Mohamed K. Yerrow

Precision Research
ACKNOWLEDGEMENTS
The authors would like to thank CESVI staff in both Galkayo and Nairobi and the entire SQUEAC team who made this assessment possible. All of your hard work and dedication made for a productive SQUEAC assessment.

Our profound gratitude goes to all carers and other informants for setting aside some time for interviews and allowing assessment teams to access their daily lives.
EXECUTIVE SUMMARY

Somalia face a chronic state of emergency due to more than two decades of civil war and natural disasters. Despite recent improvement in security, it still remain one of the countries with the longest running humanitarian crises in the world. Majority of the its estimated 12 million population remains poor and vulnerable due to long term political instability, civil conflict and insecurity. According to June 2016 FSNAU GU nutrition assessment conducted among the 12 internally displaced person (IDP) camps across the country, acute malnutrition continues to be a serious public health problem with Global acute malnutrition remaining at critical level(≥15 %) among 6 of 12 IDPs surveyed.

Mudug region is one of the regions located in the central part of Somalia. Like many other regions in central Somalia, Mudug has not escaped the effects of civil conflict, 2015 El-nino related droughts and food insecurity. This situation has affected people’s means of livelihood and their nutrition status. The above mentioned assessment further report that the nutrition situation among the Mudug IDPs particularly those in Galkaiyo is at critical level with Global acute malnutrition(GAM) rate of 16.9% and severe acute malnutrition (SAM) rate of 3.1% respectively. Compared to same period in 2015 (16.5% GAM and 1.7% SAM), nutrition situation in Galkaiyo IDP camps has further deteriorated.

In the context of Health and Nutrition, in Galkaiyo town, with financial support from ECHO and SHF(formerly CHF), Cesvi is providing integrated basic Health and Nutrition services primarily targeting internally displaced persons with focus on children under-fives years, pregnant and lactating women running 12 OTPs( 9 mobile and 3 fixed). The programmes is further linked to the community through network of 30 CHWs and community mobilisers who not only do active household MUAC screening and referral but also provides nutrition education in addition to defaulter tracing and delivering hygiene promotion messages. As much as the programme is primarily targeting 37,050 estimated IDPs, up to 40% of 281,280 Galkaiyo town population in South are also benefitting.

CESVI, with support from independent consultant, conducted its first SQUEAC assessment in Galkaiyo IDPs camps from 3rd to 16th August 2016 to assess programme coverage and accessibility.

Methodology

To assess the service quality and the programme coverage of the CESVI IMAM programme a three stage investigation model of Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) methodology was used. This model includes: i) collecting and analysing the qualitative and quantitative data; ii) developing and testing the hypothesis by conducting a small area survey; and iii) conducting a wide area survey to estimate the final programme coverage rate of Outpatient Therapeutic Programme (OTP)

Main Results

Stage -1

The OTP programme performance: The IMAM programme admissions data showed that from November 2015 to July 2016, of all the severely acute malnourished (SAM) children that were admitted in OTP, 96% of them were successfully treated and cured.

Communities’ knowledge and attitudes: From the qualitative assessment most of the community members were found to have knowledge of the IMAM programme. However, it is important to identify all important stakeholders such as traditional healers and traditional birth attendants (TBAs) and make another formal
introduction of the programme activities to them. This is to ensure that the community fully understand and participate in this programme.

**Stage – 2**

**Hypothesis testing and results**

After collecting and analysing the data in stage one, a hypothesis was generated and tested in stage two. Both qualitative and quantitative findings consistently indicated a high coverage area across the catchment areas. Due to this, 4 peripheral IDP camps were selected to disprove the high coverage assumption. The findings formally negated the hypothesis. This leads to conclusion that the coverage may be different in the various locations but is generally considered to be homogenous and equal or above the 90% threshold.

