitative findings from interviews with non-covered cases
- Previous participation in treatment programmes
- Previous screening

All of the above results can be analysed in more detail at camp level or can be disaggregated by implementing partner. But this is not available in this report. Where relevant, some camp level analysis is included. Additional analysis can be done using the raw datasets shared with the final report.

Anthropometric results for all camps

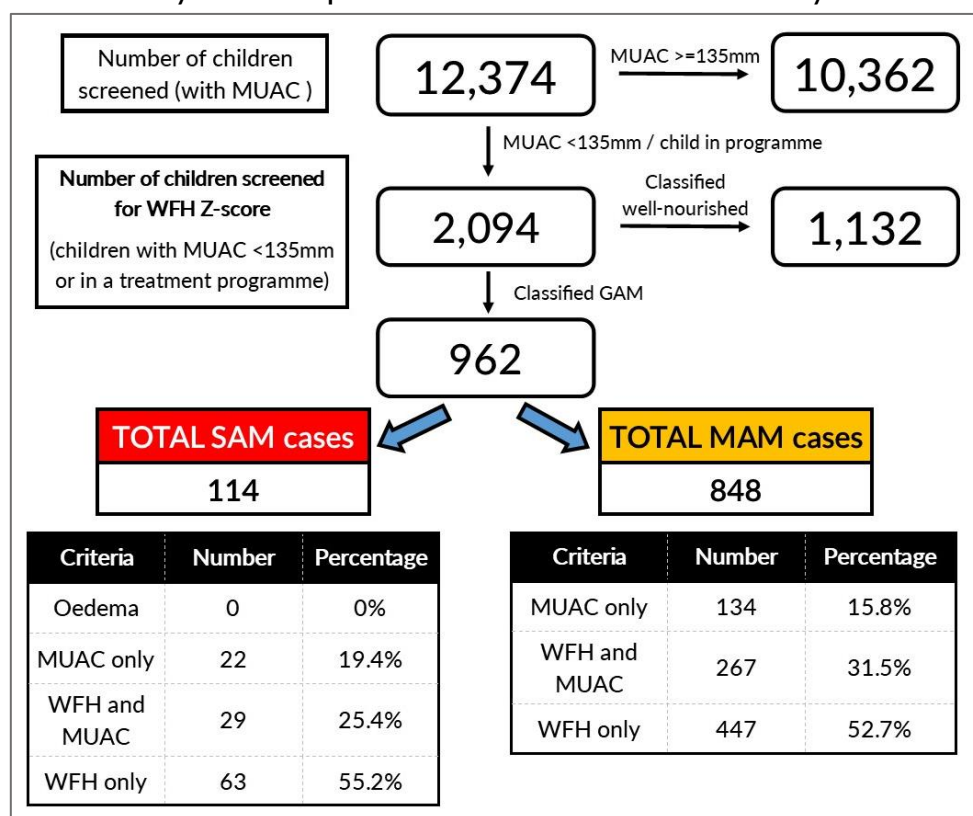
During case finding in selected sub-blocks, data collection teams set out to identify all children fulfilling the case definition of the survey (detailed in Annex 1). To do this they recorded the MUAC measurements and checked for signs of oedema of all children

aged 6-59 months in the selected sub-blocks. Where a child's MUAC measurement fell under 135mm, or if the child was enrolled in an OTP or TSFP at the time of the survey, the team went on to complete a "full" measurement of the child by recording their weight and height and calculating the WFH Z-score. Children were then classified as SAM, MAM or Well nourished (WN) based on the full anthropometric measurement. The results for children measured are summarised in Figure 9.

Amongst the 962 acutely malnourished cases identified during the survey, no cases of oedema were found. A total of 114 SAM cases and 848 MAM cases were identified based on MUAC and/or WFH Z-score. The criteria for classification are shown in Figure 9. Overall, approximately 44% of SAM cases and 47% of MAM cases were SAM or MAM by MUAC alone or by MUAC and WFH Z-score. However this figure is not representative of the entire population of children aged 6-59 months as only children with a MUAC less than 135mm were assessed for WFH Z-score. Therefore there would have been children in the sub-blocks who were MAM (and some SAM) who had MUACs greater or equal to 135mm who were missed. During the 2018 assessment, a MUAC cut-off of 140mm was used. Therefore all children under 140mm had their weight and height measurements recorded in order to calculate the WFH Z-score. The data found that 5.9% of SAM cases and 21.4% of MAM cases had MUACs **greater or equal to 135mm**.

However during the 2019 survey it was preferable for case finding to reflect standard community outreach procedures in order to test the effectiveness of community outreach.

Figure 9: Summary of anthropometric results from SLEAC surveys



Age and gender of cases identified

Figures 10 and 11 show the genders and age ranges of the children identified as SAM and MAM during the surveys.

Figure 10: Genders of children identified as SAM and MAM

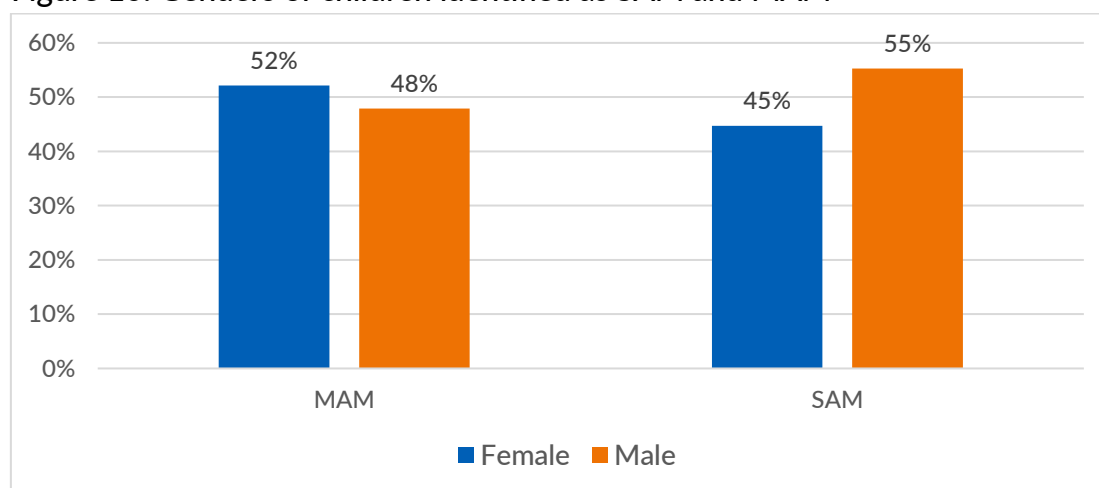
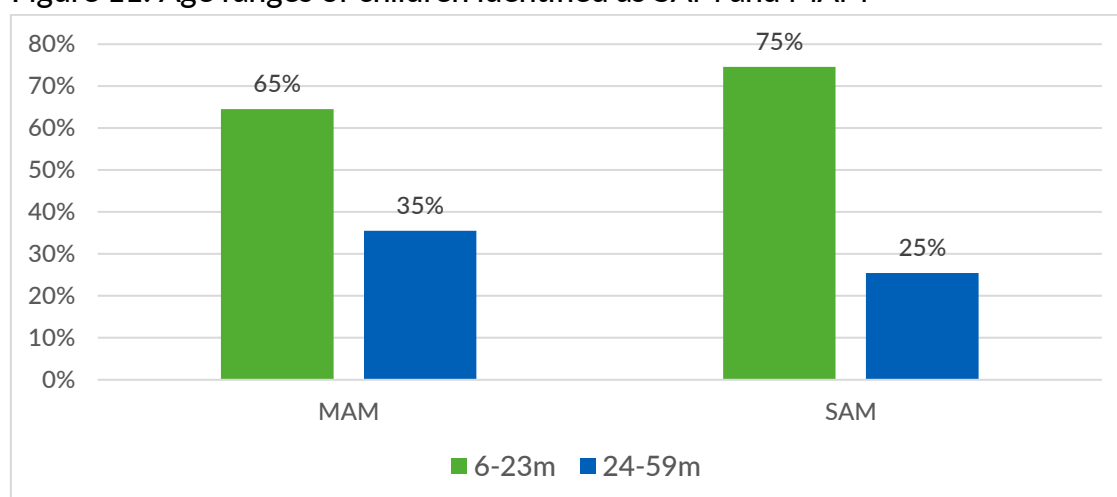


Figure 11: Age ranges of children identified as SAM and MAM



In summary, slightly more of the MAM cases identified were girls. While a greater proportion of SAM cases were boys. This is very similar to the results of the baseline coverage assessment.

The majority of GAM cases identified (66%) fell into the 6-23m age range. The median age for all SAM and MAM cases was 18 months (which was the same as the baseline assessment). However for SAM cases 75% were in the 6-23 month age range (compared to 62% in 2018) indicating that younger children are at greater risk of being SAM than before. In future it is therefore essential to ensure that the younger age range is prioritised during community screenings.

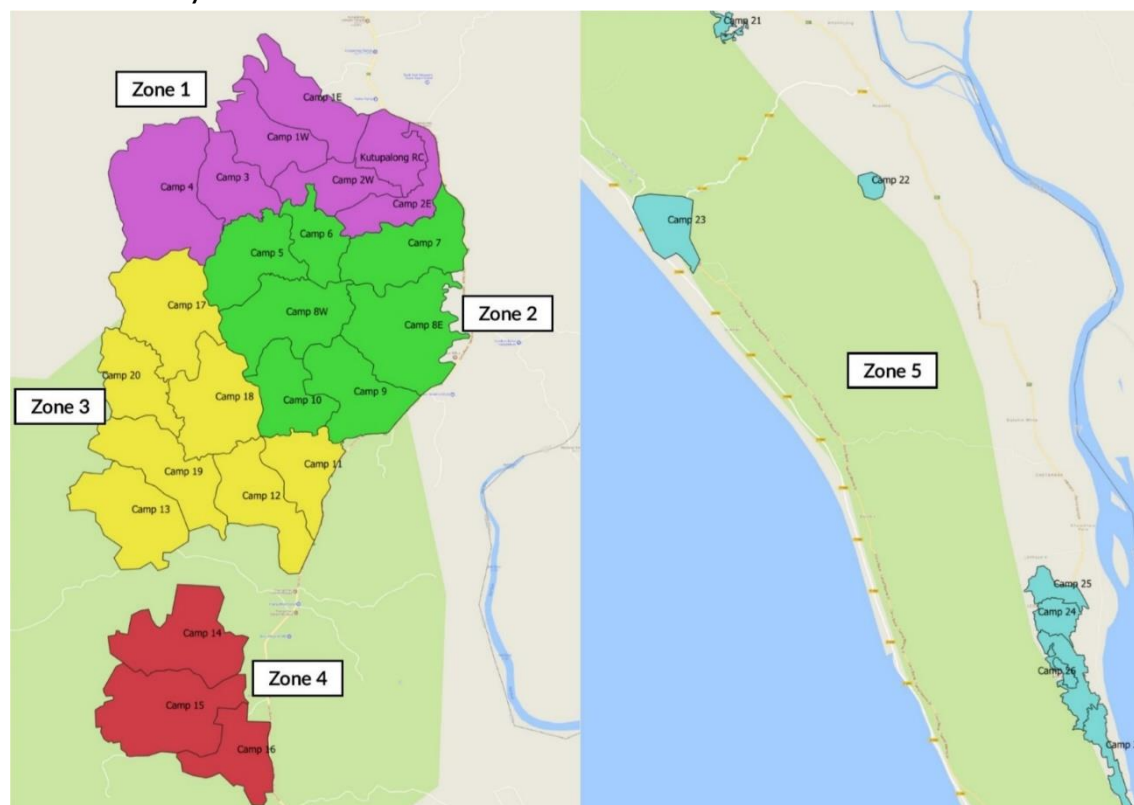
OTP coverage results

As mentioned in Annex 1, owing to the low number of OTP cases in the camps at the time of the survey, in 2019 OTP coverage was classified across the five SLEAC zones

used during the 2018 SLEAC survey. Each zone included varying numbers of camps and populations.

The five zones are shown in Figure 12.

Figure 12: Five SLEAC zones used for OTP coverage classification during 2019 SLEAC surveys



By the end of data collection, a sufficient number of OTP cases had been identified to be able to classify OTP coverage by SLEAC zone. Table 5 summarises the results by zone. Owing to the fact that the “Single coverage estimator” was used for the calculation of coverage, *Rout* (Recovering cases OUT of the programme) has been calculated for each zone. The calculation used to estimate this figure is included in Annex 1.

Table 5: OTP SLEAC survey results by zone

Case definition	OTP Cin	OTP Cout	OTP Rin	OTP Rout	TOTAL
Description	SAM cases in the OTP	SAM cases not in the OTP	OTP recovering cases	Recovering cases not in the programme (calculated)	Cin + Cout + Rin + Rout
Zone 1	12	12	44	13	81
Zone 2	20	8	43	5	76
Zone 3	16	9	26	4	55
Zone 4	9	4	15	2	30
Zone 5	16	8	26	4	54
All zones	73	41	154	28	296

Once the cases were totalled by zone, it was then possible to calculate the 60% and 90% decision rules for each zone using the Lot Quality Assurance Sampling technique. Then, by comparing the number of covered cases found with the decision rules, it was possible to classify coverage. This is shown in Table 6.

Table 6: OTP coverage classifications by zone and overall

	TOTAL (n)	Covered cases (c)	Decision rule 1 (d ₁)	c>d ₁ ?	Decision rule 2 (d ₂)	c>d ₂ ?	Coverage classification
	Cin+Cout +Rin+ Rout	Covered cases (Cin+Rin)	d_1 $= n \times (\frac{60}{100})$		d_2 $= n \times (\frac{90}{100})$		
Zone 1	81	56	48	Yes	72	No	Moderate
Zone 2	76	63	45	Yes	68	No	Moderate
Zone 3	55	42	33	Yes	49	No	Moderate
Zone 4	30	24	18	Yes	27	No	Moderate
Zone 5	54	42	32	Yes	48	No	Moderate

Table 6 therefore indicates that OTP coverage for all zones fell in the “Moderate” classification range (60-90% coverage).

A total of 268 OTP cases were identified across all zones (it was estimated that an additional 28 cases were *OTP Rout* cases making the total sample size 296). As this exceeds 95, it is possible to estimate OTP coverage for all zones assuming that coverage is homogenous (or not patchy). To test patchiness, a chi-squared test was completed with the assessment results. The calculations for this are shown in Table 7.

Table 7: Chi-square test calculations for OTP coverage results

	Total (n)	Observed covered cases (O)	Expected covered cases (E)	$O - E$	$(O - E)^2$	$\frac{(O - E)^2}{E}$
Zone 1	81	56	62.12	-6.12	37.43	0.6026
Zone 2	76	63	58.28	4.72	22.24	0.3816
Zone 3	55	42	42.18	-0.18	0.03	0.0008
Zone 4	30	24	23.01	0.99	0.99	0.0429
Zone 5	54	42	41.41	0.59	0.35	0.0083
SUM	296	227	227			1.0362

The critical value for five survey areas is 9.49. As 1.0362 is not greater than 9.49, this indicates that based on the SLEAC assessment results, coverage of OTP services is not patchy in the Cox’s Bazar refugee settlements.

The overall OTP coverage estimate was then weighted based on the expected number of SAM cases in each zone. The weighting calculations are shown in Table 8.

Table 8: Weighting calculations for OTP coverage

	Total population children aged 6-59m (a)	SAM prevalence (b)	Estimated no. of SAM cases (N)	Weighting factor (w)	Estimated coverage	Weighted coverage
			$N = a \times b$	$w = \frac{N}{\sum N}$	$\frac{c}{n}$	$w \times \frac{c}{n}$
Zone 1	37,909	1%	379	0.25	0.69	0.18
Zone 2	38,631	1%	386	0.26	0.83	0.21
Zone 3	30,089	1%	301	0.20	0.76	0.15
Zone 4	17,334	1%	173	0.12	0.80	0.09
Zone 5	25,624	1%	256	0.17	0.78	0.13
SUM	149,587		1,496			76.9%

Therefore the weighted OTP coverage estimate was calculated to be 76.9%.

Finally, the calculations for the 95% upper and lower confidence intervals for this estimate are shown in Table 9.

Table 9: Calculation of confidence interval for OTP coverage

	w	w ²	$\frac{c}{n}$	$1 - \frac{c}{n}$	$\frac{w^2 \times \frac{c}{n} \times (1 - \frac{c}{n})}{n}$
Zone 1	0.25	0.064	0.69	0.31	0.00017
Zone 2	0.26	0.067	0.83	0.17	0.00012
Zone 3	0.20	0.040	0.76	0.24	0.00013
Zone 4	0.12	0.013	0.80	0.20	0.00007
Zone 5	0.17	0.029	0.78	0.22	0.00009
SUM					0.00059

The 95% confidence interval (CI) is:

$$95\% CI = 0.777 \pm 1.96 \times \sqrt{0.00059} = \{72.11, 81.65\}$$

The overall OTP coverage estimate using the Single Coverage Estimator is therefore:

76.9% (95% CI: 72.1-81.7%)

This represents a 50% increase in comparison to the 2018 OTP coverage estimate (27%). The large increase can be attributed to multiple factors including improved community outreach, better organisation of camps and the extended OTP protocol.

The large number of OTP recovering cases identified during the survey is due to the extended OTP protocol. This does have a big impact on coverage. However even if recovering cases are excluded from the calculation, coverage remains high in comparison with 2018. When recovering cases (in and out of the programme) are excluded from the calculation, the coverage estimate is as follows:

63.4% (95% CI: 54.6-72.2%)

This is known as the **Point coverage estimate**. The point coverage estimate in 2018 was 21.5%. So even when recovering cases are excluded from the calculation, coverage has increased by more than 40%.

The Sphere standard for treatment coverage in camp settings is 90%. Therefore there is still some way to go to achieve the Sphere standard of coverage in camp settings. The reasons why coverage was not as high as it could have been are explored in more detail below.

TSFP coverage results

As explained in the methodology, coverage of TSFP services can be classified by camp based on the sample sizes achieved. This was not possible during the 2018 survey (TSFP coverage classified by SLEAC zone). However the results from 2019 can still be compared with the results from 2018 to evaluate progress.

For TSFP services, coverage has been classified using the same LQAS classification technique used to classify OTP coverage in the previous section.

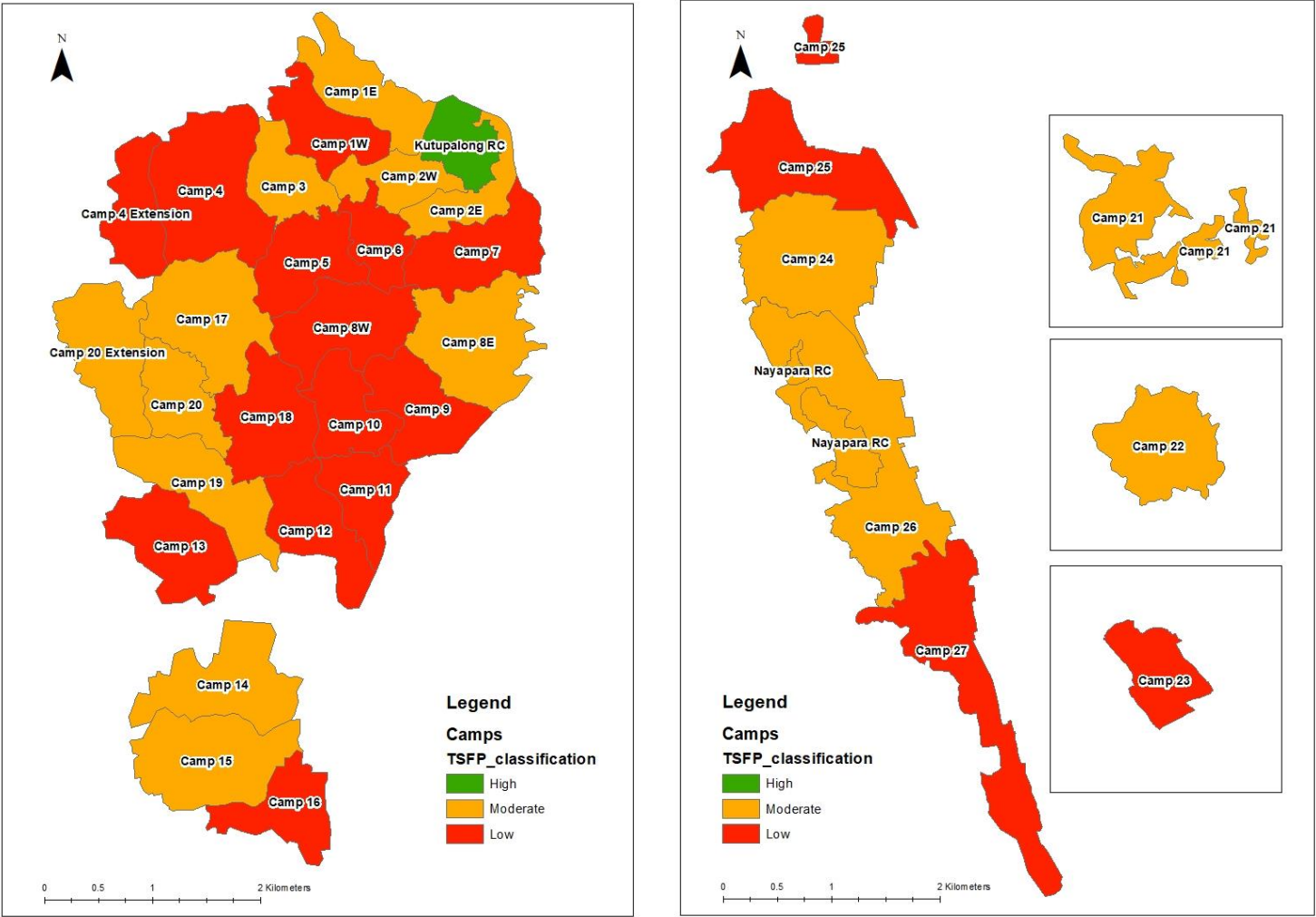
First, the totals of each case (TSFP Cin, TSFP Cout and TSFP Rin) are summed by camp. Then, TSFP Rout is calculated for the camp using the formula included in the methodology. The total cases for each camp are then summed and the decision rules for each of the totals is calculated. Finally the number of covered cases found (Cin+Rin) is compared with the decision rules to determine if coverage is **Low**, **Moderate** or **High**. The classifications for all camps are displayed in Figure 13 and the detailed results are included in [Annex 8](#).

