

Semi Quantitative Evaluation of Access & Coverage Final report

Laskargah, Nad-Ali and Nawa-e-Barakzaye Districts

Helmand Province

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ACRONYMS

ACF	Action Contre La Faim/ Action Against Hunger
ACTD	Afghanistan Centre for Training and Development
AGE	Anti-government elements
AOG	Armed Opposition Groups
BHC	Basic health centre
BPHS	Basic package of health services
CBHC	Community-based health care
CHAP	Chapter
CHC	Comprehensive health centre
CHF	Common Humanitarian Fund
CHS	Community health supervisor
CHW	Community health worker
CMAM	Community based management of acute malnutrition
CSO	Central Statistics Organization
DH	District hospital
EPHS	Emergency package of health services
EU	European Union
HE	Health Educator
HF	Health Facility
HMIS	Health Management Information System
HP	Health post
IDP	Internally displaced persons
IMAM	Integrated Management of Acute Malnutrition
IMF	International Military Forces
LOS	Length of stay
MAM	Moderate Acute Malnutrition
MAR	Monthly activity report
MAAR	Monthly aggregated activity report
MIAR	Monthly integrated activity report
MoPH	Ministry of Public Health
MUAC	Mid-upper arm circumference
NGO	Non-government organisation
OCHA	Office for the Coordination of Humanitarian Affairs
OPD	Out-patient department
OTP	Out-patient therapeutic programme
PH	Province hospital
PU-AMI	Premiere Urgence - Aide Medicale Internationale
RUTF	Ready-to-use therapeutic food
SAM	Severe Acute Malnutrition
SEHAT	System Enhancement for Health Action in Transition Project
SHC	Sub-health centre
SMART	Standardised Monitoring and Assessment of Relief and Transitions
SQUEAC	Semi-quantitative evaluation of access and coverage
TFU	Therapeutic feeding unit
TTD	Time-to-default
UNICEF	United Nations Children's Fund
WFA	Weight-for-age
WFP	World food Programme
WHO	World Health Organisation

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EXECUTIVE SUMMARY

Afghanistan Centre for Training and Development (ACTD) with support from ACF International conducted a SQUEAC (Semi-Quantitative Evaluation of Access and Coverage) assessment in three districts of Helmand province namely: Lashkargah, Nad-Ali and Nawa-e-Barakzaye, Afghanistan from 5th - 28th May 2015. The assessment was intended to provide reliable coverage estimation for the SAM treatment programme, to gather information on barriers and boosters to access and to develop recommendations to improve coverage for SAM services. The assessment estimated an overall coverage of 34.9% (CI 95%: 26.3% to 44.5%) using the single coverage estimator.

The assessment points to 3 systems in the BPHS that are currently working at sub-optimal levels, namely, community mobilisation, OTP treatment services and provision of treatment commodity. The main problems across systems are under human resourcing (undefined or dual role of actors¹), training, supervision and reporting of all the actors involved in the nutrition programme, at the community level as well as at the clinic level.

The specific barriers to nutrition programming and access were:

- poor sensitisation on understanding malnutrition and awareness of the programme,
- poor timely case- finding and referral, no follow-up monitoring,
- inadequate health promotion and coordination through key community members, under-resourcing and heavy workload (dual roles) of nutrition staff,
- poor quality training and capacity building, supervision and reporting at all levels, incorrect information to caregivers about treatment protocols promoting high default and poor cure rates, lack of female staff limiting access to mothers,
- poor management of provision of treatment commodity particularly concerning request and delivery, frequent RUTF stock-outs, few community health posts and no OTP in sub-health centres (SHC).

The assessment also identified positive factors affecting coverage (boosters), such as clinic-preference for treatment seeking, good community engagement and involvement including word-of-mouth messaging, vaccinator and midwife participation in community sensitisation, good community mobilisation when there is good communication between

¹ Actors in this context are considered to be CHW, CHS, HE, CBHC Officer and Nutrition Programme Staff

clinic and community, and improved human resourcing and stock-preference² when funded by CHF project.

Based on these findings, nutrition programme recommendations were made under key areas in order to overcome the barriers to access and improve coverage, such as, strengthening community mobilisation and nutrition-specific education, promoting community participation through involvement of key community figures like Shuras, family health action group (FHAG) and mullahs improving referral systems by engaging key community figures in referring malnourished cases to the health facilities, Improving OTP service delivery through defining clear job functions, providing quality training to health facility staff, Advocating for increased supervision and quality reporting to ensure quality service delivery

High level recommendations were also made based on the key finding of poor implementation of community mobilisation by BPHS in nutrition services. It involves strengthening community mobilisation in the implementation of integrated nutrition programme. A clear positioning of the CHW-CHS-HE-CBHC officer operation line would give focus to development and implementation of this component. Re-directing the management of community mobilisation through the CBHC officer would improve access and coverage.

Also, based on the finding that there are not enough community health posts and there are sub-health centres (SHC) without OTP services, our recommendation calls for a re-designing of the ratio of health post to population in order to reduce workload of CHW at community level. MoPH in collaboration with the ACTD partner would be the responsible organisation.

² Health facilities which are part of the CHF funding have more preference for being delivered stock than those HFs without funding

1. INTRODUCTION

1.1 Background information

SQUEAC (Semi-Quantitative Evaluation of Access and Coverage) assessment was facilitated by Action Contra la Faim (ACF) in Helmand province, in cooperation with the nutrition programme implementer, Afghanistan Centre for Training and Development (ACTD) to measure coverage, to identify and understand the factors that affect access to SAM treatment services and to recommend improvement of nutrition services.

In order to gain reliable information related to the performance of SAM treatment in Afghanistan ACF, in partnership with OCHA, has embarked on a series of coverage assessments across the country. Targeting the areas with the highest SAM prevalence,³ ACF, in partnership with nutrition programme implementers, will be facilitating SQUEAC (Semi-Quantitative Evaluation of Access and Coverage) assessments to measure the coverage and gain an in depth understanding of the factors that affect access to SAM treatment services.

Helmand is the largest (about 60,000 sq. km) of 34 provinces of Afghanistan, located in the southern part of the country. It is a large basin region, encompassed by the Hindu Kush mountains to the north, the east Iranian range to the west and the Balochistan mountains to the east and the south.

Helmand borders Nimroz and Farah districts to the east, Ghor and Daykundi to the north, Kandahar to the east and Balochistan province of Pakistan to the south. Helmand is divided into 14 districts with Lashkargah City as its provincial capital. Helmand has a total population of 984,200³. Each household on average has 9 members. 51% of its population is male and 49% female. Around 94% of the population live in rural districts whilst 6% live in urban areas. The population is largely Pashtun, although there is a significant minority of Balochi tribe. 4% of this population are Kuchi nomads who predominantly seen to migrate before harvesting season. The overall literacy rate in Helmand is 12 % - 10% for men whilst only 1.4% for women. The Kuchi population is particularly vulnerable with just 0.1% men literacy and no women able to read and write. Pashtu is spoken by 92% of the population⁴. Helmand also has thousands of insurgency-induced internally displaced populations (IDPs)⁵, a large population resident in Lashkargah city.

Afghanistan center for training and development (ACTD) has been the BPHS implementer in Helmand province since 2009. From Oct 2009 to Dec 2013 BPHS implementation was run in joint partnership with Bangladesh Rural Advancement Committee (BRAC) providing basic

³ CSO Population statistics 2012/13

⁴ <http://www.mrrd-nabdp.org/attachments/article/236/Helmand%20Provincial%20Profile.pdf>

⁵ <http://www.irinnews.org/report/91592/afghanistan-call-for-help-for-idps-deportees-in-helmand>

health services in 8 (Nad-Ali, Margah, Nawa, Garamsir, Khanishin, Deshu, and parts of Nahr-e-Seraj and Lashkargah) out of 14 districts through 27 health facilities. This project was funded through MoPH/World Bank. In Jan 2014, ACTD took over as the sole BPHS implementer providing basic health services in all 14 districts through 65 health facilities: 3 District Hospitals (DH), 14 Comprehensive Health Centres (CHC), one CHC plus, 32 Basic Health Centres (BHC), 13 Sub-Health Centres (SHC), a prison health centre and a Mobile health team and 455 Health Posts (HP). This project is funded through the MoPH/SEHAT for the period: Jan 2014 - Dec 2016. In spite of their universal presence, as much as 55% of the population have limited or no access to healthcare because of fighting and insecurity. As ACTD works towards filling in the gaps in nutrition service delivery, and integrate IMAM in BPHS, the SQUEAC survey will help to understand and address current nutrition programme challenges (barriers as well as boosters) in access and coverage. These will help to inform recommendations that will help to improve programming and raise the coverage of the OTP sites. SQUEAC will also provide basic training for nutrition staff on monitoring and evaluation of their own project.

The most recent SMART survey⁶ data for Helmand which was conducted in 5 districts indicates that the prevalence of malnutrition was 2.7% by WHZ and 9.6% by MUAC. The prevalence of SAM was 0% by WHZ and 2.1% by MUAC. Although the prevalence of GAM and SAM by WHZ indicates low levels of malnutrition it is important to note that the prevalence by MUAC indicates can be classified as “poor” as per the WHO thresholds. This was evident with the high number of cases of malnourished children by MUAC in stage 3 of SQUEAC.

ACTD ran a poor nutrition CMAM (Community Management of Acute Malnutrition) programme from 2009 to 2013. There was screening by CHW but no SAM treatment service, and two TFU centres for stabilisation of 10 patients. Since they had no capacity, SAM patients identified by screening were transferred to DH or PH. In 2013, ACTD ran the nutrition programme with technical support from Save the Children, who specifically provided training for the nutrition nurses. By mid-2014, ACTD was just beginning to roll out CMAM. (Refer to Annex 1 for brief description of CMAM, IMAM, OTP and TFU). The main gaps in health service delivery were related to case identification of SAM, admission to OTP for treatment and referral of complicated cases to SCs/TFUs (coverage and access), and strengthening of community based health care system (monitoring nutrition status of children). The present Common Humanitarian Fund (CHF) of OCHA is filling these gaps to some extent in terms of Human resource provision. Priority intervention strategies include

⁶ Nutrition and mortality SMART survey Helmand province –March 2015- ACF and ACTD

capacity building of BPHS health staff, increase access to nutrition services and raising awareness in the community, as well as strengthening implementation of IMAM activities.

1.2 Objectives

The need for baseline coverage in Helmand, as well as the need for developing capacity of ACTD Nutrition staff formed the basis for the SQUEAC training and investigation. The objective was to create awareness for coverage monitoring, to inform the senior nutrition staff of ACTD on the SQUEAC methodology used to establish programme coverage, to build capacity so that the SQUEAC tools can be adopted and used routinely to investigate the programme and finally to make recommendations based on the findings that will strengthen the programme. The specific objectives were:

1. To develop capacity of ACTD nutrition stakeholders on undertaking programme coverage assessments using SQUEAC methodology
2. To identify areas of low and high coverage in Lashkargaah, Nad-Ali and Nawa-e-Barakzaye districts of Helmand province
3. To identify possible boosters and barriers to OTP coverage
4. To develop feasible recommendations to improve coverage and outcome of OTPs

1.3 Methodology

The coverage assessment was undertaken by a team of 6 core members who were directly or indirectly involved in the Nutrition programme at ACTD, 12 educated enumerators and a translator (list of participants is shown in Annex 2), between the 5th and 28th May 2015 (Timetable shown in Annex 3). The three-stage SQUEAC Methodology was used, and the three principles of the methodology namely iteration, triangulation and sampling to redundancy were applied successfully:

Stage 1: The Investigation Process: Identification of areas of high and low coverage using an analysis of routine program quantitative data as well as qualitative data.

Quantitative data was obtained through the analysis of OTP cards, OTP registers, CHW referral slips and CHS Monthly aggregate activity reports (MAAR). Solar Hijri date entries were converted to the Gregorian calendar (Annex 4).

Qualitative data were obtained by the following methods and sources:

- **Sources of data:** Quantitative routine program data and qualitative information was obtained from beneficiary mothers and fathers, caregivers of defaulters, men

and women in village, community leaders (Mullah, Malik), community elders, health Shura, community health workers (CHW)- males and females, community health supervisor (CHs), school teacher, head of clinic, OPD doctors, nutrition nurses or OPD nurses, health educators, vaccinator, and midwives

- **Methods:** Key informant interviews: simple-structured interviews, semi-structured interviews, informal (focus) group discussions, in depth interviews (case studies), observations at health facility, and quantitative data analysis

Throughout the investigation process, information was iteratively gathered, organized and up-dated using the “BBQ” tool (i.e. approach using three panes to record “Boosters, Barriers, Questions) - New findings were up-dated and discussed during daily debriefing sessions with the investigation team. The BBQ tool proved useful during the investigation to make sense of large quantities of data from many and different sources, and to plan further data collection on pending questions. These data were eventually presented in a ‘concept map’ to allow for visualisation, triangulation and correlation. A strong triangulation (by source and method) and investigation to redundancy resulted in a strong belief that the data are accurate.

Stage 2: building and testing the hypothesis through small area survey to confirm (or deny) the assumptions related to areas of high or low coverage.

This stage also involves creating a *PRIOR* or an informed *guess* about the most likely coverage from the prior information (weighted barriers and boosters developed in stage 1).

Stage 3: Estimation of overall programme coverage (the ‘Posterior’) by using Bayesian conjugate analysis. It involves determining the *LIKELIHOOD* of coverage from a wide area survey with systematic random sampling of villages. The conjugate analysis is the process of combining the *prior* and the *likelihood* to arrive at the *posterior*. The overall coverage estimation was calculated using the Single Coverage Estimator. The final step of this stage is developing Recommendations to improve coverage.

1.4 Challenges and limitations

Insecurity

The prevailing security situation in Helmand province is extremely unstable. SQUEAC assessment was undertaken in the three secure and accessible districts of Helmand ⁷, namely Lashkargah, Nad-Ali and Nawa-e-Barakzaye (called Nawa for short) (Figure 1) situated around the capital city of Lashkargah and along the Helmand river. Even within these districts, there were areas that were impossible to access because of fighting. These areas were determined and omitted from our investigation. The redefined SQUEAC area can be seen in figure 1. Planning of field trips included making advance calls to determine the security conditions in the study areas. Unfortunately, supervision of field work by the SQUEAC trainer was not possible for the same security reasons.

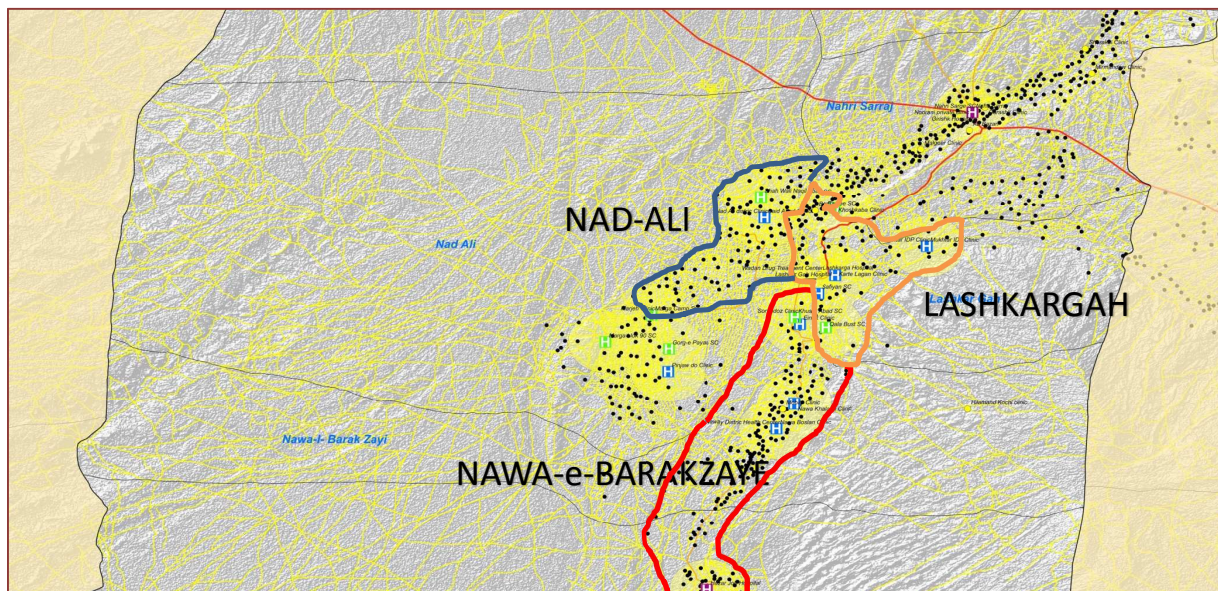


Figure 1: Map of Helmand showing the secure areas in the 3 accessible districts.

Data availability and quality

Only 13 out of 18 health facilities (HFs) from these 3 chosen districts were included in the SQUEAC assessment - shown in Table 1. The clinics that were excluded and corresponding reasons are as follows: for Lashkargah district: Lashkargah provincial hospital (EPHS - implemented by MSF) and Khoshkaba Clinic (insecure). For Nad-Ali district: Shah Wali

⁷ Lashkargah city, controlled by Afghan security forces and the neighboring areas have lower levels of insurgency activity and less fighting when compared to the other districts

Naqil Abad Clinic (Sub-health centre (SHC) without OTP service and also insecure). For Nawa district: Gor-e-Payan and Khusor Abad (both SHC without OTP in 2014).

Qala Bust health clinic in Lashkargah was included in the assessment, although the programme was only functional from 2015. The gap in nutrition services in 2014 was due to a disagreement over the coverage area as it is located on the border of 2 districts. It was reopened in Jan 2015.