**Stage – 3**

Coverage Estimation (results from wide area survey) in stage three, survey data allowed us to perform the final coverage estimation after the wide area survey. The period coverage rate is estimated at **90.8%** with Credible Interval (**95% CI = 80.6%–95.8%**). This estimate lies within the current SPHERE standard for camps set-up, >90%. Since this coverage is first one in Galkaiyo IDP camps, there is no comparison done.

**Main Barriers identified were:**
- OTP/SFP interface problems (lack of or insufficient RUSF) leading to a high number of relapses.
- Intra household sharing of RUTF,
- Opportunity cost for families seeking treatment from the IMAM programme.
- Insufficient community knowledge on enrolment criteria and immediate causes of malnutrition
- misunderstanding on the use of W/H z-score in admission by programme staff

**Key Recommendations**
- Immediately meet and hold dialogue with SDRO and WFP to discuss the challenges with RUSF stock out with view of ensuring regular and sufficient supply to reduce MAM cases deteriorating to SAM in addition to get a reliable MAM programme where cases graduating from OTP can be referred. It is further recommended that if there will be no change this challenge to taken to other fora such as Clusters and Donors level. As a temporary measure, it is recommend to treat all SAM cases till full recovery and discharging at >12.5 cm MUAC. Also CESVI should consider looking for ways of start MAM programme in the near future.
- Strengthen Key messages on the use of Plumpynuts during admission and during follow-up visits addition to opening discussion with WFP on possibility of providing protection ration for household of SAM cases. Further, strengthen key message during discharge on importance of revisit health facility/OPT site in case the child’s condition changes for worse, possibility of transfer to programmes in other location in case, the caretaker want to move out and importance of completing treatment.
- Investigate how families are affected by the opportunity cost of accessing the IMAM programme to find a practical solution to address this issue.
- Do a refresher training for OTP staff on admission and discharge criteria particularly using Z-score.
- Organize community meetings to discuss the sharing of RUTF, Data entry, AWG, LOS, enrolment criteria and cause of malnutrition. Encourage community leaders and Elders to educate their community on the immediate causes of malnutrition and programme target.
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Abbreviation
BBQ                           Barriers, Boosters and Question
CI                             Confidence Interval
CESVI  Cooperazione e Sviluppo
CHF                           Common Humanitarian Fund
CHW                           Community Health Workers
FGD                           Focus Group Discussion
FSNAU  Food Security and Nutrition Analysis Unit
GAM                           Global Acute Malnutrition
IDP                           Internally Displaced Persons
IMAM                          Integrated management of acute malnutrition
IMC                           International Medical Corps
IYCF                          Infant and Young Child Feeding
KII                            Key Informant Interview
LoS                            Length of Stay
MAM                           Moderate Acute Malnutrition
MUAC                          Mid-Upper Arm Circumference
OTP                           Outpatient Therapeutic Programme
RUSF                          Ready to Use supplementary Food
RUTF                          Ready to Use Therapeutic Food
SAM                           Severe Acute Malnutrition
SHF                           Somali Humanitarian Fund
SRDO                          Somali Relief and Development Organisation
SQUEAC                        Semi Quantitative Evaluation of Access and Coverage
TBA                           Traditional Birth Attendants
MOH                           Ministry of health
TSFP                          Targeted Supplementary Feeding Programme
UNICEF                        United Nations Children’s Fund
WHO                           World Health Organisation

Glossary
GU and Dayr                      Rainy season (Heavy rain and Light rain)
Jiilaal and Hagaa           Dry season (dry and very dry)
1.0. Introduction

1.1 Country Context
Somalia face a chronic state of emergency due to more than two decades of civil war and natural disasters. Despite recent improvement in security, it still remain one of the countries with the longest running humanitarian crises in the world. Majority of the its estimated 12.3 million population remains poor and vulnerable due to long term political instability, civil conflict and insecurity. The nutritional status of Somali children is among the worst in the world and remains a huge public health concern. Levels of global acute malnutrition (GAM) for children under five are considered critical if they exceed 15 per cent\(^2\). The major contributing factors to this high level of malnutrition include: the effects of droughts; underlying vulnerabilities caused by years of conflict; the collapse of basic social services; and an erosion of coping mechanisms and resilience over time. According to Food Security and Nutrition Analysis Unit (FSNAU) GU season nutrition assessment conducted among the 12 internally displaced person (IDP) camps across the country, acute malnutrition continues to be a serious public health problem- with Global acute malnutrition remaining at critical level(≥15 %)\(^3\) among 6 of 12 IDPs surveyed.