The coverage results indicate that TSFP treatment coverage varied throughout the camps in 2019. Highlights are as follows:

- Out of the 32 camps / combined camps included in the survey
 - One camp fell in the **High** coverage range (Kutupalong RC),
 - 15 camps fell in the **Moderate** range
 - 16 camps fell in the **Low** range
- The highest coverage camp was Kutupalong registered camp which was the only camp to achieve coverage in the **High** classification range – out of a total of MAM 30 cases found, 28 were enrolled in the TSFP.
- The lowest coverage camp was Camp 23. Out of a total of 32 MAM cases found, only 8 were confirmed to be in the TSFP.
- During the 2018 coverage survey (when the same range of classifications was used), all SLEAC zones were classified in the **Low** range.

The reasons behind the poor coverage in the camps which were classified in the low range are explored in the next section.

Figure 13: TSFP coverage classifications by camp



TSFP coverage estimate

A total of 888 TSFP cases were identified during the SLEAC surveys across all camps. As the number of cases found exceeded 96, it was possible to estimate the coverage of TSFP services across all camps. As with the OTP coverage estimate, the following steps were conducted to do this:

- “Patchiness” was assessed using the “chi-squared” test: the result of the chi-squared test was 42.59. The critical value for 32 surveys is 44.5. This indicates that the coverage result was within an acceptable range of patchiness (just).
- The coverage estimate was weighted based on the population of MAM children in each camp (calculated using population and MAM prevalence data from the October 2019 SMART survey in the camps)
- The confidence intervals were calculated

These calculations and the data for them are not included in the main report or annexes. But the database can be shared on request.

The overall TSFP coverage estimate for all camps using the **Single Coverage Estimator** was found to be:

61% (95% CI: 57.5-64.6%)

As seen in the maps of the coverage results in Figure 13, there is variation between the camps. However it is still possible to publish an overall TSFP coverage estimate as the result of the chi-squared test does not exceed the critical value for 32 surveys.

The point coverage estimate can also be calculated by removing the recovering cases from the calculation:

55.6% (95% CI: 51.7-59.6%)

Both the single coverage estimate and the point coverage estimates show an increase in TSFP coverage in comparison with the results of the baseline coverage assessment in 2018. The single coverage estimate was approximately 34% in 2018, and the point coverage estimate was 28%. So coverage has increased by at least 25% in the 14 months since the previous assessment. However there is still some way to go to achieve the target coverage rate of 90%.

The “Qualitative findings of the SLEAC surveys” section (below) explores some of the reasons why the coverage estimate across the camps was not higher.

BSFP coverage results

While conducting case finding in the communities to identify SAM and MAM cases, the data collection teams also asked carers if their child was enrolled in the BSFP at their nearest BSFP / TSFP facility. This was done for all children measured with MUAC tapes (12,374 children in total).

Considering the high number of children assessed in each camp (more than 96 cases per camp), it was possible to estimate BSFP coverage in each camp. The BSFP coverage estimated are summarised in [Annex 9](#). The results have also been classified using the same range of classifications as OTP and TSFP and are shown on the maps in Figure 14.

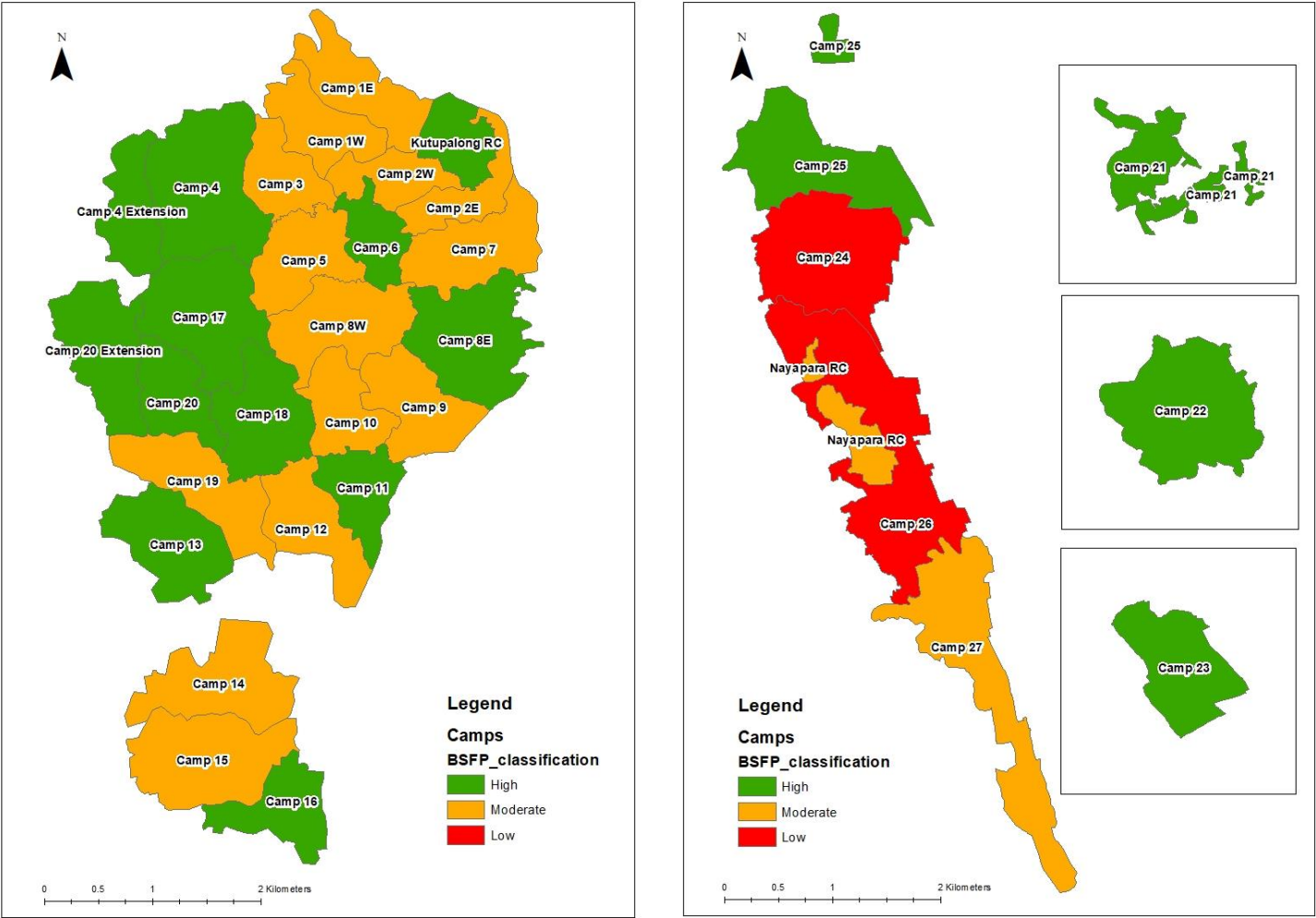
The BSFP coverage results also indicate significant variation throughout the camps.

- Out of the 32 camps / combined camps included in the survey:
 - 14 camps had BSFP coverage estimates greater than 90% (the highest were the combined camps of Camp 20+20 Ext with a coverage of 96.6%)
 - In 16 camps, BSFP coverage ranged from 60-90%
 - In 2 camps BSFP coverage was less than 60%. Camp 26 was the lowest coverage with just 7.9%

The primary reason for the low coverage in Camp 26 was an absence of child registration cards in the camp. This therefore prevented children from being admitted to the BSFP. Data collection team supervisors also recorded camp-specific reasons for low BSFP coverage. These can be found in [Annex 5](#).

Overall, coverage of BSFP services across all the camps was approximately 80%. However, variation of BSFP coverage is too excessive to be able to combine the results from all camps and publish one coverage estimate.

Figure 14: BSFP coverage classifications by camp

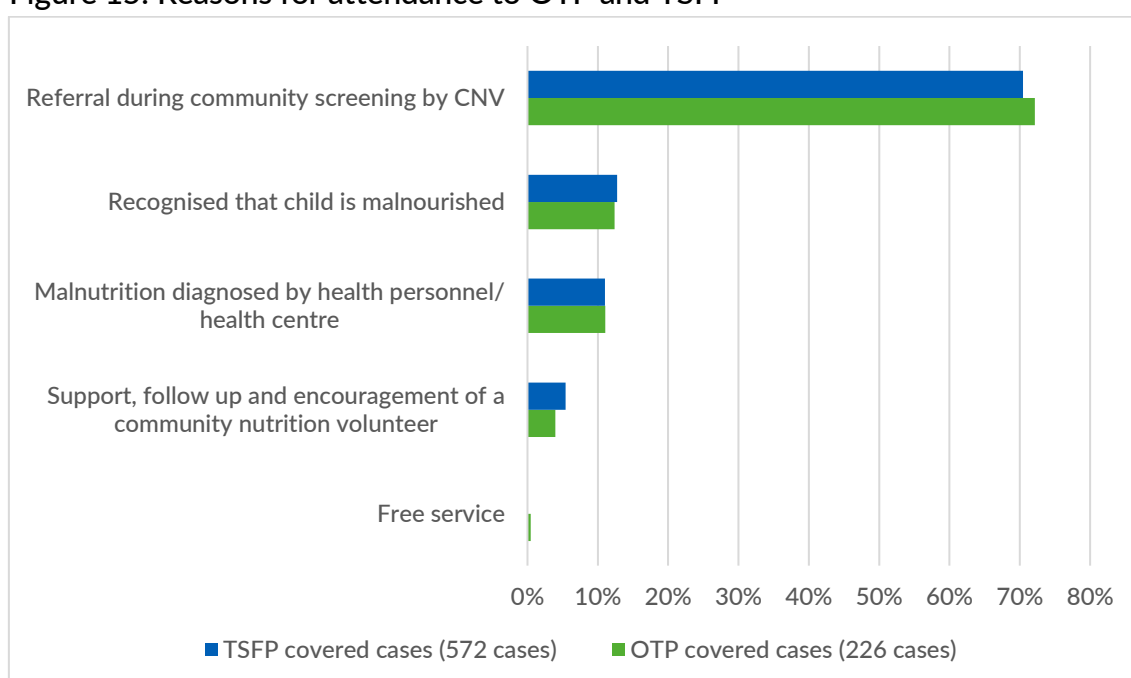


Qualitative findings from interviews with covered cases

During data collection, if teams identified a covered case in the sub-block they were visiting, they conducted a short questionnaire with the carer which aimed to identify why the carer had visited the nutrition facility to admit their child to the relevant programme (OTP and TSFP).

A total of 227 covered OTP cases were interviewed and 572 covered TSFP cases were interviewed. The main reasons provided by carers for attending the programme are summarised in Figure 15.

Figure 15: Reasons for attendance to OTP and TSFP



These results indicate that community level screening by CNVs is the primary reason why SAM and MAM cases are admitted to the OTP and TSFP. This confirms the effectiveness of screening by CNVs in the camps, especially in the camps and sub-blocks where coverage is high. Around 12% of carers said that they went to the facility because they recognised that their child was malnourished.

The results in 2018 presented a similar picture. However in 2018, a greater percentage of carers of covered OTP and TSFP cases said that they visited nutrition facilities on the advice of a neighbour or community member. The 2019 results indicate that diagnosis and referral of malnourished children may be coming too reliant on community outreach and that the community is not empowered to identify and refer children suspected of being malnourished on their own initiative.

Qualitative findings from interviews with non-covered cases

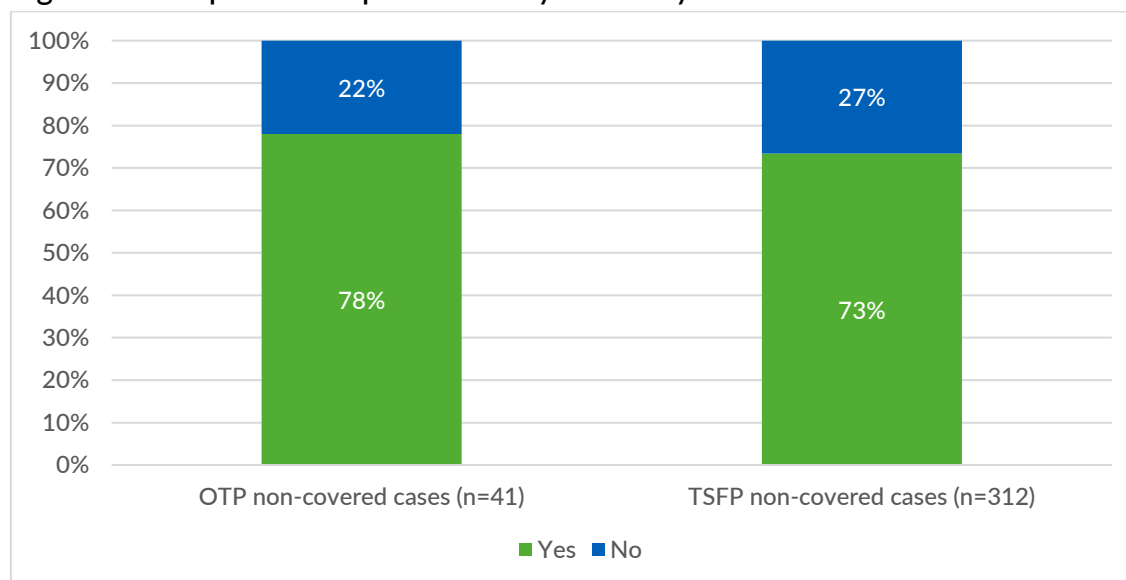
If data collection teams identified a non-covered OTP or TSFP case during data collection, they administered a questionnaire to identify the primary “reason for non-attendance” for the child.

This was done using a structured questionnaire (more information in Annex 1).

Awareness that child was sick

The first question asked to carers of non-covered cases was “Do you think your child is sick?”. Figure 16 shows the combined results for OTP and TSFP.

Figure 16: Responses to question: Do you think your child is sick?



The majority of OTP and TSFP carers were aware that their child was sick. A slightly greater percentage of non-covered SAM cases recognised that their child was sick in comparison with TSFP carers.

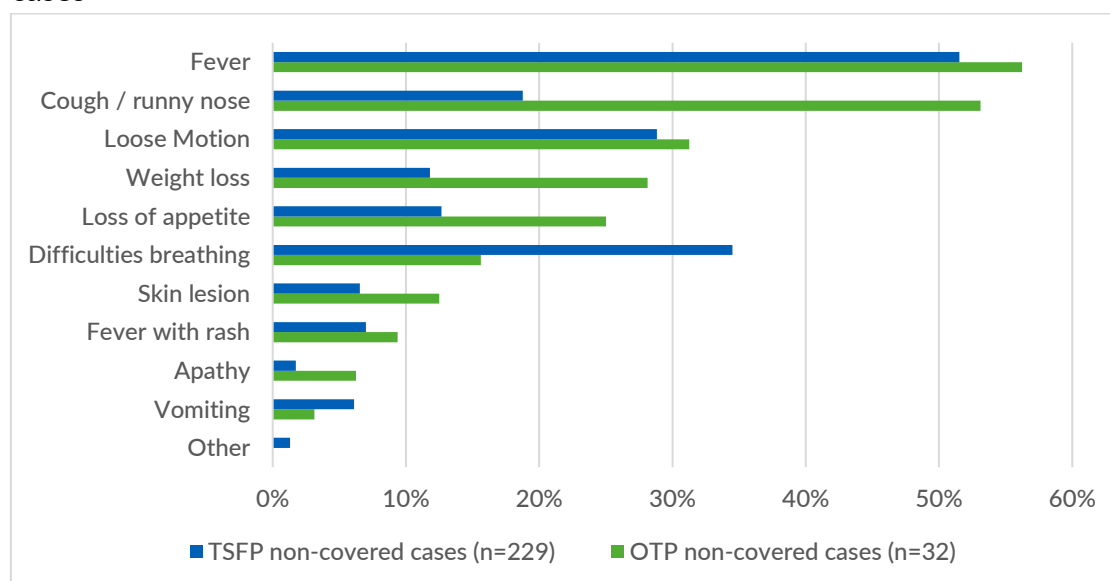
During the 2018 coverage survey, the same question was posed to carers of non-covered cases: in 2018, 32% of non-covered SAM cases were NOT aware that their child was sick and 39% of non-covered MAM cases.

This indicates that there has been an improvement in the awareness of carers about the symptoms of common childhood illnesses between 2018 and 2019. However it is important to continue sensitisations to ensure that this percentage reduces and to ensure that sensitisations reach all of the intended target audiences.

Symptoms of illnesses

If a carer confirmed that their child was sick, the interviewers went on to ask what symptoms their child was suffering from. The carer could name numerous symptoms. The most commonly mentioned symptoms for OTP and TSFP non-covered cases are summarised in Figure 17.

Figure 17: Symptoms of child sickness by carers of non-covered OTP and TSFP cases

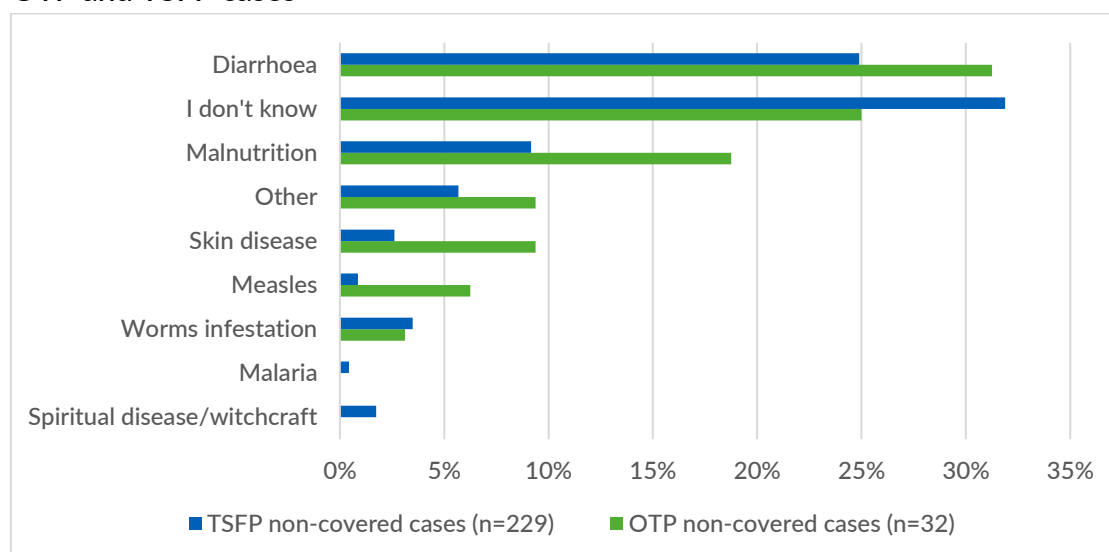


“Fever” was the most commonly cited symptom mentioned by carers of non-covered SAM and MAM cases. This was also the case during the 2018 survey. “Cough/runny nose” seemed to be slightly more common for SAM cases in 2019 in comparison with MAM cases. However in 2019 compared to 2018 a much higher proportion of MAM carers mentioned that their child was experiencing difficulties breathing. This symptom was mentioned by 79 carers which accounts for over a third of non-covered MAM cases identified. This indicates that there were high rates of acute respiratory infection (ARI) in the camps at the time of the survey.

Suspected cause of symptoms

Carers were then asked which diseases their suspected were causing the symptoms. Again, interviewers could record multiple illnesses based on the responses of carers. The responses from carers of non-covered SAM and MAM cases are summarised in Figure 18.