Data quality was highly affected by the lack of proper understanding of admission and discharge protocols by OTP staff. A lot of time was invested in data collection training and supervision. (see Annex 14 for Details of nutrition services offered at each facility)

2. THE INVESTIGATION PROCESS

2.1 Stage 1

2.1.1 Key Components of Outpatient SAM Treatment Program

The investigation started with a brief investigation of the key components of SAM OTP treatment programme for children aged 6 to 59 months, as defined by CMAM guideline which was effectively being used during the time-frame of our investigation (Jan 2014 to Feb 2015).

The SAM OTP programme has two major parts “**Community Mobilisation and SAM treatment service**”. It was unanimously agreed by the SQUEAC team that effective Community Mobilisation - active case finding, referral and follow-up make up the cornerstone of successful outpatient care.

Because, its aim is to maximise the coverage of the programme by ensuring the maximum number of children with malnutrition are able to access and attend health facilities for treatment. CHS/ CHW work in collaboration with the community and the clinic to achieve this aim. Under this big umbrella the important components identified and their characteristics are: community sensitisation, health education, case detection, nutrition protocols, admissions and discharge criteria, follow up procedures, training, reporting, supervision, and stock and supplies management. (see Annex 15 for a brief description of these components).

2.2 Quantitative data analysis

An Assessment of OTP programmes in 13 health facilities in the 3 districts: Lashkargaah, Nad-Ali and Nawa-e-Barakzaye in Helmand province was conducted. A total of 1,958 OTP treatment cards of discharged patients, growth monitoring/screening registers, CHS referral slips, MAR and MAAR reports, monthly SAM reports, IMAM reports and stock

receipts from Feb 2014 to Feb 2015, were investigated. Analysis includes MUAC on admission, admissions over time, active and passive referrals, admissions by village distance, comparison of admission and discharge reported in different sources, discharge outcomes over time, length of stay in program, defaulting over time and time to default. Pooled data analyses for the 13 health facilities are generally presented.

2.2.1 MUAC on admission

There was a total of 1,958 SAM admissions by MUAC over the 14 months period, in the 13 HFs assessed. There was a preference for admissions by MUAC in all health facilities. An additional 6% of admissions were by weight-for-height - mostly admitted from one clinic (Nawa Khalach Clinic) and only 3 admissions were by oedema (not included in the analysis).

Analysing data on MUAC on admission helps the programme team to understand timeliness of health and treatment seeking behaviours in the community as well as pro-activeness of the CHWs in early screening and referral of SAM cases.

Figure 2: MUAC on Admission

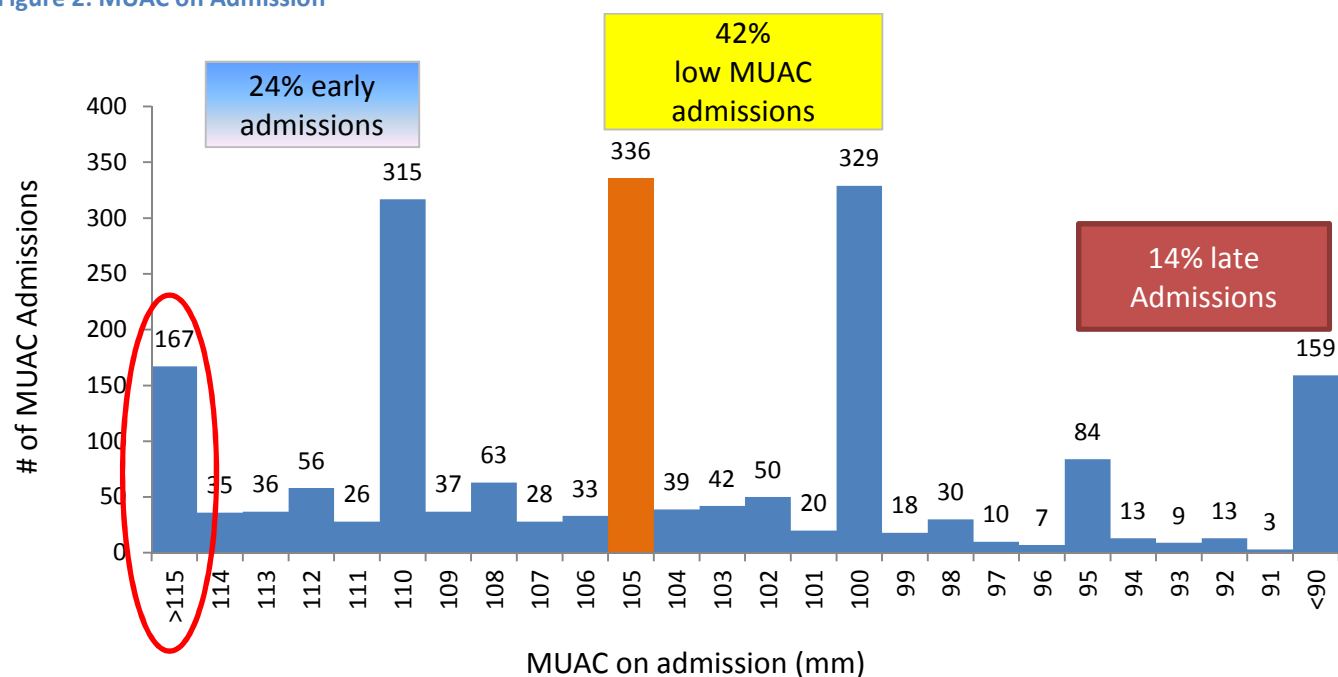


Figure 2 shows the range of MUAC from total admissions in the 13 HFs from Feb 2014 - Feb 2015. There were 9% children wrongly admitted into the programme (MUAC >115 mm, 13%) showing that the admission cut-off was not applied appropriately and indicating a lack of proper understanding of the nutrition protocol by OTP staff. Early admissions (110-114mm) were only 24% (468). This, taken together with the median of 105 mm suggests a relatively late progression of malnutrition. Effectively, 42% (816) had low MUAC (100-105mm) and

14% (281) late critical MUAC (<95mm), indicating problems in treatment seeking behaviour and care practices whereby mothers not taking child for treatment immediately on becoming sick. This affects coverage when children remain uncovered for a considerable period of time, and end up in the programme only when in an advanced state of nutrition. Late admissions were associated with poor community mobilisation involving poor programme awareness, poor community screening and case finding. Also, poor opinion of the programme amongst caregivers, in turn leads to more late presentations and admissions, and development of a negative feedback cycle.

The data also shows digit preference for multiples of 5mm (110mm - 16%, 105mm - 17%, 100mm - 17%, 95mm - 4% and 90mm - 8%), another indication of poor accuracy of measurements by OTP staff. This, becomes more pronounced by the fact that different staff (nutrition nurse, SFP nurse, CHS and HE) were involved in MUAC measurements has also jeopardize the quality of measurements.

2.2.2 Admissions over time

Pattern of SAM admissions over time in relation to seasonal calendar data of the most common Child morbidity and food availability allows us to examine how incidence is affected by context of the programme's catchment area.

Figure 3: Pattern of total OTP Admissions and overlapping seasonal calendar

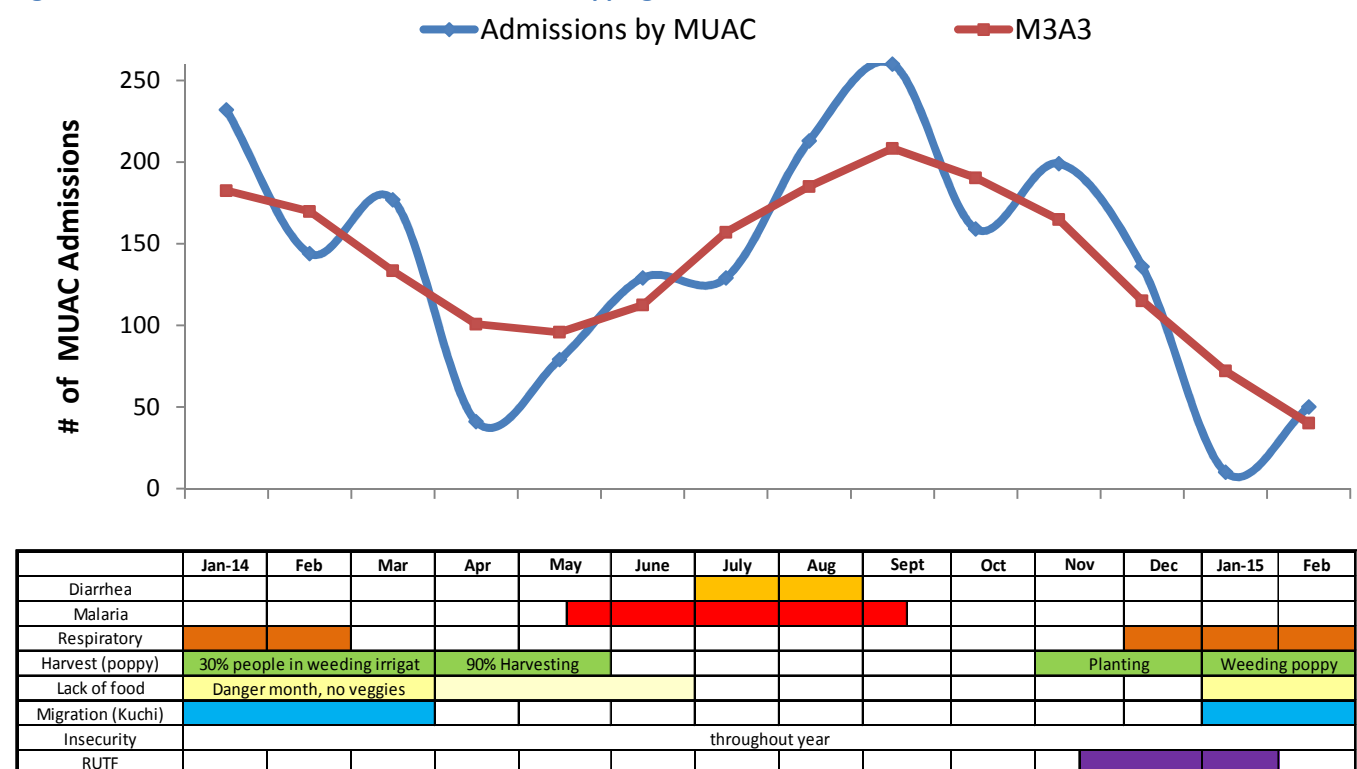


Figure 3 shows total admission by MUAC over time - raw data (blue curve) - as well as the superimposed smoothed data (M3A3, red curve) generated by using a moving median of a span of 3 followed by a moving average also of a span of 3.

M3A3⁸ gives the combined effect of seasonality and trend. The figure shows that the higher admissions during the months of Jan to Mar 2014 can be related to high winter incidence of respiratory problems in children, as well as Kuchi migrations before harvesting season. The decreasing trend in admissions during April and May is most definitely related to spring poppy harvesting activities, which involve nearly 90% of the local population. During this time, husbands and men in the family are 100% occupied in the field and beneficiaries mothers have no maharams to accompany them to HFs. The admission trend picks up during the summer months (July through September) when diarrhoea and malaria outbreaks are frequent. The decreasing trend that follows (fall 2014 and winter 2015) is impacted by RUTF stock-out from 15th Nov to end Dec 2014. RUTF supply also plays a major part in the few admissions in Jan and Feb 2015, as it affects/dampens the expected pattern of high incidence of SAM during the winter months: thus, RUTF stock-out contributes to poor coverage.

SAM admissions are influenced by both positive and negative factors. An increasing trend of admissions may indicate heightened nutrition activities and more admissions and/or a good treatment-seeking behaviour of caregivers (good programme management). However, it can also reflect a deteriorating nutrition situation (for example, a disease outbreak) with increasing incidence of malnourished cases. In the latter situation, a poor programme management will produce the opposite effect - poor nutrition services and poor admissions.

2.2.3 Program discharge outcomes

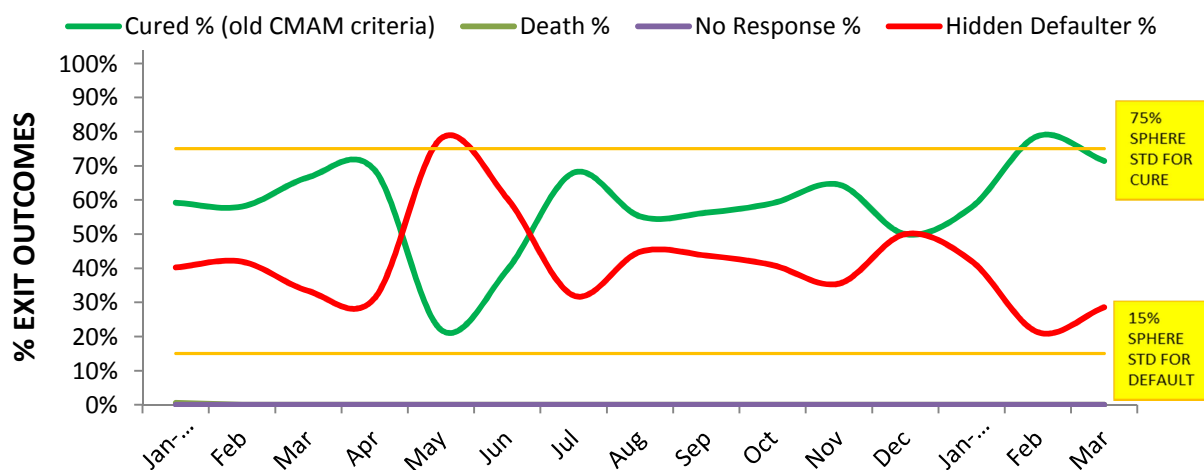
Analysis of discharge outcomes was a very big challenge since the discharge criteria was not properly understood and therefore not properly applied by OTP staff when filling out OTP cards. As such, discharges were by the CMAM, CMAM criteria of MUAC ≥ 11.5 cm for 1 visit but nonetheless wrongly executed when patients were discharged at MUAC =11.5 instead of >11.5 cm and 1 week instead of two. 13 % of the “cured” patients were wrongly marked, when the cure involved long treatments with multiple gaps of 3-6 weeks with no identification of absentees and defaulting. These were counted as “hidden default”. In fact, in this programme, absentee, defaulting, non-response and deaths (except for 1 reported death) were nearly never marked in the treatment cards, because these

⁸ M3A3 is use of moving average of 3 and median average of 3 to smooth the data to be able to see the trends of admissions over a period of time.

discharges were perceived as negative and avoided at all cost. Thorough investigation of discharge data revealed that 42% of the discharges were “hidden defaulters”, either wrongly marked as ‘cured’ or left unmarked.

Standard performance indicators: Analysing the patterns of the discharge outcomes gives an idea of the success of SAM treatment/ performance of the programme

Figure 4: OTP Discharge Outcomes, Feb 2014 – 2015



In Figure 4 the patterns of discharge outcomes (cured and hidden defaulters) are superimposed with cure and defaulter sphere standards, to get an idea of the performance of the programme. The analysis of program performance indicators shows that the programme has low cure rates (<75%) and high defaulting (>15%) inspite of the CMAM discharge of MUAC $\geq$ 11.5cm just above the admission criteria, which means that in a small jump of MUAC, patient is cured. The results are indicative of a poor retention in the programme. In fact, children were showing repeated defaulting, that is, spending unnecessary long periods of time in the programme- with gaps during treatment. Repeat-defaulting compromises the effectiveness of the treatment and invariably leads to complications. Thus, poor adherence to treatment protocol by both caregivers and nutrition staff leads to poor coverage because SAM cases remain uncovered in the community.

The data also shows a poor cure rate (as low as 22%) and a high hidden defaulting rate (peaking to 78%) during the poppy harvesting months, highlighting the impact that poppy harvest has on the programme. Interviews with defaulting mothers indicates that defaulting during the harvest season is highly influenced by males in the family being fully occupied in the field and mothers having no maharam to go to the clinic, as well as poor information about treatment protocol. The Kuchi defaulters who live in distant villages report additional factors such as transportation, poverty (illiteracy) and opportunity costs.

2.2.4 Discharge outcomes from OTP cards versus OTP monthly reports

Figure 5: Comparison of discharges analysed from OTP cards OTP Monthly reports, Jan 2014 to Feb 2015

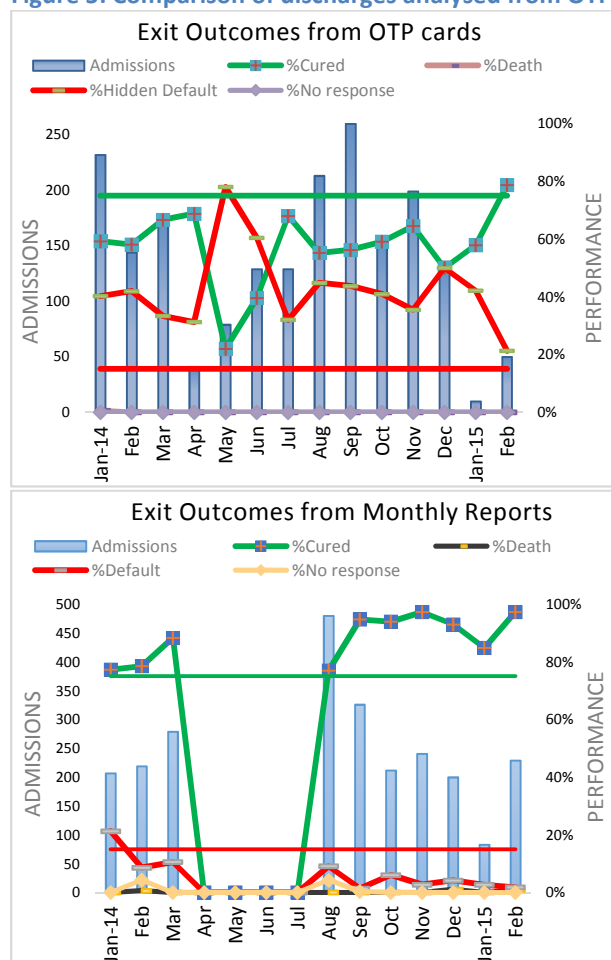


Figure 5 shows that the reported exit outcomes in the Monthly reports did not match the Data OTP cards indicating a problem in documentation and reporting. In the monthly reports the cured rate was very high for the months with data. Also, the marked default rate and No response rate published in the monthly reports were not observed in the OTP cards. The published data is a wrong picture of the programme's performance at the national level, and the discrepancy in data, automatically generates doubts about the trustworthiness of monthly reports.

