



COVERAGE MONITORING NETWORK



Save the Children



Semi Quantitative Evaluation of Access & Coverage Final report

Kama, Behsud and Jalalabad districts

Nangarhar Province

Date: April 2015



Funded by:



OCHA

Author: Stephen Kimanzi

Action Contre la Faim

ACF is a non-governmental, non-political and non-religious organization

TABLE OF CONTENTS

TABLE OF CONTENTS	I
LIST OF TABLES	II
LIST OF FIGURES	II
LIST OF ANNEXES	II
ACRONYMS	1
ACKNOWLEDGEMENTS	2
EXECUTIVE SUMMARY	3
1. INTRODUCTION.....	5
1.1. BACKGROUND INFORMATION.....	5
1.2. SURVEY JUSTIFICATION	5
1.3. SURVEY OBJECTIVES	5
1.4. METHODOLOGY	6
1.5. CHALLENGES AND LIMITATIONS	6
1.6. DESCRIPTION OF AREA AND POPULATION.....	6
1.7. HEALTH AND NUTRITION SITUATION.....	7
1.8. HEALTH SYSTEM.....	7
2. STAGE 1: IDENTIFICATION OF AREAS OF LOW AND HIGH COVERAGE	9
2.1. QUANTITATIVE DATA ANALYSIS	9
2.2. QUALITATIVE DATA COLLECTION.....	16
2.3. CONCEPT MAP	20
3. STAGE 2: HYPOTHESIS SETTING AND TESTING	21
4. DEVELOPING THE PRIOR	24
5. STAGE 3: WIDE AREA SURVEY	27
6. CONCLUSION.....	31
7. RECOMMENDATIONS.....	31
8. ANNEXES	35

LIST OF TABLES

Table 1: List of health facilities and services offered.....	7
Table 2: Qualitative data analysis.....	16
Table 3: Villages selected for hypothesis with results.....	22
Table 4: Small area survey results.....	23
Table 5: Boosters and Barriers (simple and weighted).....	24
Table 6: Wide area survey results	28

LIST OF FIGURES

Figure 1: Admissions over time (data based on beneficiary cards from 15 Health facilities)....	10
Figure 2: Admissions per district data from 1937 beneficiary cards.	11
Figure 3: Admissions per health facilities over the past 6 months (data from the beneficiary cards)	12
Figure 4: MUAC on admission (based on 1688 MUAC admissions).....	13
Figure 5: Standard program Indicators (data from the 1937 beneficiary cards)	14
Figure 6: Average Length of stay (data from the 1,937 beneficiary cards)	15
Figure 7: Concept Map showing a relationship between the positive and the negative factors (Jalalabad, Kama & Behsud districts, Nangarhar province).....	21
Figure 8: Reasons for non-attendance - Small area survey.....	24
Figure 9: Prior plot.....	27
Figure 10: Coverage estimate	30
Figure 11: Reasons for non-attendance - Wide area survey	30

LIST OF ANNEXES

Annex 1: SQUEAC assessment plan for Nangarhar province	35
Annex 2: villages for qualitative data collection	36
Annex 3: Key informants in the survey.....	38
Annex 4: List of boosters and barriers with sources.....	39
Annex 5: SQUEAC participants list	41
Annex 6: Wide area Results template	42
Annex 5: List of villages used for sampling	43

ACRONYMS

AADA	Agency for Assistance and Development Afghanistan
ACF	Action Contre La faim
AVDA	Afghanistan Volunteer Doctors Association
BBQ	Booster Barrier and Questions
BHC	Basic health Centre
BPHS	Basic Package for Health Services
CHC	Comprehensive Health Centre
CHF	Common Humanitarian Fund
CHS	Community health Supervisor
CHW	Community Health Worker
FANTA	Food and Nutrition Technical Assistance
IEC	Information Education Communication
IMAM	Integrated management of Acute malnutrition
LQAS	Lot Quality Assurance Sampling
MAM	Moderate Acute Malnutrition
MOPH	Ministry of Public Health
MUAC	Mid Upper Arm Circumference
OJT	On Job training
OTP	Outpatient Therapeutic Program
PND	Provincial Nutrition Director
RUTF	Ready to Use Therapeutic Food
SAM	Severe Acute Malnutrition
SCI	Save the Children International
SHC	Sub Health Centre
SMART	Standardized Methodology for Assessment of Relief and Transitions
SQUEAC	Semi Quantitative Evaluation of Access and Coverage

ACKNOWLEDGEMENTS

ACF international is grateful to all the parties who were involved either directly or indirectly in the SQUEAC assessment. ACF and SCI acknowledge the following parties for their effort and contribution throughout the exercise.

- Save the Children International Afghanistan mission for their support in the assessment, special thanks to the nutrition team in Nangarhar, Logistics and security departments for their support
- The Nangarhar assessment team led by the PNO for their commitment and tireless efforts in the entire assessment
- Health facility staff and all the key informants interviewed during the survey.
- The communities of Jalalabad, Kama and Behsud districts for being welcoming to the survey teams.
- CHF for their financial support to undertake the assessment.

EXECUTIVE SUMMARY

Save the Children International (SCI) with support from ACF international conducted a SQUEAC training and assessment in Behsud, Kama and Jalalabad Districts of Nangarhar Province, Afghanistan from 1st – 23rd April 2015. This was with the aim of building the capacity of the SCI staff as well AADA staff who are the current BPHS implementing partner on coverage assessment. This being the first assessment to be done in the province since the inception of the OTP program, the assessment was also aimed at determining the estimate coverage of the OTP program and also identify barriers and boosters to program coverage. The assessment ultimately gave practical recommendations to improve coverage in the area. With use of Bayesian technique, the assessment presented point coverage of **52.6% (41.6% - 63.4%)**.

After quantitative and qualitative data collection, the assessment confirmed range of factors having a negative effect on coverage. The most significant barriers identified were:

- 1) Insecurity in some areas, which affected screening activities and also supervision of service delivery;
- 2) Distance and lack of health posts combined to cause low program awareness in far areas;
- 3) Short duration of the funding of nutrition partners in the past have affected the continuity of services to children admitted in the program and credibility to the service (with the current funding coming to an end in May, it is likely that all gains made in the program will be lost);
- 4) Staff shortage was also noted to be a key factor where caregivers were uncomfortable with the long waiting time or rescheduling of their visits.

Several boosters to coverage were also identified. These included:

- 1) Training on IMAM for most of the OTP staff and follow up OTJ sessions, enhancing that all the staff have updated management information;
- 2) Consistent supply of RUTF was noted which was much attributed to the low rates of defaulting and the high admission numbers;
- 3) There was high awareness of the program in the community especially the villages which were near the OTP sites;
- 4) Most of the caregivers of the children in the program as well as the general population had a positive opinion about the program as being beneficial and lifesaving to the children who were severely malnourished.

Recommendations to address the identified gaps include:

- 1) Mapping of all the villages in the program area to ensure each village is attached to a health post. This will also involve reviewing the coverage targets of the CHWs and engaging more CHWs where necessary and ensuring that the CHWs are engaged as a couple in each post (male & female) unlike currently where most of the health posts were being run by male CHWs only.
- 2) The program currently has engaged one community mobilizer per district. Only one out of the six mobilizers is female. This would work better if they were engaged as a couple (male & female).
- 3) Training on IMAM with the current IMAM guideline was recommended to increase the pool of personnel who can effectively offer IMAM treatment.
- 4) To raise the program awareness in the community address it, there is a need to create unified nutrition and BPHS community mobilization plan for villages (involving key influencers in the community);
- 5) To reach every area with nutrition services, the management and the implementing partners needs to explore alternative modalities for insecure areas so as to expand the program beyond the current six districts.

1. INTRODUCTION

1.1. Background information

Nangarhar is one of the 34 provinces of Afghanistan, located in the eastern part of the country. It is divided into twenty-two districts and has a population of about 1,436,000. The city of Jalalabad is the capital of Nangarhar province. Nangarhar province borders Laghman, Kunar, Nuristan and Paktia provinces.

Nangarhar is considered as the food basket of Afghanistan as most of the crops produced here are consumed in different parts of the country. The main summer crops grown in the province are rice, maize, cotton, sunflower, beans, potato whereas main winter crops are wheat, barley, sugarcane, potato and mustard.

Although opium is still considered as the predominant crop in 12 southern districts of the province, farmers are increasingly engaging in vegetable crop production due to growing demand and relatively high benefit. The vegetables normally grown in summer are okra, tomato, eggplant, pepper, pumpkins, cucumbers, spinach, lettuce and others. The winter vegetables are onion, cauliflower, turnip, spinach, radish, carrot, cabbage etc. Rodat district is well known for potato and onion production. Most of the vegetables and crops produced are supplied to Kabul and other parts of Afghanistan. Some of the crops and vegetables are also sold locally.

Save the children International has been supporting AADA, the BPHS partner to implement nutrition services in six districts namely Kama, Jalalabad, Behsud, Kuz Kunar, Surkhrod and Rodat districts with a total population of 1,204,646. The current support has been in place since June 2014 and runs through to end of May 2015.

Only three districts out of six program districts in Nangarhar province (Kama, Behsud and Jalalabad districts) were selected for the assessment covering 68.9% of the total population of the program area. This was after putting into consideration the security situation and accessibility of the areas.

1.2. Survey Justification

This was the first nutrition coverage assessment to be conducted in Nangarhar province, even though IMAM program have a considerable time of implementation by different partners overtime. It was therefore time to assess the program coverage as well as barriers and boosters to coverage in the area. These will help to inform recommendations of improving programing and raising the coverage of IMAM program.

1.3. Survey objectives

The objectives of the survey were:

- To assess point or period coverage of SAM treatment Nangarhar province (Jalalabad, Kama and Behsud districts)
- Identify the boosters and barriers affecting the IMAM program.
- To build the capacity of IMAM program staff on SQUEAC methodology
- To provide feasible recommendations for programming advised by the factors identified in the assessment.

1.4. Methodology

The assessment employed the SQUEAC methodology¹ which involves three stages;

- Stage 1: Analysis of routine program data to identify possible areas of low and high coverage and qualitative data collection from the target communities, caregivers and health staff as well as any other relevant data to help build the hypothesis on areas with high and low coverage.
- Stage 2: building the hypothesis and testing the hypothesis through a small area survey.
- Stage 3: Estimating the overall coverage by use of Bayesian technique.

1.5. Challenges and limitations

Insecurity

The initial objective of the assessment was to cover all 6 districts of the OTP program. The security situation however limited the survey area to only half of the districts and thus the assessment findings are only relevant for the districts included in the assessment. Mentoring of the teams on qualitative data collection through field supervision was not possible since it was impossible for a non-local staff to go to the field.

Limitations

The data available for analysis was limited to the six months Save the Children International (SCI) has been supporting the IMAM program. Change of the implementing partner meant that all data with the previous partner could not be traced, exposing a gap in the lack of adequate program data collection and analysis for consistent nutrition programming. This meant that it was not possible to do the seasonal variations in admissions as well as comparing exits with seasonality.

1.6. Description of Area and Population

Kama, Jalalabad, Behsud districts have an estimated total population of 830,064². Of this population 20%³ are children under five years of age. The three districts have an estimated

¹ M Myatt et al 2012 Semi-Quantitative Evaluation of Access and Coverage (SQUEAC)/Simplified Lot Quality Assurance Sampling Evaluation of Access and Coverage (SLEAC) Technical Reference. Washington, DC: FHI 360/FANTA

² Ministry of Public Health 2014-2015 figures

307 villages with Behsud district accounting for the most districts. Each village is headed by a Malek who is normally the most respected person in the community and usually a wealthy person. The three districts have a deeply rooted culture where all female members of the community are not allowed in public unless accompanied by mahrams.