Figure 18: Suspected causes of child illness identified by carers of non-covered OTP and TSFP cases



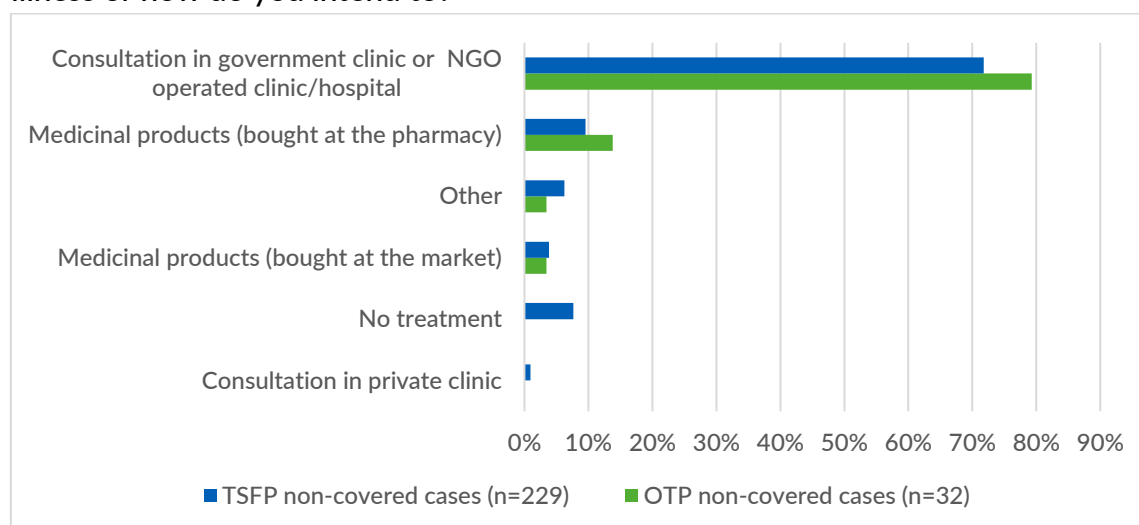
Observations are as follows:

- **Diarrhoea** was the most commonly cited illness by carers of non-covered SAM and MAM cases. A third of all carers of SAM cases thought that this was the cause of the child's illness and a quarter of all carers of MAM cases.
- More than a third of carers of MAM cases **did not know** the cause of their child's illness (which is similar to 2018's results). However awareness by carers of non-covered SAM cases seemed slightly improved compared to 2018 (2018: 39%; 2019: 25%).
- Just 9% of carers of MAM cases identified **malnutrition** as the cause of their child's illness and 19% of carers of SAM cases. This is in contrast to 2018 when the results indicated that more than a third of both non-covered SAM and MAM cases said that their child's symptoms were caused by malnutrition.
- 2% of MAM carers cited **spiritual disease / witchcraft** as the cause of their child's illness. The equivalent results in 2018 were approximately 3% of SAM carers and 4% of MAM carers. This therefore represents a slight improvement in comparison to the 2018 results.

Intended course of treatment

Carers were asked how they had, or how they intended to, treat their child for their illness. Again, interviewers could record multiple responses based on the responses from the carers. Figure 19 summarises the results.

Figure 19: Summary of responses to question: how have you tried to treat this illness or how do you intend to?



More than 70% of carers of both non-covered SAM and MAM cases said that they had, or they intended to, seek treatment at a government or NGO clinic. Approximately 18% stated that they intended to purchase medicines from the pharmacy or market. Just 8% of non-covered MAM carers said that they had or did not intend to seek treatment.

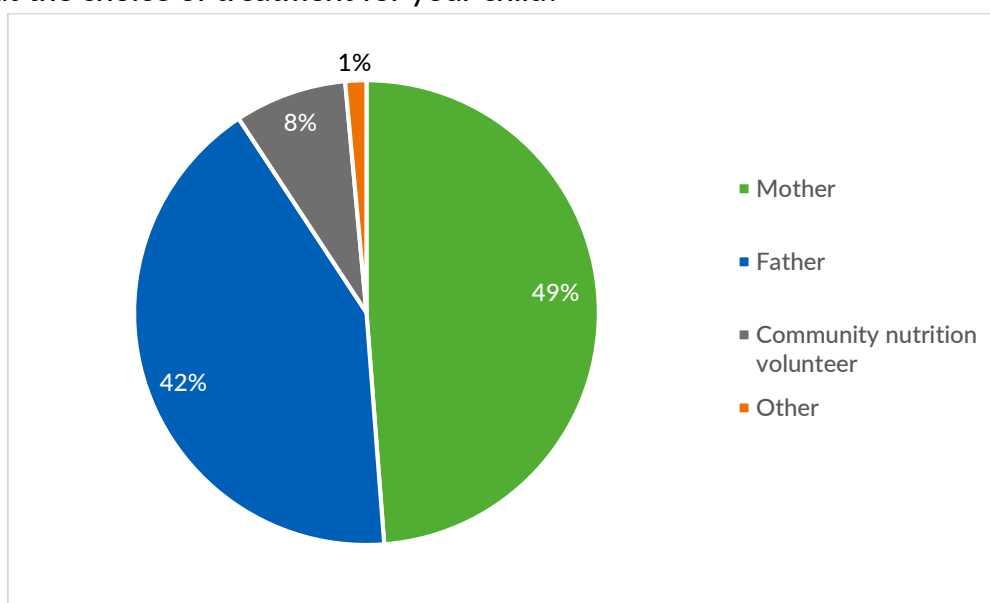
This represents an improvement compared to the 2018 results when just 55% of carers of non-covered SAM and MAM cases said that their intended course of treatment was in NGO or government facilities. This supports the findings from the qualitative investigation, where it was found that the majority of community members interviewed were aware of nutrition facilities and knew who they were targeted at.

Decision makers for treatment of child illnesses

Carers of non-covered cases were asked who usually makes the decision about the choice of treatment for their child. Interviewers could only select one option from a list. The combined results for OTP and TSFP are shown in Figure 20. There were no major differences between the responses from carers of non-covered SAM and MAM cases.

The results show that, based on the responses, for half of all non-covered cases identified, the mother is the main decision maker when it comes to their child's health. In 42% of households, the father is the main decision maker. These results are very similar to the results from the same question in 2018's survey. The only slight difference is that in 2019, 8% of carers said that they rely on the advice of the CNV. This is an increase compared to 2018 and indicates that there has been an improvement in community confidence of CNVs during 2019.

Figure 20: Summary of responses to question: who usually makes the decision about the choice of treatment for your child?



Awareness of nutrition facilities

Carers of non-covered OTP and TSFP cases (who were aware that their child was sick) were asked if they were aware of the existence of services dedicated to the treatment of acute malnutrition in their camp.

During the 2019 SLEAC surveys, out of the 260 carers of non-covered SAM and MAM cases who were asked this question, **only 7 carers (approximately 3%)** said that they were not aware (all were carers of non-covered MAM cases). During 2018, the same question was asked and more than 30% of carers said that they were not aware of the existence of services. This shows the positive impact of regular screenings and sensitisations in communities. Again this supports the findings of the qualitative investigation.

Summary reasons for non-attendance to programmes

If a carer was aware that their child was sick and that there was a facility available where they could treat them, they were then asked why they had not gone to the clinic for treatment.

The interviewers had to select one response from a list of possible reasons (developed based on the 2018 coverage survey and on previous assessments). They could also click "Other" and record the reason if the reason was not found in the list. The responses are summarised in Figures 21 and 22. "Carer was not aware that the child was sick" and "Carer was not aware of the nutrition programme" have been added as reasons to the charts. Therefore the primary reasons for non-attendance to OTPs and TSFPs are summarised and ranked for all non-covered OTP and TSFP cases identified.

Figure 21: Primary reasons for non-attendance to OTP (n=39)

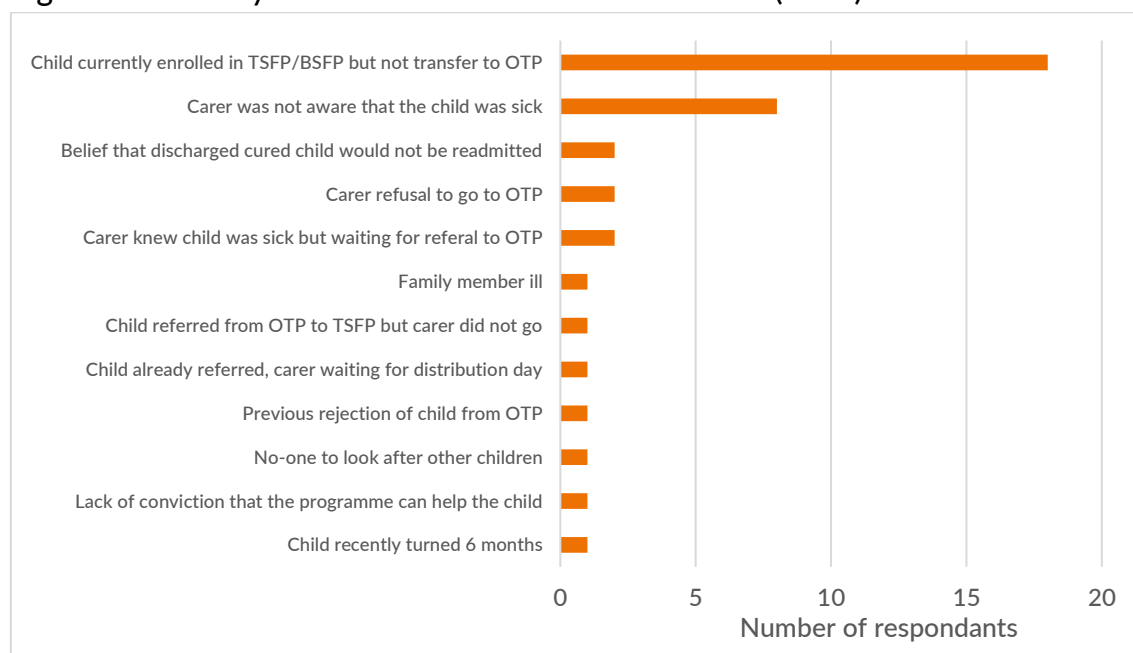
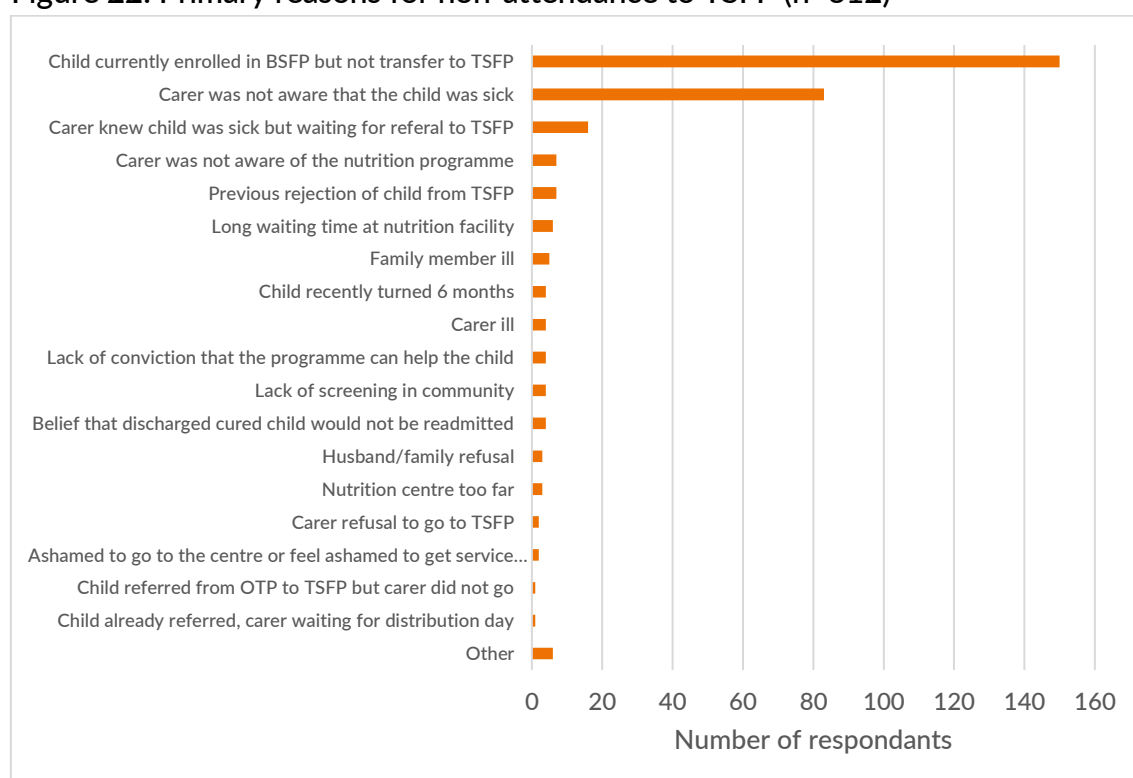


Figure 22: Primary reasons for non-attendance to TSFP (n=312)



Figures 21 and 22 show that the primary reason for non-attendance to both OTP and TSFP was due to the fact that the child was enrolled in the wrong programme. This meant that:

- For non-covered SAM cases, they were enrolled in a BSFP or TSFP and had not been identified as SAM by facility staff or had become SAM since their last visit

- For non-covered MAM cases, they were enrolled in the BSFP and had not been identified as MAM by facility staff or had become MAM since their last visit

These reasons represent the primary reasons why SAM and MAM cases are not covered for 46% of OTP cases and 50% of TSFP cases. They provide strong evidence of weaknesses in anthropometric measurement in BSFP and TSFP facilities.

These reasons were identified as the primary reason for cases not being covered by TSFP across most camps. The only camps where it **was not** identified as a reason for cases not being covered were **Camps 19 and 24**. The camps where it accounted for greater than 70% of the reasons were:

- **Camps 14 and 18:** Measurement error was the primary reason for non-attendance for all non-covered TSFP cases identified
- **Camps 5, 6, 11, 12, 17 and 22**

For OTP non-covered cases, measurement error was also evenly split across various camps with no particular camp standing out amongst the rest.

For both OTP and TSFP, the second most common reason for non-attendance was that **the carer was not aware that the child was sick**. In previous surveys, this reason has often been found to be the most common reason for non-attendance (as it was in 2018). For MAM cases especially, it can be difficult for carers to identify by sight the typical symptoms of malnutrition. Compared to the findings from the 2018 survey, the percentage of carers who cited this reason as the primary reason for non-attendance has dropped from 30% to 20% for OTP cases and from 40% to 20% for TSFP cases. Improved sensitisations and community outreach will help to reduce it further in future.

Some carers said that the reason they had not taken their child to the nutrition facility was because they were **waiting to be referred by a CNV**. A total of 15 carers mentioned this (2 OTP and 13 TSFP). This is concerning as some carers believe that they can only be admitted when they are referred by a CNV. It also suggests in some camps there may be an over-reliance on CNVs and that the community is not taking ownership for identifying and referring carers and children to nutrition facilities.

Six carers of TSFP cases told interviewers that they did not want to go to facilities due to **long waiting times at the facility** and five carers of TSFP cases said that **their child had been previously rejected from the facility**. These support some of the negative quality of care findings from the qualitative investigations and indicate that carers have experienced frustrations with nutrition facilities in their camps in the previous months.

Previous participation in treatment programmes

All carers of covered cases and non-covered cases were asked if their child had participated in the OTP or TSFP previously (depending on whether they were SAM or MAM). This information was also checked in the child health cards.

The percentage of cases that had **previously been enrolled in the programmes** is summarised in the table below:

OTP non-covered cases	32%
TSFP non-covered cases	32%
OTP covered cases	12%
TSFP covered cases	16%

The interviewers went on to enquire as to why the child had left the programme. The majority of carers (85%) said that the child had been discharged as cured from the programme and had relapsed. This indicates that, based on the data collected during the survey, the relapse rate for SAM and MAM cases is approximately 20% throughout the camps. This is similar to the relapse rate identified during the survey in 2018.

Evidence of previous screening

The carers of all children who received full anthropometric measurement (all children with MUACs <135mm and / or who were enrolled in an OTP or TSFP) were asked if their child had been measured previously at home with a MUAC tape, and if so, how long ago this had happened.

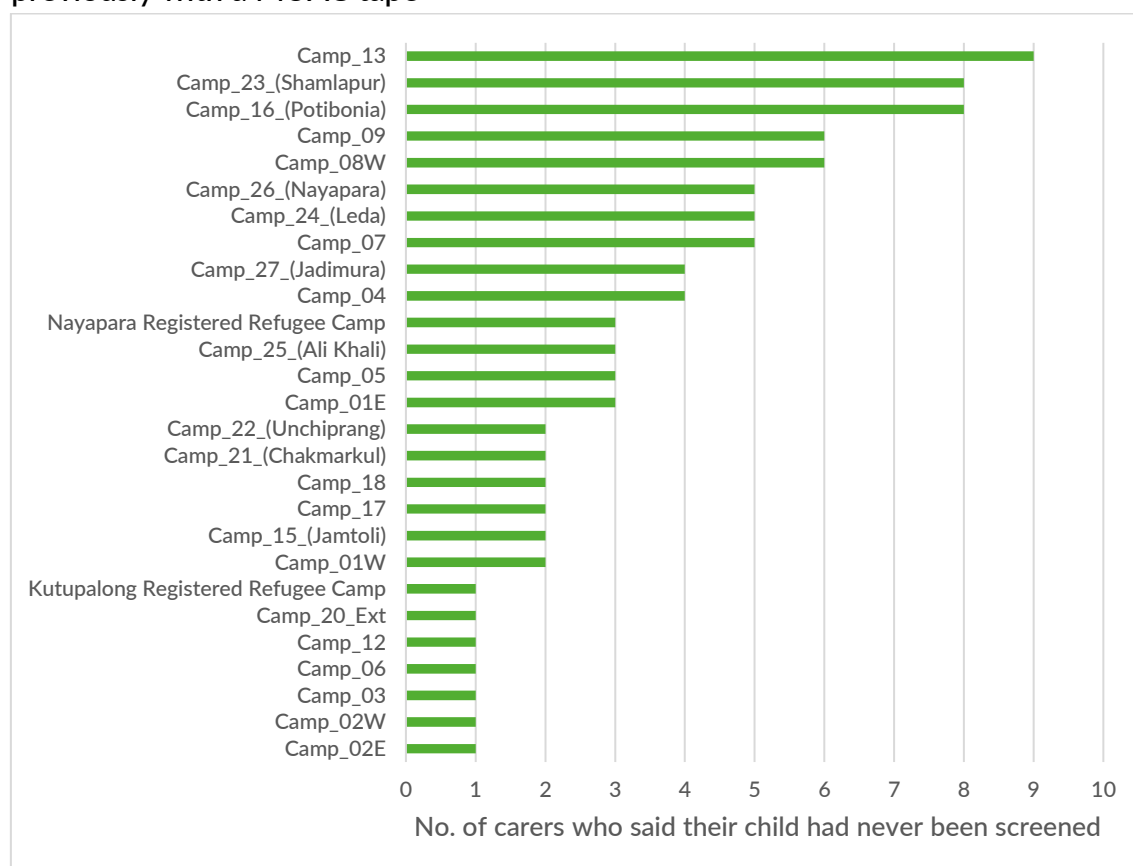
The main findings are as follows:

- 95% of carers said that their child had been measured previously. This provides strong evidence that effective screening is taking place throughout the camps.
- Out of 2094 children assessed, 91 children had NOT been screened with MUAC tapes previously across a range of camps (27 camps in total). The distribution of these cases are shown in Figure 23. 13 of these children were aged 6 or 7 months and so it was possible that they had not been measured previously as they did fall into the target age range. However the other 78 children should have been measured previously.
- Camps 13, 16 and 23 had the highest number of children without previous screening (9, 8 and 8 children respectively).
- All carers whose child had been measured stated that they had been measured by a **CNV** or **nutrition facility staff member**.
- 92% of carers said that their child's MUAC had been measured in the last month. The remaining 156 cases (8%) were measured more than 1 month ago.

In summary, this indicates that regular screening is taking place in nearly every sub-block regularly (which supports the findings of the qualitative investigation). However considering this is a refugee camp where the population are static and are relatively close to nutrition facilities, the nutrition sector should be aiming for 100% screening coverage. It is important therefore to investigate why some carers said that CNVs had never screened their child at home.

These questions were not included in 2018 SLEAC survey therefore it is not possible to assess year on year progress.

Figure 23: Number of carers who said that their child had never been screened previously with a MUAC tape



3.5. RESULTS OF CNV SURVEY

Introduction

During the SLEAC assessments, quantitative data collection team leaders conducted structured interviews on tablets with the CNVs who accompanied them during data collection. A total of 178 CNVs were interviewed – one for each sub-block visited. Therefore interviews were conducted with CNVs working in all camps for a range of implementing partners.

Summary of findings

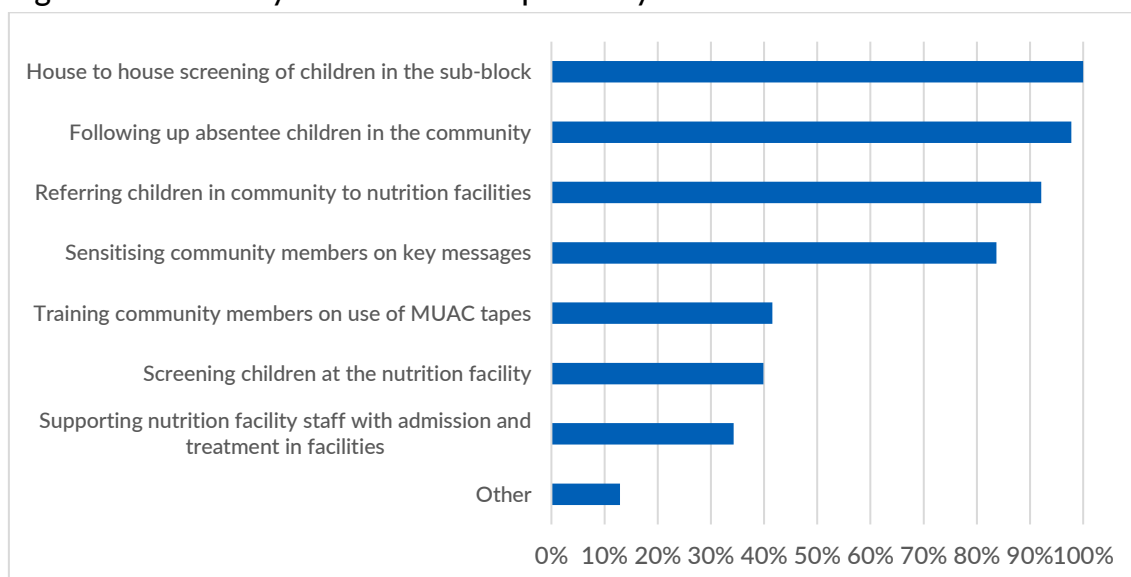
Basic information about the CNVs:

- 78% were Male, 22% were Female
- 73% were from the Rohingya community; 27% were from the host community
- 88% had been in their role for more than 6 months
- The youngest was 17 years old and the oldest 38 years old; 19 was the most common age

Which activities do CNVs complete?