2.2.5 Length of stay (LOS)

LOS allows to ascertain the duration of treatment taken to cure SAM children. Analysis of the duration in the programme also allows an understanding of poor adherence to exit protocol seen in this programme

Figure 6: Length of stay for cured, Jeb 2014 – Feb 2015

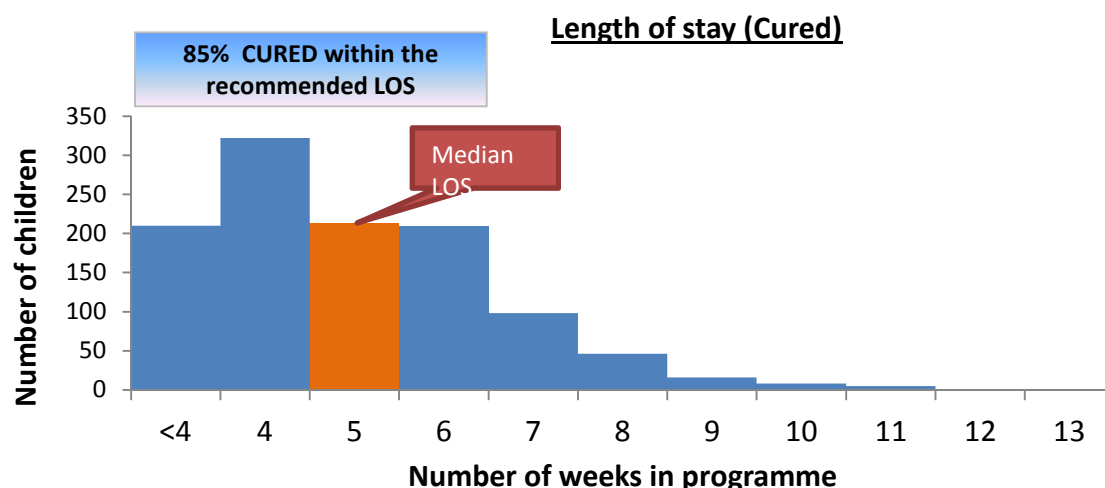


Figure 6 shows a median LOS of 5 weeks, and that 85% patients were cured within the LOS of 6-7 weeks. The short LOS for a high percentage of patients is explained by the wrong practice of health facilities using a discharge criteria of ≥ 11.5 for 1 visit whereby a SAM admission will need a short length of time to reach 11.5cm. Another reason for short LOS is that the analysis does not include the repeat-defaulters cases with the very long over-stay, reaching up to 40 weeks.

2.2.6 Time to Default (TTD)

Equally important in the analysis of defaulters is the number of visits made to OTP by beneficiaries prior to default.

Figure 7: Time to default for hidden defaulters, June 2014 to Feb 2015

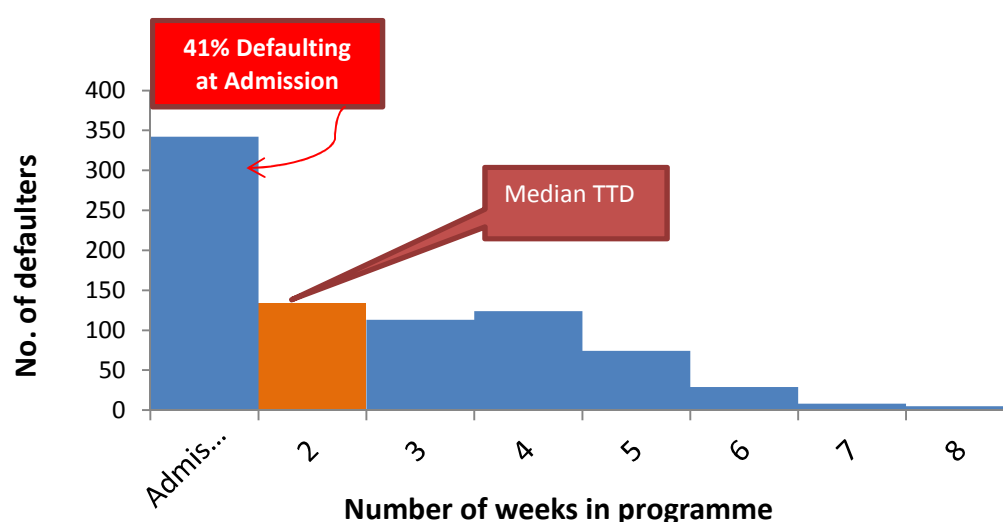


Figure 7 examines the time-to-default (TTD) of hidden defaulters to determine when beneficiaries start to default (first default) during treatment. TTD analysis shows that 41% SAM patients are defaulting immediately after admission (early defaulting), indicating poor compliance to treatment protocol due to poor information given to beneficiaries

about when they have to come for the next visit and about the importance of adherence to the treatment. No timely follow-up monitoring attempts to bring these children back to treatment. Also, beneficiaries do not have a good understanding of malnutrition and do not see the importance of the treatment. Thus, poor community mobilisation affects the quality of the programme performance because it directly affects SAM treatment coverage as beneficiaries who are covered become uncovered.

2.2.7 Screening and referral system

Analysis of OTP Screening data helps to understand if the SAM admissions are largely from passive referral by health facility staff.

Table 1: Passive SAM Referrals and those of which succeed in entering SAM programme (Jan-Dec 2014)

Health Facilities	Admissions from Passive Referrals (total Passive Referrals)	Total Admissions
Laway Manda BHC	73 (661)	134
Nad Ali CHC	106 (555)	408
Pinjaw do BHC	118 (125)	131
Sorkhodoz BHC	118 (128)	117
Total	415 (1469)	790

Analysis of Passive Referral was attempted by tallying SAM referrals in growth monitoring registers with SAM admissions. This was supposed to be an easy task because all children attending the health facility, whether referred by CHW, or sick or other, are supposed to be screened and reported in growth monitoring registers; those malnourished are supposed to be directly admitted into the programme. Unfortunately, this was not the case. The reason was the following: during stock-outs, SAM children who were referred by passive screening could not be admitted directly into the programme. Some entered the programme at a latter moment and could be traced with difficulty. Nearly 50% of SAM admissions could not be traced in the registers - it was not possible to determine if they had been recorded in the registers at another time or not recorded at all.

Table 2 presents data for 4 health facilities to have some understanding of how many children are admitted by passive referral at the clinic. Analysis revealed 2 findings: 1.) 415 out of 790 (53%) admissions were from passive referrals. Since the SAM children were

being routinely screened and referred before being admitted, 100% admissions should have been screened and recorded in the growth monitoring registers. Investigation revealed that the main reason was carelessness by OTP staff in executing a proper referral and admission procedure. 2.) Only 415 out of 1469 (28%) of SAM passive referrals were entering the programme. This means that 72% of SAM identified at the clinic were left uncovered by the programme and this directly affected coverage. Various problems were identified: Beneficiaries were not given proper information at the time of referral; they did not understand the procedure and just went home. Negative attitude of HF staff towards patients and long waiting time deterred caregivers from waiting until their children were admitted.

During RUTF stock-outs, admissions were deferred until stocks were available.

Comparing data of Active Referral by CHW: Analysis of CHW referral slips (MAR) collected from clinic and CHW (MAR) reports help us to understand importance given to CHW referral

Table 2: Count of CHW referral slips at health facility vs actual CHW referrals in MAR reports (Jan-Dec 2014)

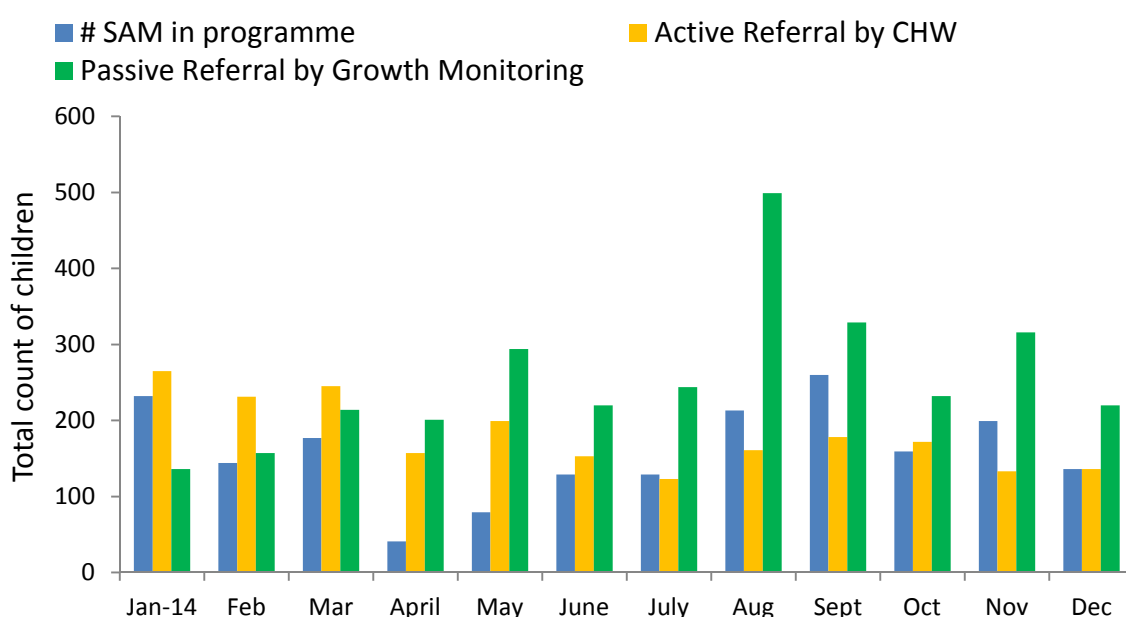
Health Facilities	# CHW Referral Slips collected from HF	# of SAM children referred by CHW from MAR reports
Karte Lagan CHC	79	355
Laway Manda BHC	31	210
Said Abad BHC	44	542
Nawa Boslan BHC	71	103
Pinjaw do BHC	106	311
Total	331	1521

It was impossible to determine the proportion of children being recruited by active referral because referral slips were not systematically collected and filed at the HF. We were able to collect referral slips from only 5 HFs, which turned out to be only 22% of those reported in MAR reports (actual number of active referrals reported by CHW). If referral slips were properly collected, it would be easy to trace and follow-up those who were not making it to the clinic, by cross-checking referral slips with CHW Monthly Activity Report. If there were any irregularities in reporting, it could be identified and corrected

at this point. This data indicates that there is a lack of understanding of the importance of active referral, and therefore no execution of tracing and follow-up of referrals. This directly affects coverage because SAM cases remain uncovered in the community.

Comparing Active and Passive Referral versus SAM admissions: Firstly, analysis of Active and Passive Referral helps us to understand CHW activity (active case finding) and related-HF activity. Secondly, comparing referrals and admissions tell us about the effectiveness of the referral system

Figure 8: Total active referrals by CHW and passive referrals by Growth Monitoring at HF versus SAM admissions in programme, from 13 HFs during 2014



Referral data is shown only for 2014 because it was the only data available at the time of the analysis. Fig 8 shows that in 2014, there were a total of 2153 SAM children referred by CHW (from MAAR report), 3062 - referred by Growth Monitoring (HMIS report) and 1898 SAM admission (OTP cards) for the 13 HFs under study. Because it was impossible to get accurate raw data about active and passive referrals, these reported data (from MAR and HMIS reports) are presented to give a rough idea of some of the barriers associated with referrals. A synthetic comparison of total numbers of referrals and SAM admissions for 2014, point out to the following inefficiencies in the referral system, such as:

1. No system of reporting to know/inform if the SAM admission is by active, passive or self-referral. This indirectly affects coverage because there is a lack of knowledge about which referral system needs to be strengthened to find all SAM children.
2. Actively referred patients are re-measured and registered in Growth monitoring registers when they present themselves at the HF, indicating that passive referrals

also includes active referrals. From our data we can calculate that there are about 6 SAM passive referrals/HF/month. This data supports the qualitative findings that passive screening is being undertaken only when a child is obviously malnourished, thus, largely missing out children close to the 11.5cm cut-off.

3. The main problems with poor passive referrals, according to HF staff, are summarised as follows: no lists or follow-up of uncovered SAM and restrictions of admissions when there is not RUTF availability.
4. Others important reasons are: lack of knowledge and understanding of the programme, OTP staff are few and overworked with no motivation. Taken together, the data indicates that there is a lack of expert staff with experience in nutrition programming. This directly affects coverage when children remain uncovered in the community.

2.2.8 Analysis of reporting systems and data sources

Admissions from OTP cards (raw data), OTP Monthly reports and IMAM reports: Comparison of numbers of admissions registered in different sources: OTP cards, OTP monthly reports and IMAM national reports allow a closer look at the reporting efficiency.

Figure 9: Comparison of total admissions (which includes admissions by MUAC, W/H and oedema) analysed from OTP cards and OTP Monthly reports from 13 HF, Jan – Dec 2014

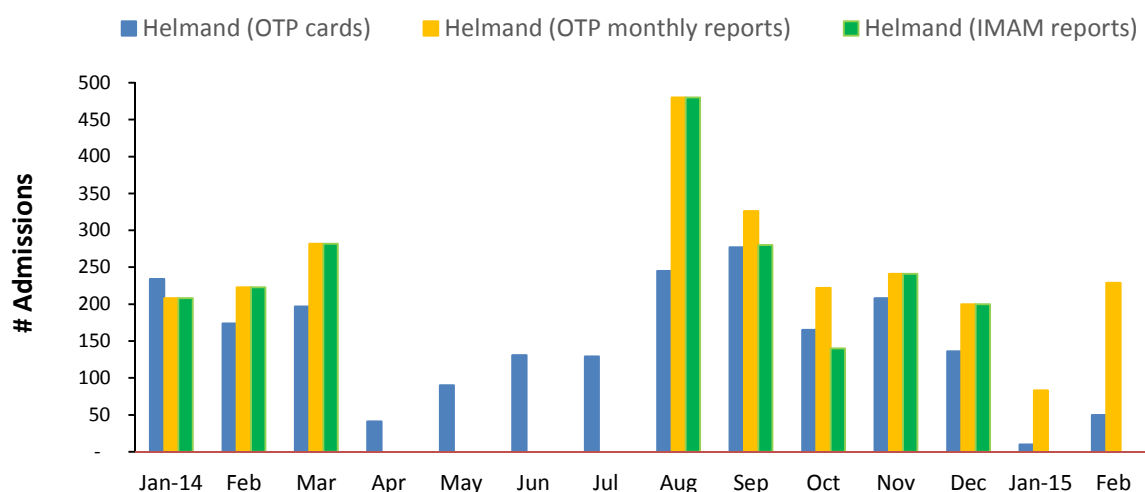


Figure 9 shows that the reported admissions in the OTP monthly reports (Nutrition Database) and national IMAM summary reports for Helmand are more or less similar except for the months where there was no reporting for that province or months where late amendments were made to reported data. There are differences however, between the OTP card - raw data and the reported data. This indicates a lack of proper analysis of cards, and poor supervision of the documentation and reporting process. This leads to

erroneous reports at national level. It also has consequences on coverage, when estimations of the annual ration of RUTF for a particular province/district are based on the number of admissions reported in the previous year. Thus, improper reporting will compromise the annual quota of RUTF for that region.

2.3 Qualitative data collection

The main objective of the qualitative investigation was to validate the results of the quantitative data analysis, to investigate emerging questions and to explore additional information that might be useful in understanding the factors that affect access and coverage of SAM treatment services. Investigation was conducted at the health facility and the community to redundancy. Triangulation was also achieved using a range of qualitative research tools, methods and sources.

At the community, semi structured interviews, focal group discussions and case histories were conducted to probe the knowledge of malnutrition, awareness of the SAM programme, and details of health seeking behaviour - at the community as well as at the HF level (refer to Table 4). Key informers such as beneficiary mothers, defaulting mothers, CHWs, CHSs, CBHC Officer, nutrition nurses were interviewed separately as far as possible, to yield additional information about screening, referral and treatments for their malnourished children. Question guides were customised for different types of informants namely, (1) Beneficiary mothers and caregivers, (2) Mothers and caregivers of defaulting children, (3). Mothers of non-attending cases , community members, community elders and religious leaders, (4) CHWs, (5) Programme and health facility staff (see Annex 6 for English version of guides and Annex 8 for Pashtu version). Additionally, an observation checklist was also used to gather technical information about the health facility. The guides merely provided a structure and focus to the interview. Also, photographs of children with marasmus and oedema were introduced, when appropriate, to provide visual input. The villages selected to conduct the interviews were sampled purposively; as such, villages located close and far from OTP, with and without presence of CHW, with low and high admission and defaulting rate, and so-called 'camp areas' with migratory populations were chosen.

The qualitative investigation was undertaken over three-day period, during which the SQUEAC team visited 32 villages, and conducted 1 visit to each of the 13 OTP sites. The days were exhaustive with 0.5 to 1 hour of travelling back and forth and 3 hours of interviews. Nevertheless, the team returned to the training room to discuss the information that was collected.