1.2. Mudug region Context
The Mudug region is the most centrally located region in Somalia and equidistant from Galkaiyo by 750Kms to Mogadishu, Hargeisa, Bossaso and Harar in Ethiopia. It is bordered to the east by the Indian Ocean, to the west by Ethiopia, Nugal region on the north and to the south by Galgadud region. Following the protracted civil war, the region was divided between Puntland regional Government in the North and Galmudug State in the South with both sides having its regional capital in Galkaiyo town separated by a distinct boundary. With 72,933 km\(^2\), it is the largest region, inhabited mainly by the Marjerten and Habargir-Sa’ad sub-clan in the North and South respectively. Physio-graphically, Mudug region is a land of limited contrast. It mainly consists of shallow plateau valleys and dry watercourses known as ‘Ogo’ in Somali isolated by broken mountain ranges gradually slopes toward the Indian Ocean. Hot conditions prevail year-round along with monsoon winds and irregular rainfall of about 200 to 300 mm annually with mean daily

\(^1\) Population Estimate UNFPA October, 2014.
\(^2\) UNICEF Situation Analysis, 2016.
\(^3\) FNSAU, GU season Nutrition Assessment, June 2016.
temperatures of 30 to 40°C. Vegetation consists of scattered low trees to a combination of low bushes. With estimated total inhabitant of 717,863, the Primary livelihood activity is pastoralism in rural areas and commerce in the urban trading centres.

Like the rest of the Country, Mudug suffer from cyclical climatic impacts, armed conflict, clan violence, widespread human rights violations, political instability and insecurity, and persistent low levels of basic developmental indicators. This is exacerbated by high malnutrition rates, extensive food insecurity, vulnerable livelihoods, poor health infrastructure, recurrent disease outbreaks, a lack of clean and safe water, poor provision of basic services, including education, and pervasive protection violations. Internally displaced persons are particularly vulnerable, and are at more risk than the host community.

1.3. Context in Galkaiyo

As mentioned above (under 1.2) Galkaiyo town is divided into North and South with Northern part administered by Puntland and Southern part administered by Galmudug State. Forty percent (40%) of its estimated 281,280 inhabitant lives in the Galmudug controlled south including 37,050 estimated IDPs. In December 2015, fighting broke out between Puntland Administration and Galmudug Administration in Galkaiyo town displacing more than 95% of the population. This displacement in addition to effect of El Niño phenomenon, and returnees from Yemen exacerbated already fragile humanitarian situation in the in the area. According to FNSAU GU season IDP Nutrition Assessment, Galkaiyo IDPs is at critical level with Global acute malnutrition rate of 16.9% and SAM of 3.1% respectively. Compared to same period in 2015 (16.5% GAM and 1.7% SAM), nutrition situation in Galkaiyo IDP camps has further deteriorated.

Figure: Map Nutrition situation estimates  Somali

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1.4. CESVI IMAM Programme

Galkaiyo South District has 9 health facilities, out of which one is a hospital in Galkaiyo town, 5 are Health Centres and three Health Posts/MCHs. In the area of prevention and management of acute malnutrition, the State ministry of Health benefits from the support of four partners, namely: CESVI, IMC, IRC and SDRO.

CESVI has been working in Somalia since 2006, initially in Somaliland and Puntland. In 2009, CESVI expanded its activities to Galmudug, Hiraan, Benadir and lower Shabelle in South Central implementing emergency and early recovery Programs in the most food insecure and vulnerable populations delivering integrated humanitarian assistance through self-implementation.