CNVs were asked to identify the activities that they complete in their roles from a list of seven possible options. The responses are summarised in Figure 23.

Figure 24: Summary of activities completed by CNVs



The three most common responses related to identifying, referring and following up cases. “Sensitising community members” was also cited by more than 80% of CNVs (further analysis of sensitisations is included below). These four activities can be considered the “core roles” of CNVs in the camps.

More than a third of CNVs also stated that they support nutrition facility staff in nutrition facilities. In some cases this may mean that, in some camps, CNV’s are playing a role in the measurement and admission of children to nutrition facilities (which could be concerning).

More than a third of CNVs also said that they train community members on the use of MUAC tapes. While it was confirmed at the time of the survey that some mothers are being trained to monitor the MUACs of their child and other children, it is surprising that this percentage is so high.

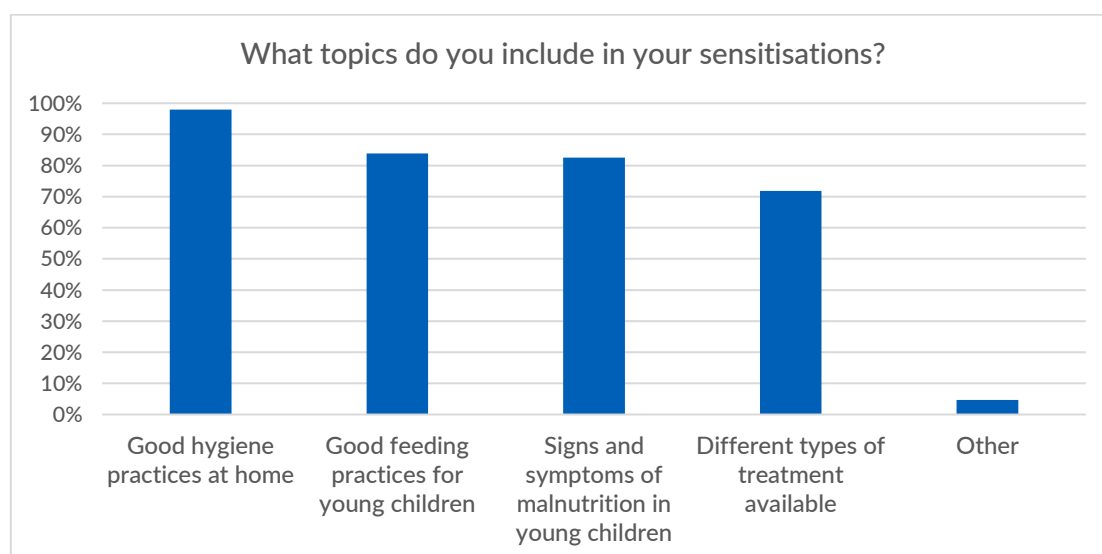
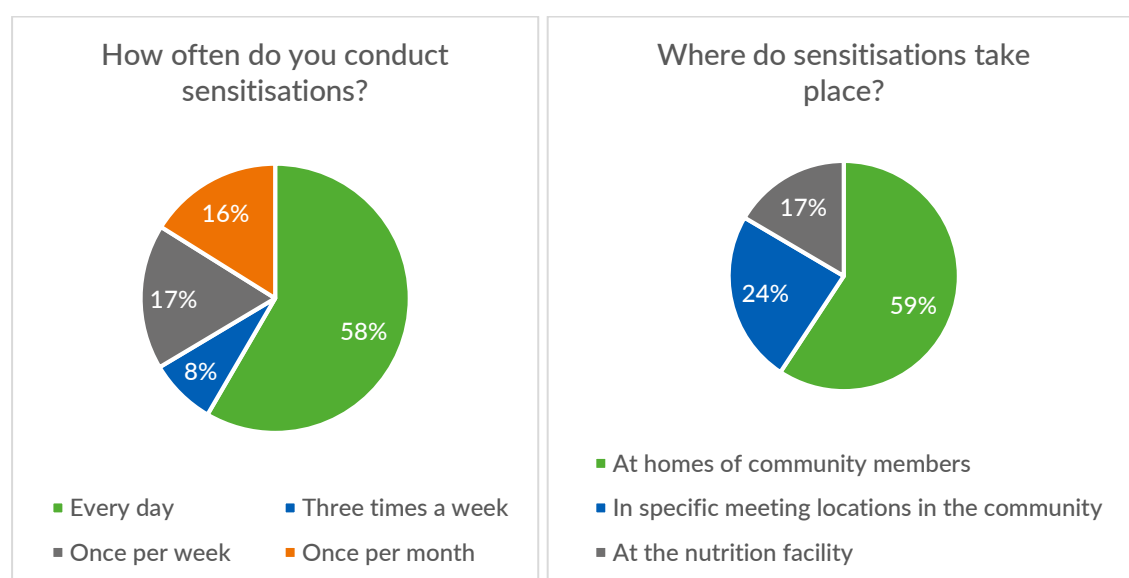
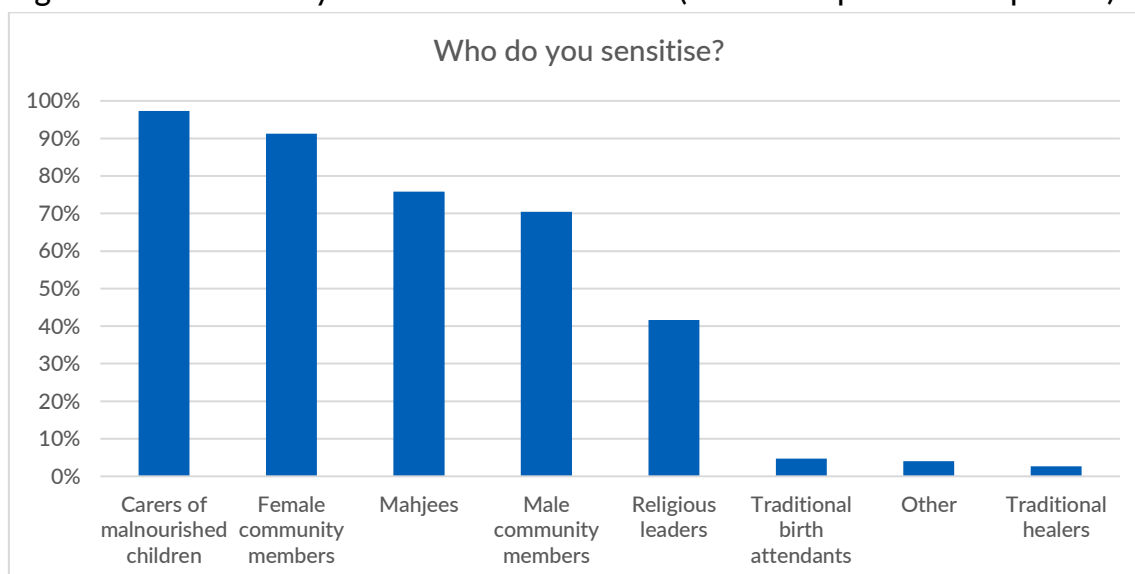
Analysis of sensitisations

Out of the 178 CNVs interviewed, 149 stated that they sensitise community members. If they stated that they conduct sensitisations, the CNVs were then asked the following:

- Who do you sensitise?
- Where do sensitisations take place?
- How often do you conduct sensitisations?
- What topics are covered?

Figures 25 to 29 summarise the responses to these questions.

Figures 25 to 29: Analysis of CNV sensitisations (149 CNVs provided responses)



The above charts indicate that carers of malnourished children and groups of women are the primary targets of the sensitisations conducted by CNVs. More than 70% of CNVs also stated that they sensitised mahjees and male community members, which is positive. However just 42% of CNVs stated that they sensitised religious leaders and very few stated that they sensitised traditional birth attendants and traditional healers. Therefore there may be opportunities to target these groups more in certain camps, especially in camps where it is common for carers to refuse to go to nutrition facilities if referred due to religious reasons.

More than 80% of sensitisations are conducted in the community, either at the homes of community members or in central meeting locations. 17% of CNV's state that they conduct sensitisations at nutrition facilities as well as in the community. Furthermore nearly all CNV's (84%) who stated that they do conduct sensitisations, said that they do so at least once a week.

In terms of the topics included in sensitisations, the most common topic cited by CNVs was "Good hygiene practices at home" (98% of CNV's). Malnutrition-specific topics ("Recognition of the signs and symptoms of malnutrition in young children" and "Understanding of different types of malnutrition") were mentioned by 83% and 72% of CNV's respectively. The qualitative investigation and SLEAC assessment indicated that carers have a preference for RUTF and RUSF (over WSB++). This therefore indicates that it would be pertinent to ensure that all CNV's explain clearly to target audiences what the differences are between the treatment products and to clarify who they are targeted for.

Training and Supervision of CNVs

All CNV's were asked about the training which they had received.

More than 90% of CNVs said that they had been trained within the last three months. Figure 30 indicates the different training topics mentioned and the frequency with which each of the topics was mentioned.

Figure 30: Training topics included in CNV trainings

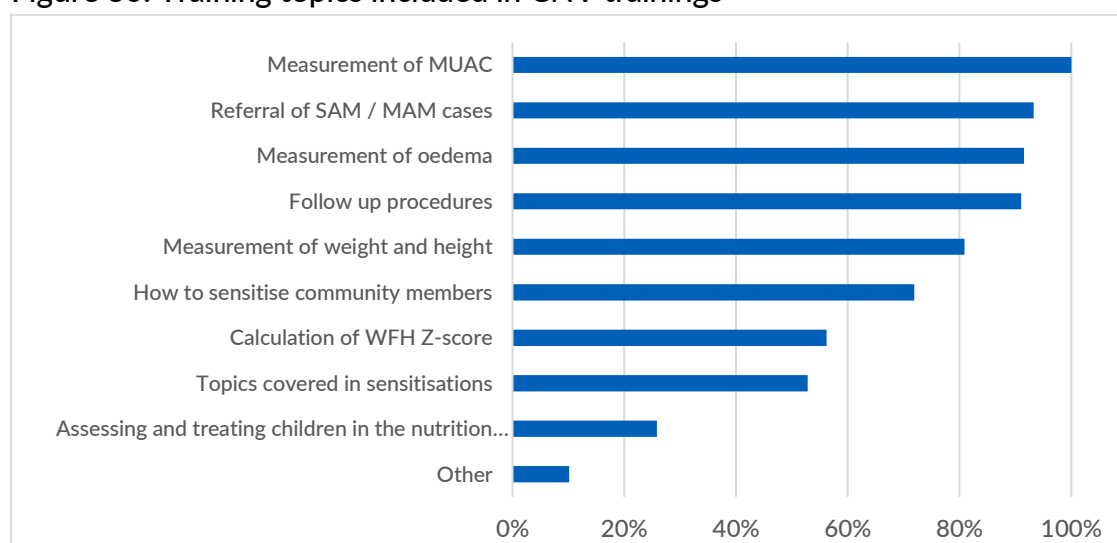


Figure 30 indicates that while the majority of training topics included in CNV trainings centre around the key responsibilities of the CNVs (diagnosing and referring SAM and MAM cases in the community), more than 50% of CNVs are also trained on how to take weight and height measurements and to calculate WFH Z-scores. 26% of CNVs even mentioned that they are trained on how to assess and treat children in the nutrition facilities. This suggests that in some facilities, CNVs are required to support the nutrition facility staff with the measurement and treatment of new or existing malnutrition cases which *could* lead to measurement errors.

All CNVs were asked if they were supervised by their manager and, if so, where the supervision took place and how often they were supervised.

Out of the 178 CNV's interviewed, **86 (48%) stated that they are NOT supervised in their work**. This may be reflective of the workload of nutrition facility outreach managers. However it is concerning, especially considering that many CNVs are poorly educated and may be conveying inaccurate information during sensitisations or recording inaccurate measurements during screenings.

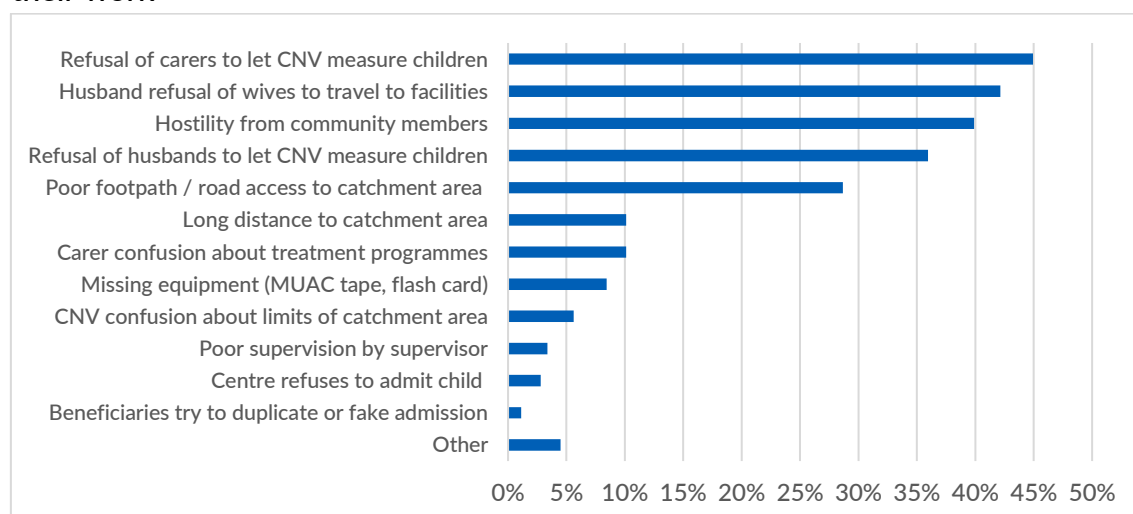
On a positive note, out of those that confirmed that they were supervised, nearly all said that they receive “on-the-job” supervision and more than 80% said that supervision takes place at least once a week.

This indicates therefore that where supervision does take place, it is done so regularly. However regular supervision appears to be very patchy across camps.

Challenges encountered by CNVs

All CNV's were asked to identify if they encountered challenges in completing their activities and, if so, what these challenges were. Nearly all CNV's (93%) said that they encountered at least one challenge in completing their work. The frequency of the challenges mentioned are summarised in Figure 31.

Figure 31: Frequency of challenges encountered by CNVs in the completion of their work



The results in Figure 31 indicate that 36-45% of all CNVs interviewed face challenges relating to hostility from community members and / or refusal of carers to go to nutrition facilities. Some of these challenges were also encountered by the data collection teams during the SLEAC assessment. While it was not clear from these responses what the primary causes of the hostility or refusals were, religious reasons are partly to cause and / or mistrust of the CNVs.

This was reiterated in a subsequent question where CNVs stated what they least enjoyed about their role. Many said that they feel sad when beneficiaries do not follow their instructions. Therefore there is strong evidence that CNVs should be supported more in their role, or trained on how to persuade carers to travel to nutrition facilities.

Poor footpath / road access to the CNV's catchment area was also mentioned by around a third of all CNVs as a challenge encountered which highlights that improvement work remains to be done on the infrastructure of the camps.

On a positive note, a small number of CNV's stated that they did not have the necessary equipment to be able to complete their roles or that they were not clear about the extent of their catchment area.

4. ANALYSIS OF FINDINGS

The mixed methods approach used during the 2019 CMAM coverage assessment in the Cox's Bazar Rohingya refugee camps yielded a large amount of data and outputs which enabled the assessment team to achieve the key objectives of the coverage assessment:

- To assess the coverage of OTP and TSFP treatment during SLEAC surveys, where possible at camp level, in order to identify areas of high and low coverage:
 - OTP coverage was classified by SLEAC zone and estimated overall
 - TSFP coverage was classified by camp and estimated overall
- To determine the possible reasons for high and low coverage in these camps.

However, owing to the design of the methodology, additional information and data was collected and analysed including routine programme and anthropometric data, qualitative data from community members and questionnaires with CNVs. This has enabled the assessment team to:

- Triangulate the findings of the SLEAC assessment in order to build evidence about the root causes of low or high coverage and about quality of care issues
- Capture opinions and perspectives about the perception of malnutrition and about the effectiveness of the CMAM programme from a range of key informants
- Set up monitoring and analysis templates and forms which can be used to monitor potential barriers to access in months and years to come.

Based on the findings and on the analysis included in the Results section, a number of key positive and negative findings have been identified. Table 10 summarises these findings and [Annex 12](#) presents the evidence supporting each of the findings. In most cases (unless stated otherwise), these observations apply to both OTP and TSFP services in all camps and to all implementing partners.

Camp level observations are summarised in [Annex 5](#) and the data sets shared will enable partners to conduct detailed camp level analysis of the programme data, SLEAC results and CNV questionnaires (if required).

During the dissemination workshop in December 2019, partners worked to jointly elaborate recommendations and activities to address the challenges identified. These are included in [Section 5](#).

Table 10: Summary of positive and negative findings from coverage assessment

	Positive findings	Negative findings
Community screening	- Community level screenings are taking place extensively across all camps and are effective at recruiting cases to OTPs and TSFPs	- Gaps in screening in some sub-blocks indicating weaknesses outreach programmes - Refusal of carers to allow CNVs or survey teams to measure the MUACs of their children (sometimes due to religious practices)
Community awareness of malnutrition and CMAM programmes	- Key community groups are sensitised about the signs and symptoms of malnutrition and are aware of CMAM programmes	- Misconceptions about malnutrition exist in some communities - Sensitisations are not conducted with all key community members
Treatment coverage of services	- Compared to the baseline coverage survey in 2018, the 2019 coverage assessment found that a greater proportion of SAM and MAM cases are accessing treatment	- Coverage of TSFP and BSFP was low in some camps - Distance and accessibility was identified as a factor affecting coverage in some camps
Appreciation of CMAM programme by community members	- In general the CMAM programme and the products used to treat acute malnutrition are appreciated by community members	RUTF and RUSF are popular with carers in the camps leading to: - Increased risk of CNR - Strong desire of carers to enrol healthy children in programme - Double / triple registrations in facilities - Sale of RUTF and RUSF in markets
Nutrition facility screening and quality of care	- CMAM programme stock and human resources availability were good during the period assessed - High cure rates and short lengths of stay in OTP and TSFP improve perception of programme in community	- Inconsistent and poor quality measurements in nutrition facilities leading to acutely malnourished children being missed during monthly visits to TSFP / BSFP - High percentages of SAM and MAM cases admitted to OTP and TSFP based on inaccurate MUAC measurements - High caseloads in facilities (especially TSFP and BSFP) leads to poor quality measurements, long waiting times and frustrated carers
Other factors		- Pressure from management to increase admissions of SAM cases to OTP

5. CONCLUSION

The 2019 CMAM programme coverage assessment in the Rohingya refugee camps indicates that the treatment coverage of both OTP and TSFP services has improved compared with the baseline coverage assessment (conducted in August 2018).

The baseline assessment found that coverage of both OTP and TSFP services was low; overall approximately 30% of acutely malnourished cases were receiving the treatment available to them (27% of SAM cases and 34% of MAM cases). 14 months later, the follow up assessment in November 2019 shows a much-improved situation.

OTP coverage is estimated to be **76.9% (95% CI: 72.1-81.7%)**
TSFP coverage is estimated to be **61% (95% CI: 57.5-64.6%)**

Multiple reasons can explain this. Most of the reasons can be attributed to the changes in context and treatment modalities detailed in Section 1. In summary:

By late 2019 CMAM services were more organised and extensive in comparison with mid-2018 (which was less than 12 months after the major influx of Rohingya population into Bangladesh). Partners implementing CMAM services had had the opportunity to establish quality facilities and to set up effective community outreach services. As a result of the latter, the 2019 assessment indicates that CNVs are conducting door-to-door screening in more than 95% of sub-blocks regularly.

Also strong evidence came from the assessment that CNVs are conducting regular sensitisations about malnutrition and about the CMAM programme with key community members. As such, awareness about the signs and symptoms of malnutrition amongst community members is good across most camps. Nearly all community groups are aware of nutrition facilities and of their objectives in the camps and carers who have children enrolled in the programme are happy that their child is receiving treatment.

More TSFP / BSFP facilities have been established and since the end of 2018, MAM has been treated exclusively with RUSF (rather than with WSB++ as it was in 2018) which is preferred by carers and children as a product.

More acutely malnourished children are being identified owing to the increase of the MUAC cut-off point during screening from 125mm to 135mm (which was enacted following the 2018 coverage assessment). Furthermore from June 2019, a revised protocol was applied to SAM treatment throughout the camps reflecting the 2013 WHO guidelines. At the time of the assessment, all SAM cases enrolled in OTPs needed to remain in the OTP until they fully recovered from malnutrition. This resulted in a positive impact on the OTP coverage estimate.