Table 3: List of Key informants and Methods

	SOURCES	METHODS
1	Beneficiary mothers	Semi-structured interviews
2	Non-beneficiary mothers	Simple structured interviews
3	Mothers of defaulters	Informal group discussions
4	Mullah	In-depth interviews (case histories)
5	Malik	Observations at HF
6	Community elders	Quantitative Data Analysis
7	Village and Health Shuras	
8	CHW	
9	CHS	
10	School teachers	
11	Director of clinic/ OPD doctors	
12	Programme nurses	
13	Health educators	
14	Community-based health care (CBHC) Officer	
15	Vaccinator	
16	Midwives	
17	Programme data	
18	Observation	

Discussions with the community members and health facility staff

Boosters and barriers that affect access and coverage in Lashkargah, Nad-Ali and Nawa districts are derived from discussions in the community as well as at the HF. This triangulated and exhaustive information is summarised below in Table 5.

Table 4: Qualitative data analysis and discussion

Positive Factors (Boosters)	Explanation	Source
Good treatment seeking behaviour in some parts of the community.	First preference is to go to the clinic when the child is sick because the treatment is free and effective. There is also a willingness to be screened and adhere to treatment, especially when medicine given by private doctors does not improve the condition of the child.	Key community figures like Mullahs, caregivers of children
	Very often, the Mullah has a good	Mullah,

Key community figures engaged and aware of nutrition messages	awareness of the programme and is very effective in disseminating messages and urging early treatment-seeking behaviour. This is normally done during prayer time and wedding gatherings	Caregivers, Sheikh and imam of the local mosque
Word of mouth information about SAM treatment between mothers and community members	Communication within the community, between neighbours, family and villagers is essential for spreading messages about malnutrition, programme and treatment. However, this communication can be negative when beneficiaries have bad experiences at the HF. In such situations, the community becomes biased and there remains a general impression that the programme cannot help their children.	Caregivers of children, community leaders, facility staff.
Good integration of nutrition into other health services offered at facilities.	Vaccination polls in outreach programme are seen to be useful for dissemination of information about the programme. Midwives serve the same function at the clinic during meeting with the mothers	HF staff
Good linkage of HF staff with community representation groups.	Some clinic directors are very active: 1. They conduct regular meetings with health and community Shuras which significantly improves the communication link between community and clinic, and promotes outreach activities, awareness and faith in the programme. 2. They accompany and support their staff in their activities. These HFs are shown to have good performance: high cure rate and few defaulters	Shurah leaders, community elders, HF staff.
Additional funds for nutrition services in the province considered a booster to access and coverage.	CHF funding by OCHA has effectively filled the gap in human resourcing in the nutrition programme (sponsoring dedicated nutrition nurse (NN) and health educator positions). It greatly alleviates the workload of the NN and promotes health education at the community and the health facility.	HF staff, partner staff

Negative Factors (barriers) ⁴	Explanation	Sources
Community has lack of knowledge of malnutrition	There is a general ignorance about Malnutrition. Mothers are unable to discern when their children are malnourished. The general perception is that the child is getting weak, thin, has no appetite and losing weight (locally called Dangar). Lack of mother's milk, inadequate food (due to poverty) and acute diarrhoea are seen as reasons for this condition. Malnutrition is more often seen as an outcome than as a disease that has health consequences. In some cases these malnourished children are	Caregivers of children, HF staff

	stigmatised and called monkey.	
Poor awareness and understanding of the programme	There is substantial ignorance about the programme especially in the villages without active CHW, community outreach and health education. In these villages, weak children are taken to mullah for an amulet or the private doctor insisting for some medicine to make the children fat and healthy. In villages with active CHW, mullah, health education and outreach, there is awareness but nevertheless a poor understanding about the programme. Most often, the programme is limited to getting RUTF which is perceived as a food, to fatten thin children - reason enough to see the programme as beneficial.	CHW, Caregivers of children, HF staff.
Poor active case finding, referral, follow-up of referrals and community sensitisation	No preference for CHW referrals and subsequent long waiting time at the health facility dampen CHW creditability in the community and reduce CHW motivation, even for those CHWs that had been long serving (for 7 to 13 years). As such, mothers simply ignore the referrals and in extreme cases even discard the referral slips. Lack of support and recognition/appreciation from HF staff worsen the situation, and reduce CHW motivation even more. CHWs end up doing their job without attention.	Routine program data, CHW, Community elders
Too many people for any one health post (HP)	In the area under study, a health post, made up of a female and male CHW was responsible for a population between 2000 and 19,000 people (refer to Annex 8). This leaves a majority of communities without CHW permanent presence. For those HPs covering too many people, In the areas of large populations for few HPs, many villages in these areas remained uncovered even when the CHWs are very active. Moreover, lack of proper facilitation to reach the scattered villages, brings CHW activities to a standstill.	CHW, Community elders, Program staff
No quality training and supervision of CHW by CHS	In most cases, CHW received Initial Training. However, poor quality refresher courses and on-the-job training limits the quality of CHW work. Investigation reveals that supervision of CHW is limited to CHS visiting HP only to collect screening and referral data for MAR and MAAR reports. Since there are no lists of CHW referrals prepared by CHS, CHW do not follow-up uncovered	CHW

	SAM cases	
Restricted movement of Key community health workers and community health supervisors	Lack of allocated funds for transportation to conduct supervision means the CHS cannot properly implement his activities. As such, cases of false reporting of HPs. Poor performance is also evident in the lack of follow-up of CHW referrals and defaulters, poor reporting and poor nutrition messages.	CHS, CHW, routine program data
CBHC Officer, the key actor of community mobilisation is not effectively integrated in the programme	CBHC Officer who overviews CHS and CHW planning and execution of activities and defines HP functioning plays a side-role, evidenced by exclusion from community and HF debriefing meetings and lack of initiation and development of community task force. Triangulated evidence points to a lack of importance and value given to his function.	CBHC, Program staff, CHW, CHS
Poor nutrition-specific education at the community as well as in the clinic	Although nutrition education is prioritised (salaried Health educators in 11 HFs - part of the CHF2 funding), overwhelming evidence through interviews with mothers and community members point to poor nutrition-specific health education at the HF and especially at the community level. Quality training, planning and organisation are lacking. The outcome is lack of community understanding of malnutrition and health seeking behaviour, poor knowledge of the programme, and no encouragement of defaulting families to go back to HF. Mass screening, supposed conducted by health educators (HE), is also far from being executed efficiently. Coordination with CHW and CHS is missing. Among the many challenges for HEs are large numbers of villages to visit and long distances to travel.	Caregivers, community elders
Poor IMAM nutrition-specific training for CHW, CHS, HE, NN, DOCTOR and even for nutrition management staff.	All the HFs in our assessment, were running their programmes using the old CMAM criteria, although the nutrition nurses of 9 HFs were trained in IMAM protocol in Jan 2015. This indicates poor understanding of the training, especially affecting the proper use of admission and discharge criteria. Also, the nutrition staff of the two non-CHF funded health facilities were not included in the training and were ignorant of IMAM.	Program staff
Poor on-the-job training and supervision of OTP staff	Poor adherence to treatment protocol and weak follow-up of SAM patients and defaulters were attributed to poor on-	Program staff

	the-job training and a lack of coordination meetings. Nurses also admitted to not knowing the importance of the treatment protocol. In fact, a strong emphasis on training and supervision was absolutely necessary to achieve even a minimum quality of performance because more often nurses were not professionally qualified and it was necessary to constantly check their progress. In short, nutrition staff are not capacitated for their roles.	
Poor understanding of Protocol by OTP staff who do not know about the implications of defaulting	Poor information about defaulting result in poor compliance of with treatment protocol (at the level of OTP staff as well as beneficiaries) shown as follows: 1. Standard use of modified CMAM exit criteria of $\geq 11.5\text{cm FOR 1 VISIT}$ instead of 2 without understanding that it jeopardises the quality of treatment. 2. Wrong information given to beneficiaries about timely visits, length of treatment and how to use RUTF 3. High frequency of « Returned defaulters » resulting in long treatments with multiple gaps of 3-8 weeks with no identification of absentees and defaulting. 4. No reporting of defaulting exits, no defaulter list and no mechanism to bring back defaulters.	Routine program data, program staff, HF staff
Poor passive screening and referral	All sick children taken to the HF are not screened for MUAC. Often, the MUAC measurements are estimations, which is especially the case during stock-outs when only serious and obvious cases are identified and referred to provincial hospital. As a result, SAM close to the 11.5 cm cut-off are often not identified. Lack of knowledge and understanding of the programme, no enthusiasm for work, lack of staff and heavy workloads are other valid reasons	Routine program data
Poor documentation and poor reporting of transfer of patient, non-response and death	Wrongly and incompletely filled OTP admission cards and growth monitoring registers were a big challenge during data analysis. No importance to transfer of patients IN or OUT of the programme makes follow-up of patients difficult. Non-response and death are seen as poor outcomes and conveniently not documented, thus leading to misleading reports. Wrongly reported admissions for Qala Bust, BHC in IMAM monthly reports are other big example of poor reporting.	Routine program data
Poor coordination between	Strong evidence shows that delayed salaries for stretches of 2-3 months	HF staff

program management and HF leading to sub optimal performance of OTP staff	brings down the general moral of OTF staff to the point that they are not motivated to do their best at their jobs. Furthermore, rude comments and no support from their superiors only add to their frustration which is reflected in the poor quality of performance (refer to previous barriers) and bad behaviour towards beneficiaries.	
Gaps in programme due to RUTF stock-outs	During periods of alleged stock-out, the running of the programme is down to a minimum and in some cases services are even suspended, throughout the period of stock-out. The reason given is that the demand of the people cannot be met during stock-out. It turns out that even the nutrition staff, wrongly see the programme as a mere dispensary for RUTF hand-outs, and are convinced that the community is satisfied with the programme when they get RUTF.	Stock records, caregivers, HF staff
No planning about timely RUTF request is an important reason for stock-outs	There is no regular and systematic written request for stocks. Sometimes, last minute stock requests by telephone, inform the clinic that there is a stock-out at the main office. (Refer to Small Study in stage 2 for more details). Investigation points to poor stock management and foresight at the clinics as well as the main office.	HF staff
Poor management of RUTF stocks	Warehouse and transportation problems limit the number of RUTF boxes delivered to each HF, and indirectly set a target coverage rate. For example, limited space in truck allows a drop off of 40 boxes per clinic for a planned delivery route. Thus, poor management of RUTF stocks at the main office, jeopardise the proper running of the programme, and highlights that the focus is not on treating ALL SAM children.	HF staff, Stock records
During RUTF stock out, poor health education about alternative nutrition food (no counselling)	Health education and counselling about alternative nutritious food to substitute the lack of RUTF treatment are rarely practiced. In fact, Karte Lagan CHC who councils their patients about alternate food during stock have good admissions, good overall performance, and 84% of their patients had a recommended length of stay of 6 weeks.	Caregivers of children, community members
Poor interface and transfer with other nutrition programme such as SC and SFP	Coordination and debriefing meetings engage OTP staff, CHS, HE and even the Health Shura (when the director is active). But this is not sufficient because without the cooperation of the CHW and	Observation, routine program data, caregivers

	CBHC Officer, good community mobilisation is difficult. Furthermore, poor interface and transfers with other nutrition programme such as SC and SFP leads to poor continuity and follow-up of SAM patients.	
Poor clinic and community Shura activity	In most health facilities, there is no communication between the clinic and community especially when Health Shuras do not play an active in the programme. Shuras when active share messages about the programme, promote active case finding, and community mobilisation. Participation of the Family Health Action Group (FHAG) is recommended to improve community mobilisation.	Community leaders, caregivers
Poor perception of the programme	Families want more information so that they can cure their children of maladies and nurture healthy children. They make an extra effort and go with to the clinic. They are not given preference in spite of having a CHW referrals slips, but instead have a long waiting time in the hall way, without a separate waiting area for women. If they return to the clinic 2-3 times and there is no treatment, they lose faith in the programme. Lack of female staff and bad behaviour of staff are also seen negatively.	Caregivers, CHW, community members
Poor/late treatment seeking behaviour	In the communities investigated, malnutrition condition is only taken seriously when children are very weak and start falling sick, at which point they are taken to the HF (if aware of the programme) or the private doctor. The main reasons are lack of awareness about malnutrition, and ignorance of the benefits of early treatment. Relatively healthy-looking SAM children, close to the 11.5 cm MUAC are generally missed out until too late.	Caregivers, HF staff, routine program data
Defaulting due to poor understanding of treatment protocol, stock-outs, bad behaviour of staff and long waiting time at clinic result in poor opinion of the programme, no maharam, poverty (lack of food and no livelihood), opportunity costs, migration due to harvest of poppy and fighting/insecurity	Interviews with mothers and caregivers point to a myriad set factors affecting defaulting: Lack of information and importance about adhering to treatment protocol leads to early and repeated late defaulting. Stock-out is an important barrier when poor beneficiaries travel long distances (up to 1-2 hours) by foot and no treatment is available. This taken together with bad behaviour of staff, long waiting time at the clinic, recurrent visits with no RUTF due to wrong information about next visits, deter beneficiaries from returning to the	Caregivers, community members, routine program data

	programme. Lack of maharam (especially during harvesting season), importance to house work and family care as well as migration due to poppy harvesting or fighting (refugees) are other reasons for defaulting	
Distance	Distance can be a barrier especially when there is no transportation connection between village and HF. Access is even more difficult when villages are over 10 km from health facility, have no CHW or community outreach, and/or fall in insecure fighting zones.	Caregivers, routine program data

2.4 STAGE 2

2.4.1 Hypothesis formulation and testing

The objective of Stage 2 is to test our understanding (based on findings from Stage 1) on what factors affect coverage most strongly, and if suspected, test for potential heterogeneity (or patchiness). This will be done through a Small-Area Survey where a handful of villages are purposively⁹ selected (depending on the hypothesis) and each village is sampled for SAM children to redundancy. It is determined whether each SAM child found is covered (undergoing treatment) or uncovered (not in treatment). The coverage of the sample found in each set of villages (each representing one side of the hypothesis) is then classified as acceptable or unacceptable (according to given criteria) using the lot-quality assurance (LQAS) sampling method.

2.4.2 Small Area Survey

Stage 2 involved developing a hypothesis about coverage, based on the quantitative and qualitative data analysis from stage 1. This hypothesis was tested to confirm (or deny) the assumptions related to areas of high or low coverage, using small area survey or small study. Confirmation of the hypothesis indicates a good understanding of the barriers and boosters of the programme. The next step involved creating a *PRIOR* or an informed *guess* about the most likely coverage from this in-depth investigation (weighted barriers and boosters developed in stage 1).

⁹ Purposive selection is a non-probability sampling method that allows the investigator to select based on his/her judgment depending on the unit to be studied.

2.4.3 Hypothesis 1

Qualitative data analysis suggested that coverage was unlikely to be even in the area of study because of CHW activity, health education, awareness of programme and belief in the clinic. More specifically:

- ❖ Interviews with key informants indicated less programme awareness in communities which lacked active CHW and health education
- ❖ Furthermore, good awareness in the programme, alone, did not guarantee a high level of coverage
- ❖ Poor treatment-seeking behaviour was influenced by bad behaviour of clinic staff and long waiting time during visits to the clinic, which weakened the belief in the health facility

These factors, when taken together, seemed to be important for programme coverage. Coverage was lowered when any one of these factors were not met. The patchiness of coverage was corroborated by quantitative findings showing that numbers of admissions varied between villages.

Based on this triangulated information the following two-part hypothesis was developed:

Part 1. Coverage is satisfactory in villages where ALL the following conditions are met: active CHW, good health education, good awareness of programme and good belief in the clinic

Part 2. Coverage is not satisfactory if ANY one of the above conditions are NOT met

Method and sampling

To test this hypothesis, a small area survey was conducted in purposively selected villages, which fulfilled Part 1 and Part 2 characteristics, according to information gathered and triangulated by more than one source and method. Satisfactory coverage was set by 50% minimum SPHERE Standard for rural areas¹⁰.

Active and adaptive case finding was undertaken by teams consisting of a supervisor and two enumerators, to look for all SAM cases covered and not covered by the programme. Covered cases included those below 11.5cm as well as those between 11.5 to 12.5 cm MUAC - the latter grouped as 'recovering cases'. The uncovered cases were also grouped into uncovered SAM (below 11.5 cm MUAC) and uncovered MAM (11.5 to 12.5cm, not

¹⁰ The assessment was done in Kandahar city district but the targeted population has a rural lifestyle hence the 50% coverage standard

shown). Caregivers of all cases were subjected to simple structured interviews with specific questions related to the hypothesis, and also to identify reasons for being in the programme or not, as appropriate.

The hypothesis was tested using the simplified classification technique called Lot Quality Assurance Sampling (LQAS).

The following formula was applied:

$d = (n/2)$ against the 50% sphere standard for coverage for rural areas, where 'd' is the decision rule or threshold line, and 'n' is the total number of SAM cases.

The findings in each village are as shown in the table below showing coverage data for villages corresponding to Part 1 and 2 and the hypothesis decision.

Table 5: Stage 2 Small Area Survey results

Purposively selected villages				Coverage			d = n/2	Hypothesis decision
	Village		Characteristics	Total SAM (n)	SAM Covered	SAM Uncovered		
Part 1	Karte Lagan	+	Active CHW, good HE, good awareness of programme, good belief in the clinic	5	5	0	10	SAM Covered cases = 14 out of 20 SAM cases, which is above the threshold line (50% coverage), therefore Part 1 Hypothesis is confirmed
	CAMP	+		3	2	1		
	Loway Qalai	+		5	5	0		
	Lande Shah	+		6	2	4		
	Heratian	+		1	0	1		
	Total			20	14	6		
Part 2	Deharvool	-	NO CHW, NO HE, NO awareness of programme, NO belief in the clinic	2	0	2	13	SAM Covered cases = 9 out of 26 SAM cases, which is below threshold line (50% coverage), therefore Part 2 Hypothesis is also confirmed
	Nigare	-		3	1	2		
	Werdagan	-		2	0	2		
	Zarghoun	-		7	1	6		
	Wakil Qalai	-		6	5	1		
	Washir	-		6	2	4		
	Total			26	9	17		

The above results show that coverage was satisfactory in villages which fulfilled all four characteristics set in Part 1, and coverage was not satisfactory in villages in which any one of the stipulated conditions set in Part 2 were not met: poor CHW activity and health education, poor awareness of the programme, as well as poor belief in the clinic.