1.7. Health and Nutrition situation

Save the Children International has been supporting AADA to implement the IMAM program in Nangarhar province. The program has currently been successfully implemented in six districts out of the 22 districts in the province, with efforts to roll out the program in more districts.

ACF supported SCI and AADA to conduct a SMART survey in the month of Dec 2014 to establish the prevalence of malnutrition in the province. The survey covered the five districts (Jalalabad, Surkhrod, Kama, Behsud, and Kuzkunur Districts) due to the others being insecure. The survey showed a GAM rate of 5.6% (3.9 - 7.9) and a SAM rate of 0.6% (0.2 - 1.5)⁴. Numerous activities to recruit the severely malnourished, not limited to mass screening and scaled up community screening have been in place. The SFP program to treat the moderately malnourished has however stalled due to lack of supplies. The untreated MAM cases are likely to progress to SAM, which can further increase the burden in SAM treatment.

1.8. Health system

The IMAM program in Nangarhar is currently supported by SCI in partnership with AADA since June 2014. The admissions to the program started in October 2014 owing to delay in RUTF supply to the facilities. Six districts out of the 22 districts in the province are supported, covering a total of 33 health facilities (see table below for the facility names, type and services offered). The program has engaged Nurses specifically for the IMAM program, one in each health facility who are additionally recruited by SCI. There are 5 community mobilizers recruited by SCI, one per district. Out of these community mobilizers, 4 are male and only one female engaged in the mobilization. There are several HPs in the program, whose major nutrition activities are screening and referral of malnourished children and defaulter tracing and also passing nutrition related messages in the community. A considerable number of villages still lack a health post, with most of the villages having one CHW mostly male and not a couple (male and female) as per the CBHS guideline.

The SQUEAC assessment covered three districts; Behsood district, Kama district and Jalalabad city with a total of 15 health facilities covered.

Table 1: List of health facilities and services offered

No	District	Facility name	Facility Type	Nutrition service offered
1	Kama	Kama	DH	TFU/OTP

³ Ministry of Public Health 2014 projection

⁴ Nangarhar SMART survey, ACF, December 2014

2		Zakhil	SHC	OTP
3		Landaboch	BHC	OTP
4		Sang Arsary	CHC	OTP
5		Shaga	BHC	OTP
6	Kuz Kunar	Atawor	BHC	OTP
7		Khewa	CHC	OTP
8		Bark Ashkot	SHC	OTP
9		Joy haft	CHC	OTP
10	Jalalabad	Zaren Abad	BHC	OTP
11		AVDA	BHC	OTP
12		Hesarshahi	CHC	OTP
13	Rodat	Baro	BHC	OTP
14		Kan	BHC	OTP
15		Qalimeji	BHC	OTP
16	Behsood	Najmuljahad	BHC	OTP
17		Najmulgura	CHC	OTP
18		Nahrishahi	BHC	OTP
19		Balndghar	CHC	OTP
20		wachtangi	BHC	OTP
21		Qalikhiali	BHC	OTP
22		Sarachaalikkhan	SHC	OTP
23		Kariz kabeer	SCHC	OTP
24	Surkhrood	Charbaghsafa	SHC	OTP
25		Bakhtan	BHC	OTP
26		Lower shikh Mesri	BHC	OTP
27		Upper shikh mesri	BHC	OTP
28		Sultan poor	CHC	OTP
29		Shamshapoor	BHC	OTP
30		Kankrak	BHC	OTP
31		Chamtala one	BHC	OTP
32		Chamtala two	BHC	OTP
33		Amarkhil	BHC	OTP

2. STAGE 1: IDENTIFICATION OF AREAS OF LOW AND HIGH COVERAGE

This stage involved the collection of both quantitative and qualitative data to identify possible areas of low and high coverage. Quantitative data was collected by extracting the data about the program from the registers and the OTP cards. Other contextual information relevant to the OTP program, i.e. data on morbidity trends, weather patterns, migrations, labor demands and support to the OTP program was also collected and analyzed to give more insight about the program.

The program data collected included the admission data (total number of admissions per month by MUAC, WHZ and oedema). For children admitted by MUAC, the measurement on admission to determine the stage of admission, program exits per month (cured, deaths, defaulters transfers and non-recovered), moment of default and length of stay in the program for the cured cases were analysed.

2.1. Quantitative data analysis

Monthly admissions

Data on monthly admissions was extracted from the beneficiary treatment cards. The OTP registers were also used to triangulate with the data in the cards as all the cases in the treatment cards are also included in the OTP register. One of the challenges was the availability of the program data from the previous implementing partner, which limited the level of analysis on the data as only data for the last six months, since Save the Children International has been supporting the program, was available.

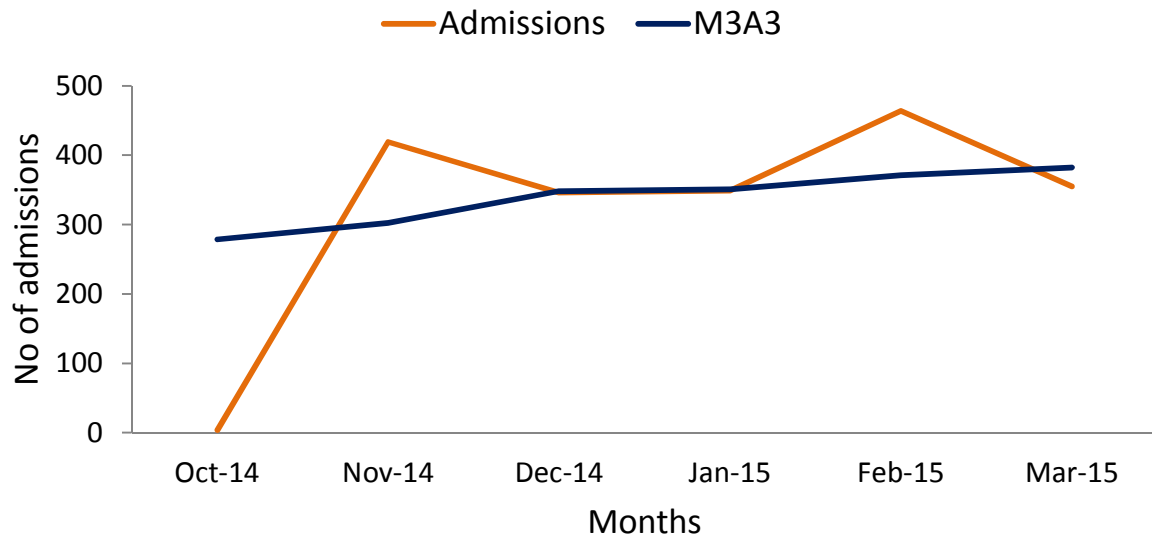
Analysis of the data showed that the admissions trends were constant, regardless of the seasonal variations in the program. The program implementation includes several activities potentially enhancing admissions e.g. mass screening in the villages, consistent supply of RUTF etc. In the very beginning, the program experienced delayed delivery of RUTF and therefore few admissions⁵. It is also likely that the program is reaching more new villages with the mass screening hence the lack of a decline in the admissions, as the SMART survey results did not indicate a worsening nutrition situation.⁶

The raw admission data was smoothed using moving medians of 3 months followed by moving averages of 3 months (M3A3) to show seasonality and trend. This is as shown in the figure below;

⁵ Current IMAM support started in June but admissions started in October when stocks were available

⁶ Nangarhar SMART survey, December 2014 - SCI/ACF

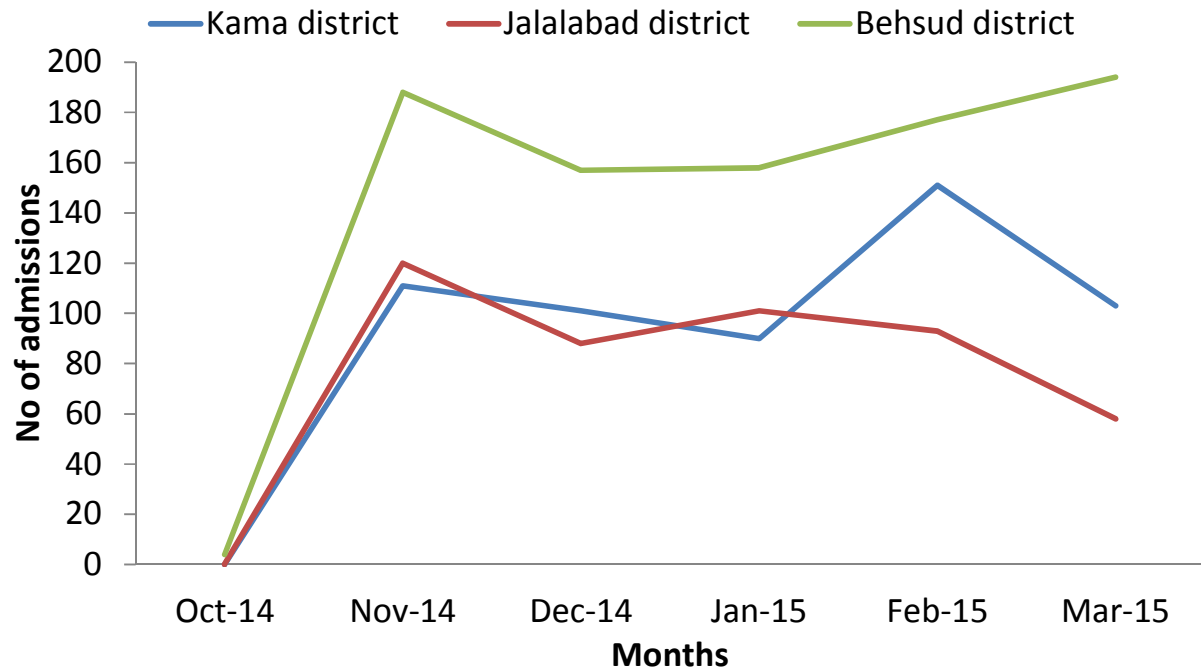
Figure 1: Admissions over time (data based on beneficiary cards from 15 Health facilities)



	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15
SCI support						
RUTF Supply						
Weather patterns	Warm	Warm	Cold	Cold	Cold	Warm
Migrations in						
Migrations out						
Farming						

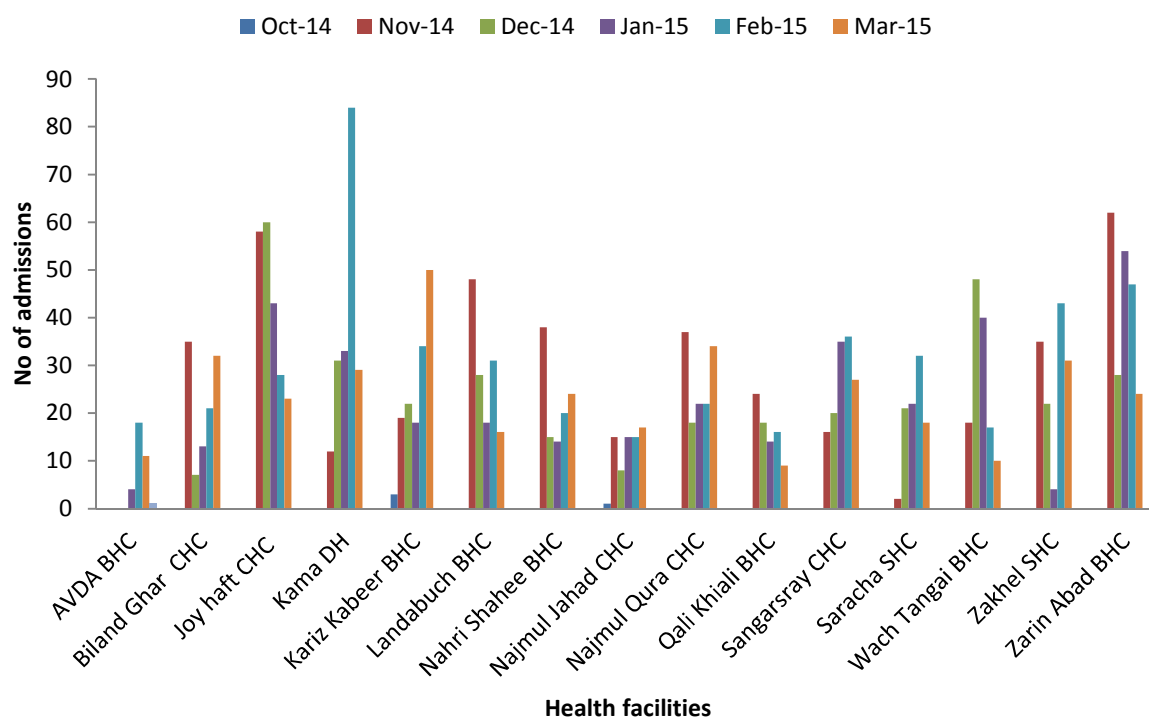
Analysis of the admissions per district showed that admissions in the districts were consistent with the district populations and the number of OTP sites in the districts; the most populated district having the biggest number of OTPs had highest number of admissions.