In spite of the sensitisations that are taking place, misconceptions about malnutrition persist in some camps and the relapse rate for SAM and MAM cases remains relatively high (based on the results of the SLEAC surveys). Survey teams and CNVs also encountered challenges in measuring children due to hostility and refusal by carers

(sometimes based on religious beliefs and cultural norms and sometimes due to previous rejection from nutrition facilities). There is also evidence that community members in many camps do not fully understand that RUTF and RUSF are therapeutic foods which are meant only for malnourished children. The sale and sharing of RUSF (and to some extent RUTF) continues to be widespread and some carers of healthy children want their children to be enrolled (as they say that their child likes eating the product). The more that this happens, the more carers will associate the treatment products as food which could lead to increased sharing and selling, increased lengths of stay and therefore increased instances of children being discharged as non-respondent cases.

While the overall coverage results indicate an improved situation, they mask varied results at camp level, particularly with regards to TSFP coverage. In 16 camps TSFP coverage still fell in the “Low” classification range (treatment coverage was less than 60%). The major reason behind the lower coverage results (for OTP and TSFP) was that inaccurate anthropometric measurements were recorded at facility level during regular visits of carers to TSFP / BSFP facilities and were therefore not identified as SAM or MAM (if they were in the BSFP but not in the TSFP). This can be attributed to poor training and supervision of facility staff, large caseloads for staff (particularly in BSFPs) and poor quality or poorly calibrated equipment. The assessment team also found measurement inaccuracies on child health cards in multiple camps. This was also one of the reasons which could explain the very high OTP admissions seen across the camps during the previous 12 months.

Coordination challenges between OTPs, TSFP / BSFPs and SCs were also identified during the assessment. For example, carers were reluctant to travel to SCs if referred due to the fear of an overnight stay. Also, when children were discharged from OTPs they were required to enrol in TSFPs for two visits before being integrated into the BSFP. The TSFP admissions data did not indicate that this was happening which could have justified the higher relapse rates.

There was also evidence of poor practices by some implementing partners. For example some OTP facilities staff said that they were encouraged by their management staff to increase OTP admissions in order to reach OTP “admission targets”. In one TSFP facility, staff would not admit MAM cases on a particular day as the carer had come on the “wrong admission” day for their sub-block.

Based on these findings, the key recommendations are summarised in Table 11.

Table 11: Key recommendations from 2019 coverage assessment

Quality of care in nutrition facilities	- Improve and monitor quality anthropometric measurements across all facilities - Support the workload of measurement teams in TSFPs / BSFPs
Community outreach	- Improve supervision of CNVs in order to reduce carer refusal - Conduct more sensitisations with religious leaders and traditional healers and birth attendants - Promote complementary feeding during sensitisations
Coordination between facilities	- Improve linkages and referral of cases between OTP, TSFP, BSFP and SC - Take steps to reduce double / triple registrations between camps

Following the assessment, during the results dissemination workshop, nutrition sector partners in Cox's Bazar elaborated activities to address the recommendations. These are detailed in the next section.

6. ACTION PLAN TO IMPROVE COVERAGE

Theme	Activity	Location/s	Progress indicator	Target	Source of verification	Responsible party / parties	Timeframe
Poor anthropometric measurements at facility level and poor case definition	Ensure quality anthropometric tools including standard weights are available in all the nutrition centres	All camps	#of facility having quality full anthropometric tools	100%	Monitoring visits	Implementing partner and donor agency	Dec 2019/ January 2020
	Training of measurers on anthropometric measurements with focus on practice and standardization test	Centre level / Training venue	#Measurers trained on anthropometry #of standardization tests done on a regular basis	100%	# of trainings conducted	Implementing partner, Nutrition Sector and Care Standardization to be done by the SMART trained staff	Quarterly
	Strengthen supervision of the measurers 1. Nurses to cross check the measurements during review of the OTP/TSFP beneficiaries 2. Centre supervisor to conduct daily quality checks on a sample of measurements.	At centre level	#of nutrition facility where nurse and centre supervisor cross-checked anthropometric measurements	100%	Site monitoring report	OTP/TSFP nurses and centre supervisors.	Immediately

Theme	Activity	Location/s	Progress indicator	Target	Source of verification	Responsible party / parties	Timeframe
	Training –of the staff on accurate detection and referrals between SC, OTP, TSFP and BSFP	All camps	Improve case classification of the malnourished	100%	Monthly reports; registration book and referral slips: Regular spot checks on the registers and verification of admissions.	Facility staff All staff conducting monitoring and supportive supervision (UN/Nutrition sector /Partners)	On-going
	Cross monitoring by other partner during the independent monitoring visits by a taskforce	At centre level	Number of Cross monitoring by other partners	4	Monitoring reports	Monitoring task force on a quarterly basis by another partner.	Starting in January 2020 and continuing on a biannual basis
	Regular quality data checks using ENA on sampled anthropometric measurements	Facility level	#No of quality data checks	100%	# Quality checks using ENA with plausibility report shared	SMART trained staff per Agency	Quarterly
	Strengthen Quality joint supportive supervisions by the Joint assessment teams	Facility	No of Joint assessment visits conducted.	At least all facilities visited twice in a year	Support supervision reports , signed field level support	Joint assessment team (UNHCR,WFP, Nutrition Sector,	Biannual

Theme	Activity	Location/s	Progress indicator	Target	Source of verification	Responsible party / parties	Timeframe
			No of action points followed up		supervision books	UNICEF and one National partner and INGO)	
Supporting workload of measurers at BSFPs	Increase the measurement points at BSFP centres and ensure adequate staff and anthropometric equipment	Centre level	#of measuring points	100%	Site visit reports	Site supervisor	January 2020
	Scheduling of beneficiaries in order to reduce crowding at the BSFP (Consultation with their care givers should be done)	Centre level - Centre level	#of all sites	100%	# Meetings conducted with beneficiaries	Site supervisor Outreach supervisor	1 st Quarter 2020 Continuous
Poor or inadequate linkages and referrals of cases between the between OTP, TSFP, BSFP and SC services	Integrated facilities to reduce the number of fall out cases due to referrals.	All camps	Fall out rate # of children /cases referred or transferred between the CMAM /BSFP	<10%	Monthly reports; registration book and referral slips	Facility staff	On-going
	One nutrition partner per camp to provide all the services and allow accountability.						
	Increase community awareness on nutrition treatment protocols (especially among the men and community leaders)	All camps	Increased number of acceptance of referrals to SC	90%	Monthly reports; registration book and referral slips	Facility staff	On-going
	Development of guidelines on beneficiary flow and referral pathways	Cox's Bazar	Guidelines validated adopted by partners	100%	Availability and use of the guidelines	Nutrition Sector (CMAM Focal Person)	Q1

Theme	Activity	Location/s	Progress indicator	Target	Source of verification	Responsible party / parties	Timeframe
						and site supervisor	
	Referrals should be done every day by CNVs and admissions should be done every day as per the referral.	All camps	Number of children referred and admitted	100%	Facility reports, CNV reports	Facility Staff, CNVs	Daily
Double or triple registrations are happening in certain camps where multiple partners deliver different services	Introduce a digital recording and reporting system that has the ability to give alerts (pop up message) to identify the appropriate programme the child should be admitted in (SC/OTP/TSFP/BSFP). Digitalization will help reduce double dipping. The software should be designed in such a way that it gives a warning message on double dipping Training of staff on the use of the system	All camps	All camps using digitalized information system recording and database	100%	Number of facilities using the digital systems	Implementing partners	Q2
Limited evidence of follow up of cases by CNVs at home	Reduce workload for CNV to cover 150 -200HH and improve on supportive supervision	All camps	Increase follow up of beneficiaries	90%	Home visit report and registration book	Facility staff and CNVs	Ongoing
	Harmonization of monitoring tools including supportive supervision tools.	Cox's Bazar	Monitoring tools validated available for partners	100%	Availability of the harmonized	Nutrition Sector (CMAM Focal Person)	Q1

Theme	Activity	Location/s	Progress indicator	Target	Source of verification	Responsible party / parties	Timeframe
					monitoring tools		
Reluctance of community members to go to SC	Train OTP/TSFP Staff trained on in patient management of SC services to give right information to the beneficiaries	Training venue	# of staff trained on SC services in the OTP	At least 10 facility staff (Nurses and nutrition site supervisors) in the OTP	Bi-annual Training report	Nutrition Manager	Q1 2020
	Strengthen the referral of SAM cases with medical complications to the SC	OTP	% of referred SAM cases with complications go to the SC	80%	OTP weekly report SC admission report Facility referral slip	Nurses and nutrition site supervisions SC doctors and nurses	Weekly follow up
	Linkages with the health sector, training of the staff in the health facilities to Identify SAM with medical complication and refer to the SC for follow up.	Health posts/health	# of doctors and health post staff trained on identifying children with medical complications.	At Least 50% of Health staff trained in respective camp	Training reports	Partner responsible for implementing SC services.	Quarterly basis Q1. TBD
	Intersectoral coordination with protection to ensure linkage to foster care of children in the absence of the caregivers due to SC admissions.	OTP and CiC office /protection facilities/focal	# of SAM with medical complication receiving foster care services	TBC	Protection report	Nutrition site supervisor, protection focal, nutrition partner and NS	Monthly

Theme	Activity	Location/s	Progress indicator	Target	Source of verification	Responsible party / parties	Timeframe
	Provide access to the beneficiaries alternate designated family member to pick up rations	OTP, GFD, WASH and other services	# of alternate designated family member picking rations	Morther of SAM cases with complications	Alternate designated family member register	Nutrition site supervisor,	Monthly
	Training of the nutrition and protection focal people	All camps	No of CP /nutrition focal staff trained on basic nutrition and CP services / referral pathways No of referrals from CP to Nutrition and Vice versa	At least 50% of all CP/ Nutrition staff in each camp	Training report,	Implementing partner in respective camps	Bi annual
Lack of complementary feeding contributing to CNR and relapse	Conduct participatory cooking demonstration.	Integrated CMAM facility	# of food demonstrations	Pregnant lactating mothers	Register	Health educator	Monthly
	Home gardening in linkage with FSL	Community	# of beneficiaries with home gardens	Caregivers of under 5 children	Program reports	Implementing partner (IP)	Quarterly
	Scale up sensitization of men, male community leaders and other r influential groups on malnutrition	Community	No of group sessions held for community leaders and Male	Community leaders (Mahjis)	Program reports	IPs	Quarterly

Theme	Activity	Location/s	Progress indicator	Target	Source of verification	Responsible party / parties	Timeframe
			at the community level	Father of children under five			
	Development and use of IEC materials on causes and effects of malnutrition	Cox bazaar	Number and variety of nutrition-related communication materials with good nutrition behaviour messages produced and disseminated at all levels		Availability of harmonised contextualized materials in use by all facilities	CMAM TWG /IPs	Ongoing

7. ANNEXES

ANNEX 1: ADAPTED SQUEAC METHODOLOGY

1. CMAM Programme data collection and analysis

The first stage of the coverage assessments in the camps in 2019 involved the collection and analysis of CMAM programme data and other data from individual nutrition facilities to indicate and map catchment areas with potentially high and low coverage.

During October 2019, nutrition sector partners collected data from each of the nutrition facilities which they are responsible for on an excel-based data collection tool (available on request). The compiled data was shared with the Action Against Hunger Bangladesh Surveillance team. Data was received from 109 facilities: 58 OTPs and 51 TSFPs. The following data was shared (separately for OTP and TSFP) by month (between October 2018 and September 2019):

- No. of weeks in month with 100% stock availability (RUTF or RUSF as relevant)
- No. of weeks in month with 100% human resources availability (for nutrition facilities only, i.e. not including community outreach workers)
- No. of children screened in community in catchment area of nutrition facility
- No. of new enrolments to programme
- No. of cases discharged as defaulters from programme
- No. of cases discharged as non-responders from programme
- No. of cases discharged as cured from programme
- Average length of stay for children discharged as cured
- MUAC at admission for all children aged 6-59 months (during July-September 2019 period)

Once received, this data was compiled, analysed and summarised by partner and by camp in an excel analysis sheet and Microsoft Power Bi.

Analysis indicated:

- Differences in programme data by camp, by implementing partner and by OTP / TSFP
- Variations in programme data during previous 12 months by camp, by implementing partner and by OTP and TSFP

The findings of the analysis were summarised and presented to Nutrition Sector partners during a half-day workshop on Monday 4th November.

The objective of the workshop was for partners to review the programme data (where possible for the camps they are responsible for), to identify potential high and low coverage camps and to hypothesise the reasons for high and low coverage.

During the workshop, following an introductory presentation by the Global Coverage Advisor, the partners split into two groups: one group looked at OTP data and the other at TSFP data. Charts had been printed and stuck to flipcharts. The groups made observations on the flipcharts to explain or justify the trends seen in the data. They then presented their observations to the plenary.

The observations were summarised overall and by camp on a summary table (Annex 5). This information was then also to select camps for the qualitative investigation to visit.

2. SLEAC surveys in individual camps

The second stage of the coverage assessment involved the implementation of coverage surveys in individual camps using the SLEAC methodology.

The implementation of the SLEAC survey involved a two stage sampling technique:

- Stage 1: Calculation and selection of primary sampling units
- Stage 2: In-community case finding to identify and classify all OTP and TSFP cases

The findings of stage 2 were then compiled and analysed to classify coverage of the TSFP at camp level and to classify coverage of the OTP across the SLEAC Zones used during the 2018 assessment. It was also possible to estimate the coverage of OTP and TSFP across all camps.

Stage 1: Calculation and selection of primary sampling units

The first stage involved calculating and sampling the primary sampling units to be visited during the SLEAC survey.

Calculation of target sample size: During a SLEAC survey the primary sampling units should be the smallest possible catchment areas in a survey zone (typically a village in rural settings) or the number of children that one survey team can typically screen in one day (80-120).

In the context of the camps in Cox's Bazar, the primary sampling units were sub-blocks which have an average population of 463 individuals (based on the latest population data from UNHCR).⁸ Recent population data also indicated that children aged 6-59 months account for approximately 19% of the population (however this figure varied by camp).

The first step taken to select the primary sampling units was to calculate the target sample size of SAM and MAM cases to find during the SLEAC survey in each of the camps. To classify coverage at camp level, a minimum sample size of 40 SAM and MAM cases should be found. However, if the expected number of SAM or MAM cases at the time of the survey is likely to be less than 500 (which might be the case if the

⁸ With the exception of Kutupalong and Nayapara Registered camps where there are no sub-blocks and the average block population is around 1,280.

populations of camps are small and/or the prevalence of SAM or MAM is low), the sample size can be reduced based on the following table:

Total number of cases in the service delivery unit	Target sample size
>500	40
250-500	33
125-250	32
100-125	29
80-100	26
60-80	26
50-60	25
40-50	22
30-40	19
20-30	18
<20	15

This table is taken from page 115 of the SLEAC technical reference⁹ and is based on a three-tier classification system. The expected number of SAM or MAM cases can be calculated with the following formula:

$$\text{average camp population all ages} \times \frac{\text{population 6 – 59 months}}{100} \times \text{SAM or MAM prevalence}$$

Once the required sample size is calculated, the following calculation is used to calculate the number of sub-blocks to visit to reach the sample size (n = required sample size):

$$\left\lceil \frac{n}{\text{average sampling unit population all ages} \times \frac{\text{population of 6 – 59 months}}{100} \times \text{SAM or MAM prevalence}} \right\rceil$$

Based on the above calculation, it was estimated that a very large number of sampling units (1,083) would need to be visited in order to classify coverage of OTP coverage at camp level. With the resources available for this survey, this would not have been possible. Therefore the team aimed to combined the results from neighbouring camps to classify coverage of OTP services across the five “SLEAC zones” used during the baseline coverage assessment.

Therefore the survey team set out to classify the coverage of TSFP by camp. Owing to their small populations, Camp 4 Extension and Camp 20 Extension were merged into Camp 4 and Camp 20 respectively. Target sample sizes to classify TSFP coverage were therefore calculated for 30 camps and 2 merged camps. The sample size calculations indicated that teams would need to visit 175 sub-blocks across all camps (the data used to calculate this figure are included in [Annex 2](#)).

⁹ The technical reference for the methodology is available here: <http://www.coverage-monitoring.org/wp-content/uploads/2014/10/SQUEAC-SLEAC-Technical-Reference-Oct2012.pdf> (starting from page 114)

Further information about sample sizes achieved is detailed below.

Selection of the sub-blocks: During a SLEAC survey, selection of the sampling units to visit can be made using one of two methods.

If detailed maps are available marked with the names of each sub-block for the entire survey area, the centric systematic area sampling method can be used to select the sub-blocks to visit. This involves drawing a grid over the map to create quadrats. The sub-block at, or nearest, the centre of each quadrat is then selected as the sub-block to visit. This was not possible for the Cox's Bazar camps due to unavailability of detailed camp level maps.

If no detailed maps are available, then the SLEAC sample sub-blocks can be selected from a list of sub-blocks using the systematic, stratified sampling methodology. This is the sampling method used during the 2019 coverage assessment.

All sub-blocks in a camp were listed alphabetically, stratified by block. The required number of sub-blocks per camp were then sampled from the list as follows:

- A sampling interval was calculated by dividing the total number of sub-blocks in the camp with the total number of sub-blocks to visit (based on the TSFP minimum sample size).
- Starting with a random number (between 1 and the sampling interval), the sampling interval was then applied systematically to the list of sub-blocks until the required number of sub-blocks had been selected.

Stage 2: In-community case finding for OTP and TSFP cases

Stage 2 involved survey teams visiting the selected sub-blocks to conduct exhaustive in-community case finding of all eligible cases, recording their anthropometric details and determining if they were enrolled or not enrolled in the relevant treatment programme.

Target population and case definition:

The target population for the survey was children aged 6-59 months in the selected sub-blocks.

Teams conducted door-to-door sampling in order to identify if they are a case.

Case definition: During the Cox's Bazar SLEAC surveys, a case included any child in the target population that was SAM or MAM at the time of the survey and/or any child that was enrolled in an Outpatient Therapeutic Programme (OTP) or Therapeutic Supplementary Feeding Programme (TSFP) at the time of the survey.

Verification of age: To determine the age of identified children, the survey teams first asked if the carer could show them a registration card, ID card, EPI card or nutrition programme treatment card. If the carer could not provide any of these and could not provide an accurate age for the child, the survey team used a key events calendar to determine the age.

Identification of SAM and MAM cases: SAM and MAM cases were identified by MUAC, presence of oedema and/or by weight for height (WFH) Z-score. The case definitions for SAM and MAM cases were as follows:

	MUAC	Oedema	WFH Z-score
SAM case (any of)	<115mm	+, ++, +++	<-3
MAM case (any of)	115-124mm	No oedema	-2 to -3

Confirmation of enrolment in OTP or TSFP: Carers of cases who identified their child as being enrolled in an OTP or TSFP needed to confirm using the following proof:

OTP	TSFP
OTP treatment card OR A full packet of RUTF OR Confirmation from a CNV	TSFP treatment card OR A full packet of RUSF OR Confirmation from a CNV

If it was not possible to confirm that the child was in the relevant programme then they were considered a non-covered case.

Decision process: Each child in the age range was then measured using a MUAC tape and for signs of oedema. If their MUAC fell below a cut-off of 135mm and/or if they showed signs of oedema, their weight and height Z-score was determined using a set of scales, a height board and a WFH Z-score calculation table.

Based on the three measurements, the survey team classified them as SAM, MAM or Well-nourished and administered the relevant questionnaire.

There were seven possible classifications of cases. These were identified as follows:

Acronym	Description
OTP Cin	A SAM case in the OTP
OTP Cout	A SAM case not in the OTP
OTP Rin	A case that was SAM but who is still in the OTP programme as they have not yet reached discharge criteria
TSFP Cin	A MAM case in the TSFP
TSFP Cout	A MAM case not in the TSFP
TSFP Rin	A case that was MAM but who is still in the TSFP programme as they have not yet reached discharge criteria
WN	A child is found to be well-nourished following measurement

The carers of all cases listed above were then interviewed (using KoboCollect software loaded onto tablets) to determine the main reason for enrolment to the relevant programme or the main reason for non-attendance to the programme. During case finding, the results were recorded on a data collection summary sheet.

At the end of every day of data collection, the team leaders from each team returned to the assessment base in Cox's Bazar to share with the coordination team the survey results from the sub-block which they visited. They also checked and sent completed questionnaires to the Kobo server at the end of every day.

TSFP sample sizes achieved

[Annex 2](#) includes the data used to calculate the target sample sizes per camp as well as the sample sizes achieved for each camp.

The target TSFP sample for all camps was 1,178. By the end of data collection, 908 TSFP cases had been identified across all camps (77.1%) with significant variation between camps. In five camps, the sample sizes were achieved or exceeded. The target sample sizes were not met in the remaining 29 camps.