2.4.4 SMALL STUDY ON RUTF STOCKS MANAGEMENT AND PLANNING

Background

From stage 1 investigation, stock-out of RUTF was also found to be a significant factor affecting coverage, in regard to adherence to treatment of SAM beneficiaries as well as admitting new patients. Planning and delivery of stock to health facilities were seen as specific barriers affecting coverage. Triangulation at the health facility and programme level resulted in the development of the following hypothesis, which was tested by a small study:

Hypothesis 2

Lack of timely planning of RUTF stocks at the health clinic results in stock-outs. This affects coverage negatively because it increases defaulting.

Study formulation: The hypothesis setting was informed by the following reasons:

- The majority of health facilities with poor admissions had higher defaulting cases and evidence from clinic staff link low admission to RUTF stock outs.
- Observations of the stock register indicate that the stock-out as perceived by the health facilities was only partially true. As such, during the months of Jan to 15th Nov 2014, the main office had received the RUTF rations that they had applied for. Legitimate stock-out occurred only the 15th Nov to end Dec 2014. In Jan and Feb 2015, ACTD did receive stocks.

Study description: This small study was developed well into Stage 2. Two clinics were chosen for the study: Karte Lagan (KL) CHC Clinic in Lashkargah district with good admissions and low defaulting, and Laway Manda (LM) BHC Clinic in Nad-Ali district with fewer admissions and higher defaulting. Karte Lagan Clinic was particularly interesting because although a CHC-type clinic, it was one of the two clinics in the 3 districts under investigation that did not have CHF2 funding. This meant that it did not have a Nutrition Nurse and Health Educator dedicated specifically to nutrition activities. CHS and vaccinator undertook health education. Laway Manda Clinic on the other hand was under

the CHF project and had specific Nutrition Nurse and Health Educator for nutrition services.

Methodology

Structured interviews (shown below) were conducted targeting Director of Clinic (DC), Nutrition Nurse (NN) or Nurse (N) who did nutrition activities, CHS, Food Distributor (FD) and Health Educator (HE) in the case of Laway Manda Clinic. Additional triangulated information from Informal interviews with Clinic staff and Community members during stage 1 and 2 related to planning of stocks and stock-outs, are also included and summarized in the findings.

Findings

Question 1: *Were there RUTF stock-outs at your clinic during the period from January 2014 to February 2015? If so, which months?*

There has been frequent stock-out since Jan 2014. The staff of the two HFs interviewed could not give information about the actual monthly stock-out. The procedure as explained was the following: Nutrition nurses generally call in request to the main office when the stocks are down to a few boxes. Most often, they are told that the stock is on the way, or they have to wait their turn. They are never sure whether they will receive the stock or not. In the past, delivery has been affected by security.

Question 2: *Do you plan your RUTF stock requirements in advance and send a stock request to main office?*

Generally, there is a systematic and good execution of planning but request of RUTF stocks is lacking at the health facility level as well as at the office level. The problems are myriad, such as:

1. There is poor or no capacity building and training of staff on how to handle stocks and to make written requests.
2. Planning and requests are erratic and dependent on turnover of staff nurse and doctor.
3. At the main office, the RUTF requests are not taken seriously. RUTF requests to suppliers are non-systematic and the orders do not match the demand of the clinics.
3. Warehouse and transportation problems limit the number of RUTF boxes delivered to each HF. For example, limited space in truck allows a drop off of 40 boxes per clinic for a planned delivery route.

4. When main office receives more stock from UNICEF than they can fit in their small storage, nearby HF might unexpectedly receive up to 120 boxes of RUTF at a time, for storage.
5. Stock requests, from HFs not covered by CHF, are only met if there is a surplus stock at main office.

From the small study structured interviews and informal interviews, there is evidence that stock outs can be avoided if HF are organised and send timely requests. For example, Karte Lagan CHC and Mukhtar IDP CHC which have a systematic planning and timely request of RUTF have good admissions and low defaulting.

Question 3: *What information do you give to old and new beneficiaries during RUTF stock-outs?*

Information is limited to when beneficiaries have to come back for admissions or continuation of treatments. The information is generally wrong because HF staff themselves have no certainty about when the stocks will arrive.

Generally, staff do not stress on information about what alternate foods to have until treatment is available. The director of Karte Lagan HF explained that when they counsel patients and give information about substitute foods¹¹, as well as disperse messages about stock arrival through CHWs, they have shorter lengths of stay until cured.

Question 4: *What are the negative outcomes of RUTF stock-outs?*

Beneficiaries are discontent during stock-outs. Wrong information about when to come back for next visit, further adds to their frustration because for many beneficiaries coming to the clinic is a costly and timely affair and waste of time of maharam. Stock-out is seen as a Nutrition Programme weakness: Interviews with mothers inform us that beneficiary's loose trust in the programme and are more likely to default after 3-5 visits without treatment. The opinion of HF staff is that these defaulting mothers are less interested in getting back to the programme and following treatment, and it is generally considered a waste of time to find these patients.

Conclusion

Frequent RUTF stock-outs are due to lack of systematic planning and request systems at health facilities. There is no emphasise put on counselling and giving information about

¹¹ rice, beans, potatoes, pulses and vegetables, especially stressing the use of clean drinking water

alternate foods until treatment is available. RUTF stock-outs lead to defaulting outcomes when patients lose trust in the programme.

2.5 DEVELOPING THE PRIOR

The PRIOR is as integral as useful in the SQUEAC methodology because it makes use of all the findings collected so far to provide a great deal of information about programme coverage. Based on this wealth of information, a model of probability distribution (the PRIOR) is developed which is subsequently combined by conjugate analysis with the new data/information (the LIKELIHOOD), collected posteriorly from coverage survey, to give the overall estimate of programme coverage.

The first step is to express the PRIOR information (boosters and barriers) as a probability density - this is an informed guess about the most likely coverage (the PRIOR MODE). The boosters and barriers are given weighted scores based on the effect/strength the factor has on coverage and how much it is confirmed by different sources (1 - weak belief and 3 - strong belief) or simple scores (value of 3 for all factors). The booster findings are used to 'build up' from zero or lowest possible coverage, and the barriers to 'knock down' from 100% - highest possible coverage, as shown in Table 7.

To ensure triangulation in the developing the prior, three methods were used; an average of the simple scores, an average of the weighted scores and the prior value from the histogram (belief about coverage).

Simple and weighted barriers & boosters: Modes are calculated using the list of boosters and barriers developed in Stage One.

Table 6: Boosters and Barriers to access and coverage

	Booster	Simple Score	Weighted Score	Barrier	Simple Score	Weighted Score
1	When child is sick, first option is to go to clinic	3	3	Community has lack of knowledge of malnutrition	3	3
2	If director of clinic takes interest, he works with Shuras for good outreach and promotes good performance of staff	3	3	Poor awareness and understanding of the programme	3	3
3	CHF has improved the quality of programme	3	3	Poor active case screening, referral, follow-up of referrals and community	3	1.5

				sensitisation		
4	Knowledge of programme from vaccinator and midwife in the clinic	3	3	Too many people for any one health post (HP)	3	3
5	Mullah is important in sharing messages about SAM programme in the community	3	3	No quality training and supervision of CHW by CHS	3	2
6	Word of mouth information about SAM treatment between mothers and community members	3	3	CHW does not have creditability in community	3	3
7				Poor performance of CHS is affected by lack of transportation for outreach work	3	3
8				CBHC Officer, the key actor of community mobilisation is not effectively integrated in the programme	3	3
9				Poor nutrition specific (outreach) education at the community as well as in the clinic	3	3
10				Poor IMAM nutrition-specific training for CHW, CHS, HE, NN, DOCTOR and even for nutrition management staff	3	3
11				Poor on-the-job training and supervision of OTP staff	3	2
12				OTP staff do not know about the implications of defaulting	3	3
13				Poor passive screening and referral	3	3
14				Poor documentation and poor reporting of transfer of patient, non-response and death	3	3
15				Poor quality of performance of OTP staff because of NO	3	1.5

				support from main office		
16				Gaps in programme due to RUTF stock-outs	3	3
17				No planning about timely RUTF request is an important reason for stock-outs	3	3
18				Target Coverage Limits stocks supplies to health facilities	3	3
19				RUTF stock out: no RUTF preference for NON CHF HFs	3	3
20				During RUTF stock out, wrong information to patient about when to come back for next visit	3	3
21				During RUTF stock out, poor health education about alternative nutrition food (no counselling)	3	3
22				Poor communication between HF staff + HE+CHW/CHS/CBHC officer which leads to poor outcome of programme	3	3
23				Poor communication between community and clinic because of poor clinic and community Shura activity	3	3
24				Poor perception of the programme	3	3
25				Poor/late treatment seeking behaviour	3	2
26				Defaulting due to poor understanding of treatment protocol, stock-outs, bad behaviour of staff and long waiting time at clinic etc.	3	3
27				Distance	3	3
	Total	18	18	Total	81	75
	Lower Coverage Value	0	0	Highest Coverage Value	100	100
	Scores	18	18	Scores	19	25

Barriers and boosters were weighted according to the evidence (source and methods) from Stage 1:

Weighted scores

The total sum of the boosters was added to the lowest possible coverage

$$(0 + 18) = 18\%$$

Total sum of the barriers was subtracted from the highest possible coverage

$$(100 - 75) = 25\%$$

Prior mode from the weighted boosters and barriers:

$$\frac{18\% + 25\%}{2} = 21.5\%$$

Simple scores

The total sum of the simple boosters was added to the lowest possible coverage

$$(0 + 18) = 18\%$$

Total sum of the simple barriers was subtracted from the highest possible coverage

$$(100 - 81) = 19\%$$

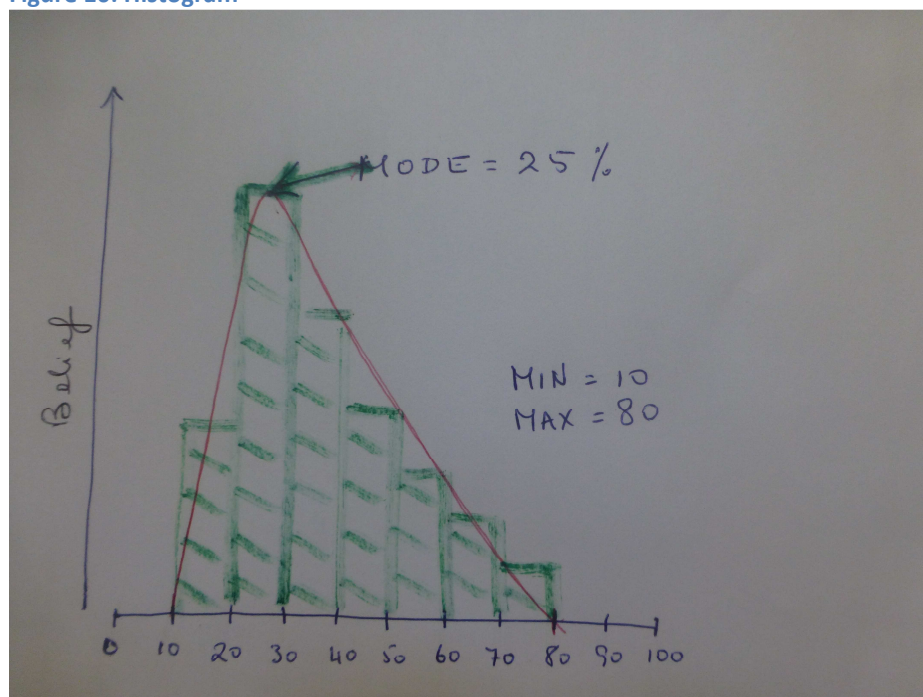
Prior mode from the simple boosters and barriers:

$$\frac{18\% + 19\%}{2} = 18.5\%$$

Histogram

This was the belief about coverage based on the already available information. The team came together to plot the beliefs as a HISTOGRAM. The lowest coverage was thought to be around 10% and the highest possible coverage around 80%. The coverage estimate (MODE) was thought to be around 25% as shown in the figure below.

Figure 10: Histogram



Average of Weighted Averages:	21.5%
Average of Unweighted Averages:	18.5%
Histogram method:	25%
Prior Mode:	21.67%

The overall PRIOR MODE was therefore calculated by taking the mean of the three modes calculated above

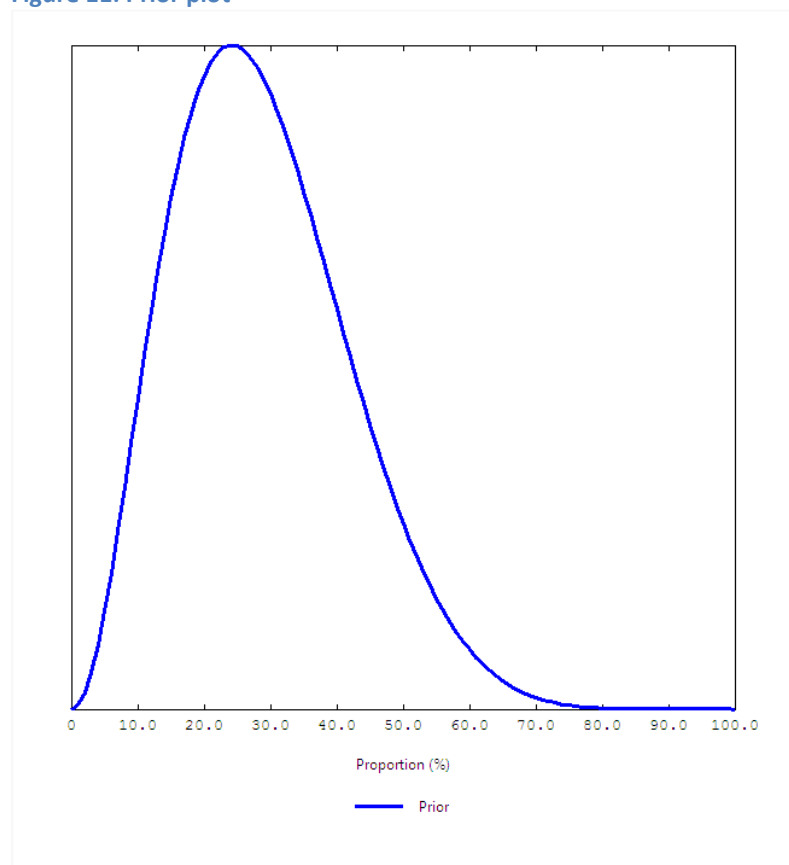
$$\frac{21.5\% + 18.5\% + 25\%}{3} = 21.67\%$$

Prior plot

The prior mode value of **22%** was used to plot the estimate coverage on the Bayes SQUEAC Coverage Estimate Calculator (version 3.01)¹². Being the first time coverage assessment in Helmand, a high level of uncertainty was expected. The PRIOR MODE was skewed on the low coverage side. The plot was obtained by adjusting the prior α and prior β shape parameters, to have the curve at approximately 22% with an uncertainty of maximum of 82% and a minimum of 5%. Using the mode, minimum and maximum we calculated α - prior and β - prior values to be 3.2 and 7.9 respectively. The plot is as shown below:

¹² This is the latest version of Bayes estimate calculator and is available freely at www.brixtonhealth.com

Figure 11: Prior plot



2.6 STAGE 3

This is the final stage of the SQUEAC assessment and it involves providing the overall program coverage for the three assessed districts by use of the Bayesian techniques. As such, the PRIOR is combined with new coverage survey information (called the LIKELIHOOD) which will be collected in this stage 3, by conjugate analysis, to give the overall estimate of programme coverage.

2.6.1 Wide Area Survey

2.6.1.1 Sampling framework

The sample size for the number of SAM cases needed in the wide area survey, was calculated with the prior mode of 22%, α - prior of 3.2 and β - prior of 7.9, and a precision of 10%¹³. The following formula below was used:

$$N = \frac{\text{mode}(1-\text{mode})}{(\text{precision} \div 1.96)^2} - (\alpha + \beta - 2)^{14}$$

¹³ High prevalence of SAM and population not sparsely populated

¹⁴ FANTA SQUEAC technical reference

The sample size derived was **55 SAM cases**.

Furthermore, the number of villages to visit was determined using the following formula:

Where,

Sample size (n): **55**

Average village population: **600**

Percentage of population 6 to 59 months: **15.6 %**

SAM prevalence: **2.1% (SMART 2015, ACF)**

$$n \text{ villages} = \frac{n}{\text{average villages population} \times \frac{\% \text{population of 6 – 59m}}{100} \times \frac{\text{Prevalence}}{100\%}}$$

From the above calculation, **28 villages** were sampled to be visited in Lashkargah, Nad-Ali and Nawa districts of Helmand. The 28 villages were selected through systematic random sampling using the vaccinator updated village list for the three districts selected. Insecure villages were excluded from the list before selection. Eight villages were selected in Lashkargah district, eight in Nad-Ali district and twelve in Nawa district.

2.6.1.2 Data collection

All the children 6-59 months were screening for MUAC to look for the SAM cases. Data collection was done in 4 days, with each team (one supervisor and two enumerators) visiting one village per day. Each team had a sachet of RUTF and RUSF to help the caregiver differentiate the children admitted in the OTP and the SFP programs. All the SAM cases not admitted to the OTP program were referred to the nearest OTP sites with the help of a referral slip. A tally sheet for SAM cases was used, to record the cases in the program, not in the program and the recovering cases. A standard questionnaire was also applied to all the uncovered cases to get the reasons for not being in the program.

2.6.1.3 Coverage Estimate

The wide-area survey found a total of 15 SAM cases. This was short of the target sample size of 55. The total cases found are presented in Table 7 below and by villages.