In the context of Health and Nutrition, in Galkaiyo town, with financial support from ECHO and SHF(formerly CHF), Cesvi is providing integrated basic Health and Nutrition services primarily targeting internally displaced persons with focus on children under-fives years, pregnant and lactating women running 12 OTPs( 9 mobile and 3 fixed). The programmes is further linked to the community through network of 30 CHWs and community mobilisers who not only do active household MUAC screening and referral but also provides nutrition education in addition to defaulter tracing and delivering hygiene promotion messages.

CESVI, with support from independent consultant, conducted its first SQUEAC assessment in Galkaiyo IDPs camps from 3rd to 16th August 2016 to assess programme coverage and accessibility.

2.0 Objective of the Study

This been the first IMAM programme in Galkaiyo South IDP camps, overall goal was to conduct community assessment to help understand the community dynamics that influence access to care and the coverage of IMAM programme, identify any existing overlap, barriers in CESVI area of intervention in Galkaiyo south IDP camps which will be informative to all stakeholders to provide interventions that are effective. The SQUEAC training was conducted in Galkaiyo town (programme area) with the aim of building skills of key nutrition staff and community volunteers. This included: how to improve the collection, quality and utilisation of the routine programme data, role of partners in in management of different IMAM components and improve overall programme coverage. In addition, the consultant provided practical support during the data collection in the field in SQUEAC methodology.

2.1 Specific Objectives

i. To map out both period and point coverage in the CESVI area of operation in South Galkaiyo

ii. To identify factors affecting uptake of the CMAM services in area of operation (barriers and booster)

iii. To develop competencies and skills of technical staffs in SQUEAC methodology

iv. To develop in collaboration with CESVI senior management specific recommendations and Joint Action Plan to improve acceptance and coverage of the programme.

v. To identify and refer severely malnourished children not covered by the CMAM program
vi. To understand the community dynamics, especially its positive and negative aspects having an influence or impact on the access to care and the coverage IMAM programme in Galkaiyo South IDP camps, in order to develop context-specific recommendations aiming to improve its quality.

2.2 Expected outputs

i. Train both staff and community Enumerators on SQUEAC methodology
ii. Supervise and support full implementation of coverage assessment in all the targeted areas IDP camps
iii. Produce preliminary and final coverage survey report to be submitted to Assessment and information monitoring working group (AIMWG).
iv. Train data collectors for the Assessment: Transfer skills in undertaking a SQUEC survey to national CESVI’ staff to equip them with skills to undertake a SQUEAC coverage survey independently.

2.3 Duration of Training and Assessment

August 3rd to 16th August 2016, (Annex1)

2.4 Participant

A total of 12 Enumerator (staff+ Community) was trained in the SQUEAC method for three days (Annex 2).

3.0. Methodology

SQUEAC methodology was used to assess the IMAM programme coverage and qualities of the CESVI self implemented programme in the Galkaiyo South Internally Displaced Persons’ Camps of Mudug region, Somalia. The SQUEAC methodology was developed to provide a low-resource method capable of evaluating Program coverage and identifying barriers to service access and uptake. It is an interactive, informal and intelligent investigation that collects a large amount of data from different sources (i.e. using routine data as well as additional data collected in the field), using a wide variety of methods and providing the means to organize the data. The technique also uses Bayesian probability theories to estimate the coverage of the Programme. Prior to the start of the survey, CESVI organized a 3 days training on SQUEAC survey methods and data collection tools for the survey teams. The consultant provided technical support in developing the training package. A total of 12 team members including data collectors and CESVI Galkayo staff were trained. As part of the training exercise, the participants also field tested the data collection tools that were used during the SQUEAC survey. To estimate coverage, camps with ‘high admission’ and camps with ‘low admission’ rates were detected and the principle factors preventing higher coverage in targeted areas were identified. As per standard SQUEAC guidelines, the survey was conducted using three-stage methodology. Details are as here below:

3.1 Stage 1

This stage began with the collection of both contextual data (qualitative) and programme routine monitoring data (quantitative). Qualitative data was collected through conducting Focus Group Discussions, Key informant Interviews, observations and seasonal calendar. Quantitative data was collected from the health facilities and mobile OTP sites records by reviewing the routine OTP cards. Feedback sessions at the end
of data collection was ensured on in order to collect and enlist the boosters, barriers and any other information relevant to program. The qualitative data collection was carried out according to the “qualitative sampling matrix” developed in collaboration with key members of the assessment team. The main aimed was to understand the perception of the community about the programme, the programme implementers, and their knowledge of malnutrition in the area. A generic questionnaire was developed to guide the data collection from communities on their perceptions of the IMAM programme, care seeking behaviour and common practice of treating malnutrition.

In order to assure the representativeness of all zones as well as the unbiased participation of all key informants, the sampling matrix took into consideration all factors, visualize them and transcribe them into a planning calendar. Then, the data collectors were trained on interviewing skills and how to facilitate group discussions. Focus group discussions (FGDs), Key Informant Interviews (KII) and observation techniques in OTP sites (see table3 below) with open ended generic questionnaires were used.  

Table1: Qualitative data by methods and sources:

<table>
<thead>
<tr>
<th>Method</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key informants Interviews(KII)</td>
<td>Village Chiefs (local authorities) and gate keepers</td>
</tr>
<tr>
<td></td>
<td>Religious Leaders (Sheikhs, Imams,)</td>
</tr>
<tr>
<td></td>
<td>Teachers (school teacher, Quran school)</td>
</tr>
<tr>
<td></td>
<td>Traditional Birth Attendants (TBA)</td>
</tr>
<tr>
<td></td>
<td>Traditional Healers</td>
</tr>
<tr>
<td>Focus Group Discussions (FGDs)</td>
<td>Caretaker of OTP children</td>
</tr>
<tr>
<td></td>
<td>OTP staff</td>
</tr>
<tr>
<td></td>
<td>Community Volunteers(CHWs)</td>
</tr>
<tr>
<td></td>
<td>Assessment team (Programme Team)</td>
</tr>
<tr>
<td>Semi Structure Interview (SSI)</td>
<td>Caretakers of children with SAM who are ‘not in Programme’</td>
</tr>
<tr>
<td>Seasonal Calendar (Fit to Context and Seasonality)</td>
<td>Community and assessment</td>
</tr>
</tbody>
</table>

The qualitative sampling matrix further allowed analysis of information gathered and triangulation by method and source. Moreover, the information was plotted on a ‘mind map’ which is a graphical way of storing and organising data and ideas around a central theme; in this case was programme ‘coverage’. Based on the findings from programme routine data and information collected from the communities, the barriers and boosters were identified and questions were generated for further investigation. The boosters and barriers were then weighed and scored to determine the coverage for stage one, which then helped to set the prior for the wide area survey and sample size calculation.

The Seasonal calendar which was drawn in stage one helped to get a broader picture of programme performance against context. The calendar included climatic condition, non-agricultural labour, illness and hunger gaps. Admission and defaulter trends were then compared to the seasonal calendar to determine whether the programme was responding to seasonal changes and context-specific factors.

3.2. Stage 2 Small Area Survey

The objective of the second stage of the investigation was to confirm or reject, through small-area surveys, the hypothesis generated on areas of high coverage as well as the barriers to access as identified.
in stage 1. The hypothesis generated was: “Does the areas with high admissions in OTP also have high coverage and areas with low admissions for OTP have low coverage.

**Hypothesis formation:** from the question above, a hypothesis was generated-OTP site with high admission have high coverage rates while those with low admissions have low coverage rates.