The TSFP target sample sizes were not achieved due to the following reasons:

- The target sample sizes were calculated based on the expected population of MAM cases in each camp. The TSFP achieved sample sizes included active MAM cases, as well as recovering TSFP cases (cases in the TSFP that were not MAM at the time of the survey as they had not yet been discharged from the TSFP). However many MAM cases were identified during the survey which were OTP recovering cases. Therefore these cases were not considered as the TSFP sample sizes.
- The target sample sizes were calculated based on a MAM prevalence of 10.1% by WFH Z-score (based on the SMART survey conducted in the makeshift camps in October 2019). This prevalence was the prevalence of ALL children measured. During the SLEAC surveys, teams did not calculate the WFH Z-score for children with MUAC measurements of 135mm or more (in order to reflect the community outreach procedures used in the camps). Therefore some MAM cases will have been missed during the survey.
- The required sub-blocks to visit to classify MAM coverage by camp was calculated to be 175 sub-blocks in total. In the end, an additional 8 sub-blocks were visited to increase the sample sizes. It is common practice when planning SLEACs to include one extra sampling unit in order to stand a greater chance of achieving the sample size. However 183 sub-blocks was the maximum possible number of sub-blocks that could be visited with the time and resources available for this survey.

However the SLEAC methodology offers a degree of flexibility with target sample sizes. It is preferable to achieve the required sample size – but it is not essential to do so. Even if the sample size is not achieved, it is still possible to classify coverage on a three tier scale without a risk of major errors. Therefore in spite of the fact that the target sample sizes were not achieved, it was still possible to classify TSFP coverage across the 32 camps.

OTP sample sizes achieved

By the end of data collection, a sufficient number of OTP cases had been identified to be able to classify OTP coverage of each of the SLEAC Zones.

Classifying coverage

When teams had visited all selected sub-blocks in a camp, the survey coordinator analysed the results to determine the coverage classification of TSFP coverage (and OTP coverage if possible). This was done using the LQAS classification technique.

The SLEAC survey methodology uses a classification system derived from the “Lot Quality Assurance Sampling” (LQAS) classification technique which enables classification of coverage on a two or three-tier scale. A three-tier classification scale was used for the survey in Cox’s Bazar (the same scale used during the 2018 survey). The classifications were based on the Sphere Project’s standard for coverage of CMAM services in camps (90%¹⁰). Therefore for coverage to be considered “High” it should exceed 90%.

Following the recommendation by the Global Coverage Advisor, the Assessment Technical Working Group and survey Core Team agreed to use the same classification scale as the one used during the baseline coverage assessment:

Low	Moderate	High
0% - 60%	61% - 90%	91% - 100%

Single coverage estimator

The final coverage classifications and estimates were calculated using the single coverage estimator. This estimator replaces the former *Point* and *Period* coverage estimators which have been used in the calculation of coverage in previous years. More information about the calculator can be found in an article in Field Exchange from 2015¹¹.

The single coverage estimator includes recovering cases that are both in the programme and recovering cases that are not in the programme (known as *Rout*). Therefore the Denominator of the coverage calculation for single coverage included *Cin*, *Cout*, *Rin* AND *Rout* as shown by the formula below.

$$\text{Single Coverage} = \frac{Cin + Rin}{Cin + Cout + Rin + Rout}$$

The survey teams found recovering cases that were in the programme during case finding. They were classified as OTP Rin or TSFP Rin. However it was not possible to find recovering cases not in the programme. These were SAM or MAM cases which recovered naturally without entering a nutrition treatment programme. The estimated

¹⁰ See <http://www.spherehandbook.org/en/management-of-acute-malnutrition-and-micronutrient-deficiencies-standard-2-severe-acute-malnutrition/>

¹¹ For more information see Myatt, M et al, (2015) *A single coverage estimator for use in SQUEAC, SLEAC, and other CMAM coverage assessments*, p.81 Field Exchange 49

number of these cases was estimated using C_{in} , C_{out} and R_{in} using the following formula:

$$R_{out} \cong \frac{1}{3} \times (R_{in} \times \frac{C_{in} + C_{out} + 1}{C_{in} + 1} - R_{in})$$

Therefore before classifying coverage it was necessary to calculate the number of recovering cases NOT in the programme (R_{out}).

Calculations for classification of coverage

Once R_{out} was calculated for each camp, the following steps were taken to classify coverage:

1. Based on the denominator of SAM and MAM cases, decision values were calculated using the following equations:

$$d_1 = \left\lfloor n \times \frac{p_1}{100} \right\rfloor \quad d_2 = \left\lfloor n \times \frac{p_2}{100} \right\rfloor$$

d = decision value

p = coverage proportion

n = sample size

For example, if the denominator of TSFP cases in a camp was 50 cases and the classification scale of this survey was used, then decision values would be as follows:

$$d_1 = \left\lfloor 50 \times \frac{60}{100} \right\rfloor = 30$$

$$d_2 = \left\lfloor 50 \times \frac{90}{100} \right\rfloor = 45$$

2. The number of covered cases (the numerator) identified were then be compared with the decision values.
 - If 25 covered cases were found out of the 50, as 25 is inferior to d_1 , coverage would be classified as low.
 - If 40 covered cases were found, as 40 falls between d_1 and d_2 , coverage would be classified as moderate.
 - If 47 covered cases were found, coverage would be classified as high.

(NB. The number of covered cases needs to exceed the decision value to be classified in the category above. E.g. if covered cases = 45 then this would still be considered moderate coverage).

Estimating coverage

It may be possible to estimate coverage for the entire survey area by combining the results from all camps.

It is only possible to estimate coverage if the following conditions are met:

- The overall sample size is 96 (or more). This sample size is usually sufficient to estimate coverage with a 95% confidence interval and a precision of 10%
- Coverage is not patchy (i.e. coverage is broadly similar in each of the areas surveyed).

The final coverage estimate will be weighted based on the expected number of OTP / TSFP cases in each camp. Then, to test the patchiness of coverage, a *chi-squared* test will be completed. More details of both of these steps is available in the SLEAC technical reference¹² on pages 129-133.

Analysis of questionnaires

When an OTP or TSFP case was identified, a structured questionnaire was administered to the carer to determine the reasons why the child was or was not enrolled in the relevant treatment programme. The questionnaire was administered on tablets using “Kobo collect” software.

The aim of the questionnaire for carers of non-covered cases is for the interviewer to determine the primary reason for non-attendance to the programme. The questionnaire followed the following logic:

1. The first question asked carers: *Do you think your child is sick?* If the response to this question was “No” then the interviewer ended the questionnaire. This is because if the carer was not aware that their child was sick, then asking more questions about the symptoms and perceived illness of the child would have been no longer applicable.
2. If the carer was aware that their child was sick, the interviewer then asked the following questions: *“What symptoms is your child suffering from?”*; *“What illness has caused these symptoms?”*; *“How have you tried to treat this illness or how are you going to treat it?”* and; *“Who made a decision about the choice of treatment?”*. For each of these questions carers could provide multiple responses.
3. The carers were then asked: *Do you know that there is a service at the health facility dedicated to the treatment of malnutrition?* If they answered No to this question, the interviewer ended the questionnaire.
4. If carers were aware that their child was sick and were aware of the existence of a programme where they could receive treatment for malnutrition, they were then asked: *Why didn’t you bring your child to the health facility for the treatment?* Interviewers had to select one reason from a list of commonly cited reasons, or they could select “Other” and specify the reason if the reason provided was not on the list.
5. Carers who were aware of the existence of the programme were also asked if their child had been previously enrolled in the programme and how they had been discharged (as *a cured case*, *non-responder* or *defaulter*). If they had defaulted or discharged as a non-responder, further questions were asked as to when and why this had happened.

¹² The technical reference for the methodology is available here: <http://www.coverage-monitoring.org/wp-content/uploads/2014/10/SQUEAC-SLEAC-Technical-Reference-Oct2012.pdf>

The aim of the questionnaire for covered cases was to identify who or what had influenced the carer to go to the nutrition centre to seek treatment for their malnourished child.

1. The first question asked the carer about previous enrolment of their child in the relevant treatment programme. If the child had relapsed or defaulted, the interviewer would ask follow up questions to try to understand why.
2. The second question asked if the carer had other children enrolled in the OTP or TSFP.
3. The third question asked: *Why did you decide to enrol your child in the OTP / TSFP programme?* Interviewers had to select one reason from a list of commonly cited reasons, or they could select "Other" and specify the reason.

Data checks: Once data collection in a sub-block had been completed, the team supervisor completed a Sub-block Screening Summary sheet. He/she then crosschecked that the number of questionnaires saved in the tablet reflected the total number of cases identified on the summary sheet. Once this check had been completed and adequate internet connect was available, the survey team supervisors sent the questionnaires to the survey database on KoBoCollect.

The survey coordinator then crosschecked the data on the summary sheets with the data received in the database at the end of every day of data collection.

The results were then analysed to determine the primary reasons why active cases were NOT in the relevant treatment programme for non-covered cases. For cases that were in the programme, the questionnaire identified the primary reasons why the case was in the programme.

These were analysed and ranked by camp and for the entire survey area.

3. Qualitative investigation:

Overview of methodology

A qualitative investigation took place in parallel to the SLEAC surveys. The qualitative investigation aimed to identify and investigate key themes relating to community perceptions of malnutrition and the services available. This information will help service providers to refine and improve community outreach strategies in order to improve service uptake.

Timeline and investigation team

The investigation took place over 14 days and was completed by one investigation team comprised of 5 members: one team leader and four investigators.

Data collection tools and methods

The investigation involved one investigation team leading multiple focus group discussions (FGD) and semi-structured interviews (SSI) with key informants (including community members and CNVs) with the help of interview guides. Additional interview

guides were used to collect case studies with carers of children that had been discharged as defaulters or as CNR.

Responses from interviews were noted directly to the interview guides by the investigators.

Selection of investigation camps and sub blocks

Sub-blocks and camps were purposively selected for the qualitative investigation in order to include a representative sample of communities and locations.

Camps were selected based on pre-existing programme data and contextual information in order to include a range of camps where coverage might be high and coverage might be low. This was determined based on admissions, MUAC at admission data and programme exit data from the Programme data analysis. Camps were also selected where different implementing partners supported CMAM programmes.

Sub-blocks were selected based on their approximate distance to the nearest Nutrition facility. Approximate distance varied by camp, by it was judged that any sub-block which was greater than 15 minutes' walk would be considered "far" and less than 15 minutes walk would be "near". Seven sub-blocks were selected which were deemed to be far from the nearest nutrition facility and seven sub-blocks were selected which were deemed to be near the nearest nutrition facility (based on a visual assessment of maps of each selected camp).

Selection of key informants

The investigation team set out to conduct an FGD and at least three SSIs in each selected sub-block with a range of 10 key informants. The target key informants (and the data collection methods used for each) included:

- SAM carers (SSI)
- MAM carers (SSI)
- Female community members (FGD)
- Male community members (FGD)
- Block leaders (SSI)
- Imams (SSI)
- Traditional healers (SSI)
- Traditional birth attendants (SSI)
- CNVs (SSI)
- Carers of defaulter, CNR or OTP late admission cases (children admitted with a MUAC of less an 11cm)

In each sub-block, they always conducted an FGD (with community members) and an SSI with the CNV. For the remaining key informants they alternated. The qualitative sampling framework was updated at the end of every day with the key informants interviewed in the sub-block which had been visited and a plan was made for the next day to ensure that a representative sample of key informants was reached.

By the end of data collection 70 interviews / focus group discussions had been completed with a total of 182 key informants in 14 sub-blocks in 14 camps. The final list camps and sub-blocks visited and key informants reached in each of these sub-blocks is included in [Annex 3](#).

Analysis of findings from qualitative investigation

The responses from key informants were analysed by the data collection teams in order to identify key themes impacting the coverage of CMAM services and additional information.

The findings were recorded at the end of every day of data collection on flip charts in the assessment base and triangulated by key informant and location. The team identified positive and negative factors and grouped them in line with the following themes:

- Awareness and understanding of malnutrition
- Awareness, understanding and perception of nutrition programmes
- Community outreach
- Quality of care in nutrition facilities
- Other factors affecting coverage

On separate flipcharts, the teams also recorded suggestions made by key informants to improve nutrition programmes and local, Rohingya terms used in relation to sick and malnourished children.

At the end of the investigation, all factors identified and the triangulation data (key informant and location data) of each were recorded into an analysis sheet.

The factors were further grouped into a synthesized list of 16 positive and 15 negative factors affecting coverage. Each of the factors was then weighted based on the triangulation by calculating the percentage of all key informants who mentioned the factor along with the percentage of camps where the factor was mentioned.

For example, a total of 12 key informant “groups” were included in the investigation in 14 different locations. Therefore, if a particular factor was mentioned by 5 key informant groups in 7 of the camps, the Key informant score was calculated by dividing 5 with 12 (42%) and the Location score was calculated by dividing 7 with 14 (50%).

By completing the same process with all factors, this enabled the team to identify how often key positive and negative factors were mentioned. A separate analysis was done to identify the key positive and negative factors by key informant.

ANNEX 2: SLEAC POPULATION AND SAMPLE SIZE DATA

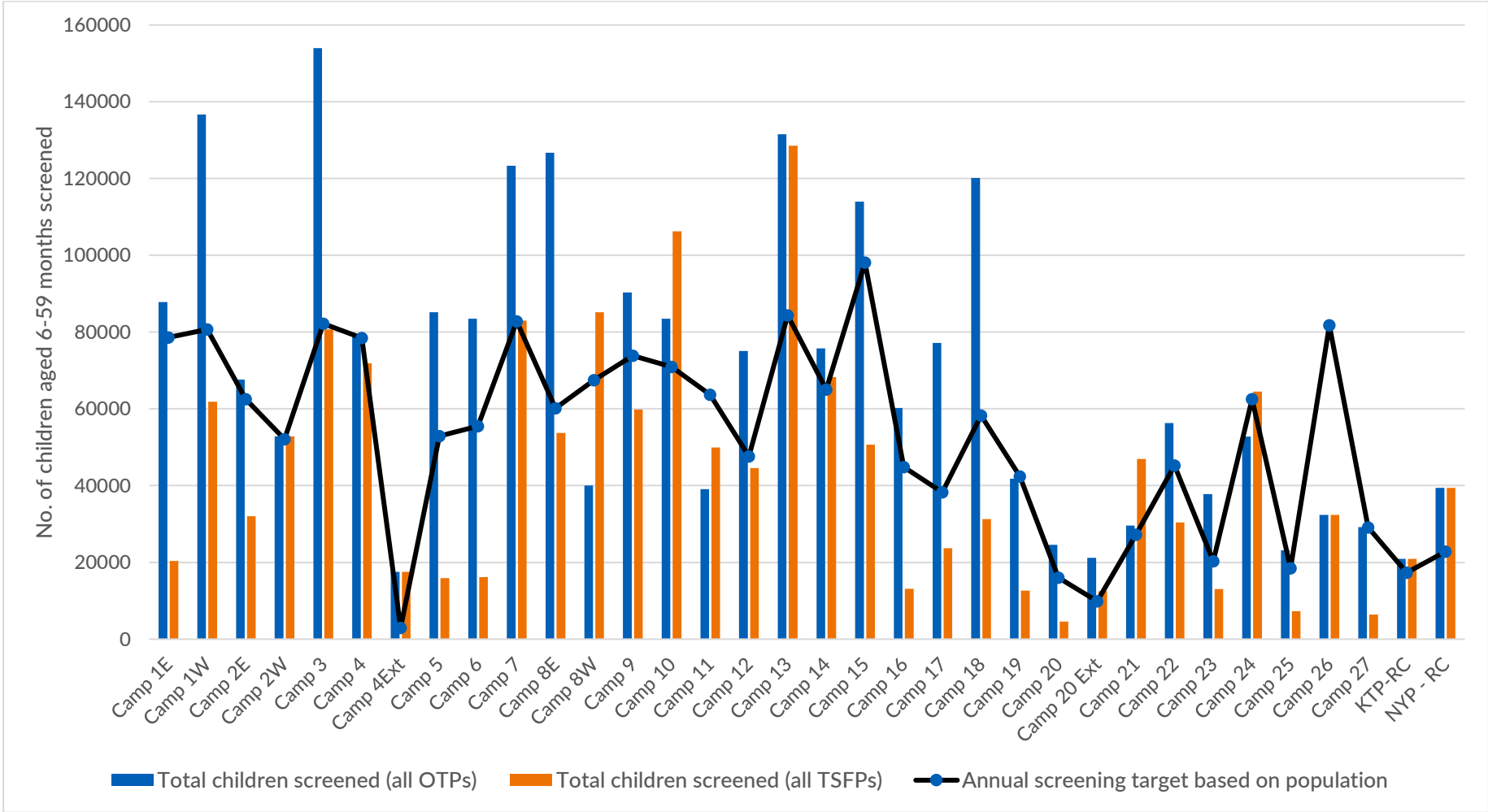
Camp	Total Individuals	% pop'n aged 6-59m	Number of sub-blocks	Total MAM ¹³	Target sample size to classify coverage of TSFP treatment	Estimated sub-blocks to visit to classify TSFP coverage	Actual sub-blocks visited	TSFP Sample size achieved
Kutupalong RC	14592	10%	13	146	32	7	7	31
Camp 01E	40538	16%	104	662	38	6	6	59
Camp 01W	41061	16%	99	679	38	6	6	33
Camp 02E	30168	17%	60	526	38	5	5	37
Camp 02W	26048	17%	46	439	37	4	4	48
Camp 03	39659	17%	85	692	38	5	5	21
Camp 04 and 4 Ext	38561	18%	79	661	38	5	5	23
Camp 05	25122	18%	47	445	37	4	4	26
Camp 06	24931	19%	40	467	37	4	4	11
Camp 07	39627	17%	63	697	38	4	4	20
Camp 08E	31234	16%	77	506	38	6	6	32
Camp 08W	32357	17%	80	568	38	6	6	15
Camp 09	36817	17%	94	621	38	6	6	43
Camp 10	32953	18%	81	597	38	6	7	39
Camp 11	31487	17%	79	536	38	6	6	35
Camp 12	23745	17%	56	401	37	6	6	11
Camp 13	41770	17%	94	710	38	6	6	38
Camp 14 (Hakimpara)	31912	17%	47	547	38	4	4	13
Camp 15 (Jamtoli)	49400	17%	102	826	39	5	5	21
Camp 16 (Potibonia)	21838	17%	52	378	37	6	6	21
Camp 17	17534	18%	42	322	36	5	5	30
Camp 18	26801	18%	74	491	38	6	6	20
Camp 19	20833	17%	66	357	37	7	7	35
Camp 20 + 20 ext	12026	18%	46	223	35	8	8	32
Camp 21 (Chakmarkul)	13172	17%	32	229	35	5	6	26
Camp 22 (Unchiprang)	22215	17%	57	381	37	6	6	30
Camp 23 (Shamlapur)	10210	17%	12	171	33	3	9	32
Camp 24 (Leda)	33540	16%	69	527	38	5	5	32
Camp 25 (Ali Khali)	9497	16%	23	155	32	5	5	26
Camp 26 (Nayapara)	41007	17%	82	688	38	5	5	21
Camp 27 (Jadimura)	14269	17%	36	245	35	6	6	21
Nayapara RC	20326	9%	14	192	34	7	7	26
TOTAL	895250		1951	15083	1178	175	183	908

¹³ Total MAM calculated based on 10.1% MAM prevalence (from October 2019 SMART survey)

ANNEX 3: QUALITATIVE INVESTIGATION SAMPLING

Data Collection Date	Camp Name	Sub-block name	Distance to facility	SAM Carer	MAM carer	Community members		CNV		Block leaders	TBA / TH	IMAM	Defaulter	CNR	LA	TOTAL
				F	F	F	M	F	M	M	F	M	F	F	F	
10-Nov-19	Camp 27 (Jadimura)	E8	Far		1	10			1	1			OTP	OTP	OTP	7
11-Nov-19	Nayapara RC	C1	Near	1		10			1	1						4
12-Nov-19	Camp 23 (Shamlapur)	A06	Far		1		10	1			1			OTP	OTP	6
13-Nov-19	Camp 22 (Unchiprang)	D01	Near	1			10		1			1		OTP		5
14-Nov-19	Camp 16 (Potibonia)	D08	Far	1			8		1	1				OTP		5
16-Nov-19	Camp 15 (Jamtoli)	G4	Near		1	9		1			1			TSFP		5
17-Nov-19	Camp 19	D12	Far		1	9			1			1	TSFP			5
18-Nov-19	Camp 12	G1	Far		1		8		1	1				TSFP		5
19-Nov-19	Camp 7	A1	Near	1		9		1			1			OTP		5
20-Nov-19	Camp 8W	A53	Near	1			8		1	1				2 OTP	OTP	6
21-Nov-19	Camp 20 Extension	B1	Far	1		8			1			1		TSFP		5
23-Nov-19	Camp 3	AA22	Near		1	8			1	1						4
24-Nov-19	Kutupalong RC	F	Far		1	8		1								3
25-Nov-19	Camp 1W	1W	Far	1			10		1	1				OTP		5
TOTAL KII				7	7	8	6	4	10	7	3	3	2	10	3	70
TOTAL PARTICIPANTS				7	7	71	54	4	10	7	3	3	2	11	3	182

ANNEX 4: OTP AND TSFP SCREENING TOTALS PER CAMP



ANNEX 5: PROGRAMME DATA OBSERVATIONS (OCTOBER 2018-SEPTEMBER 2019) AND OBSERVATIONS FROM TEAM LEADERS

Camp	Service type	Implementing partners	Programme data key trends	Explanations for trends	Survey team leader observations
Kutupalong Registered camp	OTP	ACF	Quite high CNR (16%) for period.		
Camp 1E	OTP	TDH	Steep increase in screening in April/May 2019.		
Camp 1W	OTP	ACF, TDH		TDH: Slight increase in admissions in May due to increased prevalence of disease	OTP on border between 1E and 1W. 3 OTPs close together. Carers are reluctant to go to TSFP when referred as it is far. And often the carers are turned away and told to come back another day. Coordination challenges.
Camp 2E	OTP	ACF, SARPV	SARPV OTP: 71% of admissions at MUAC <115mm July-Sept. SARPV Av LoS remained low throughout year (av. 30 days)		
Camp 2W	OTP	ACF			
Camp 3	OTP	TDH, ACF, SARPV	Drop in screening from June 2019 onwards		
Camp 4	OTP	SARPV, SCI			