Table 7: Wide Area Results

SAM Cases IN Programme (C_{in})	15
SAM case OUT of Programme (C_{out})	48
Total Active SAM cases	63
Recovering Cases IN Programme (R_{in})	17
Recovering Cases OUT of Programme (R_{out})	9 (calculated using formula below)
Total SAM Cases	80
Overall Coverage	34.9% (CI 95%: 26.3% to 44.5%) $z = -0.071, p = 0.4776$

The Single Coverage Estimator was deemed the most appropriate representation of coverage in the target area due to large numbers of recovering cases found in Stage 3. Single Coverage Estimator can be calculated with the following formula:

$$\text{Single Coverage} = \frac{C_{in} + R_{in}}{C_{in} + R_{in} + C_{out} + R_{out}}$$

Where,

C_{in} = Current SAM cases IN the programme

C_{out} = Current SAM cases NOT in the programme

R_{in} = Recovering SAM cases IN the programme

R_{out} = Recovering SAM cases NOT in the programme

If we assume that incidence and coverage to not change very rapidly over time (i.e. little or no change was confirmed over the last two months), then we assume that

$$\frac{C_{in} + C_{out}}{C_{in}} = \frac{R_{in} + k \cdot R_{out}}{R_{in}}$$

Where,

k is a correction factor

When we applied the single coverage estimator to wide-area survey data from the 3 districts in Helmand, using a $k=6$, we could calculate $R_{out} = 9$

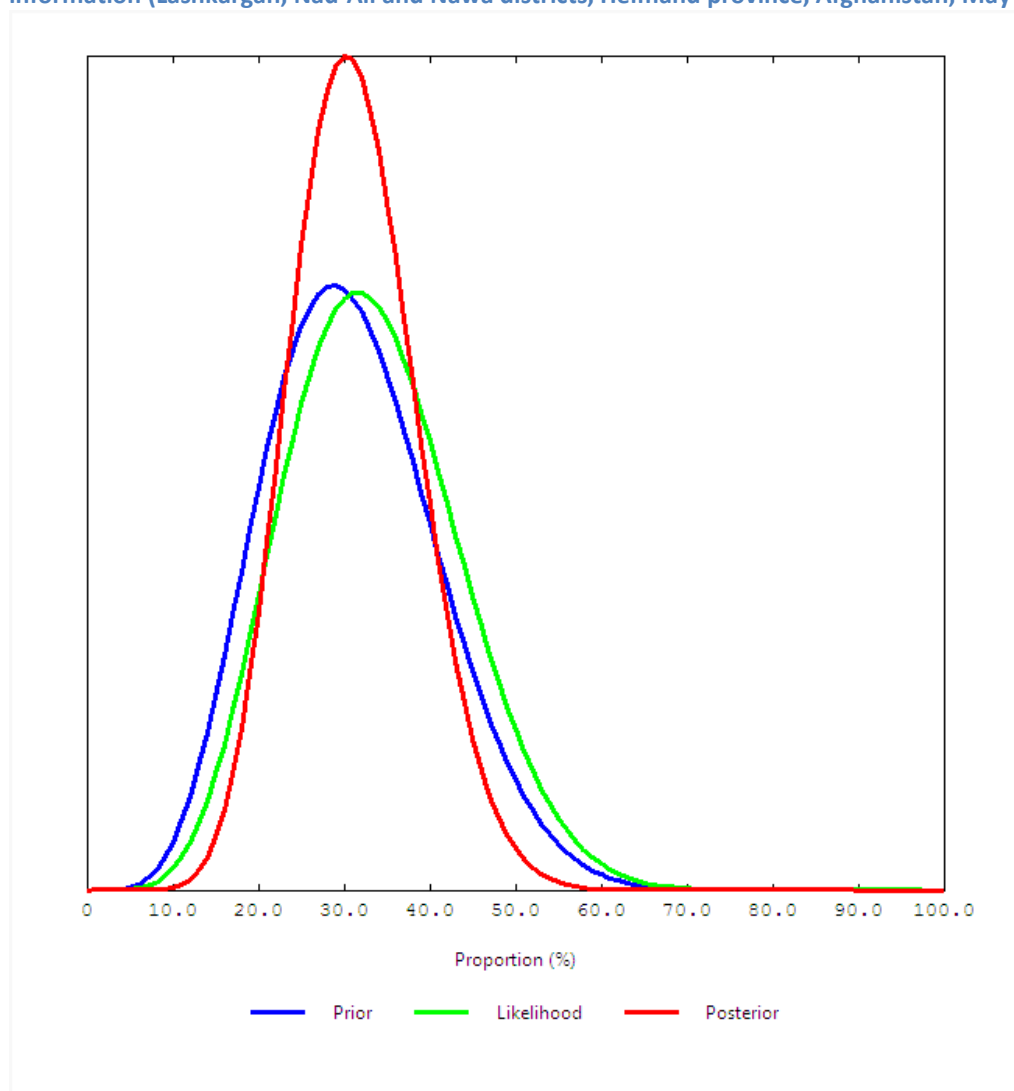
$$\text{Coverage} = \frac{15 + 17}{15 + 17 + 48 + 9}$$

Overall coverage was calculated through the Bayes SQUEAC calculator by combining the prior and the likelihood (Single coverage estimation using data collected during the wide-area survey) with a conjugate analysis to produce the posterior (overall coverage).

The following coverage estimation was calculated which is also presented graphically in Figure 12.

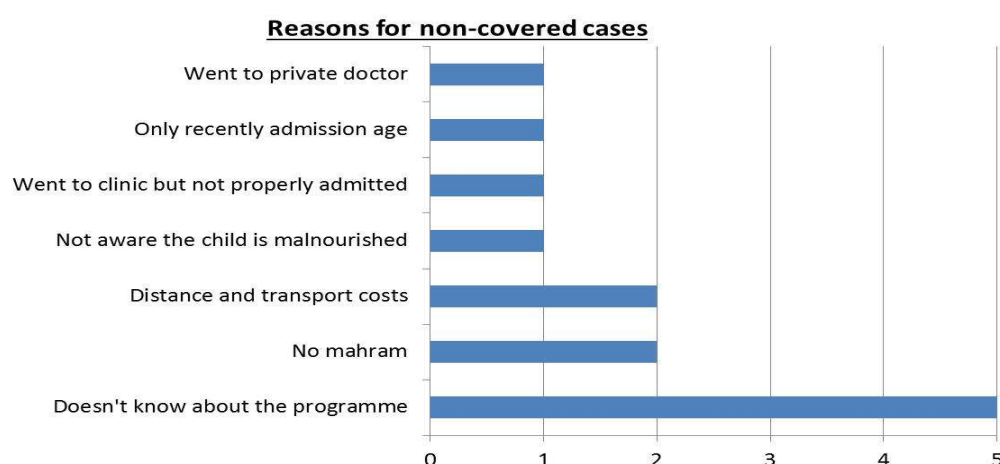
34.9% (CI 95%: 26.3% to 44.5%)

Figure 12: Graphical representation of coverage estimate including the prior, likelihood and posterior information (Lashkargah, Nad-Ali and Nawa districts, Helmand province, Afghanistan, May 2015)



From the Bayes coverage estimate calculator, the overall coverage was determined 34.9% with 95% credible interval of 26.3% to 44.5%, p value of 0.4776 and z-test of -0.071. For a coverage threshold of $p = 50\%$, the decision factor is 17.45. Since our COVERED cases were 15, we could conclude that Coverage was unsatisfactory.

Table 8 Reasons for Non-attendance



Reasons given for the 48 SAM cases not attending the programme were:

Of the 48 cases where the caregiver did not know about the programme, two said that they have no information about the health facility at all, and two said that they had been to the health facility but their child had not been screened, nor had they been told about the programme.

3. CONCLUSION AND DISCUSSION

The single coverage estimate of 34.9% (26.3-44.5 95% CI) for 3 districts in Helmand shows that the BPHS has performed below the sphere standard of 50% coverage for rural areas. The assessment of the CMAM-BPHS (SAM) programme, points to three systems that are working at sub-optimum levels, such as community mobilisation (CM), OTP treatment services and provision of treatment commodity. The main and common problems across the three systems are under human resourcing (undefined or dual roles of actors), and poor support, training, supervision and reporting.

Community mobilisation (defined in the key component section in the Annex 15) is the cornerstone to a successful implementation of the BPHS and an essential element in Management of Acute Malnutrition. In the Helmand CMAM programme, CM is weak in community nutrition health promotion, which is essential for prevention and identification of malnutrition and maximising coverage of the programme. Investigations points to insufficient nutrition messaging, poor case finding and referral and no follow-up monitoring being key barriers delaying treatment-seeking behaviour. The outcome is low coverage when there are uncovered SAM children in the community.

The key community mobilisers are the CHW, CHS and more recently the health educator (HE). The CHW the main figure conducting CM activities, does poor sensitisation and

health promotion and prevention, and poor timely case-finding and recruitment. This limited SAM admission, and resulted in low (<75%) cure rate and long length of stay with repeated absence and defaulting (>15%), which in turn led to bad perception of the programme in the community, and late treatment seeking. The CHW was clearly not motivated and did his job without any attention. The main barriers conducting poor CHW performance were: no support, supervision and oversight from his supervisor (CHS) and lack of creditability by the community in his work - when CHW referrals have no preference in clinic and have to wait long hours at the clinic or when CHWs have not sufficient medicines to cover the needs of the sick.

CHS is also failing to perform his duties: giving poor support and supervision of CHW, poor tracing and follow-up monitoring, incorrect reporting, and inadequate health promotion through key community members. This led to unchecked repeated defaulting and a negative feedback of poor retention from admission to cure, as a poor perception of the programme developed. Under-resourcing in terms of finance (no transportation cost to visit villages) in BPHS was one of the reason for his poor performance.

The activities of newly appointed health educator (HE) were not prioritised. After 4 months into his job (since Jan 2015 -CHF2 project), there was no training and support to CHW and FHAG (ref: AFG-14/S1/N/NGO/248-248-Proposal). Duplication of function was a big problem as CHWs were still receiving refresher training from CHS. Under-resourcing and poor quality training and supervision were limiting HE performance and producing weak CM.

The critical issue in this BPHS implementation is that the CHS and HE are reporting to the director of the clinic and not to the CBHC officer who supervises CHW and CHS activity, and is responsible for oversight, support, and development of implementation of Community Mobilisation¹⁵. This point to an under-engagement of a potentially important figure of CM. This is because in the BPHS, the CBHC officer is not involved in implementation of integrated programmes. The SQUEAC assessment highlights that a clear positioning of the CHW-CHS-HE-CBHC officer operation line would unequivocally strengthen community mobilisation and maximise coverage of the programme.

Under-resourcing (dual roles of nutrition staff), lack of quality training and supervision, heavy workload and few female staff are the major barriers for quality OTP treatment services leading to poor passive screening and referral, a poor understanding, execution and communication to beneficiaries of correct nutrition protocols, no follow-up monitoring, incorrect documentation and reporting and bad attitude with beneficiaries.

¹⁵ Afghanistan Community Health Programs

This limited SAM admissions, led to low cure and high default rate, and also fostered a poor belief that the programme can treat and cure SAM children.

Lack of foresight of provision of treatment commodity (RUTF), led to poor management of RUTF -particularly concerning request and delivery and frequent stock-out. This was a major stumbling block to nutrition programme coverage as numbers of uncovered SAM children increased only because of stock-out and independent of other limiting factors.

Distance also limited coverage when the coverage area was too wide, village were remote or too much population for a health post, and where effective community mobilisation and CHW activity was no possible. More sub-health centers with OTP services, additional health posts and mobile clinics should be considered to improve access and coverage.

On a positive note, CHF project was a booster to the programme, because it partially filled in the gap of under human resourcing. Dedicated nutrition nurse and health educators relieved the workload of BPHS staff. This taken together with good health facility management, increased admission and cure rate and reduced the length of stay and repeated defaulting. This correlated with improved coverage outcome for specific health facilities.

4. RECOMMENDATIONS

Preliminary recommendations were developed with the SQUEAC team during the last day of the assessment after reflections of their findings and evidence from the assessment. Subsequently specific actions were developed. All actions were given levels of priority of low, medium and high.

	Recommendation	Findings	Action to be taken	Responsible organization/ people	Level of priority
Community Mobilization & Health Education	1. Extend community mobilization, to create awareness and understanding about the program, promoting CHW activity and motivating CHW referrals to go to the clinic 2. More engagement of female educators and mobilisers 3. Community mobilization should have a formalized planning showing schedules and activities of all actors involved in nutrition program. 4. Give strong emphasis and promote the communication links between clinic and community to have a clear insight into the problems at the community level 5. Nutrition education should be THE key effort of community mobilization, involving a collaborative effort between CHW, CHS, Health educator. 6. Integration of nutrition activities into other health services and campaigns e.g. vaccination and supplementation campaigns	Community has lack of knowledge of malnutrition Poor awareness and understanding of the program. Poor nutrition-specific education at the community as well as in the clinic CBHC Officer's role in nutrition is minimal at present.	1. More engagement of female educators and mobilisers 2. Include community and health Shuras, mullahs and FHAG in community mobilization activities, referrals and screening by providing them with the necessary tools (IEC materials, MUAC tapes etc.) 3. Initiate monthly meetings between community representatives and facility staff to discuss on key nutrition issues and challenges. 4. Bring private doctors into the loop, by giving refresher courses on malnutrition so that they can recognize and have a speedy referral of malnourished patients 5. Organize for training sessions on nutrition for key program staff (HE, CHWs, CHS and CBHS) 6. Re-evaluate and re design CBHS job description to include nutrition activities 7. Synchronize Sensitization sessions with Vaccination and supplementation campaigns to optimize case finding in far off villages	ACTD	Medium

Referrals systems.	1. Strengthen the existing referral systems through provision of adequate training to the HF staff as well as Community based staff (CHW,CHS) 2. Set up clear monitoring and follow up mechanisms to identify key challenges with referrals 3. Expand the scope of referral through engaging and involving key community figures in referral of malnourished children.	Poor active case finding Poor passive screening and referral	1. Organize for refresher training for HF staff and community based staff focusing on referral mechanisms, tools used for referral and the importance of referral. 2. Engage key community figures in referral of cases by providing referral tools (MUAC tapes, referral slips) as well as sensitization on how to check for malnutrition. 3. Give recognition to good CHW activity by appreciation letters etc. to acknowledge and motivate CHW work. 4. Setting up a clear referral system that includes records and files for CHW and other referral mechanisms for ease of supervision and monitoring.	ACTD	High
Capacity building	1. Training and Supervision Strategy and Management should be re-designed to focus on Community mobilization - to maximize the coverage of the programme and ensure access to treatment for maximum number of SAM children 2. IMAM training should first be rolled out for Nutrition Programme Management, making sure that there is a thorough understanding of IMAM guidelines 3. Promote training in routine data collection and analysis for supervisors (methodology of SQUEAC), so that they can look through some treatment cards during their visits and identify problems 4. Regular and systematic planning of RUTF stocks at OTP sites, especially accommodating uncovered children 5. Building strategy of stock management and 100% coverage at main office level	Poor understanding of Admission and Discharge Criteria Poor understanding of Treatment Protocols Poor documentation and poor reporting of discharges Poor quality IMAM training Poor supervision of OTP staff	1. Organize for IMAM training for all key facility and community based staff 2. ACTD need to initiate regular sensitization of key community and facility based staff on community mobilization activities and actions. 3. Regular supervisions to be conducted to using SQUEAC tools to ensure quality of services. (analysis of monthly admissions and discharge outcomes) 4. Regular refresher trainings to provide continuous and sustainable capacity building	ACTD, MoPH, Unicef	High

Commodity Resourcing	1. Good planning and management of RUTF stocks to make sure of continuous supply of RUTF 2. When no apparent stocks, the underlying problem points should be analysed and rectified 3. Timely and sufficient RUTF requests to accommodate needs of all SAM being identified by referral	Gaps in programme due to RUTF stock-outs Not asking for sufficient stocks from the source	1. Provide clear guidance and tools on stock management to all the HF in Helmand. 2. Develop a clear Stock management and request plan together with Unicef	ACTD, Unicef	Medium
Community Health Centers	1. Map all villages in the programme and ensure that each village is attached to a health post. 2. Revise the HP: population ratio currently in place to allow for ease of service delivery 3. Design HP to address the needs of the population they serve	Distance is considered as a major hindrance to accessing nutrition services No default tracing mechanism thus no clear vision of where most cases are coming from.	1. ACTD to initiate mobile outreach for village >10km from HF where normal outreach does not go 2. Create more HPs as needed, especially in the far-away villages abandoned from community mobilization activities.	MoPH and BPHS	Medium
Reporting and Documentation	1. Improve documentation through regular supervision and monitoring of health facilities by PNO 2. Capacity building of HF staff on accurate reporting and documentation.	Poor documentation at facility level (Incomplete registers, cards) Poor understanding of discharge protocols by HF staff Discrepancy between facility data, raw data from cards and monthly reports.	1. ACTD to organize for refresher training for all the HF staff on reporting. 2. ACTD and PNO to develop a clear supervision and monitoring plan to all the HF as part of the quality control on documentation and reporting.	ACTD, PNO	High

5. ANNEXES

Annex 1. Terminology

CMAM – Community based Management of Acute Malnutrition

CMAM has 4 components:

1. Community Mobilisation
2. Supplementary Feeding Programme (SFP) provides management of MAM (Moderate Acute Malnutrition) patients from 6 to 59 months and Pregnant and Lactating women.
3. Outpatient Therapeutic Programme (OTP)
4. Inpatient care for management and stabilization of complicated patients in the hospital pediatric ward

IMAM – Integrated Management of Acute Malnutrition

IMAM reflected the aim to integrate CMAM services into the BPHS (Basic Package of Health Services). It has the same 4 components but integrated together with the rest of the primary and secondary care services:

- Out-Patient Department
- In-Patient Department
- Moderate Acute Malnutrition or OPD-MAM,
- Corresponds to SFP (Supplementary Feeding Programme), in CMAM.