Figure 2: Admissions per district data from 1937 beneficiary cards.



The below analysis of the admissions by the health facilities showed that admissions had followed the same trends in all the sites. AVDA BHC had the lowest number of admissions, owing to its small coverage area and with the lack of HPs attached to it.

Figure 3: Admissions per health facilities over the past 6 months (data from the beneficiary cards)

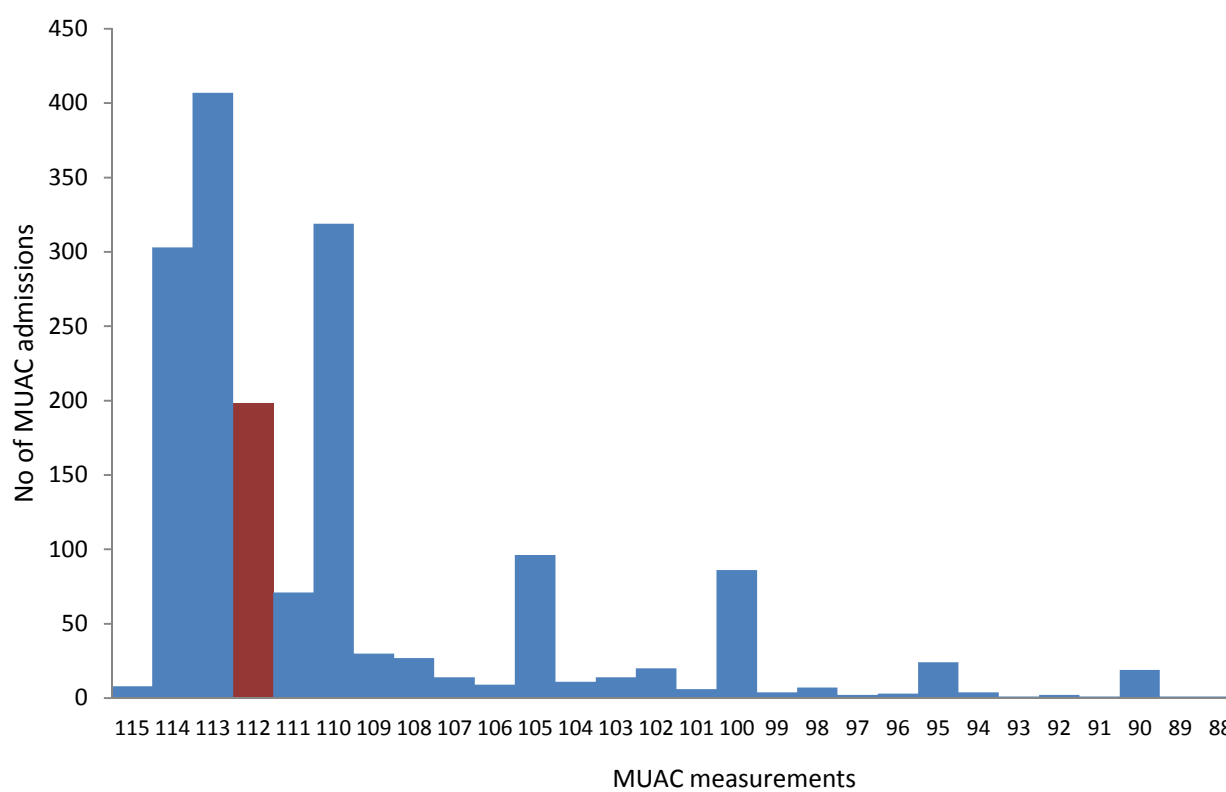


MUAC on admission

Analysis of the frequency of the MUAC measurements below 115 mm at the moment of admission might be used as a proxy indicator to understand whether the caretaker are sensitized to bring their children to the center on time and whether the measures for early detection of cases (such as mass screening and referral) are efficient. In a larger sense, this indicator can inform about the health seeking behaviors of the caregivers or whether caregivers can be able to notice a change in the nutritional status of their children and their speed of seeking care in that regard. Children admitted to the program with a MUAC measurement near the cutoff point of 115 mm indicated early treatment seeking with less complications and short stay in the program. MUAC measurements far from the cutoff point are indicative of late treatment seeking and possible complications related to malnutrition hence long stay in the program and possible defaulting which can have an end result of a negative opinion about the program.

The analysis as shown in the figure below shows a median MUAC of 112 mm which is indicative of early admissions. Most of the children were admitted with a MUAC measurement above 110 mm. this suggests good treatment seeking behavior in the three districts. There was however few cases admitted with a MUAC less than 100mm which suggest late admissions and possible SAM related complications.

Figure 4: MUAC on admission (based on 1688 MUAC admissions)



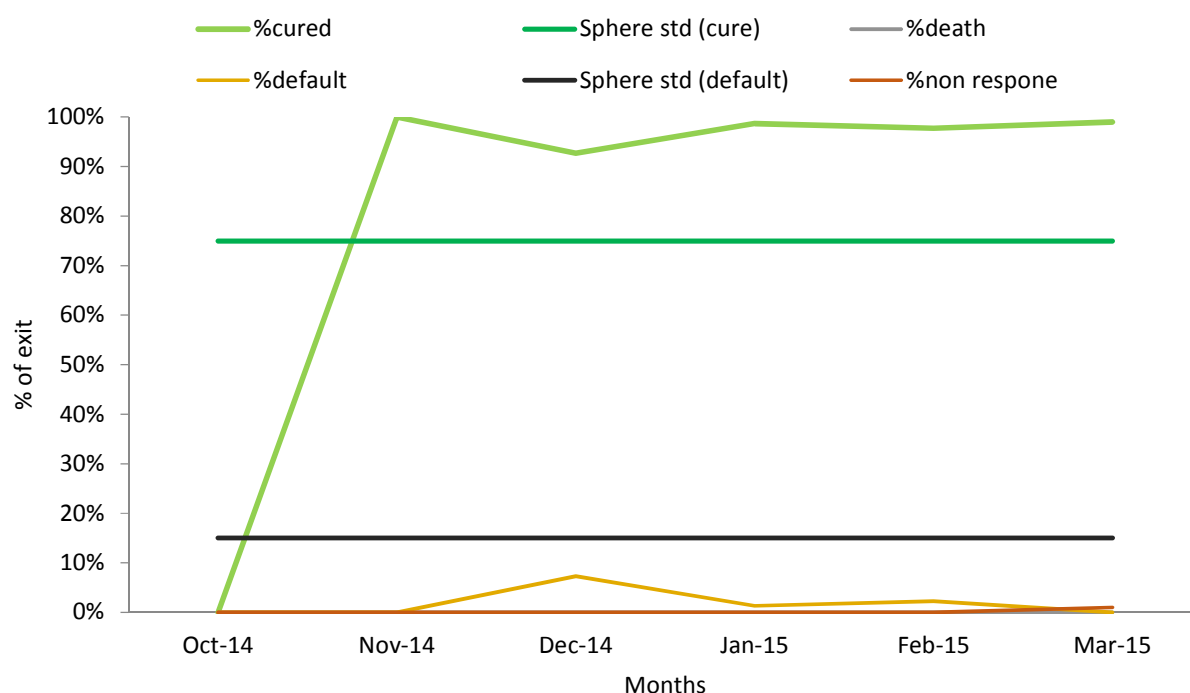
Standard program indicators

This is the analysis of the program performance indicators and comparing them with the SPHERE standards⁷. The indicators analyzed are the cure rate, default rate, death rate and non-response rate. Analysis of the program data on exits showed that the program consistently recorded high cure rates with low levels of defaulting. The data analyzed was for the first six months of program implementation when activities are expected to be optimal hence measures should be in place to ensure consistent high cure rates and low defaulting is maintained. The program has so far put in place good measures to prevent defaulting as well as having a working defaulter tracing mechanism. Consistent supply of RUTF was quoted by the program staff as the main factor preventing defaulting. Some of the cases identified during the hypothesis testing reported that they had defaulted in the previous program support period due to lack of stocks. The program has been able to prevent defaulting by contacting any absentees in the program through the contact details recorded in the beneficiary cards. Contextual information indicates that the program is likely to experience high defaulting in the months of April to June when migrations out of the province are highest. Measure to curb the defaulting are therefore recommended key among them being the effective use of transfer cards to the migratory areas. It is also highly recommended that CHWs be supported more to monitor the beneficiaries within their areas of work, with

⁷ Sphere Handbook, 2011

more emphasis being on detecting any absenteeism and notifying the caregivers of the option of transfer cards when they have to move.

Figure 5: Standard program Indicators (data from the 1937 beneficiary cards)



Time of default

Analysis of time of default is important to understand at what stage defaulting occurs most and the potential impact it can have on the defaulting child. Cases which default from the program early (4 visits and below) are likely to be active SAM cases in the community with a possibility of having developed more complications. Late defaulters are likely to have received a treatment of proven efficacy and therefore are likely to be cured or recovering cases in the community.

The program data showed very few (11) marked defaulters. This low number of defaulting made it hard to draw a conclusion on defaulting in the program, both on the trends of defaulting and the stage of defaulting. There were cases discharged as transfers to other IMAM sites and with lack of clear records on the transfers, these are likely to be children who defaulted and presumed to be transfers.