To test the hypothesis, 4 peripheral Internally Displaced Persons (IDP) Camps was assumed to be adequate and systematically selected and surveyed to disprove the high coverage assumption. These are Buulo Noto and Buulo Jawan OTP sites for highest number of admissions and Hiran 2 and Qorahey OTP sites which recorded lowest admission from November 2015 to July 2016.

To estimate the coverage for the hypothesis, the 12 survey team members were divided to 4 teams of three (3) members and the camps distributed between them. The survey was conducted in one day and since it was not necessary to calculate Sample size in advance, all SAM cases found in the survey area were included.

Based on the coverage threshold for Camps as per the SPHERE minimum standard, 90% coverage was defined as minimum coverage. Each team moved from House-to-House using predesigned questionnaires to record SAM cases in programme. A separate questionnaire was used for the mothers/caretakers of malnourished children that were not in the programme to find out and record the reasons for not been in the programme. Further, an active and adaptive case finding method was utilized to find active SAM cases as well as OTP recovering cases.

**ACTIVE:** The method actively searched for cases rather than just expecting cases to be found in a sample.

**ADAPTIVE:** The method used based on information found during case-finding exercises to be informed and improve the search for case finding exercise.

**Case Definition:** The admission criteria for SAM for the Galkaiyo IMAM programme included children age between 6 and 59 months with at least one of the following criteria.

- MUAC <11.5 cm and/or Bilateral pitting oedema. For purpose of this SQUEAC survey, a case is defined as a child with a MUAC of <11.5cm and/or presence of bilateral pitting oedema.

Besides these standard criteria, survey teams used local SAM terminologies to increase sensitivity of the case finding method.

The steps for testing a hypothesis/making a classification using SQUEAC small area survey data were:

1. **Set the standard (p):** The standard (p) was set according to SPHERE minimum standards for therapeutic programs in camps (minimum 90% for camps)
2. **Carry out the small area survey**
3. **Use the total number of cases found (n) and the standard (p) to calculate the decision rule. For example,** if \( n = 9 \) and \( p = 90\% \) then: \( d = n \times p / 100 = 9 \times 90 / 100 = 8.1 = 8 \)
4. **Apply decision rule:** if the number of cases in the program is > \( d \), then the coverage is classified as HIGH (otherwise it is classified as LOW).

A total of 102 children were screened during this stage.

3.3 Stage 3 ‘Wide Area Survey’

Been a final stage of the survey, the objective of this third stage of the evaluation was to provide an estimate of the program coverage by applying Bayesian theory of probabilities to estimate the sample size. This technique includes an estimation of the prior and prediction of coverage before conducting a wide area
survey to calculate a minimum sample size (active cases to be found) in the survey; the survey data uses to estimate the programme coverage.

Developing the “Prior”

A Prior Probability was developed: a statistical representation of the "belief" about the level of coverage that the evaluation team was able to develop based on the findings from the previous stages. The “prior” or “Mode” for the wide area survey is generally estimated on the available information from the stage one and two of the survey. This helps to assume possible coverage of the programme and then it is expressed as a probability density. On the basis of findings in barriers and boosters by giving weightage, it was assumed that the coverage for the programme is 87% and the sample size of 20 for the wide area survey was calculated with a 95% credibility interval and ±10% precision. There is always uncertainty in the value of the prior. The amount of uncertainty about the prior is same as the probable range of the values (minimum and maximum) of the coverage and that is constant with the prior information. Following are the minimum and maximum probable values through considering ±25 uncertainty value in assumed 87% coverage.

- The minimum probable value of the coverage is = 87%-25% = 62%
- The maximum probable value of the coverage is =87%+25% = 112%.

The uncertainty lower than ±25, usually enhance the chances for inappropriate results and seldom appropriate results are observed in first time SQUEAC in the area.