Camp	Service type	Implementing partners	Programme data key trends	Explanations for trends	Survey team leader observations
Camp 4 Extension	OTP	ACF	Erratic Average LoS. Very high in Jan 2019		
Camp 5	OTP	ACF, CWW	Higher admissions than expected (730%). Two facilities, similar number of admissions.		
Camp 6	OTP	ACF, SARPV	Higher admissions than expected (722%). Two facilities, similar number of admissions. SARPV just higher.		
Camp 7	OTP	ACF (1), SHED (2)	Higher admissions than expected (807%). Three facilities, similar number of admissions. SHED OTP20 highest admissions. Big peak in admissions at 114mm in SHED OTP20 - 98 cases admitted at 114mm July-Sept. 87% of admissions at MUAC <115mm.	OTP 20. Facility supervisor said that the management encouraged them to increase admissions. Therefore since July 2019 they have been completing more "rigorous" screening in blocks and sub-blocks and have encouraged CNVs to accompany referred cases to clinic. Very high MUAC admissions compared to WHZ (>60% by MUAC)	Carers reluctant to come to centre due to need to bring back empty packets. Evidence of carers selling RUTF.
Camp 8E	OTP	Concern (1), SHED (2)	Higher admissions than expected (979%). Three facilities, similar number of admissions. SHED OTP24 highest admissions. 66% of		

Camp	Service type	Implementing partners	Programme data key trends	Explanations for trends	Survey team leader observations
			admissions at MUAC <115mm July-Sept.		
Camp 8W	OTP	SARPV	Quite low Av LOS Oct2018-June 2019 (<30 days) Admissions up and down.	Increase in CNR from August to October due to new protocol. Seasonal diseases affected OTP admissions (chicken pox in April/May).	>80% admissions by WHZ. Hilly area – badly affected by monsoon due to mud. Lower admissions at this period, higher CNR and defaulter.
Camp 9	OTP	SHED	Higher admissions than expected (856%). Two facilities. OTP27 highest >1100 admissions. SHED OTP 29 no increase in Av LoS after July 2019	Potentially higher admissions as some admissions may be coming from camps 8W and 10.	Measurement discrepancy. Case measured as MAM during survey admitted as SAM to OTP on same day.
Camp 10	OTP	ACF	Annual screening totals below target screening total (for 12 months)		
Camp 11	OTP	ACF			
Camp 12	OTP	CWW			Some carers refused survey team to measure children as they believe measurement worsens child's malnutrition status
Camp 13	OTP	ACF, TDH			Some carers refused survey team to measure children as they believe measurement worsens child's malnutrition status
Camp 14	OTP	ACF, CWW			
Camp 15	OTP	CWW, SCI	SCI no increase average LOS after July		

Camp	Service type	Implementing partners	Programme data key trends	Explanations for trends	Survey team leader observations
Camp 16	OTP	ACF			
Camp 17	OTP	CWW, SCI, SHED	Higher admissions than expected (809%). Three facilities. OTP43 (SHED) highest (more than double others) (449). Quite high CNR (12%) for period. SHED Av LOS longest - 70 days by september		Some carers refused survey team to measure children as they believe measurement worsens child's malnutrition status
Camp 18	OTP	CWW, SARPV, SCI (2)	Higher admissions than expected (849%). Four facilities. SARPV more than double others. SCI OTP 73% of admissions MUAC <115mm July-Sept Average LoS: CWW longest 70 days in september		
Camp 19	OTP	TDH	Tdh OTP: 65% of admissions at MUAC <115mm July-Sept.		
Camp 20	OTP	SCI, TDH	SCI long Av LOS from Oct18-Jan19 (50+days)		
Camp 20 Ext	OTP	CWW	100% of MUACs at admission <115mm during July-Sept		Well organised model camp. Good conditions. Nicely integrated BSFP / TSFP / OTP.

Camp	Service type	Implementing partners	Programme data key trends	Explanations for trends	Survey team leader observations
					High transfer rate from TSFP to OTP. 60% of OTP admissions coming from the TSFP. Suspected sharing and selling of RUTF which accounts for high rate of TSFP to OTP transfer. Good collaboration between nutrition and health sectors.
Camp 21	OTP	ACF			
Camp 22	OTP	SARPV (2)	Increased OTP admissions, especially from April - September 2019. OTP 54: 1st 6 months: 148, 2nd 6 months: 340 OTP 53: 1st 6 months: 222; 2nd 6 months: 283 Actual cases in OTP at time of visit: 130. Expected SAM population: 40 Higher admissions than expected for year (753%). Similar admissions in both.		
Camp 23	OTP	SHED	Higher admissions than expected (865%). One facility. V short average LoS Oct18-June19 (20 days). Increase		

Camp	Service type	Implementing partners	Programme data key trends	Explanations for trends	Survey team leader observations
			to about 60 days June to Sept		
Camp 24	OTP	ACF			
Camp 25	OTP	SCI	Quite high CNR (10%) for period. High average LOS throughout year. 70+ days		
Camp 26	OTP	ACF	Annual screening totals below target screening total (for 12 months). Average per month screening 2700, population 6-59m 6800. Peak in av LOS in February (60days)		
Camp 27	OTP	SCI	High average LOS throughout year. 70+ days. Reduction from May 2019 onwards.		
Nayapara Registered camp	OTP	ACF			
Kutupalong Registered camp	TSFP	ACF	Big peak in admissions in May 2019 and dip in December 2018.	Facility staff say that there is a peak of sickness in the middle of the year (Summer to rainy season transition) which led to the peak in admissions. This also happened in OTP (but in July).	Out of 121 admitted in May, 103 were transferred from BSFP. Sharing and selling is common (RUTF and RUSF).

Camp	Service type	Implementing partners	Programme data key trends	Explanations for trends	Survey team leader observations
Camp 1E	TSFP	ACF, TDH	ACF TSFP, long av LOS (80+ days)		
Camp 1W	TSFP	ACF	42% of expected admissions for period. ACF TSFP only started in Feb 2019	Big peak of admissions in July. Moved from covering 3.5 of the block. From June reallocated and increased to 5 blocks. Associated increase in defaulters and CNR. Some confusion of BNFs about which facility to go to (ACF / TDH OTP).	6000 children under 5 in catchment. So far only managed to cover 3,500. Insufficient resources for the size population. Facility informed management about this. Some preference amongst community members for RUTF / RUSF and not for WSB++. Some community members do not come in spite of the insistence of NF staff.
Camp 2E	TSFP	ACF			
Camp 2W	TSFP	ACF			
Camp 3	TSFP	ACF, WC			
Camp 4	TSFP	SARPV, WVI	WVI: Long LoS in May (100+ days) SARPV: Long LoS in July (100+ days)		High discrepancy between MUAC and height measurement between facility and survey team measurement. Block found which was not covered by a partner.
Camp 4 Extension	TSFP	ACF			
Camp 5	TSFP	CWW	31% of expected admissions.	TSFP opened in May 2019 only	High distance from CWW centre to sub-block (30mins+). Low BSFP coverage

Camp	Service type	Implementing partners	Programme data key trends	Explanations for trends	Survey team leader observations
Camp 6	TSFP	SARPV, WC	WC: Long LoS June and July (100+days)		
Camp 7	TSFP	BRAC, SHED	Cure rate: 77% overall BRAC cure rate 74%; CNR: 17.5%, def: 8.4%		BRAC – high CNR rate in February, possibly due to introduction of RUSF. Lots of diarrhoea. Until July 2019, there was only one TSFP facility (BRAC) which was at one end of the camp (hilly). Therefore this led to a high default and CNR. Also suspected insufficient rations of WSB++. At one point they had 8500 active cases to follow up. The situation improved after July when a second TSFP opened up (SHED) and spread the load.
Camp 8E	TSFP	BRAC, CWW			
Camp 8W	TSFP	BRAC, WVI			
Camp 9	TSFP	SARPV (2)			
Camp 10	TSFP	ACF, WVI	Lower admissions than expected (52%).	ACF facility only opened in April 2019.	Low BSFP coverage. Only opened a few months.
Camp 11	TSFP	SCI	Lower admissions than expected (55%). Cure rate: 77% overall SCI cure rate: 77%, CNR: 17%	Possibly due to distance from TSFP to furthest blocks.	
Camp 12	TSFP	SCI	Lower admissions than expected (48%).		Distance from TSFP to furthest blocks is quite high. Likely cause of low admissions.

Camp	Service type	Implementing partners	Programme data key trends	Explanations for trends	Survey team leader observations
			Cure rate: 80%, CNR: 9%, Def: 11.5%		Jan 2019: catchment area changed reducing the high number of defaulters and CNR. Also there was quite a lot of carer sickness leading to default. Poor follow up based on observation. Suspected that CNVs did not know where defaulter cases were found. CNR remained high in Nov 2018 due to lack of technical staff. Also nutrition coordinator said that some carers do not follow complementary feeding practices while their child is in the TSFP. Carers not interested in getting WSB++. Only want RUSF / RUTF
Camp 13	TSFP	SCI			Referred children rejected based on sight. Salter scale being used and different height measurement and children measured with clothes.
Camp 14	TSFP	SCI, CWW			
Camp 15	TSFP	SCI, SARPV			Double admissions - BSFP and TSFP in different facilities. SARPV / SHED.
Camp 16	TSFP	WC			
Camp 17	TSFP	SCI, SHED			
Camp 18	TSFP	CWW, SCI	Cure rate 79% CWW: Cure: 84%, CNR 15%		Five TSFP Coutis referred to CWW facility. All not admitted as they had been treated previously and currently enrolled in BSFP and NF supervisor

Camp	Service type	Implementing partners	Programme data key trends	Explanations for trends	Survey team leader observations
			SCI: Cure 77%, CNR 12%, Def 11%		would not readmit before 2 months had passed. CWW tech advisor notified.
Camp 19	TSFP	TDH	Lower than expected admissions (23%). Facility only opened in June 2019. 74% of admissions admitted MUAC <125mm		Transfer in admissions from camp 13 to camp 19. There has only recently been a TSFP set up in 19 (August). Big distance between sub-blocks to BSFP. Carers not willing to travel. Refusal of carer to go to centre (SAM case)
Camp 20	TSFP	SCI, TDH	Lower admissions than expected.	Both facilities only started reporting admission after June 2019	Discrepancy between survey team MUAC and height measurement and centre measurements (TDH).
Camp 20 Ext	TSFP	CWW			Big discrepancy found between BSFP and survey team measurements (height and MUAC) Quite a lot of movement from and to 20 Ext affects admission overtime. Also a high rate of BSFP to TSFP transfer during monsoon (more disease).
Camp 21	TSFP	BRAC			
Camp 22	TSFP	SARPV			
Camp 23	TSFP	SHED			
Camp 24	TSFP	SHED, ACF	For period worst exit criteria: Cure rate: 73%, CNR: 15%, defaulter: 11% SHED TSFP: 19% CNR, 8% defaulters		Low BSFP coverage (CNVs had not screened sub-block)

Camp	Service type	Implementing partners	Programme data key trends	Explanations for trends	Survey team leader observations
			ACF TSFP: 11%CNR, 14% defaulters SHED, no LoS data reported		
Camp 25	TSFP	SCI	Long average LoS over period (79 days)		
Camp 26	TSFP	ACF	Short av LoS (<60days)	Admissions for TSFP may be going to Nayapara RC due to proximity of integrated programme.	Extremely low BSFP coverage. Population not issued SCOPE cards and so population not eligible to food assistance.
Camp 27	TSFP	SCI	Long average LoS over period (81 days)		
Nayapara Registered camp	TSFP	ACF	Higher admissions comparatively	Includes admissions from Camp 26.	

ANNEX 6: COMMUNITY SUGGESTIONS TO IMPROVE CMAM AND ROHINGYA TERMS

Theme	Suggestion	Which key informants?	Which camps?
Nutrition facilities	More RUTF/RUSF distribution for disabled children	CNV	22
	More Staff needed in Nutrition Facility	SAMC, MAMC,	NYP RC, 12
	Fathers should be allowed to collect RUTF/RUSF	CMM	16
	Nutrition Centre needs to be extended	CNV	NYP RC
	More organized queuing system in the facility	SAMC	1W
	Soap distribution to the BNF to encourage BNF	CNV	20 ext
Community outreach	More volunteers needed in outreach	CNV	19, 27
	More follow up at the community to reduce RUTF/RUSF selling	CNV	22
Sensitisations	More sensitization meetings	CNV, CMM, TH, BL, CMF, TBA, IMAM	20 ext, 7, 1W, 8W, 22, 16, 3, 15, 23
	Technical staff should conduct sensitization meetings	CMM	1W, NYP RC
	More sensitization meeting focusing on IYCF key practices for under 2 years children's caregiver and on other topics	CNV, OBS, CMM, CMF	23, 3, 12, 19
	Sensitization meeting for IMAM, Majhi and Fathers	CNV	22, KTP RC
	More sensitization meeting to promote SC	OBS	8W, 1W, 7

Key informants

Abbreviation	Key informant
SAMC	SAM Carer
MAMC	MAM carer
CMM	Community members (male)
CMF	Community members (female)
CNV	Community Nutrition Volunteer
BL	Block leader
IMAM	Imam (religious leader)
TBA	Traditional birth attendant
TH	Traditional healer
OBS	Observation by investigation team

Rohingya terms for sick or thin children

Rohingya word	Literal translation	Meaning in context
Leda, Olimma, Majamora, fuana, Hengla, Shukna	Thin	Wasted
Beraimma, Khinaporainna	Severely thin	Marasmus
Maijla	Slightly thin	Potentially Wasted
Boli	Fat	Healthy
Susthi	Weak and sick	Sick
Majur, Lula	Paralysed	Marasmus
Chummadia, batash maijje	Evil eye, blood sucking	Supernatural effect

ANNEX 7: SUMMARY OF CASE STUDY FINDINGS

Defaulter and non-respondent case studies

Date of case study	Camp and block	Nearest Nutrition facility	Admission and discharge information (if available)	Reason for default / CNR	Action taken by CNV
OTP Non respondent cases					
10/11/19	Camp 27 Sub block C	SCI OTP	MUAC at admission: 101mm	Also late admission. One of a set of twins. The other twin died. The mother was sick. Therefore she could not travel to the OTP and she thought she needed to be there to have her child admitted	Child is now in programme. Current MUAC 114mm
11/11/19	Nayapara RC Block D	ACF OTP	n/a	Mother became frustrated by long waiting times and so did not return. She also missed appointments due to long waiting times	CNV encouraged mother to attend. When this failed he informed the ACF APO.
14/11/19	Camp 16 Block D9	ACF OTP	Admission date: 23/10/18 Age: 30 months MUAC: 113mm WHZ: -3SD Discharge: 21/1/19 MUAC: 111mm WHZ: <-3SD Length of stay: 120 days	Disabled child. Consumed full ration. Mother observed positive change at first. But then became thinner.	CNV thinks that mother does not take sufficient care of the child because he is disabled.
13/11/19	Camp 22 Block C	SARPV OTP	Admission: 31/07/19 Discharge: 23/10/19 Wks in prog: 12 weeks	Child refused to eat RUTF and health deteriorated. Mother persevered anyway and completed feeding.	CNV notified the office.

Date of case study	Camp and block	Nearest Nutrition facility	Admission and discharge information (if available)	Reason for default / CNR	Action taken by CNV
			MUAC: 105mm Age 7 months -3 SD	Child discharged CNR. Then readmitted now she is improving.	
19/11/19	Camp 7 Block B1	SHED OTP	Admission: 21/07/19 MUAC: 105mm 9 months Discharge: 13/10/19 MUAC: 111mm Wks in prog: 12 weeks MUAC: 105mm	Child had breathing problem. Child could not breastfeed. So when eating RUTF, vomiting and choking. Carer had positive attitude to service.	CNV counselled mother and took child to centre. CNV thinks that the reason child was discharged CNR is because the child is always sick.
20/11/19	Camp 8W Block: A52	SARPV OTP	Admission date: 19/8/19 Age: 10 months MUAC: 100mm WHZ: <-3SD Discharge: 14/11/19 MUAC: 100mm WHZ: <-3SD Length of stay: 120 days	Carer was grandmother. Mother was pregnant. Carer did not notice any change. Belief that the child had a blood sucking disease. Went to a traditional healer = spent 7000 taka. Very reluctant to visit SC.	CNV counselled carer. Facility staff and site management also counselled. But carer did not want to go because it was SC.
25/11/19	Camp 1W Block: E	ACF OTP	Admission date: 5/8/19 Age: 7 months MUAC: 113mm WHZ: -3SD Discharge: 28/10/19 MUAC: 113mm WHZ: <-3SD Length of stay: 84 days Current MUAC 112mm	Mother refuses repeatedly to go to SC (not clear why). Maybe because they need to stay overnight. Mother could not breastfeed. Milk became sour. Mother thinks that it is because mother and father are thin. This is why child is thin. She does not believe that is a disease.	Child admitted again to OTP. CNV counselled carer to go to facility. CNV thinks that it is because the child doesn't like to eat RUTF (mother said this)

Date of case study	Camp and block	Nearest Nutrition facility	Admission and discharge information (if available)	Reason for default / CNR	Action taken by CNV
TSFP Non respondent cases					
18/11/19	Camp 12 F7	SCI TSFP	Admission: 17/2/19 Age: 6 months MUAC: 12.1 Z-s:<-2SD Discharge: 26/5/19 MUAC: 12.3cm Z-s:<-2SD Length of stay: 16 weeks	Mother believes that because the child has a cough, they have not recovered properly. Also the child did not always finish all of the ration given to her.	CNV believes that mother is not following complementary feeding practice which is why they did not recover. Reported to nutrition facility.
21/11/19	Camp 20 Ext S2-B2	CWW TSFP	Admission: 18/6/2019 Age: 10 months MUAC: 118mm WHZ:<-2SD Discharge: 3/10/19 MUAC: 123mm WHZ:<-2SD Length of stay : 120 days	Mother did not know why child did not recover. However she admitted that she shared RUSF as child could not eat the whole packet.	After discharge child was sent to SC for medical check up. CNV suspects frequent diarrhoea and unhygienic conditions were cause of CNR
TSFP defaulter					
17/11/2019	Camp 19 C6	TDH TSFP	Admission: 21/7/19 Discharge: 1/9/19 Wks in prog: 4 wks MUAC at admission: 11cm	Child did not like eating RUSF. Mother was busy looking after other children and so could not travel to facility. Father could not spare time to look after other children. Distance is far >30mins.	CNV visited mother and took her to the nutrition facility to talk to facility staff. Facility staff sensitised. But mother didn't come back.

Late admission case studies

Date of case study	Camp and block	Nearest Nutrition facility	Date of admission	Anthropometric measurements at admission	Reason for late admission	Additional information from CNV
OTP late admission						
12/11/19	Camp 23 A4	SHED OTP	Admission: 3/6/2019 Wks in prog: 20	Sex: Male Age: 8m MUAC: 85mm Z-score: <-3 SD	The mother saw that the child was thin, but did not think he was sick. She thought only thinner children were sick. She also was not aware of the nutrition facility.	
20/11/19	Camp 8W A53	SARPV OTP	Admission date: 3/7/19	Age: 10 months MUAC: 98mm WHZ: <-3SD Discharge: 25/9/19 MUAC: 104mm WHZ: <-3SD 120 days	Consumed full ration according to carer. At first gained weight but then became thinner. Carer doesn't know why her health deteriorated.	CNV suspects that baby has another disease. Referred to SC. Now back in OTP.