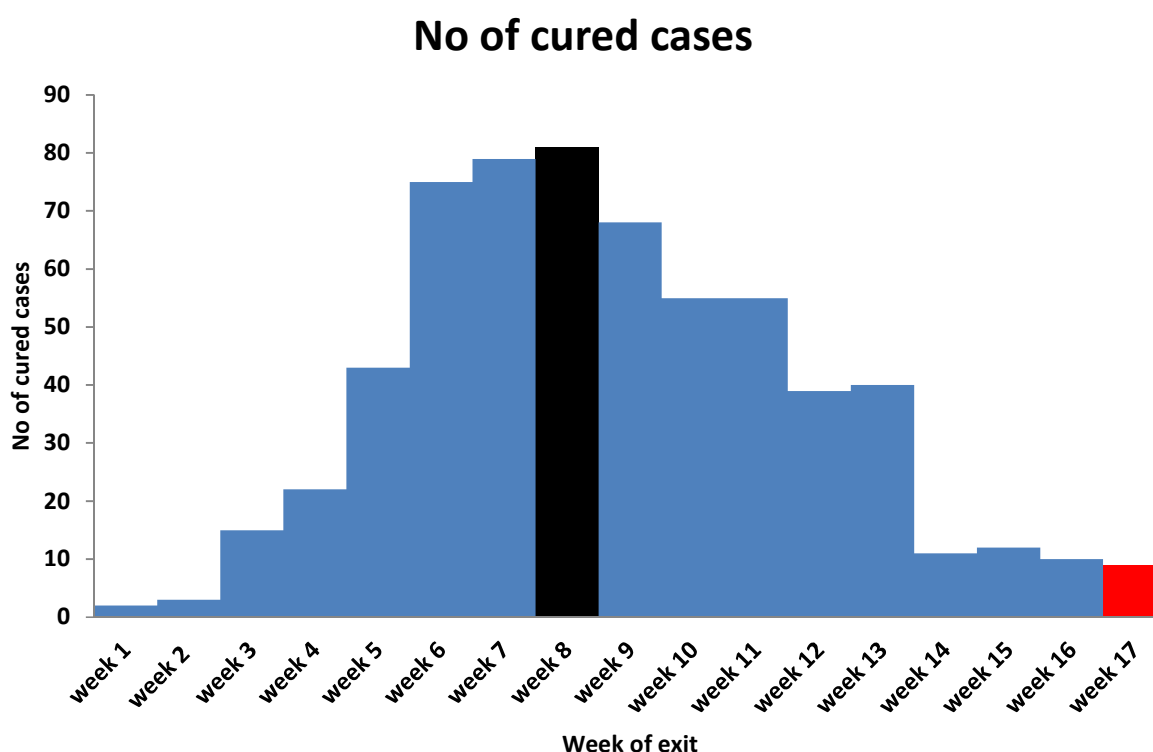
Length of stay

Length of stay is subjective of many factors, which may include lack of adherence by the caregiver to management (lack of continuity of care, intra household sharing etc.) and also

lack of adherence by the program staff (e.g., failure to give a systemic treatment, RUTF stock-outs). Time of admission (early or late admission) can also determine the length of stay. Cases admitted with MUAC > 11.5 and WHZ close to -3 Z-scores are anticipated to have shorter length of treatment. Programs with long treatment episodes are likely to have high defaulting and hence poor opinion about the program from the community.

The average length of stay calculated from the program data was 8 weeks. According to the IMAM guidelines for Afghanistan, discharges from treatment for both MAM and SAM follow the same criteria. For a child admitted by MUAC, the child has to reach a MUAC measurement equal or greater than 12.5 cm for 2 consecutive visits. For a child admitted by WFH/L, the child has to reach a WFH/L score equal or greater than -2Z scores for 2 consecutive visits, and no edema for at least 2 weeks for children admitted with edema. Based on this exit criteria, a child admitted with a MUAC <11.5 cm or a WFH/L score <-3Z score will take considerably longer than the optimal time of below 4 weeks to cure from the program and thus the cured cases with less than 4 weeks in the program may not have followed the national IMAM guidelines in place. The data showed that there were few cases of overstay in the program beyond the 4 months (16 weeks) of maximum stay⁸.

Figure 6: Average Length of stay (data from the 1,937 beneficiary cards)



⁸ Afghanistan IMAM guideline, January 2014

2.2. Qualitative data collection

Qualitative data was collected through different sources and with different methods such as informal group discussion, semi structured interviews, in depth interviews and observation check lists. Triangulation of the data was done and the discrepancies detected following the triangulation, informed on what further data needed to be collected and how. This process involved daily organization of data using the BBQ approach (Barrier, Booster and Question)⁹. The tools used to collect the data were informal group discussion guides, semi structured interview guides, in depth interviews and observation check lists at the health facilities. Guides to collect the required information were formulated and were administered to TBAs, THPs, community leaders (Mullah, Malek), and care givers of children in the program, caregivers of children not in the program, caregivers of defaulting children, facility staff and CHWs¹⁰. Management staff were also interviewed. The observation checklist was used at the health facilities which are also the OTP sites to check for presence of IEC materials, presence of stocks, ration cards, documentation in the OTP registers, organization of the OTP program and waiting time for the caregivers during feeding days. This ensured that information about the program was collected from those involved both directly and indirectly in the OTP program.

Qualitative data was collected by five teams consisting of one supervisor and two enumerators. This was done in four days in all the OTP sites and in 14 purposively selected villages¹¹. These were selected putting into consideration the distance to the OTP sites (near and far), economic status (poor and rich), number of admissions in the OTP sites from the villages and livelihood status. Findings were categorized into either positive or negative factors (boosters or barriers)¹². The findings are as shown below;

Table 2: Qualitative data analysis

Positive Factors	Explanation
Most of the health workers are trained on IMAM with follow up OJT sessions at the health facilities	This information was collected by interviewing the health workers in the OTP sites on when they had received IMAM training and which guideline was used for the training. The program supervisors were also interviewed and confirmed of most of the facility staff being trained on IMAM. Interviews with the OTP nurse reported weekly OJT sessions in the facilities.
Regular RUTF supply	There has not been a supply breakdown in the program since October 2014. This was confirmed by observations in the records of the health

⁹ See annex 4

¹⁰ See annex 3

¹¹ See annex 2

¹² See annex 4

	facility stores and also interviews by nurses and CHWs. Caregiver interviews also reported that supplies have been available for every distribution.
Positive opinion of the OTP program	Benefits of the program were reported across board, with the caregivers of children both in the program and not in the program reporting of the benefits it had on their children. The community elders reported RUTF as a commodity which has been helpful to poor children, showing a high possibility it is treated as food as well. There was however no evidence of intra household sharing of RUTF
Friendly health facility staff	Caregivers reported good relationship between the health facility staff and the beneficiaries. Even though the waiting time at the facility was relatively long, caregivers didn't report the waiting time as a problem. This was reported by almost all caregivers. Only a few community leaders who didn't have a clear understanding of the program had the perception that the program was selective.
Screening of all the under-fives in the health facilities	Observations at the health facilities showed that there was good organization and integration of services. All children under five were screened on entry to each facility, then referred to the respective service point.
High awareness of the program in most of the caregivers	There is a high awareness in most of the caregivers both in the program and not in the program. Some caregivers reported having learnt of the program from their neighbours. Majority of the mothers could even explain the MUAC cut off points.
Availability of well updated HMIs tools at the health facility	All the beneficiary cards were available and well updated. The registers contained all the beneficiaries in the cards. There was good monitoring with the dates in the local language in the cards, making them user friendly
Mass screening at the community	Information on mass screening was verified by both the program staff, facility staff, CHS and the CHWs. Analysis of the program data showed most of the admissions being by MUAC indicative of community screening. Mass screening was

	however limited to the near villages due to accessibility and security
Regular supervision of the OTP program by the various nutrition actors with feedback meetings	Interviews with the PNO, the program staff and the facility staff were conducted to get information on the frequency of supervision to the OTP sites. At least monthly supervisory visits are done with feedback sessions being held to the facility staff
A working defaulter prevention and tracing mechanism	All the beneficiary cards had contact details of the beneficiary caregiver including the village name. Interviews with CHWs reported that caregivers are contacted when they miss distributions and even followed up in their respective villages. The challenge however was the shortage of CHWs with some villages not covered by CHWs
IEC materials at the health facilities	OTP sites had IEC materials pinned on the wall with educative messages which were translated to the local Pashtu language.
RUTF ration monitoring with caregivers returning the empty sachets for every distribution	This was confirmed by interviews with CHWs who reported that for a mother to get another ration, she has to produce empty sachets of the previous distribution. This is a measure to prevent mismanagement or selling of the rations.
Integration of services at the facility for all the beneficiaries	Every child who comes to the facility is offered other services including growth monitoring, IYCF messages and education on good hygiene messages. This was evidenced through observations and interviews with facility staff.
High Cure rates	The program had consistently high cure rates (>75%)
Negative Factors	Explanation
Insecurity in some areas	Most of the areas are not accessible with ease. Out of the six program districts, only three were secure enough to be assessed.
Long distances affecting some areas	Mothers in some areas have to walk more than an hour to reach the program site. In such very few were in the program despite the program adjusting to biweekly visits. Awareness was also low in the villages far from the program sites.
Lack of program awareness in some key community people and in some far areas	Community leaders, Mullas and some care givers in areas far from the program sites had little or no information about the program. There were

	no HPs in the areas from which information could have been passed.
Staff turnover hence hard to sustain the trained staff	Some of the OTP nurses interviewed (4) were newly recruited and hence not trained on IMAM except through the OJT sessions. This indicated a gap in the number of staff fully trained on IMAM
Lack of health posts in some areas	Villages with few admissions were visited and among the reasons for low admissions was lack of health posts. Some caregivers reported screening to have taken place more than 3 months ago.
Migration causing defaulting	Interviews were held with caregivers of defaulters. Due to the migration, it was only possible to interview the mothers on phone. IMAM staff and CHWs interviewed on defaulting reported migrations as a major cause of defaulting. All the 11 defaulters in the program were due to migrations to locations far from the program areas.
Short funding duration of nutrition partners affecting continuity of services	During the small area survey, one of the cases had been a beneficiary in 2014 before the program came to a stop. The case was still an active case almost a year after leaving the program due to funding issues. The current program support expires end of May 2015
Lack of the SFP program hence most of the MAM cases deteriorate leading to high admissions	Currently the SFP program is not ongoing in the province due to lack of the RUSF supplies. Several MAM cases were found both in the small area survey and the wide area survey. These cases are more likely to deteriorate to SAM cases due to lack of management.
Lack of a standard procedure to motivate the CHWs	During the interviews with the CHWs, one of the areas was to give recommendations for improvement. Most of the CHW cited lack of motivation in terms of airtime and transport facilitation as a reason for not meeting their targets.
Lack of program flexibility to culture (lack of enough space for mothers' privacy at the OTP centers)	The waiting area of the OTP sites is not big enough to accommodate a high number of caregivers. Due to culture the caregivers were uncomfortable with the small space especially if they are being served by a male nurse.
Staff shortage leading to long waiting time for OPD-SAM services	The average waiting time observed for an OTP beneficiary is 1.5 hours due to the high number

	of beneficiaries. The program reported to operate all the days of the week except Fridays. However each health facility has got one staff dedicated for the IMAM program, and interviews with the mothers reported that the caregivers are rescheduled for a different date in days with high beneficiary turnout.
Home treatment of malnutrition before hospital management	Provision of the perceived nutritious food combined with some local herbs was rampantly reported. This is the first measure most of the caregivers took, if it failed then the malnourished children were taken for management. This was majorly reported through discussions with caregivers and community elders of villages which were far from the OTP sites

2.3. Concept Map

The boosters and barriers identified were organized in a concept map to show a relationship between the factors. The figure below shows how the positive factors relate to improve coverage and also the relationship of the negative factors to lower coverage. The map also shows how some negative factors can link to the positive factors to lower coverage.

- High admissions were noted in the villages which were near the OTP sites and few admissions in far villages
- Health posts concentrated in near villages and very few in the far villages. Those in far villages are less effective.
- Follow up visits in OPD-SAM are done on a weekly basis in the near villages and biweekly in the far villages.
- Regular mass screening was reported in the near villages due to easy access whereas it lacked in the far villages due to limited access.