According to BPHS Guideline 2010, MAM management has to be established in areas where nutrition assessments have shown more than 10% of GAM among children 6-59 months.

Out-Patient Department – Severe Acute Malnutrition or OPD-SAM, corresponds to Outpatient Therapeutic Programme in CMAM and provides treatment for SAM (Severe Acute Malnutrition) patients (6 to 59 months) without complications. According BPHS Guideline 2010, OTP (or OPD_SAM) has to be available at Health Sub-Center, Basic Health Center, Mobile Health Team, Comprehensive Health Clinics and District Hospitals.

In-patient Department – Severe Acute Malnutrition (IPD-SAM), formerly called TFU – Therapeutic Feeding Unit in Afghanistan. It corresponds to SC – Stabilisation Centre in CMAM. IPD-SAM is a unit within a hospital which delivers treatment for SAM patients with complications. According BPHS Guideline 2010, IPD-SAM has to be available at each district hospital; EPHS provincial hospitals have IPD-SAM too.

Annex 2. List of participants of the SQUEAC Assessment in Helmand, 5th to 28th May, 2015

No.	Name & Surname	Job Title
SUPERVISORS		
1	Dr Badshah Khan Sharafat	Nutrition Cluster Manager
2	Sayed Ahmad Safi	M & E Officer
3	Dr Doulat Khan Shams	CHF Health Supervisor
4	Dr Mohammad Dawood Zahid	CBHC Officer
5	Abdul Raziq Safi	Focal Point Public Private Partnership Support (PPPS)
6	Assadullah Popal	Focal Point SFP Programme
7	Dost Mohammad Dewari	Translator
ENUMERATORS		
8	Bibi Zahra Habibi	
9	Ebadullah	
10	Zabihullah Qayoumzoi	
11	Abdul Rahman	
12	Besmillah Besmil	
13	Abdul Satar	
14	Mahmood	
15	Bibi Rukhshana	
16	Bibi Fairoza Karimi	
17	Bibi Jamila	
18	Bibi Shila	
19	Bibi karima	

Annex 3. SQUEAC Work Plan (ACTD, Main Office, Lashkargah, Helmand, Afghanistan, 5th to 28th May)

	Stage 1												Stage 2			Prior	Stage 3							Recommendations		Presentation
	5-May	6-May	7-May	8-May	9-May	10-May	11-May	12-May	13-May	14-May	15-May	16-May	17-May	18-May	19-May	20-May	21-May	22-May	23-May	24-May	25-May	26-May	27-May	28-May		
	Tues	Wed	Thurs	Fri	Sat	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Mon	Tues	Wed	Thurs		
Activity		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
Preparation/planning with implementer team + collection of OTP Cards, registers, monthly reports etc																										
Quantitative Data Analysis																										
SQUEAC and Coverage overview																										
Qualitative Research Training/Preparation for Qualitative Data Collection- Role playing																										
Qualitative Data Collection																										
Stage 1 Analysis & BBQ																										
Formulation of Hypothesis + planning for Stage 2 + training of enumerators																										
Stage 2: small area survey																										
Hypothesis analysis and Formulation of Prior																										
Preparation for Wide Area Survey (Sample, Log etc.) + training enumerators																										
Stage 3: Wide area survey																										
Development of Posterior, Recommendations and Action Plan																										
Presentation																										

Annex 4. Solar Hijri and Gregorian calendar conversion

Solar Hijri Calendar	Gregorian (in 2014)
Jadi	22 nd December - 20 th January
Dalvae	21 st January - 19 th February
Hut	20 th February - 20 th March
Hamal	21 st March - 20 th April
Sawr	21 st April - 21 st May
Jawza	22 nd May - 21 st June
Saratan	22 nd June - 22 nd July
Asad	23 rd July - 22 nd August
Sonbola	23 rd August - 22 nd September
Mirzan	23 rd September - 22 nd October
Aqrab	23 rd October - 21 st November
Qaws	22 nd November - 21 st December

Annex 5A. Guides used for gathering qualitative data from informers in English

GUIDE 1: *Mothers and caregivers of children in the programme*

1. Do you know of malnutrition? Probe to get local terms
2. What do you think causes malnutrition? (use the local term for malnutrition)
3. When your child is sick, where did you seek treatment first?
4. How did you know about the programme that treats malnutrition (use the local term)? By whom?
Was your child screened by CHW? If yes? How often?
5. How much time does it take you to get to the clinic?
6. Can you explain the course of treatment (the procedures, the length of treatment, 'dos and don'ts')?
7. Has the programme been beneficial to your child?
8. Who is responsible for taking your child for treatment? If this person is not available, what happens?
9. What would make you not to attend the programme promptly?
10. Do you know any children who are malnourished but are not in the programme? What are the reasons?
11. Do you know of any children who were left the programme in the middle of the treatment (defaulting children)? What are the reasons?
How can these families be encouraged to return to the programme?
12. Do you know of children who have been rejected from the programme? Why?
13. Do you receive health education? From whom? How often?
14. Who would be the most appropriate people (mullah, malic, mothers, CHW/CHS, health groups) to inform the community of nutrition treatment? How could they disseminate the information (method used)?
15. How can the programme be improved, so that the nutrition service is better for you- RECOMMENDATIONS?

GUIDE 2: *Mothers and caregivers of defaulting children*

1. What are the reasons for defaulting?

2. How can the programme be improved to avoid your child and others from defaulting?

GUIDE 3: *Community Members ((Mullah, Malik, Community Elders, Health Shoras, TBAs, Dahi, School Teachers, Village Health Groups, Men & Women (caregivers of children not in the programme))*

1. Knowledge on malnutrition (local words to describe malnourished children)?
2. How do you identify malnutrition?
3. How do you treat malnutrition?
4. Do you know where malnutrition can be treated/ are you aware of a program which treats malnutrition?
5. How far is the program site from the village? Distance in time (Hours) and Perception of the distance (far or close)
6. Is there stigma of malnutrition in your community?
7. Show the MUAC tape and ask if they have seen it?
Where did you see it and with who?
When did you see it (MUAC) and what was it being used for?
Are there people in this village who use this (MUAC) on your children? If yes, how often do visit the houses and measure/screen the children?
Does the outreach programme also measure the children in your village?
8. Do you know any malnourished children in the programme? How many?
9. Do you know any malnourished children NOT in the programme? What are the reasons?
10. Do you know of any children who were left the programme in the middle of the treatment (defaulting children)? What are the reasons?
How can these families be encouraged to return to the programme?
11. Do you know of children who have been rejected from the programme? Why?
12. Is there any health education in the village? Who delivers it? How often?
13. Who would be the most appropriate people (mullah, malic, mothers, CHW/CHS, health groups) to inform the community of nutrition treatment? How could they disseminate the information (method used)?
14. What are your recommendations for improvement of the nutrition treatment programme:
 - At the community level
 - At the health facility level

GUIDE 4: *Community Health Workers (CHW)*

1. How long have you been a CHW?
2. Do you screen children by MUAC? How often? Do you do door-to-door/home visits?
3. Do you follow-up your referrals?
4. Are there children who leave the programme in the middle of the treatment? If yes, Why?
Can you do anything to change their mind? If NOT, what happens to these children?
5. Are there caregivers who refuse to take their referred child to the OTP? If yes, Why?
Can you do anything to change their mind? If NOT, what happens to these children?
6. How do mothers find out about the programme, through other mothers, mullahs.. etc?
7. How can you ensure high awareness of malnutrition in your community?
8. Who would be the most appropriate people (mullah, malic, mothers, health groups etc..) to inform the community of nutrition treatment? How could they disseminate the information (method used)?
9. Do you have regular on-the-job and refresher training? By whom? How often?

10. Do you have regular supervision? By whom? How often?
11. Do you time for health education? If yes? How do you deliver it?
12. What are the challenges of your job?
13. What are your recommendations for improvement of the nutrition treatment programme:
 - For you to deliver good service
 - For the programme to deliver good service

GUIDE 5: *Health facility/OTP/TFU Staff and CHS*

1. In your opinion, what do the beneficiaries/community think of the OTP program (how do they rate the program)?
Who refers them to the OTP?
2. How often do you conduct community screening/ active case finding in your outreach programme?
Which are the current sites?
3. Have you attended any IMAM training?
Do you also have on-the-job training? How often? Is it useful?
4. Who supervises your work? How often?
5. What is the admission and exit criteria currently being used?
6. What are the main factors affecting proper functioning of OTP services, like recording and reporting?
7. Are there occasions when RUTF is out of stock? What happens when you have a new patient and no stock?
8. Do you have any defaulters in your programme?
How does defaulting affect the programme?
When does defaulting occur most and what are the probable reasons for defaulting?
Do you trace defaulters?
9. Who manages the health education in the programme?
How often do you deliver health education to patients?
How does the health education component in your programme work with the HE counterpart of the BPHS (CHS and CBHC officer)?
10. How many children are currently in your programme?
11. Is there growth monitoring at your health facility? Which children are subjected to this growth monitoring?
12. What are your recommendations for improvement of the programme?

Guide 6: *Observation checklist*

Observations at the health facility:

1. OTP stocks(if they are available)
2. Presence of IEC materials
3. OTP register(if well filled) and take snaps of the register
4. Beneficiary ration cards (with beneficiaries and blank cards)
5. Organization of the OTP program
6. Waiting time(from the time the client gets to the facility to the time she leave)

Annex 5B. Guides of qualitative data translated into Pushtu

لارښود: پروگرام کی د ماشومانو میندی او پالونکی

1. آیا تاسو څو ځلې څوایي (سوی تغذیه) پیژنئ؟ هڅه وکړئ ځایي اصطلاحات تر لاسه کړئ
2. تاسو د څو ځلې د لاملونه په اړه څه فکر کوئ؟ (د څو ځلې لپاره ځایي کلیمه وکاروئ)
3. کله چې ستاسو ماشوم ناروغ وي، په لمړۍ سر کې د درملنې لپاره چیرته ځئ؟
4. تاسو د پروگرام په اړه، چې د څو ځلې درملنه کوي معلومات څنگه تر لاسه کړل (ځایي اصطلاح وکاروئ)؟ د چا لخوا؟ ایا ستاسو ماشوم د CHW لخوا سکرین شوی؟ که شوی وي؟ څو ځله؟
5. روغتيايي مرکز ته د تگ لپاره څومره وخت ته اړتیا لری؟
6. ایا تاسو کولی شئ چې د درملنې موده تشریح کړئ (تگ لاره، د درملنې موده، هغه کارونه چې باید ترسره شي او هغه چې باید ترسره نه شي)
7. ایا پروگرام ستاسو ماشوم لپاره ګټور دی؟
8. د درملنې لپاره ستاسو د ماشوم وړل د چا په غاړه دی؟ که چیرې دغه کس شتون ونلري، بیا څه کیرئ؟
9. څه شی ددی سبب کیري چې تاسو نه شي کولی پروگرام په صحیح توګه تعقیب کړئ؟
10. ایا تاسو ته داسې ماشومان معلوم دي چې په څو ځلې څوایي باندې اخته، مګر پروگرام کې شامل نه وي؟ لاملونه یې څه دي؟
11. ایا تاسو ته داسې ماشومان معلوم دي چې پروگرام یې د درملنې په منځ کې پرېښودلی وي (غایب ماشومان)؟ لاملونه یې څه دي؟
- دغه کورنۍ پروگرام ته د بیرته راتګ لپاره څنګه وهڅول شي؟
12. ایا تاسو ته داسې ماشومان معلوم دي چې په پروگرام کې قبول شوي نه وي؟
13. ایا تاسو ته روغتيايي تعلیمات در کول کیري؟ د چا لخوا؟ څو ځله؟
14. د سوی تغذیې د درملنې په اړه د ټولنې د خبرولو لپاره څوک به ډیر وړ وي (ملا، ملک، میندی، CHW، CHS، روغتيايي ګروپونه)؟ دوی څرنگه کولی شي معلومات خپاره کړي (د کومو لارو به کار واخلئ)؟
15. ددی په خاطر چه د تغذیې پروگرام ستاسو لپاره نور هم ښه شي، څرنگه پروگرام ته وده ورکولی شو- وړاندیزونه؟

لارښود: د ټولنې غړي (ملا، ملک، د ټولنې مشران، روغتيايي شوراګانې، TBA دایه/قابله، د مکتب استادان، د کلی روغتيايي ګروپونه، نارینه اوښځینه) د ماشومانو پالونکي، نه په پروگرام کې

1. د څو ځلې په اړه پوهه (د ځایي کلیماتو په مرسته په څو ځلې څوایي اخته ماشومان دی تشریح شي) ؟
2. تاسو څو ځلې څنګه معلوموئ؟
3. تاسو د څو ځلې درملنه څرنگه کوئ؟
4. ایا تاسو پوهیږئ، د څو ځلې درملنه باید چیرته وشي/ ایا تاسو د یو پروگرام څخه خبر یاست چې د څو ځلې درملنه کوي؟
5. د پروگرام کاري ساحه ستاسو د کلی څخه څومره لرې ده؟ فاصله د وخت پر بنیاد (ساعت) او د فاصلې په اړه انګیرنه (لری یا نږدی)
6. ایا ستاسو په ټولنه کې څو ځلې څوایي ته په کرکه کتل کیرئ؟
7. د MUAC د اندازه کولو فېته وړ وښايي او پوښتنه تری وکړئ، که چیرې یې لیدلې وي؟

چیرته او له چا سره مو لیدلی؟

کله مو لیدلی (MUAC) او د څه لپاره پکار وړل شوی وو؟

ایا په کلی کی څوک شته چی دا (MUAC) ستاسو په ماشومانو کاروی؟ که چیری وی، څوځله دوی ستاسو د کورونو څخه لیدنه کوی او ماشوم مو اندازه او سکرین کوی؟

ایا د پروگرام د ټولنی د پوهاوی کارکونکی هم ستاسو په کلی کی د ماشومانو اندازه کوی؟

8. ایا تاسو په خوار ځواکی اخته کوم ماشوم په پروگرام کی لیدلی؟ څو ماشومان؟

9. ایا تاسو په خوار ځواکی اخته کوم ماشوم د پروگرام څخه بهر لیدلی؟ څه لاملونه دی؟

10. ایا داسی کوم ماشوم مو لیدلی چی پروگرام یی د درملنی په منځ کی پرینودلی وی (غایب ماشومان)؟ لاملونه یی څه دی؟

دغه کورنی پروگرام ته د بیرته راتگ لپاره څنگه وهڅول شی؟

11. ایا تاسو ته داسی ماشومان معلوم دی چی په پروگرام کی قبول شوی نه وی؟ ولی؟

12. ایا په کلی کی روغتیایی تعلیمات شته؟ څوک دا ورکوی؟ څو ځله؟

13. د سوی تغذیی د درملنی په اړه د ټولنی د خبرولو لپاره څوک به ډیر وړ وی (ملا، ملک، میندی، CHW، CHS، روغتیایی گروپونه)؟ دوی څرنګه

کولی شی معلومات خپاره کړی (د کومو لارو به کار واخلی)

14. د تغذیی درملنی د پروگرام د بڼه کولو لپاره ستاسی وړاندیزونه څه دی

- د ټولنی په کچه

- د پروگرام په کچه

لارښود: ټولنیز روغتیایی کارکونکی (CHW)

1. تاسو د څومره مودی راهیسی د CHW په توګه کار کوی؟

2. ایا تاسو ماشومان د MUAC پر بنسټ سکرین کوی؟ څوځله؟ کور په کور/کورنی ملاقاتونه؟

3. آیا تاسو خپل رالیول شوی ناروغان تعقبوی؟

4. ایا داسی ماشومان شته چی پروگرام د درملنی په منځ کی پریږدی؟ که چیری وی، ولی؟

آیا تاسو څه کولی شی ترڅو د دوی سوچ بدل کړی؟ که څه نشی کولی، پدی ماشومانو باندی څه کیږی؟

5. ایا داسی پالونکی شته چی OTP ته د خپل ماشوم د راوړلو څخه انکار وکړی؟ که چیری وی، ولی؟

آیا تاسو څه کولی شی ترڅو د دوی سوچ بدل کړی؟ که څه نشی کولی، پدی ماشومانو باندی څه کیږی؟

6. میندی د پروگرام په اړه څنگه خبریږی، د نورو مورګانو په وسیله، د ملا په وسیله او داسی نور.