The alpha and beta priors were calculated using the following formula

\[ \mu = \frac{\text{minimum} + 4 \times \text{Mode} + \text{maximum}}{6}; \quad \sigma = \frac{\text{maximum} - \text{minimum}}{6}; \quad \alpha \text{ prior} = \mu \times \left( \frac{\mu(1-\mu)-1}{\sigma^2} \right) \]

\[ \beta \text{ prior} = (1 - \mu) \times \left( \frac{\mu(1-\mu)-1}{\sigma^2} \right) \]

Thereafter, the values were expressed as proportions for using them in the formulae mentioned above

\[ \text{Proportion} = \frac{\text{Percentage}}{100} \]

By using above formulae the prior was calculated \( \alpha = 14.5 \) and \( \beta = 2.2 \) as a \( \beta \) prior. These values \( \alpha \) prior, \( \beta \) prior and ±10 precision were used in Bayesian Software; the sample size was calculated as 20. Minimum 20 SAM cases (In program and not in program) was required to be identified in the wide area survey for the estimation of coverage.

Figure1: Prior for OTP coverage, IDP camps, Galkaiyo, Somalia.
4.0. Findings and Analysis

4.1. Stage 1: Routine Programme Data and Contextual data Analysis.

As mentioned above, both quantitative and qualitative data was collected and analysed in this stage. The routine programme monitoring data was also gathered and analysed using the CESVI IMAM Programme OTP cards. The qualitative information was collected from the key informants using different methods in line with the SQUEAC assessment guidelines.

4.1.1 Quantitative data collection and analysis

The data collected was for only exited cases of Severe Acute Malnourished children without any medical complications registered in OTP IMAM Programme run by CESVI from November 2015 to July 2016. The analysis of program data is used for assessing the quality of services, for identifying the trends in admissions and performance-cured, defaulted, non-cured and died.

4.1.1.1. Admissions, seasonal trends, Diseases and Hunger Gap

The figure below shows the number of admissions over time for the period November 2015 to July 2016. A total of 1,380 OTP admissions were recorded during this period. The pattern of admissions shows a typically high number of admissions in the first two months of the programme operation as both prevalent and incident cases are found and admitted. It is important to highlight that that this was CESVI’s first operation in the IDP camps of Galkayo town and the prevalence of SAM cases was very high. This period also coincided with the conflict between the states of Galmudug and Puntland over boundary issues within Galkayo town and as a result, people fled to the neighbouring settlements of Bandiradley, Galinsor among others. Normalcy returned during the month of December and this best explains the high number of admissions. There is a slight reduction in the number of admissions for the months of January through to March as this was a period when UNICEF was distributing high-density BP5 biscuits to moderately malnourished children and Pregnant and lactating women (PLW). Further, April is apparently the month with the single highest number of admissions. This peak coincides with the period of the highest prevalence...
of diarrhoea, respiratory infection, measles and reduction of staple food in the market as the period is a rainy season.

**Figure 2: Total admissions over time plotted against seasonal Calendar for Galkaiyo South IDPs, Mudug, Somalia.**

![Admissions over time graph](image)

**Table 2: Seasonal calendar**

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<td>Demand for non-agricultural labour</td>
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<td>+++</td>
<td>+++</td>
<td>Lean season</td>
<td>++</td>
<td>+++</td>
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<td><strong>Illnesses</strong></td>
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<tr>
<td>Malnutrition</td>
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<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Malaria</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Measles</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Acute respiratory Infections (ARI)</td>
<td>++</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+++</td>
</tr>
<tr>
<td><strong>Food security</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of staple foods</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Access to staple foods</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Price of staple foods</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>++</td>
<td>++</td>
</tr>
</tbody>
</table>

4.1.1.2 MUAC at Admission

**Figure 3: MUAC on admission for Galkaiyo South IDPs, Mudug, Somalia.**
The graphical presentation above shows that majority of children were admitted in the early stage of malnutrition. Only 3.7 percent of children were admitted with MUAC below 114mm. The median MUAC on admission was found to be 110mm. This shows an early treatment seeking behaviour among the community and is also an indicator of good community mobilization for early case finding and admission. Also, it is important to note here that since admission is being done by both z scores and MUAC those children with high MUAC are admitted using z-score (21% of the admission) hence a high MUAC at admission.