Villages with the identified characteristics (near with HPs and far without HPs) were purposively¹³ selected. Any distance more than 30 minutes' walking was classified as far, while distance less than 30 minutes walking was classified as near. This was based on the information on perception of distance collected in stage one. Accessibility to the villages was good, with all villages in the study area validated for access and thus selection of the far villages which are occasionally insecure was easy which are.

This hypothesis was tested through a small area survey where active and adaptive case finding was used to look for the SAM cases. This was by actively looking for all the SAM cases by using information collected from key informants in the village. Local terms for malnutrition were used to describe a child with malnutrition. The search for the cases in each village was done exhaustively ensuring all SAM cases in the selected villages were found. All teams moved with RUTF sachets to help them establish from the mother of their children were under SAM treatment. The table below shows the list of the villages selected and the results.

Table 3: Villages selected for hypothesis with results

Village	CHW	Distance	SAM cases in Program	SAM cases not in program	Recovering Cases in Program
Narang Bagh	Yes	Near	2	0	6
Zakhel	Yes	Near	10	0	5
Amem sahib	No	Far	0	0	0
Sheer gar	No	Far	0	2	1
Qala Mulakh	No	Far	0	1	0
Degan	Yes	Near	3	1	4

¹³ 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.

Mirzaheil	No	Far	1	0	2
Tagaw camp	No	Far	1	2	1
Bahra abad	No	Far	1	5	0
Darwazgai	No	Far	1	0	1

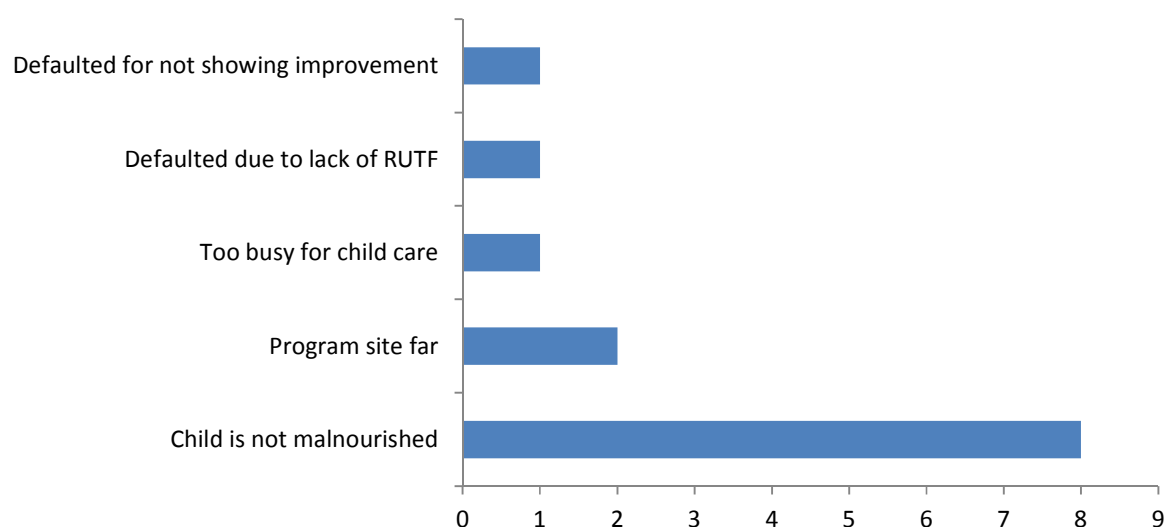
The hypothesis was tested by applying the simplified LQAS formula $d = (n/2)$ against the 50% Sphere standard for coverage for rural areas. The results for the villages near were summarized as shown below with the final conclusion that coverage was high in villages near the SAM treatment centers and with HPs and low in villages far from the SAM treatment centers and with no HPs.

Table 4: Small area survey results

Villages near to the SAM treatment centers and have a HPs		Conclusion
Coverage Target	50%	The number of SAM cases covered (15) was more than the 8 (50%). The hypothesis on high coverage in villages near with a HP was therefore confirmed.
Sample size (Total SAM cases)	16	
Decision Rule	$D = n/2$ $D = 16/2 = 8$	
No of SAM cases covered	15	
Villages far from the SAM treatment centers and don't have HPs		Conclusion
Coverage target	50%	The number of SAM case who are covered (4) was less than 7, and therefore the hypothesis on low coverage on far villages without a HP was confirmed.
Sample size (Total SAM cases)	14	
Decision Rule	$D = n/2$ $D = 14/2 = 7$	
No of SAM cases covered	4	

A standard questionnaire for non-covered cases was applied to all the caregiver of the children who were found not to be in the program. This was to acquire more information on knowledge of malnutrition, knowledge of the program and other reasons why the child was not in the program. The figure below shows the reasons as to why the children were not in the program.

Figure 8: Reasons for non-attendance - Small area survey



4. DEVELOPING THE PRIOR

To develop the prior, three methods were used to ensure triangulation. An average of the weighted boosters and barriers score, unweighted boosters and barriers score (simple scores and the histogram score) was used to get the prior value and define the prior mode using Bayesian calculator. In getting the weighted boosters and barriers score, all the boosters and the barriers which were triangulated by source and method were organized and given a score of positive for boosters and negative for barriers. The score of (1-5) was given based on how much the booster or barrier contributed to coverage. A total of the boosters score (based on the lower value anchor (0) and the barrier score (based on the upper value anchor 100%) is as shown in the table below.

Table 5: Boosters and Barriers (simple and weighted)

	BOOSTER	SIMPLE SCORE	WEIGHTED SCORE	BARRIER	SIMPLE SCORE	WEIGHTED SCORE
1	Most of the health workers are trained on IMAM with follow up OJT sessions at the health facilities	5	5	Insecurity in some areas	-5	-4
2	Regular RUTF supply	5	5	Distance affecting some areas	-5	-4
3	Positive opinion of the OTP program	5	5	Lack of program awareness in some key community people and in some far	-5	-3

				areas		
4	Friendly health facility staff	5	3	Staff turnover hence hard to sustain the trained staff	-5	-4
5	Screening of all the under-fives at the facility	5	5	Lack of health posts in some areas	-5	-4
6	Screening and referral of cases from the community by CHWs and Health Shoras	5	3	Migrations causing defaulting	-5	-2
7	High awareness of the program by most of the caregivers	5	3	Short funding duration of nutrition partners affecting continuity of services	-5	-2
8	Availability of well updated HMIS tools at the health facility	5	5	Lack of the SFP program hence most of the MAM cases deteriorate leading to high admissions	-5	-3
9	Mass screening at the community	5	3	Lack of a standard procedure to motivate the CHWs	-5	-2
10	Regular supervision of the program by the nutrition actors with feedback meetings held	5	4	Lack of program flexibility to culture (lack of enough space for mothers' privacy at the OTP centers)	-5	-1
11	A working defaulter prevention and tracing mechanism	5	4	Staff shortage leading to long waiting time at the OTP sites	-5	-3
12	IEC materials at the health facilities	5	3	Home treatment of malnutrition before hospital management	-5	-2
13	RUTF ration monitoring with caregivers returning the empty sachets for every distribution	5	3			
14	Integration of services at the facility for all the beneficiaries	5	3			
15	High Cure rates and low defaulting	5	5			
	Sum	75	59	Sum	-60	-34
	Lowest possible coverage	0	0	Highest possible coverage	100	100
	Total Score	75	59	Total score	40	66

Weighted scores

Each identified factor was given a score of between 1 (low significance) and 5 (high significance). The score given was determined by how much the factor was confirmed to be true by the different sources and methods and also the impact the factor (booster or barrier) had to coverage. Factors which were confirmed by many sources and methods were given high scores.

The total sum of the boosters was added to the lowest possible coverage $(0 + 59) = 59\%$

Total sum of the barriers was subtracted from the highest possible coverage $(100 - 34) = 66\%$

Prior mode from the weighted boosters and barriers is $\frac{59\% + 66\%}{2} = 62.5\%$

Simple scores

All the boosters and the barriers were given the maximum score of 5. This was with the assumption that all the boosters and barriers had the same impact to coverage.

The total sum of the simple boosters was added to the lowest possible coverage $(0 + 75) = 75\%$

Total sum of the simple barriers was subtracted from the highest possible coverage $(100 - 60) = 40\%$

Prior mode from the simple boosters and barriers is $\frac{75\% + 40\%}{2} = 57.5\%$

Histogram

The histogram prior was developed based on the belief that coverage could not go below 30% as shown by the findings (presence of some boosters) and that it couldn't go beyond 70% since there were barriers to coverage identified in the survey. The best belief about coverage by the histogram was agreed to be 55%.

A histogram prior-developed based on the belief that coverage could not be below <10% as depicted by findings (due to presence of some boosters to coverage) or very high (>80%) since there were some barriers to coverage. The overall prior mode was therefore calculated by taking the mean of the three modes calculated above

$$\frac{62.5\% + 57.5\% + 55.0\%}{3} = 58.3\%$$

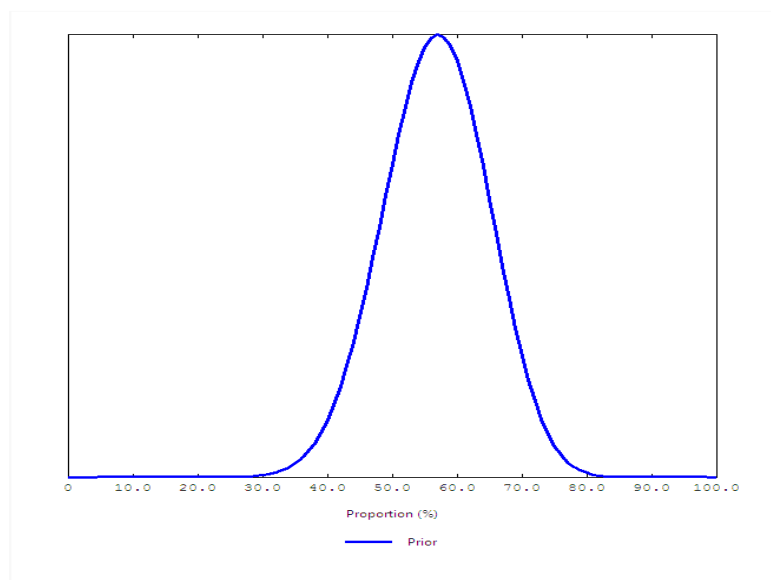
Prior plot

The prior mode value of 58.3% was used to plot the estimate coverage on the BayesSQUEAC Coverage Estimate Calculator (version 3.01)¹⁴. The plot was obtained by adjusting the prior α and prior β values to have the curve at approximately 58.3% with an uncertainty of ± 25 . This

¹⁴ The latest version of Bayes estimate calculator available freely at www.brixtonhealth.com

being the first assessment to be conducted in the area, a high uncertainty was expected. The plot is as shown below with the prior alpha value of 20.8 and beta value of 15.9;

Figure 9: Prior plot



5. STAGE 3: WIDE AREA SURVEY

This stage involved providing an overall coverage estimate for the three assessed districts by use of the Bayesian technique.