ANNEX 8: TSFP COVERAGE RESULTS AND CLASSIFICATIONS BY CAMP

					Denomi nator	Numer ator	60%	90%	
	Cin	Cout	Rin	Rout	Cin+Cout + Rin+Rout	Cin+Rin	D1	D2	Classification
Kutupalong RC	19	2	9	0	30	28	18	27	High
Camp 01E	31	13	14	1	59	45	35	53	Moderate
Camp 01W	12	12	7	2	33	19	19	29	Low
Camp 02E	16	8	12	1	37	28	22	33	Moderate
Camp 02W	25	10	12	1	48	37	28	43	Moderate
Camp 03	12	4	5	0	21	17	12	18	Moderate
Camp 04	10	11	2	0	23	12	13	20	Low
Camp 05	6	15	3	2	26	9	15	23	Low
Camp 06	4	7	0	0	11	4	6	9	Low
Camp 07	5	9	2	1	17	7	10	15	Low
Camp 08E	16	8	7	1	32	23	19	28	Moderate
Camp 08W	7	6	2	0	15	9	9	13	Low
Camp 09	18	19	5	1	43	23	25	38	Low
Camp 10	15	14	8	2	39	23	23	35	Low
Camp 11	13	20	2	0	35	15	21	31	Low
Camp 12	5	5	1	0	11	6	6	9	Low
Camp 13	14	22	2	0	38	16	22	34	Low
Camp 14	8	5	0	0	13	8	7	11	Moderate
Camp 15	10	8	3	0	21	13	12	18	Moderate
Camp 16	8	11	2	0	21	10	12	18	Low
Camp 17	19	4	7	0	30	26	18	27	Moderate
Camp 18	12	8	0	0	20	12	12	18	Low
Camp 19	15	6	13	1	35	28	21	31	Moderate
Camp 20	15	7	9	1	32	24	19	28	Moderate
Camp 21	12	7	9	1	29	21	17	26	Moderate
Camp 22	15	7	7	1	30	22	18	27	Moderate
Camp 23	6	22	2	2	32	8	19	28	Low
Camp 24	13	10	8	1	32	21	19	28	Moderate
Camp 25	8	13	5	2	28	13	16	25	Low
Camp 26	10	5	6	0	21	16	12	18	Moderate
Camp 27	9	11	1	0	21	10	12	18	Low
Nayapara RC	18	3	5	0	26	23	15	23	Moderate

ANNEX 9: BSFP COVERAGE ESTIMATIONS BY CAMP

	BSFP In	BSFP Out	Total	BSFP coverage	Lower CI	Upper CI
Kutupalong RC	284	11	295	96.3%	94.1%	98.4%
Camp 01E	412	188	600	68.7%	65.0%	72.4%
Camp 01W	292	162	454	64.3%	59.9%	68.7%
Camp 02E	264	159	423	62.4%	57.8%	67.0%
Camp 02W	240	119	359	66.9%	62.0%	71.7%
Camp 03	287	74	361	79.5%	75.3%	83.7%
Camp 04	327	25	352	92.9%	90.2%	95.6%
Camp 05	280	129	409	68.5%	64.0%	73.0%
Camp 06	208	15	223	93.3%	90.0%	96.6%
Camp 07	218	56	274	79.6%	74.8%	84.3%
Camp 08E	375	37	412	91.0%	88.3%	93.8%
Camp 08W	380	51	431	88.2%	85.1%	91.2%
Camp 09	397	90	487	81.5%	78.1%	85.0%
Camp 10	346	191	537	64.4%	60.4%	68.5%
Camp 11	314	33	347	90.5%	87.4%	93.6%
Camp 12	308	78	386	79.8%	75.8%	83.8%
Camp 13	455	41	496	91.7%	89.3%	94.2%
Camp 14 (Hakimpara)	242	40	282	85.8%	81.7%	89.9%
Camp 15 (Jamtoli)	299	59	358	83.5%	79.7%	87.4%
Camp 16 (Potibonia)	432	19	451	95.8%	93.9%	97.6%
Camp 17	295	24	319	92.5%	89.6%	95.4%
Camp 18	419	29	448	93.5%	91.2%	95.8%
Camp 19	350	78	428	81.8%	78.1%	85.4%
Camp 20	460	16	476	96.6%	95.0%	98.3%
Camp 21 (Chakmarkul)	342	34	376	91.0%	88.1%	93.9%
Camp 22 (Unchiprang)	328	25	353	92.9%	90.2%	95.6%
Camp 23 (Shamlapur)	406	37	443	91.6%	89.1%	94.2%
Camp 24 (Leda)	154	167	321	48.0%	42.5%	53.4%
Camp 25 (Ali Khali)	367	22	389	94.3%	92.0%	96.6%
Camp 26 (Nayapara)	17	199	216	7.9%	4.3%	11.5%
Camp 27 (Jadimura)	275	49	324	84.9%	81.0%	88.8%
Nayapara RC	262	82	344	76.2%	71.7%	80.7%
Total	9751	2328	12,079	80.7%		

ANNEX 10: SUMMARY OF DATA COLLECTED DURING 2019 COVERAGE ASSESSMENT

- Outputs highlighted **blue** are included in the main body of the report.
- Outputs highlighted **orange** are in the annex of this report.
- Outputs highlighted **red** are available in the datasets shared with the report.

ASSESSMENT STEPS	DATA COLLECTED AND ANALYSED	OUTPUTS
1. Programme data analysis	By facility and month: For October 2018-September 2019 period: • Availability of RUTF and RUSF • Facility level human resources availability • Screening totals • New enrolments • Cases discharged as cured, case non-respondent (CNR) and defaulter • Average length of stay before cure For July-September 2019 period: • MUAC measurements at admission	Key observations of data trends over time and in total for period for: • 1A: For all camps / overall • 1B: By camp • 1C: By implementing partner
2. Qualitative investigation	For each sub-block visited (14 sub-blocks in 14 camps): • Responses from community members during focus group discussion (FGD) • Responses from at least three community members during three semi-structured interviews (SSI) • Responses from carers of cases who had been discharged as defaulters or CNR or who had been admitted to OTP very late For each camp visited: • Key observations by data collection team leader about context of camp and CMAM quality concerns	Overall (for all camps visited): • 2A. Key positive factors affecting coverage (by theme and by key informant) • 2B. Key negative factors affecting coverage (by theme and key informant) • 2C. Summary of suggestions made by key informants to improve programme (Annex 6) • 2D. Key Rohingya terms relating to undernourished children and CMAM (Annex 6) • 2E. Summary of case study findings (Annex 7) For specific camps visited:

ASSESSMENT STEPS	DATA COLLECTED AND ANALYSED	OUTPUTS
	Investigations to explain specific data trends in camps (if necessary)	2F. Key observations by team leader and findings from investigations conducted (Annex 5).
3. SLEAC surveys	For each sub-block visited (182 in total): - Total households visited - Total children screened with MUAC tapes - Total children identified who were NOT enrolled in the BSFP - Summary of SAM and MAM cases found in each selected sub-block - Summary of OTP and TSFP cases found in each sub-block (according to case definitions of assessment) - One questionnaire completed with CNV (topics included: details of CNV, training and supervision, challenges encountered in work) - List of children referred to OTP and TSFP programmes (shared with nutrition facility supervisor at completion of data collection) - Key observations by data collection team leader about context of sub-block and CMAM quality concerns For each case identified: - Name, gender, age and anthropometric measurements of child - Details of previous treatment in nutrition programme - Distance of child from home to nearest facility (in walking time) - Completed questionnaire to identifying reasons for non-attendance to relevant programme (non-covered cases) - Completed questionnaire identifying reasons encouraging coverage (covered cases)	3A. Anthropometric measurements overall and by camp 3B. BSFP coverage estimated overall and by camp (mapped in Figure 14 and detailed in Annex 9) 3C. TSFP coverage estimated overall and classified by camp (mapped in Figure 13 and detailed in Annex 8) 3D. OTP coverage classified by SLEAC zone and estimated overall 3E. Primary reasons for non-attendance to OTP / TSFP overall and by camp 3F. Primary reasons for attendance to OTP / TSFP overall and by camp 3G. Carer perceptions of child condition for non-covered cases (overall) 3H. Details of previous treatment (for covered and non-covered cases) (overall) 3I. Main decision maker for team of sick child (for non-covered cases) (overall) 3J. Summary of key observations by data collection team leader by camp (Annex 5)

ASSESSMENT STEPS	DATA COLLECTED AND ANALYSED	OUTPUTS
4.CNV survey	In each sub-block visited during the SLEAC survey, the CNV who accompanied the data collection team during data collection was interviewed using a structured questionnaire. The questionnaire included the following topics: • Details of CNV • Activities included in role • Details of sensitisations • Training and supervision • Challenges encountered in completion of roles	Overall, by camp and by implementing partner: • 4A. CNV details (age, population group, time in role, sex) • 4B. Activities completed in role • 4C. Sensitisations (who are targets, what is included, location, frequency) • 4D. Training and supervision • 4E. Challenges encountered by CNVs

ANNEX 11: SUMMARY OF POSITIVE AND NEGATIVE FACTORS AFFECTING COVERAGE IDENTIFIED DURING QUALITATIVE INVESTIGATION

Each factor is listed with the triangulation “scores”. These include:

- % of Key informant (KI) groups: this refers to the percentage of different types of key informants who mentioned this factor out of a total of 12 groups.
- % of Key informants interviews (KIIs): this refers to the percentage of KIIs where the factor was mentioned out of a total of 70 KIIs conducted
- % of Locations: this refers to the percentage of camps where the factor was mentioned out of a total of 14 camps visited

Positive factors	% of KI groups	% of KIIs	% of locations	Negative factors	% of KI groups	% of KIIs	% of locations
Awareness, understanding and perception of malnutrition							
Recognition that malnutrition is a disease resulting in children losing appetite or weight	75%	53%	100%	Misconceptions about malnutrition (belief that “blood sucking” and “evil eye” are causes of malnutrition and that malnourished children are contagious)	33%	7%	57%
Malnutrition is not stigmatised by community	75%	54%	100%	Mis-understanding about symptoms of malnutrition	17%	6%	21%
Recognition of symptoms of malnutrition by community (diarrhoea, swollen belly, ARI, vomiting)	75%	43%	100%	Mis-understanding about causes of malnutrition by community	50%	20%	93%
Recognition of causes of malnutrition (other diseases, lack of breastfeeding, poor hygiene and lack of food)	75%	37%	86%	Mis-understanding about effects of malnutrition on a child’s body	50%	43%	100%
Recognition that malnutrition is a potentially deadly disease	67%	27%	86%				

Positive factors	% of KI groups	% of KIIs	% of locations	Negative factors	% of KI groups	% of KIIs	% of locations
Awareness, understanding and perception of nutrition programmes							
Understanding that nutrition programme is for thin / malnourished children under 5	75%	53%	100%	Lack of understanding about nutrition programmes (not clear about objectives, treatment products, perception that nutrition programme is food programme)	42%	9%	29%
Awareness and understanding of treatment products	67%	49%	100%	Children experienced diarrhoea / vomiting / coughing after eating RUTF / RUSF	42%	7%	21%
Appreciation of programme by community members as thin children become healthy	100%	74%	100%				
Appreciation of programme by carers who have experienced programme (only carers included)	100%	71%	64%				
Community outreach							
Evidence that CNV conducts regular screening, sensitisation and follow up in communities (not including CNV responses)	92%	65%	100%	CNV lacks necessary tools / support to complete effective training and sensitisation (CNV's only)	100%	20%	21%
Evidence that CNVs sensitise other community members about CMAM (eg block leaders, adolescent girls, male groups)	25%	9%	36%	Poor quality screening and sensitisation by CNV	33%	9%	36%
Community sensitisations appreciated by community	67%	31%	93%				
CNV is motivated by work and feel they have all the materials and support needed to complete a satisfactory job (CNV's only)	100%	57%	60%				
Community supports community outreach of CMAM programme (eg carers refer other carers to nutrition facility, community members refer sick children to facilities and Block leader helps organise meetings)	42%	19%	64%				

Positive factors	% of KI groups	% of KIIs	% of locations	Negative factors	% of KI groups	% of KIIs	% of locations
Quality of care at nutrition facilities							
Nutrition facility staff explain child's condition, reason for treatment and treatment method leading to positive examples of child treatment by carers (carers only)	100%	93%	93%	Long waiting time at nutrition facility leads to default, absence and CNR	67%	17%	43%
Positive experiences of CMAM by children, carers and community members (eg child likes product, kind behaviour, short waiting time) (carers and community members only)	100%	80%	100%	Poor sensitisation by nutrition facility staff at point of treatment (eg. staff do not use appropriate Rohingya terminology, mother shares product with other family members if child does not finish, poor explanation of child condition)	33%	10%	43%
Other factors affecting coverage							
Carers and community members can access facilities easily	100%	27%	43%	Selling of RUTF / RUSF in market leading to longer recovery times, increased risk of CNR and loss of confidence by community in treatment	50%	29%	93%
				Child does not like RUTF / RUSF leading to CNR or default	25%	7%	29%
				Accessibility challenges reduce willingness of carers to travel to facilities (eg distance, hills, mother too busy)	42%	14%	36%
				Social norms prevent mother from visiting nutrition facility (eg husbands / in laws reluctant to let mother visit facility or sensitisations on her own, husbands main decision makers for child health)	17%	11%	57%

ANNEX 12: KEY FINDINGS AND SUPPORTING EVIDENCE GATHERED DURING COVERAGE ASSESSMENT

OBSERVATIONS	Positive / Negative	EVIDENCE
COMMUNITY SCREENING		
Community level screenings are taking place extensively across all camps and are effective at recruiting cases to OTPs and TSFPs	Positive	Programme data: Reported screenings by partners operating OTPs and TSFPs have increased during the 12 months analysed. Screening completed by TSFPs in particular have increased following establishment of new centres. Qualitative investigation: Nearly all key informant groups in all sub-blocks visited stated that screening had been taking place regularly in their sub-blocks SLEAC surveys: 95% of carers interviewed said that their child had had their MUAC measured at home previously. Also >80% of covered cases identified said that they had come to the nutrition facility as they had been referred during a community screening. CNV survey: 100% of CNVs interviewed confirmed that they conduct house-to-house screening of children in their sub-block
Gaps in screening in some sub-blocks indicating weaknesses outreach programmes	Negative	SLEAC surveys: 5% of carers interviewed (91 - distributed across many camps) said that their child had never had their MUAC measured. Just 13 of these children (14%) were aged 6 or 7 months. Camps 13, 16 and 23 had the highest frequency.
Refusal of carers to allow CNVs or survey teams to measure the MUACs of their children (sometimes due to religious practices)	Negative	CNV survey: Nearly half of CNVs interviewed stated that some carers in their sub-blocks refused for their child to be measured. Also >40% of CNVs stated that husbands in their sub-block forbade their wife from travelling to the nutrition centre. SLEAC surveys: Some survey teams were prevented from assessing children due to hostility from carers or religious beliefs

OBSERVATIONS	Positive / Negative	EVIDENCE
COMMUNITY AWARENESS OF MALNUTRITION AND OF CMAM PROGRAMMES		
Key community groups are sensitised about the signs and symptoms of malnutrition and are aware of CMAM programmes	Positive	Qualitative investigation: The majority of community groups confirmed that sensitisations are taking place in their sub-blocks. The majority of community members also knew that malnutrition is a disease and can recognise the signs and symptoms of it in children. Awareness and understanding of the CMAM programme amongst community members was strong, with many community members understanding the targets of OTPs and TSFPs and the difference between RUTF and RUSF. SLEAC surveys: Amongst non-covered cases identified, compared to the 2018 baseline coverage survey, a greater percentage of carers were aware that their child was sick (of both SAM and MAM cases) and the majority intended to seek treatment at health or nutrition clinics. Furthermore nearly all carers of non-covered cases were aware of the nutrition services (just 3% said that they were not aware). In 2018, the same percentage was 30% - representing a significant improvement in awareness of nutrition services amongst community members. CNV survey: >80% of CNVs confirmed that they conduct sensitisations with key target groups regularly (at least once a month) and that the sensitisations take place in the community.
Misconceptions about malnutrition exist in some communities	Negative	Qualitative investigation: In 57% of sub-blocks, at least one key informant cited a misconception about malnutrition (e.g. it was caused by ghosts and is a “blood-sucking disease”). This was also identified in case studies conducted with carers of CNR cases. Understanding about the causes of malnutrition was not widespread. While most key informants groups were aware of the causes, understanding of the causes was only confirmed in 37% of key informant interviews. SLEAC surveys: Some carers refused to let survey teams measure their children as they believed that if a child is measured with a MUAC tape, it will cause their child to become malnourished. 20% of SAM and MAM cases identified during the survey had been enrolled in the CMAM programme previously - 85% of these had relapsed. This indicates poor understanding about the causes of malnutrition.

OBSERVATIONS	Positive / Negative	EVIDENCE
Sensitisations are not conducted with all key community members	Negative	Qualitative investigation: Only a quarter of key informant groups confirmed that CNVs conduct sensitisations with other, non-priority community groups (e.g. block leaders, groups of men, adolescent girls). CNV survey: 70% of CNVs stated that they sensitise men and mahjees; 40% said that they sensitise religious leaders and just 5% sensitise traditional birth attendants and traditional healers.
TREATMENT COVERAGE OF SERVICES		
Compared to the baseline coverage survey in 2018, the 2019 coverage assessment found that a greater proportion of SAM and MAM cases are accessing treatment	Positive	SLEAC survey: Between August 2018 and November 2019, OTP coverage across all camps increased by 50% (27% to 77%). TSFP coverage across all camps increased by 27% (34% to 61%) with one camp (Kutupalong registered camp) classified as High coverage (>90%). Where non-covered cases were identified, access or distance were rarely mentioned as the primary reason for non-attendance by carers (similar findings were observed in the qualitative investigation). Programme data: The geographic coverage of TSFP services increased and overall admissions to both OTP and TSFP increased year on year.
Coverage of TSFP services was low in some camps	Negative	SLEAC surveys: 16 camps were classified as having Low TSFP coverage (<60%). The lowest was Camp 23. Coverage of BSFP services was very patchy – 18 camps had coverage of less than 90%.
Distance and accessibility was identified as a factor affecting coverage in some camps	Negative	Qualitative investigation: Access challenges were mentioned by some carers during discussions either due to distance or to the location of nutrition facilities (frequently located at the tops of hills). Also carers of CNR cases stated that they were reluctant to travel to Stabilisation centres for their child to be assessed due to distance and duration of stay. SLEAC surveys: Data collection teams observed that some sub-blocks were located far from nutrition facilities (>30 mins walk). CNV survey: 39% of CNVs stated that distance and the state of roads and footpaths were challenges facing them during the completion of their activities.

OBSERVATIONS	Positive / Negative	EVIDENCE
APPRECIATION OF CMAM PROGRAMME BY COMMUNITY MEMBERS		
In general the CMAM programme and the products used to treat acute malnutrition are appreciated by community members	Positive	Programme data: Overall low rates of default in the OTP and TSFP were evidence that carers intended to continue with the CMAM programme until their child was discharged as cured. Qualitative investigation: There was strong appreciation of the CMAM programme by carers of SAM and MAM cases who had participated in the programme. This also extended to all key informant groups – meaning that even mahjees, male community members and religious leaders could understand the benefits for therapeutic feeding of sick children.
RUTF and RUSF are popular with carers in the camps leading to: - Increased risk of CNR - Strong desire of carers to enrol healthy children in programme - Double / triple registrations in facilities - Sale of RUTF and RUSF in markets	Negative	Programme data: High CNR rates (particularly in TSFP) possibly caused by carer sharing product with other family members. Also high OTP admissions may include some double and triple registrations. SLEAC survey and qualitative investigation: On some occasions data collection team leaders observed that carers of young children were frustrated that their child could not receive RUTF or RUSF as they thought that it was available for all children. This led to negative perceptions of the programme by community members and refusal to go to nutrition facilities (if their child was SAM / MAM) in some camps. Sale of RUTF and RUSF in markets confirmed by multiple key informants. Double / triple registrations identified by data collection team leaders CNV survey: Carer refusal for child to be measured or to go to nutrition facility cited as common challenges. The most common causes of this relate to previous rejection of carers from nutrition facilities or due to religious beliefs or cultural norms.

OBSERVATIONS	Positive / Negative	EVIDENCE
NUTRITION FACILITY SCREENING AND QUALITY OF CARE		
CMAM programme stock and human resources availability were good during the period assessed	Positive	Programme data: Only two minor stock shortages were reported by partners (in 2 facilities for one month) between October 2018 and September 2019. Reported HR availability was also good during the period and did not appear to affect the delivery of services. SLEAC surveys: No stock shortages were reported by carers of malnourished children.
High cure rates and short lengths of stay in OTP and TSFP improve perception of programme in community	Positive	Programme data: Cure rates for both OTP and TSFP were above Sphere standards for the duration of the period assessed. High cure rates improves the perception of the programme in the community which encourages high coverage.
Inconsistent and poor quality measurements in nutrition facilities leading to acutely malnourished children being missed during monthly visits to TSFP / BSFP	Negative	SLEAC surveys: 46% of non-covered SAM cases were found to be enrolled in the TSFP or BSFP and had not be identified as SAM during their previous visit. 50% of non-covered MAM cases were found to be enrolled in the BSFP and had not been identified as MAM during their previous visit. Also data collection teams observed anthropometric measurement errors (height, weight and MUAC) on child health cards during data collection. CNV survey: 40% of CNVs reported supporting nutrition facility staff with measurement and admission of children in facilities leading to potential quality concerns.
- High percentages of SAM and MAM cases admitted to OTP and TSFP based on inaccurate MUAC measurements	Negative	Program data: Percentages of SAM and MAM cases admitted based on MUAC measurement high in comparison with results from previous SMART surveys. Also high OTP admissions in certain facilities potentially partly caused by MUAC measurement errors. SLEAC surveys: Data collection teams frequently observed discrepancies between MUAC measurements on day of survey and recent measurements by nutrition facility staff in child health cards.

OBSERVATIONS	Positive / Negative	EVIDENCE
High caseloads in facilities (especially TSFP and BSFP) leads to poor quality measurements, long waiting times and frustrated carers	Negative	Qualitative investigation: A third of carers of malnourished children with children enrolled in the CMAM complained that they had to wait for a long time at nutrition facilities before their child was treated. SLEAC surveys: Data collection teams were frequently told by health facility staff that they needed to wait for long periods before their child was measured. Also long waiting time was fourth most common reason for non-attendance cited by carers of non-covered MAM cases.
OTHER FACTORS		
Pressure from management to increase admissions of SAM cases to OTP	Negative	Qualitative investigation: The data collection team leader was told by a facility coordinator (from OTP 20) that he was told to try to increase admissions to the OTP in order to achieve “target” admissions. The same practice may be taking place in other facilities, particularly those which the program data indicates have exceptionally high admissions compared to expected admissions.