7. په خپله ټولنه کی په لوړه کچه د سوی تغذیی پوهاوی څنگه یقینی کولی شی؟

8. د سوی تغذیی د درملنی په اړه د ټولنی د خبرولو لپاره څوک به ډیر وړ وی (ملا، ملک، میندی، روغتیایی گروپونه او داسی نور)؟ دوی څرنګه

کولی شی معلومات خپاره کړی (د کومو لارو به کار واخلی)

9. ایا تاسو د دندې پر مهال په دوامداره توګه ټرینینګ اخلی؟ د چا لخوا؟ څو ځله؟
10. ایا ستاسو کارونه په دوامداره توګه څارل کیږي؟ د چا لخوا؟ څو ځله؟
11. ایا تاسو د روغتيايي تعليماتو لپاره وخت لری؟ که لری؟ څو ځله یی ترسره کوی؟
12. ستاسو د دندې ستونزې کومې دي؟

13. د تغذیې درملنې د پروګرام د ښه کولو لپاره ستاسې وړاندیزونه څه دي؟

- ستاسې لپاره چې ښه خدمات وړاندې کړی
- د پروګرام لپاره چې ښه خدمات وړاندې کړي

لارښود: روغتيايي مرکز TFU/ OTP او CHS کارکونکي

1. ستاسو په نظر، ګټه اخیستونکي/ ټولنه د OTP پروګرام په اړه څه فکر کوی (دوی پروګرام ته څومره ارزښت ورکوی)؟
دوی څوک OTP ته رالیري؟
2. تاسو څو ځله په ټولنه کې سکرینینګ ترسره کوی/ ستاسې په ټولنیزې پوهاوې پروګرام کې د فعاله پېښو پیدا کول؟
اوسنۍ کارې ساحې کومې دي.
3. ایا تاسې د IMAM کوم ټرینینګ کې برخه اخیستې؟
ایا تاسو ته د خپلې دندې په مهال ټرینینګ درکړل شوی؟ څوځله؟ ایا ګټور وو؟
4. ستاسې د کار څارنه څوک کوی؟ څوځله
5. اوس مهال د مریض د داخلیدو او خارجیدو لپاره کومې ځانګړنې په کار وړل کیږي.
6. هغه کوم ځانګړي لاملونه دي چې د OTP د خدماتو، لکه راپور ورکول او ثبتولو صحیح کارکردګۍ باندې یې اغیز کړي؟
7. ایا داسې حالت رامنځته کیږي چې د RUTF ذخیره تمامه شي؟ پداسې حالت کې څه کوی چې نوی ناروغ ولری او په ذخیره کې هیڅ هم نه وي؟
8. ایا تاسو په خپل پروګرام کې غایبین لری؟
غیابت په پروګرام باندې څرنگه اغیز کوی؟
کوم وخت کې د غیابت کچه ډیره اوچته وي او د غیابت لپاره ممکنه دلایل کوم دي؟
ایا تاسو د غایبینو د کمولو هڅه کوی؟
9. پروګرام کې دروغتيايي تعليمات مسؤل څوک دي؟
ناروغانو ته روغتيايي تعليمات څو ځله ورکول کیږي؟
- ستاسو د پروګرام د روغتيايي تعليماتو برخه د BPHS د همکارانو (CHS او CBHC امر) سره څرنگه کارکوي؟
10. اوس مهال ستاسو په پروګرام کې څومره ماشومان شتون لری؟
11. ایا ستاسو په روغتيايي مرکز د ودې د نمو څارنه کیږي؟ کوم ماشومان د ودې د نمو د څارنې لپاره هدف دي.
12. ستاسو وړاندیزونه د پروګرام د ښه کولو لپاه کوم دي؟

Annex 6. Number of Health Posts, CHWs and Population for each Health Facility

# of HPs, CHWs and Population for each Health Facility					
Clinics	# of HPs	Male CHW	Female CHW	Total population	Population/HP
Karte Lagan Clinic CHC	46	46	46	110,159	2395
Mukhtar IDP Clinic CHC	12	12	12	30,875	2573
Mukhtar IDP Clinic BHC	5	5	5	17,710	3542
Qala Bust BHC	6	6	6	18,417	3070
Safiyah SHC	0	0	0		
Nad Ali distric Clinic CHC	15	15	15	94,008	6267
Said Abad Clinic BHC	2	2	2	37,696	18848
Laway Manda Clinic BHC	8	8	8	71,043	8880
Nawa Khalach Clinic CHC	22	22	22	43,150	1961
Einak Clinic BHC	10	10	10	61,194	6119
Nawa Boslan Clinic BHC	15	15	15	38,867	2591
Pinjaw do Clinic BHC	16	16	16	21,746	1359
Sorkhdoz Clinic BHC	2	3	1	38,407	19204

QUESTIONNAIRE FOR COVERED SAM CASES

Date: _____

Name of Child: _____

District : _____

MUAC: _____

Village : _____

Odemea? (+, ++, +++): _____

Name of Carer : _____

Sex: _____

Enumerator/Supervisor name : _____

Age: _____

Proof that child is in the programme (e.g. packet of RUTF/OTP Card/explanation): _____

1. How did you first know that your child was malnourished?

2. How did you hear about the programme?

3. Did you treat your child before coming to the health facility/OTP?

☐ Yes ; How?

And why did you then go to the health facility?

4. Do you know any other malnourished children in the community?

Annex 7B. Stage 2 Covered Questionnaires in Pushtu

په پروگرام کې د شامل شديده خواړواکو ماشومانو سوالنامه

نېټه: _____ د ماشوم نوم: _____
 ولسوالي: _____ MUAC: _____
 کلی: _____ Oedema? (+, ++, +++): _____
 جنس: _____
 د سروې کوونکي نوم: _____ عمر(مياشت): _____
 په ثبوت يې کړی چې ماشوم په پروگرام کې شامل دی. (مثال: د موادو پاکت/ راشن کارډ/ نور تشریحات): _____

1. تاسو څنگه پوهه شوی چې ماشوم مو خواړواکه وو؟

2. د پروگرام په اړه څنگه خبر شوی؟

3. مخکې له دې چې ماشوم مو کلنیک/OTP ته راوړی کوم نور علاج مو ورباندې کړی ده؟

☐ نه، بس

☐ هو، څنگه؟

او بیا مو ولې خپل ماشوم کلنیک ته راوړو؟

4. په ټولنه کې مو داسې ماشومان شته چې خواړواکه وي؟

5. ستاسو په نظر ولې ماشوم وکولای شو چې پروگرام ته لاسرسی وکړي؟

Annex 8A. Stage 2 Non-Covered Questionnaires in Pushtu

QUESTIONNAIRE FOR NON COVERED SAM CASES

Date: _____

Name of Child: _____

District : _____

MUAC: _____

Village : _____

Odemea? (+, ++, +++): _____

Name of Carer : _____

Sex: _____

Enumerator/Supervisor name : _____

Age: _____

Proof that child is in the programme (e.g. packet of RUTF/OTP Card/explanation): _____

1. Do you think your child is sick ?

☐ Yes ; which illness is your child suffering from ? _____

☐ No →
STOP

2. Do you think your child is malnourished?

☐ Yes

☐ No → **STOP**

3. Do you know where you can take your child to be treated (for malnutrition)?

☐ Yes ; what is the name of the programme/where is it? _____

☐ No → **STOP**

4. Why have you not taken your child to the Health Facility?

5. Has your child previously received treatment from the OTP or SFP or TFU? (circle appropriate)

☐ Yes ; why are they no longer in the programme ? _____

☐ No → **STOP**

☐ 1. Defaulter ; when ? _____ why ? _____

☐ 2. Discharged cured ; when ? _____

☐ 3. Discharged non-cured ; when ? _____

☐ 4. Other reasons : _____

Thank the carer and provide with a referral slip.

Any additional comments/observations :

Annex 8B. Stage 2 Non-Covered Questionnaires in Pushtu

د پروگرام نه پاتې د شديد خوارخواکو ماشومانو سوالنامه

نېټه: _____ د ماشوم نوم: _____
 ولسوالي: _____ MUAC: _____
 کلی: _____ Oedema? (+, ++, +++) _____
 جنس: _____
 د سروې کوونکي نوم: _____ عمر (مياشت): _____

1. آیا فکر کوی چې ماشوم مو مریض دی؟

☐ هو، ستاسو ماشوم څه مریضې لري؟ ☐ نه ← بس

2. آیا فکر کوی چې ماشوم مو خوارخواکه دی؟

☐ هو ☐ نه ← بس

3. آیا پوهیږئ چې د خپل خوارخواکه ماشوم درملنه چیرته وکړئ؟

☐ هو، د هغه پروگرام نوم څه شی دی او چیرته دی؟ ☐ نه ← بس

4. خپل ماشوم مو ولې کلنیک ته نه دی وړی؟

5. آیا د خپل ماشوم علاج مو مخکېنې په کوم OTP, SFP یا په TFU کې کړی ده؟ (د لاندې څخه یو په نښه کړئ)

☐ هو، اوس ولې په پروگرام کې نشته؟ ☐ نه ← بس

1. ☐ د پروگرام نه ورک شوی دی (Defaulter): کله؟

ولې؟ _____

2. ☐ روغ له پروگرام څخه خارج شوی: کله؟

3. ☐ ناروغ له پروگرام څخه خارج شوی: کله؟ _____

4. ☐ نورې وجې: _____

مننه ترې وکړئ او د ریفر کاغذ ورته ورکړئ چې خپل ماشوم کلنیک ته یوسي.

ستاسو په نظرولی ماشوم په پروگرام کې نشته؟

Annex 9. Case finding methodology

At each village, the survey used both Active and Adaptive Case Finding techniques to find all or nearly all SAM cases in the selected villages. MUAC and oedema of all possible SAM cases were checked and semi-structured interviews were administered to care-givers of both covered and non-covered cases.

Identified cases were defined as:

- (i) **SAM cases in the programme:** Child with MUAC <115mm or bilateral pitting oedema and in the OTP programme.
- (ii) **SAM cases not in the programme:** Child with MUAC <115mm or bilateral pitting oedema and not in the OTP programme.
- (iii) **Recovering cases:** Child with MUAC $\geq$ 115mm or no bilateral oedema and in the programme to attain discharge criteria (125mm for two weeks).

Annex 10. Stage 3 Questionnaire in English

Overall Wide Area Survey Data		
Date:		
Enumerator team:		
Village/ Name of Clinic		
Population:		
Distance from HF		
Active CHW (Yes or No?)		
Health education (Yes or no?)		
Awareness of programme (Yes or No?)		
Belief in Clinic (Yes or No?)		
COUNT OF		MUAC measurement
Number of CASES SCREENED (do tally): (total number of children measured-normal & SAM/MAM)		
HOUSEHOLDS REFUSING ENTRY:		
SAM CASES	IN Programme COVERED (MUAC <11.5cm)	
	IN Programme RECOVERING CASE (MUAC $\geq$ 11.5<12.5 cm)	
SAM or MAM	NOT IN Programme UNCOVERED (MUAC <12.5 cm)	

Annex 11. SAM cases by Villages (Stage 3)

Village	Associated Clinic, District	SAM cases IN programme	SAM cases OUT of programme	Recovering cases IN programme
Haji Ihsan	Loy Manda*, Nad-Ali	1	3	1
Anargul	Loy Manda*, Nad-Ali	0	1	0
Dr. Wazir	Karte Lagan, Lashkargah	0	3	0
Haji Khan	Pinjawodo, Nawa	2	1	0
Daro Khan	Basolan, Nawa Khalach	1	2	0
Shahjan or Abdullah Masjid	Karteh Lagan, Lashkargah	0	2	1
Yosuf	Basolan, Nawa	0	2	1
Haji Dawood	Basolan, Nawa	0	1	1
Haji Sharaf Din	Loy Manda, Nad-Ali	0	0	0
Haji Momin	Karteh Lagan, Lashkargah	0	3	1
Mohammad Saman	Pinjawodo, Nawa	0	3	1
Akhmad Shah	Pinjawodo, Nawa	0	1	1
Akhtar Mohammad	Pinjawodo, Nawa	0	0	0
Haji Mohammad Gul	Basolan, Nawa	0	3	4
Haji Abdul Razik	Karteh Lagan, Lashkargah	3	0	1
Haji Hayat Khan (Faquiran&Haji Sanam Qalai)	Basolan, Nawa	0	0	0
Mohammadullah Gul	Ainac, Nawa	0	2	0
Wakil Mohammad Omar	Loy Manda, Nad-Ali	1	4	1
Molani Habibullah Masjid	Karteh Lagan, Lashkargah	1	6	1
Khomeshan	Khalach, Nawa	1	1	0
Haji Nasar Mohammad	Nad-Ali CHC, Nad-Ali	0	4	0
Nowa Washiran	Bust IDP CHC, Lashkargah	2	1	1
Taimanian	Nad-Ali CHC, Nad-Ali	0	2	0
Cantinar Charei	Loy Manda, Nad-Ali	0	1	0
Dasht Sakander Khan	Bust IDP BHC, Lashkargah	0	0	0
Mullah Sayed Gul	Sorkhodoz, Nawa	2	0	1
Gurgan	Loy Manda	0	1	0
Sufi Mubin	Safiyan SHC, Lashkargah	1	1	1

Annex 12: Details of nutrition service provision at the health facilities of SQUEAC area

District	Facility Name	Facility Type - Nutrition Service
LashkarGaah	Karte Lagan Clinic	CHC - OTP
LashkarGaah	Mukhtar IDP Clinic	CHC - OTP
LashkarGaah	Mukhtar IDP Clinic	BHC -OTP
LashkarGaah	Qala Bust Clinc	BHC - OTP
LashkarGaah	Safiyan SC	SHC - OTP
Nad-Ali	Nad Ali distric Clinic	CHC - OTP
Nad-Ali	Laway Manda Clinic	BHC -OTP
Nad-Ali	Said Abad Clinic	BHC -OTP

Nawa-e-Barekzaye	Nawa Khalach Clinic	CHC - OTP
Nawa-e-Barekzaye	Einak Clinic	BHC -OTP
Nawa-e-Barekzaye	Nawa Boslan Clinic	BHC -OTP
Nawa-e-Barekzaye	Pinjaw do Clinic	BHC -OTP
Nawa-e-Barekzaye	Sorkhodoz Clinic	BHC -OTP

Annex 13: Key Components of Community mobilisation

Community Sensitisation:

Community Sensitisation works towards raising understanding of acute malnutrition, increasing awareness of the programme and improving health seeking behaviour. Normally the CHS/CHW work in collaboration with community and the associated HF to identify problems and solutions, and disseminate these messages through community figures like Mullah, elders, leaders, teachers, community and health Shuras, and family health action groups (FHAG).

Health Education:

To strengthen community mobilisation (and support the platform of Community Based Health Care Services), health educators dedicated to nutrition have been employed in the BHC and CHCs.¹⁶ The health educators are responsible for nutrition education at the HF as well as the community. They will train and support CHWs and FHAG groups in their community sensitisation endeavours.

Case detection:

This activity aims at timely detection by screening and referral of SAM children so that they can receive an early treatment. It can be achieved by:

1. Active-case finding by CHW, using MUAC to measure and refer SAM children in the community to the HF
2. Systematic passive screening at HF, using MUAC to measure and refer all children coming to the clinic, those that are sick or referred by CHW, or there for other reasons. This would be a second level screening for CHW referred children.

Nutrition Protocols:

OTP admission and discharge cut-off points

1. Cut-off for SAM admission was: Mid Upper Arm Circumference (MUAC) < 11.5cm OR Weight for Height/Length (WFH/L) < -3Z score (new WHO growth standards 2006), Bilateral Oedema +1/+2 (optional) and Appetite test. Children return weekly or biweekly for monitoring
2. Cut-off for SAM discharge was:

For CURED - when admitted by MUAC: MUAC greater than 11.5cm for 2 consecutive visits, 15% weight gain and no Oedema for 2 consecutive weeks. When admitted by W/H: Weight for Height/Length (WFH/L) equal or greater than -2Z score. And child is clinically well

For DEFAULT - Absent for 3 consecutive visits of treatment

For NON-RESPONSE - Not reaching discharge criteria after 4 months of treatment

¹⁶ AFG-14/S1/N/NGO/248-248-Proposal

Admission (once admission cut-off is met) and Discharge Procedures

1. When SAM child is eligible for OTP, the admission procedure includes explaining to the caregivers the purpose of the treatment and OTP, they get clear information on how to use RUTF and when to return for the next OTP visit (date and time). The caregivers are asked to repeat the messages back to ensure they are correctly understood.
2. The most important discharge procedure includes noting the discharge outcome in treatment card. Ideally, children discharged from OTP should be referred to supplementary feeding for a minimum of 2 months, regardless of nutritional status

Follow-up monitoring:

Essential for SAM children at high-risk: those absent at next visit or are defaulting, and those showing no response to treatment (not gaining weight in 3 weeks or deteriorating medical condition for 2 weeks). It includes

- ❖ Home visits by CHW/CHS to check on the status of these children and refer them back the health facility.
- ❖ Non-response after 4 months in treatment should be referred to in-patient care

When no follow-up is done then the discharge criteria should be recorded as 'UNKNOWN' in OTP treatment card. Transfers to inpatient care or other units should also be recorded.

Trainings:

The following training packages are normally conducted:

- ❖ Initial training for CHW by CBHC Officer
- ❖ Bi-annual refresher trainings for CHW by CHS or CBHC officer
- ❖ Cascaded Trainings to the community level (for example caregivers) to increase awareness using IEC material
- ❖ Training of CMAM, IYCF, micronutrients, breast feeding and breastfeeding counseling for doctors, nurses, CHS, CHWs and health care providers (health and community Shuras, FHAGs and teachers are included in some of the trainings)
- ❖ Training on screening of acute malnutrition and growth monitoring for nutrition staff to collect data through MUAC screening (includes follow-up)

Supervision:

Involves adequate supervision to support and monitor programme staff, such as:

- ❖ Monitoring MUAC measurements
- ❖ Checking Referrals
- ❖ Check whether Admissions and Discharges were made according to protocols and treatment protocols are performed correctly
- ❖ Reviewing treatment cards, particularly of children who have died, defaulted and those not responding to treatment
- ❖ Reviewing follow-up and transfer of patients

- ❖ Monthly on-the job training/supervision of CHW by CHS and CHS by CBHC Officer

Reporting:

- ❖ Referrals by CHWs for each health post (HP) are reported in health post pictorial tally sheets (Monthly Active Report (MAR) submitted to CHS
- ❖ Compilation of MAR reports belonged to all HPs falling under one HF is presented in Monthly Aggregated Activity Report (MAAR) prepared by CHS
- ❖ Systematic passive screening at the HF is reported in Growth Monitoring (GM) registers
- ❖ Monthly reporting of admission and discharge information from OTP treatment cards -reported in the Nutrition Database
- ❖ Screening activities and total SAM and normal children in the community - reported by CHW and HF staff, is fed in to HMIS (Health Management Information System)

Meetings:

- ❖ CHS meetings with key members in the community to promote a collaborative efforts in community mobilisation
- ❖ Communication meetings between key figures in the community and the health facility staff to ensure more responsive to community needs and problems.

Provision and Delivery of SAM treatment supplies:

- ❖ OTPs were provided cartons of RUTF as calculated for previously estimated SAM admissions