Sampling

The sample size for the number of SAM cases to look for in the wide area survey was calculated with the prior mode of 58.3%, a prior $\alpha = 20.8$, prior $B = 15.9$ and a precision of 12%¹⁵ the following formula below which gave a SAM sample of **30 cases** for the wide area survey:

$$= \frac{mode(1 - mode)}{(precision \div 1.96)^2} - (\alpha + \beta - 2)^{16}$$

Village sample size was also calculated average village size of 1803¹⁷, 20%¹⁸ as the percentage of children Under 5s and a SAM prevalence of 0.4%¹⁹, 20 villages were sampled to be visited in Jalalabad, Behsud and Kama districts. The formula below was used to calculate the number of villages:

¹⁵ Prevalence of SAM by MUAC is low

¹⁶ FANTA SQUEAC technical reference

¹⁷ Updated village population for 2014 used for immunization targeting

¹⁸ MOPH Nangarhar province projections 2015

¹⁹ Nangarhar province 2014 SMART survey

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

The 20 villages were selected through systematic random sampling since there was an updated list of villages in the three districts available and the available maps did not have all the villages updated. Ten villages were selected in Behsud district, three in Kama district and seven in Jalalabad districts.

Data collection

In all the sampled villages, all the children 6-59 months were screened by MUAC to look for the SAM cases. Five teams each consisting of 1 supervisor and 2 enumerators carried out the exercise for 4 days. A SAM cases (having MUAC<115 and/or bilateral oedema) tally sheet was used, which recorded the cases in program, not in program and the recovering cases. A referral slip was issued to all the uncovered cases found in the survey. A standard questionnaire was also applied to all the uncovered cases to get the reasons for not being in the program.

Coverage estimate

The wide area survey found a total of 41 active SAM cases. This was above the calculated sample of 30 cases. The results are as shown in the table below:

Table 6: Wide area survey results

SAM Cases in Program	20
SAM case not in Program	21
Total Active SAM cases ²⁰	41
Recovering Cases in Program ²¹	18
Total Cases	59
Point Coverage	52.6% (41.6% - 63.4%)
	z = 0.72, p = 0.4723

²⁰ Active SAM case is any child with a MUAC <115mm

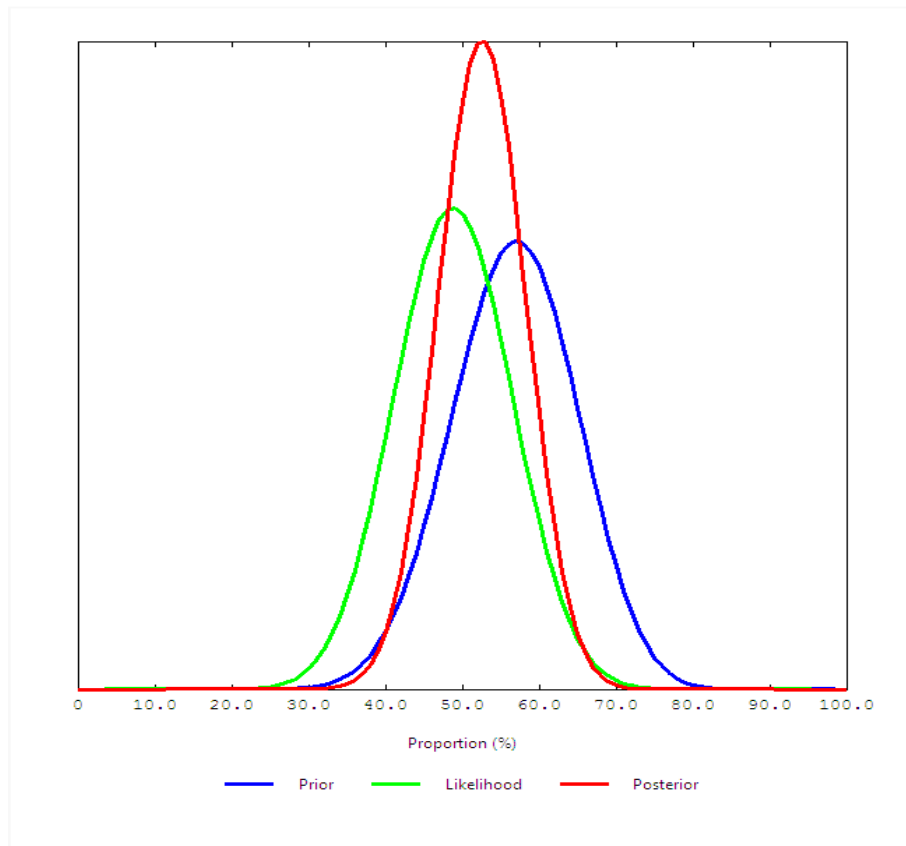
²¹ Recovering case is any child with a MUAC >115mm but still ongoing with SAM treatment

Point coverage was calculated by having the Total active SAM cases in the program divided by the Total active SAM cases found in the survey $= (20/41) * 100$.

The estimate program coverage was **52.6% (41.6% - 63.4%)**. Point coverage was reported due to the programs' unsatisfactory case finding and community screening evidenced by few admissions in the far villages and some villages lacking a health post.

The plot on overall coverage below shows that the posterior is narrower than the prior, showing that the survey has got reduced uncertainty on the coverage. There is also a considerable overlap between the prior and the likelihood. The prior and the likelihood do not conflict, indicative of reliability in the setting of the prior and thus it is reasonable to use the survey data.

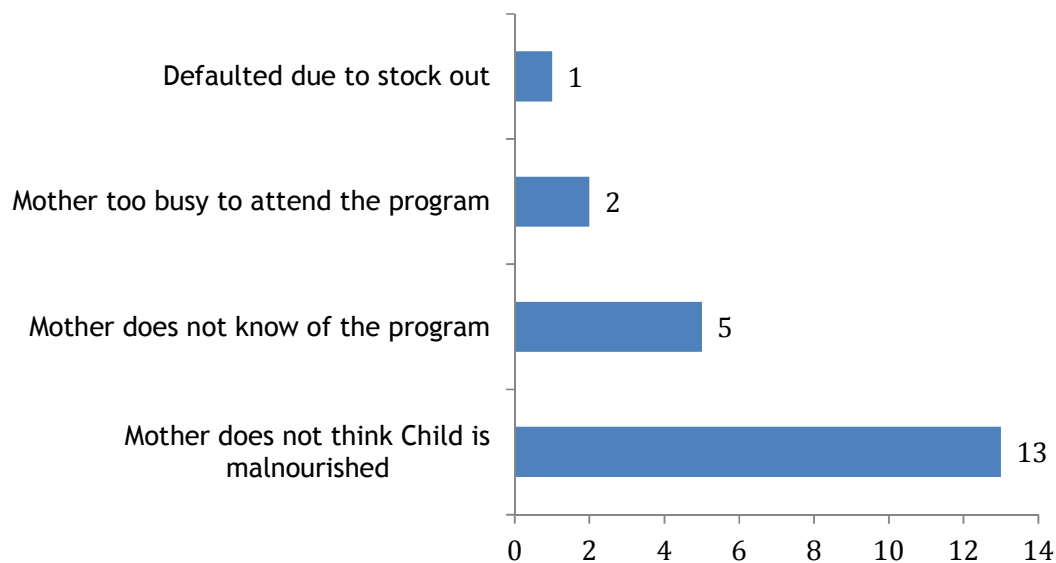
Figure 10: Coverage estimate



Reasons for non-attendance

All the caregivers of SAM children not in the program were interviewed to try to get the reasons why they were not covered. The major reason reported was that the caregivers were not aware of the signs of malnutrition and thus they couldn't get a reason for taking their children for admission in the program. Some mothers also didn't know of the existence of a nutrition program in the area with the caregiver workload and default due to stock outs accounting for the other reasons for non-attendance. This highlights the need for intensified community mobilization on the simple identification of malnutrition and awareness creation about the IMAM program. The reasons are graphically presented in the figure below.

Figure 11: Reasons for non-attendance - Wide area survey



6. CONCLUSION

The point coverage estimate of 52.6% (41.6% - 63.4%) shows that the program has performed above the SPHERE standard of 50% coverage for rural areas. This has been due to several positive factors identified in the program, worthy noting that the assessment was done in the 7th month of implementation. Despite the assessment identifying several weighty barriers to good coverage, there is a good opportunity to address them. Some of the identified barriers included distance affecting access in some areas and lack of program awareness in the distant areas. Lack of health posts in some far areas and low community mobilization are some of the barriers which can have a big impact to coverage if addressed. Feasible recommendations have been given in this report to address the identified barriers.

Analysis of the program data showed high admissions in the program. This can be an indicator of increased case finding activities in the program areas. The program data also showed that there were some beneficiaries discharged as transfers to other sites. There were no clear records of transfers at the health facilities and these cases are likely to have defaulted.. One of the appropriate measures and recommendation in regard to defaulting was the use of transfer cards as all the defaulting children had moved out of the program area. Most of the admissions by MUAC were early admissions with the median MUAC on admission being 112 mms and majority of the children being admitted with a MUAC above 110 mms. The Average Length of Stay is 8 visits, indicating that most of the beneficiaries take a considerable length of time to cure from the program. Consistent supply of RUTF as evidenced by interviews with the program staff contributed much to the short length of stay in the program as well as avoiding defaulting which resulted to high cure rates and high admissions in the program.

Improving on the CHWs numbers can be central to ensuring high awareness and participation of the community in the nutrition program. Despite lack of program awareness being evident

in the far areas, the aggravating factor was lack of health posts in the areas which translated to less program related activities.

The assessment evidenced several positive factors which are a good foundation to improve the coverage of the program, even though they were appearing on a low scale. High awareness in most of the villages was due to the activities of the CHWs and the health shuras. This needs to be up scaled by engaging more CHWs and having a health post in every village. Close supervision of the CHW activities is needed especially in regard to meeting their set targets. Training and a standard motivation procedure for the CHWs is also required.

The program has a relatively high number of beneficiaries. The current structure involves only one nurse employed by SCI in the IMAM program. Absence of the said staff for whichever reasons will affect the functioning of the program as no other staff has adequate capacity to offer IMAM services in the facilities. The assessment therefore recommends training of more health staff in each facility to increase the pool of staff capable of offering IMAM services. To avoid crowding in the IMAM sites, it is recommended that the facilities assign each village a day to have the workload evenly distributed within the week.

7. RECOMMENDATIONS

	Recommendation	Findings	Evidence	Actions to be taken	Responsible people	Level of priority
Community mobilisation	1. Create more Health posts in the far villages 2. Raise the awareness of the program at the village level	Low coverage of CHWs with some villages not covered Low CHW activity in some villages due to high targeting Poor facilitation of CHW to reach the entire target	Low admissions in the areas without CHWs Low awareness of the nutrition program in the far villages without a CHW attached. Little engagement of the key community leaders like Mullah and maleks in community activities Home treatment of malnutrition in far areas	Engage more CHW while ensuring each post has a couple (male and Female) according to the CBHS guideline	AADA	High
				Recruit more female community mobilizers	SCI/AADA	High
				Involve the key community persons in the community in creating awareness about the nutrition program	SCI/AADA	High
				Scale up nutrition and health education especially in the far villages	SCI/AADA/MOPH	High
				Community mobilization on the causes, signs of malnutrition, and on the hospital treatment of malnutrition	AADA	High
CHW	3. No standard procedure for motivation of CHWs	Some CHWs given allowances when engaged by the partner in field activities like mass	Active CHWs where partner presence is high due to a lot of facilitation from the	Explore the option of having standard motivation procedures for all the CHWs	MOPH	Medium
				Evaluate the performance of the CHWs based on set	CHS/AADA/SCI	Medium

		screening	partners	targets.		
			High admissions noted in villages where the CHWs are engaged more	Revise the CHW targets to avoid underworking some CHWs in big villages while underworking others	CHS/AADA/SCI	Medium
				Mapping of all the villages in the program m area to ensure each village is attached to a health post.	AADA	Medium
Funding	4. Short funding durations which affect the continuity of IMAM services	Current funding ending end of June 2015. There was a gap between the previous funding and the current funding.	There were Active SAM cases in the survey who automatically defaulted at the end of the previous funding support which was accompanied by stock outs of RUTF	Program managers to work on long term plans for the program to avoid disruption of services	SCI/MOPH	High
				Capacity build the facility staff by training all the staff to be able to implement the whole package of BPHs including the IMAM package integrated in the BPHS in absence of IMAM funding.	SCI	Medium
Security	5. Expand the IMAM program to cover most of the districts(beyond the current 6 districts)	Currently the IMAM program runs in 6 out of 22 districts in the province		Involve the MOPH and the facility directors in exploring the possible ways of starting the program in the insecure areas	MOPH/AADA/SCI	Medium
				Engage the key community persons in seeking the most appropriate solutions to establishing a nutrition	MOPH/AADA/SCI	Medium

				program in insecure areas		
Program Implementation	6. Improve the facility to facility linkages to ensure successful transfer of beneficiaries 7. Create a comfortable waiting area for mothers at the IMAM sites	Poor linkage of the SAM cases to other sites Small size waiting areas at the OTP sites	No records of SAM children transferred to other sites Observations during the assessment reported crowding at the OTP sites with a high number of caregivers at the site	Initiate the use of transfer cards acceptable in every program site in Afghanistan	SCI/AADA	High
				Health education to the caregivers involved in the IMAM program on the importance and use of the transfer cards when moving out of the program area.	SCI/AADA	High
				Modify the waiting area in the OTP sites to accommodate the privacy of the mothers in case a high number of mothers have come at the site.	SCI/AADA	medium
				Allocate each village a specific date for monitoring visits to minimise crowding at the facilities	SCI/AADA	High
Capacity building	8. Training or more Facility staff, CHWs & Health Shoras on IMAM 9. Retrain all the staff working in	Only the facility staff working on the IMAM program are trained on IMAM	Some villages with few admissions especially those with no trained CHW. An observation at the	Conduct classroom training for all the Health workers in the IMAM program with additional facility staff to help increase the pool of staff trained on IMAM.	MOPH	Medium

	the IMAM program with the new IMAM guidelines	Some of the CHWs and health Shoras are not trained on IMAM	sites showed only one staff was able to serve the IMAM beneficiaries in the hospitals hence crowding of beneficiaries.	Involve all facility staff in the routine OJT sessions to ensure more capacity is build.	SCI/AADA/PNO	Medium
		Use of the old guideline in some of the sites on discharge	There was a case of a beneficiary discharged from the program as cured using the old discharge criteria of MUAC >11.5	More supervision for the CHWs and Health Shoras by the CHS to ensure there is more mentoring on their activities.	CHS	High
	10. Improve the number of staff serving the OTP beneficiaries.	SCI supports one nurse to work in the IMAM program exclusively.	Crowding at the IMAM sites with some mothers reporting not to be served on the day they attended the clinic. Long waiting time of 1.5 hours observed at the clinics	Train more staff in each health facility to increase the pool of staff able to administer IMAM treatment.	MOPH	medium
				Increase the number of CHWs in villages with a high case load of malnourished children to ensure heightened screening and referral as well as monitoring and defaulter tracing.	AADA/SCI/MOPH	Medium
Staffing						

				Allocate a specific day for each village based on the beneficiary numbers from the villages to minimize crowding at the sites	AADA/SCI	Medium
--	--	--	--	---	----------	--------

8. ANNEXES

Annex 1: SQUEAC assessment plan for Nangarhar province

NANGARHAR SQUEAC ASSESSMENT PLAN, MARCH/APRIL 2015	
DATE	ACTIVITY
12 th - 31 st March 2015	Collection and analysis of routine data.
1 st - 2 nd April 2015	Training of the core team and the enumerators on the SQUEAC methodology (classroom training)
4 th - 7 th April 2015	Stage 1
	Collection & analysis of qualitative data
	Identifying areas of low & high coverage
	Identifying boosters & barriers to coverage
8 th April 2015	Formulation of the hypothesis/identification of the boosters and barriers
9 th , 11 th April 2015	Stage 2
	Confirmation of hypothesis(small area survey
	Determination of prior mode
12 th - 16 th April 2015	Wide area survey (Stage 3)
18 th - 19 th April 2015	Analysis of stage 3 data
	Preparation of the presentation and recommendations
20 th April 2015	Share preliminary findings to stakeholders
21 st April - 10 th May 2015	Share the Final SQUEAC report

Annex 2: villages for qualitative data collection

DATE	TEAM NUMBER	DISTRICT	HEALTH FACILITY	VILLAGE NAME	KEY INFOMANTS MET
04/04/2015	Team 1	Jalalabad	Joy haft CHC	Ghawchak village	Caregiver of defaulting child
					Caregivers of children in the program
					Community leaders
					Health shoras
					TBAs/THPs
	Team 2		Zarin Abad BHC		Health workers
					CHWs
					Observation checklist
					Mullah
					Caregiver of defaulter
	Team 3		Joy Haft CHC		Health worker
					Observation checklist
					Caregiver of child in program
					CHW/Mullah
	Team 4		AVDA BHC		Health worker
					Caregivers of children not in program
					Caregivers of children in the program
					Observation checklist
	Team 5		AVDA BHC	Kandak village	Village health Shoras
					Caregivers of children not in the program
					Mullah
					Malleck
05/04/2015	Team 1	Kama		Banda village (perceived low coverage)	Caregivers of children not in the program
					Community leaders
					Health Shoras
					CHWs
	Team 2		Zachel SHC	Deh Ghazi Village	Observation checklist
					Health staff
					Caregivers of children in the program
					Mullah/Mallek
	Team 3		Sangarsray CHC	Mamakhil village	Health workers
					Observation checklist
					Health shoras
					Community leaders
Team 4	Landabuch	Sada village	CHW		

06/04/2015			BHC		Health Shora		
					Caregivers of children not in program		
					School teacher		
			Team 5	Kama DH	Goj village	Community members	
						Caregivers of child in program	
						Health workers	
						Village health Shoras	
			Team 1	Nahri Shahee	Zangoyee village	CHW	
	Community leaders						
	Health Shoras						
	Caregivers of children not in program						
	Team 2	Qali Qhali BHC				Darbela village	OTP nurse
							Observation
							Caregivers of children in program
	Team 3	Wach Tangai BHC	Tawheed village	Defaulters			
Health Shoras							
CHW							
Team 4	Kariz Kabeer BHC	Kariz village	Caregivers of children in program				
			Mullah/malleck				
			CHS/CHW				
Team 5	Bilad Ghar CHC	Bilad Ghar village	School teacher				
			Traditional healer/TBAs				
			Caregivers of children not in program				
07/04/2015	Team 1	Qali Khiali BHC	Bahra Abad	Observation checklist			
				OTP staff			
				Health Shoras			
				Community leaders			
	Team 2	Nahri Shahee BHC	Bez	Mullah			
				Community leaders			
				School teachers			
				Caregivers of Children not in program			
	Team 3	Kariz Kabeer BHC	Darwaz Gai	CHS			
				Caregivers of children in the program			
				TBA/Traditional Healers			
				CHW			
Team 4	Najmul Qura CHC	Bagh E Cheena	Community leaders				
			Health Shora				
			CHS				
			OTP nurse				
				CHW			
				Health Shora			
				Caregivers of children in program			

					Mullah
	Team 5		Najmul Qura CHC	11 th	Community leaders
					Caregivers of children not in program
					CHW

Annex 3: Key informants in the survey

SOURCE	SYMBOL/KEY
Community leaders	C
Mullah	M
Malik	K
CHW	W
Health Shoras	H
TBAs	T
OTP nurses	O
School teacher	S
Caregivers of children in program	I
Caregivers of children not in program	N
CHS	Q
Observation checklist	L
Program data	A

Annex 4: List of boosters and barriers with sources

	BOOSTER	Sources	BARRIER	Sources
1	Most of the health workers are trained on IMAM with follow up OJT sessions at the health facilities	WHOQ	Insecurity in some areas	CMKWHOSQNT
2	Regular RUTF supply	MWHOIQL	Distance affecting some areas	CMKWN
3	Positive opinion of the OTP program	CMKWHTOSIQ	Lack of program awareness in some key community people and in some far areas	CMKTSN
4	Friendly health facility staff	CIMKHW	Staff turnover hence hard to sustain the trained staff	OQN
5	Screening of all the under-fives at the facility	WCQOMK	Lack of health posts in some areas	CHWOQ
6	Screening and referral of cases from the community by CHWs and Health Shoras	CMKHOIQTW	Migrations causing defaulting	CMKHOQ
7	High awareness of the program by most of the caregivers	CMKWHTSIQO	Short funding duration of nutrition partners affecting continuity of services	O
8	Availability of well updated HMIS tools at the health facility	QOIL	Lack of the SFP program hence most of the MAM cases deteriorate leading to high admissions	OWQ
9	Mass screening at the community	CMKWHSIQO	Lack of a standard procedure to motivate the CHWs	WHOQ
10	Regular supervision of the program by the nutrition actors with feedback meetings held	O	Lack of program flexibility to culture (lack of enough space for mothers' privacy at the OTP centers)	HNI
11	A working defaulter prevention and tracing mechanism	OQ	Staff shortage leading to long waiting time at the	OQIW

			OTP sites	
12	IEC materials at the health facilities	L	Home treatment of malnutrition before hospital management	CMKHQS
13	RUTF ration monitoring with caregivers returning the empty sachets for every distribution	OIW		
14	Integration of services at the facility for all the beneficiaries	OI		
15	High Cure rates and low defaulting	OA		

Annex 5: SQUEAC participants list

S/no	Name	F/Name	Sex	Mobile	Positon
1	Hamidullah	Dost Mohmmad	M	798114069	Enumerator
2	Dr. Shokat	Sheeragha	M	777607710	Supervisor
3	Dr.Zarghona	Abul wahab	F	704597244	Supervisor
4	Sajad Ahmmad	Rahimullah	M	780758912	Enumerator
5	Dr.Noormohmmad	Sheer Mohmmad	M	702222550	Supervisor
6	Dr.Shazadgi	Said Sarwar	F	767074174	Enumerator
7	Dr.Razma	Shereen Aqa	F	787640744	Enumerator
8	Dr.Shabana	Adul raziq	F	797374923	Enumerator
9	Dr.Yesna	Sardaragha	F	786250153	Enumerator
10	Dr. Lema	Ghulam Sakhi	F	783194576	Enumerator
11	Dr.Faizullah	Mohibullah	M	77201031	Enumerator
12	Dr. Wahidullah	Dr, Said Dawod	M	700619965	Enumerator
13	Dr. Baktash	Dr. Mohmmad Is-Haq	M	786070125	Translator
14	Dr. Hameedullah	Mohmmad Hossain	M	799800300	Enumerator
15	Dr. Jan	Mohammad Sahibzada	M	797979628	Nutrition Coordinator SCI
16	Dr. Zahidullah	Shagiwal	M	799303524	Nutrition officer

Annex 6: Wide area Results template

	DATE	SAM IN PROGRAM	SAM NOT IN PROGRAM	RECOVERING IN PROGRAM
1	Saracha Ali Khan	0	1	2
2	Soor Ghog	3	0	1
3	Canal joee deh malak Ekramullah	1	2	1
4	Qali Payndi	0	1	0
5	Bangakh	4	1	0
6	Mawlave Samiullah Kalee	0	1	0
7	Haji Gull mohammad kalee	0	0	1
8	Sahak	1	0	0
9	Miran payeen	1	2	0
10	Dobila	0	1	0
11	Shna qala	2	1	4
12	Shilam	1	0	2
13	Zarmandi	0	1	0
14	Abdull haq mena	0	1	0
15	Shanzda famili	0	1	0
16	Gulaee	0	1	4
17	Reg shamard khan	1	2	0
18	Kabul hada	1	2	3
19	Kochian	5	1	0
20	Samar khil	0	2	0
	TOTAL	20	21	18

Annex 7: List of villages used for sampling

No (#)	Districts	LIST OF VILLAGES FOR SAMPLING	Population
1	BEHSOOD DISTRICT	Saracha Ali Khan	3500
2		Dwosaraka	1500
3		Sarposhta	3000
4		BaBa Faried Ghondi	1200
5		Naghlo Bala	1400
6		Araban Haji Abdurahman	1400
7		Nahar ghara Pachayano kalee	1000
8		Dr. Nazar gull kalee	3000
9		Malak Sakhi kali	2000
10		Malak Gull karim kalee	1500
11		Malak khwani kalee	3500
12		Mohammad Raziq arab kalee	1500
13		Malak Nazudeen Ghondi	3600
14		Qari Ashaq kalee	3000
15		Malak Alifudeen Ghondi Darwazgi	2200
16		Soor Ghog	1500
17		Akram Ghondi Kochiano Jomat	1722
18		Badar kalee	1200
19		Jalozo Comp	1250
20		Joe Yazda payeen	2600
21		Morghee Ghondi Petawee Jalozo camp	1890
22		Haji Saifudeen Kalee	1500
23		Zar kamar	1500
24		Majboor Abad	3558
25		Zareen abad	4168
26		Base ekmalati	3676
27		Gull abad	2664
28		Zafar abad	1930
29		Canal joe deh malak Abdul Kabeer	862
30		Canal joe deh malak Ezatullah	890
31		Canal joe deh malak Ekramullah	768
32		Canal joe deh malak Habeebullah	723
33		Joe yazda Mohmmad anwar	880
34		Joe yazda Malim Mohmmad meer	1126
35		Moqam khan Payeen malak Aziz	2000
36		Moqam khan balla Malak Ab. Wodod	1479
37		Chok bani banda	1460
38		Qali Sohbad khan Qali AKHOND	1201

39	Qali Gull Jan or Qali Merza	1140
40	Qali Zargaran Qali Najara	903
41	Qali Meana Qali Khanan	1232
42	Khoshkombad	1000
43	Qali Dasht Qali Araban	1987
44	Qali Tahseel dar Qali Mohammadi	1487
45	Qali Eshaq	1080
46	Qali Payndi	500
47	Qali regi Araba	2117
48	Qlai sangi Qali shahi	2065
49	Bela Kochian	1118
50	Bela kunarian	1000
51	Seen Ghara zangoi	1000
52	Zangoi Kochian	1200
53	Samar khill Gogran	700
54	Khorghara araban	1200
55	Mowlawee mola gull massjad	1400
56	Aurozgan	1500
57	Bar kalee , Zor kalee , Baghchina	4650
58	Omar farooq kalee , Abobakr Sidiq kalee	2800
59	Shikhano kalee , Kozi numri	2700
60	Baghi mola khil	2800
61	Bangakh	900
62	Haji Abdul hakeem Kalee	1200
63	Mola Janat Gull kalee	1000
64	Niak Mohmmad Kalee	1200
65	Haji Ezat Kalee	950
66	Hameedullah Kalee	800
67	Gull faried Kalee	950
68	Chargano Farm	800
69	Haji . Ismail kalee	950
70	Haji Hafta gull kalee	1200
71	Tarkhi oba	2000
72	Qari Omar gull kalee	500
73	Redi kalee	500
74	Doctor Satar kalee	2000
75	Haji Gull agha kalee	2000
76	Mawlave Samiullah Kalee	2000
77	Sharwali markeet	1400
78	Afghan Market	1300
79	Mawlave Baz mohmmad khan kalee	1100

80	Noor Mohmmad Kalee	1200
81	Pachayano Kalee	1050
82	Mudeer Bahram Khill kalee	1200
83	Zabit Shirzad Kalee	1200
84	Mawlave Eshaq kalee	1050
85	Zar Mohmmad shah Kalee	1050
86	Kochiano Kalee	1000
87	Turab Kalee	600
88	Deen Mohmmad Kalee	700
89	Qari Gull mohmmad Kalee	1050
90	Sharwal kalee	1085
91	Haji Gull mohmmad kalee	1000
92	Sabawoon Famili	1000
93	Behsood Khas Abdyan	2000
94	Tamirat	1000
95	walayati eshq mohmmad	2331
96	Qali khiali Qali jangal	1229
97	Jora kalee	1024
98	Dowbela massjad sharif khan	600
99	Nahrmasi Qali mandas	800
100	Qali janan khan Banda	1229
101	Ghaw mesh bela	1024
102	Lajghar	716
103	Taghar	614
104	Qaseem Abad	614
105	Bahrabad	819
106	Sahak	819
107	Qali ali kakar	2760
108	Banda kargran , Shikhan Mola khill	3430
109	Perawar Bilandghar	2851
110	Joe Dag , Miagan	1337
111	Tujaran shazi shikh ali	1644
112	Charmesra lahan	2266
113	Bela benigha	1500
114	Bela pool kama	2100
115	Bela tangi	2000
116	Banigha	2765
117	Qlai Hassan , Khowaja omar	1526
118	Tapoo meran	1554
119	Saridali	1541
120	Miran bala	1890

121	KAMA DISTRICT	Miran payeen	1900
122		Shikhan Daman	2478
123		Chor khill	900
124		Perawar payeen	1550
125		Tangi Topchi	3000
126		Qali chimar , Qali rishteen	1500
127		Banda lala , Tawheed abad	2250
128		Kargran qali khiali	3000
129		walayati eshq mohmmad	2500
130		Jamali Qali bank	1500
131		Qali Arbab , Qali Payeen	2500
132		Malak bela , qali jangal	2500
133		Momeen Abad Tamirat	2000
134		Ekhlas Abad	1500
135		Banda qazia	1000
136		Dobila	2000
137		Nahrmasi	1200
138		Awal Camp	2795
139		Dowham Camp	2795
140		Zar alam Camp	1400
141		Hameedullah Camp	1470
142		Mohmmda jan kalee	1400
143		Ameer safar kalee	1540
144	KAMA DISTRICT	Jamali	2212
145		Wata poor	2255
146		Perzaiee	3688
147		Gahek	1879
148		Deh Tahir	2200
149		Sangar sari	2041
150		Kama khas	2074
151		Shna qala	1717
152		Zakhil	1613
153		Bari bela	1101
154		Mastali Malak zarab	1587
155		Mastali Khoshal malim	1997
156		Mastali Osman Pacha	1536
157		Akhond Kali Shikhan	4096
158		Arab Khil Kanzi	4378
159		Qandahari	3149
160		Deh ghazi	10240
161		Ladaboch	1611

162	JALALABAD CITY	Bajawri	1134
163		Kaka khil meran	1154
164		Sada	1575
165		Zar mandi	1540
166		Shilam	1557
167		Banjani	1611
168		kara mar ghorigi	2029
169		Shirkar godi	1513
170		Terano banda	1500
171		khar kani dag kalee	1550
172		Dareeng	1700
173		Zar shoee	2153
174		Zarmandi and karkhak	1542
175		Arbapan	2255
176		Warasa faqeer	1707
177		Safdari	2200
178		Shir gar	1513
179		Dar gali ala	2100
180		Dargali sofia	1500
181		Zarmandi	1542
182		Sahibzad ghan	1331
183		Mama khil	3148
184		Bazid khil	1792
185		Merzaiee	1792
186		Nawabad	2946
187		Deha ghazi	3535
188		Dag Kalee	3000
189		Sardar kalee	1780
190		Shada kalee	1790
191		Goj	4907
192		Khakhi	3758
193	JALALABAD CITY	Ghawchak	5000
194		Kacha gari	16000
195		Khwaja Sidiq agha	12000
196		Abdull haq mena	3300
197		Zerani Sahil abad	2300
198		Madrasa	2100
199		Qali dasht	3000
200		Mayobine	3000
201		Kochian	2000
202		Ganda choshma	3000

203		Mahbas	50
204		Qasaba	4500
205		Anghorbagh	3500
206		Narang bagh	2000
207		khoshkombad	4000
208		Mastofiyat	2500
209		Garnizon	3500
210		Qoliurdo	3000
211		Shanzda famili	2000
212		Base ekmalati	2000
213		Samarkhil	2500
214		Shahri kona	2000
215		Campona	3000
216		Regshamard khan	2000
217		Charahi	9600
218		Zerani	17000
219		Ghochak	6608
220		Nagharak	15887
221		Bagrami	18500
222		Chiknawri	8000
223		Alikhil	10821
224		Afghan mina	10400
225		Babrian	1500
226		Gulaee	1800
227		Arbapan	1000
228		Narangh bagh	1500
229		Joy hafat	2000
230		Majboor abad	3475
231		Zareen abad	4067
232		Basae ekmalati	3590
233		Gull abad	2600
234		Zafar abad	1885
235		Moqam khan	2960
236		Mogam khan Ghondi	700
237		Canal 11 weala	2908
238		Canal 10 weala	1960
239		Zara Saranwali	2500
240		Chalmetra	3500
241		Reg shamard khan	2000
242		Shannzda family	2500
243		Rokhan mena	5000

244	Base ekmalati	2500
245	Qasaba	4500
246	Qoliordo	1500
247	Majboor abad	5400
248	Anghorbagh	3800
249	Mashko kosa	13000
250	Anghorbagh	10000
251	Narang Bagh	9077
252	Kolalano kosa	8895
253	Qari jan shahid kosa	5158
254	Mia omar lisa	8000
255	BiBi hawa lisa	2315
256	Kabul hada	2500
257	Samsor mina	3558
258	Majboor abad	1500
259	Jarghara	2000
260	Nahra ghara	1300
261	Ghanda choshma	1500
262	Joy hafat	2500
263	Ghochak	5000
264	Kacha ghari	16000
265	Khowaja saidiq agha	12000
266	Abdul Haq	3300
267	Zerani Sahil abad	2300
268	Madrasa	2100
269	Qali dasht	3000
270	Maiobeen	3000
271	Kochian	2000
272	Ghanda choshma	3000
273	Qasaba	19000
274	Qabailo Reasat	2000
275	Campona	8000
276	Zangoee	2500
277	Shahri kona	2000
278	Shanzda Famili	1800
279	Chalmetra	1500
280	Rokhan mena	2000
281	Majboor abad	2000
282	Base ekmalati	2000
283	Canal	1600
284	Khoshkombad	2000

285		Saracha	1200
286		Samar khil	2000
287		Chaparhar hada	1600
288		Anghor bagh	1800
289		Daman Behsood	2000
290		Zara Saranwali	2000
291		Babarian	4200
292		Arbapan	5000
293		Araban	3800
294		Darul malimin	2800
295		Campona	4800
296		Laghaman Hada	3800
297		Nahia 3	3600
298		Garnizon	2500
299		Behsood	2800
300		Liwa e Sarhadi	2800
301		Anghor bahagh	2500
302		Narang Bagh	1800
303		Surkhrood Dosaraka	2800
304		Ghochak	2600
305		Chak nawori	2800
306		Sabz abad	2700
307		Afghan mina	2000