4.1.1.3. MUAC at Discharge
MUAC at discharge for cured patients is in accordance with the requirements set by IMAM guidelines for Somalia which puts the discharge criteria at >115mm. As there is a huge problem of OTP/TSFP interface problem, it was wrong to discharge children without attaining the requisite >125mm. This best explains why the program has a high number of relapses as reported in the qualitative assessment and captured well by the Wide Area Survey.

Figure 4: MUAC at discharge for Galkaiyo South IDPs, Mudug, Somalia.

4.1.1.4. Length of stay for cured
From the graph below, the average length of stay in the programme by OTP patients was 8 weeks. According to Somalia guidelines, the average length of stay is 6-8 weeks. The majority of the discharges occurred during 4-8 weeks. This is a good pointer that the program had good recruitment and effective
community mobilization. It also corroborates the earlier findings on MUAC that there is active case finding and community has an element of early treatment seeking behaviour. In essence, Higher coverage programme tend to have a median duration of treatment episodes of less than or equal to 8 weeks. Therefore, discharge of cured children from the OTP was timely.

**Figure 5: Number of weeks in Programme before discharge cured, Galkaiyo South IDPs, Mudug, Somalia.**

![Graph of Weeks in Programme before discharged as cured](image)

### 4.1.1.5. Length of stay for Defaulters

It is evident from the graph below the majority of the defaulters occurred during the first three weeks after admission. This may not be a problem of active case follow-up by the community health workers. Rather, this is as a result of migration on the part of the family of the defaulted child to other areas within Somalia, opportunity cost for families seeking treatment and insufficient key message during admission and follow-up as verified during the data collection period.

**Figure 6: Number of weeks in Programme before discharge as defaulter, Galkaiyo South IDPs, Mudug, Somalia**

![Graph of Weeks in Programme before discharged as defaulter](image)

### 4.1.1.6. Performance indicators

From the graph below, it is evident that performance indicators were above the SPHERE standards. The percentage of cured was relatively above the minimum 75% required while percentages of defaulters and deaths were also less than the minimum 15% and 10% set by SPHERE respectively. This is an indication
of high coverage. Twenty four (24%) percentage of total admission were either referred to stabilisation centres for further care or transferred to supplementary feeding programme after stabilisation.

Figure 7: Discharge overtime

![Discharges over time - all health centres](image)

Table 3: Indicator performance, Galkaiyo South IDP, November 2015 to July 2016.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number</th>
<th>Percentage</th>
<th>SPHERE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cured</td>
<td>1006</td>
<td>95.99%</td>
<td>&gt;75%</td>
</tr>
<tr>
<td>Defaulter</td>
<td>28</td>
<td>2.67%</td>
<td>&lt; 15%</td>
</tr>
<tr>
<td>Death</td>
<td>7</td>
<td>0.67%</td>
<td>&lt; 5%</td>
</tr>
<tr>
<td>Non-response</td>
<td>7</td>
<td>0.67%</td>
<td>&lt; 5%</td>
</tr>
<tr>
<td>Transfer out</td>
<td>332</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.1.1.7. Time Travel to OTP site.

Figure 8: Time take to travelling to OTP sites in Galkaiyo south IDP camps.

![Overall admissions by time travelled to health centre](image)
Time travel was less than 5 minutes to all OTP sites, therefore, distance was not a coverage problem. This is due to the fact the programme employed 3 mobile OTP teams that were present in each of the 12 IDP camps at least once a week.

4.2.0 Qualitative Data collection
On a daily basis, 5 teams each composed of two enumerators, carried out at least five KIIs, totalling to 122 interviews with 4 FGDs across all the 12 IDP camps of Galkayo south. The objectives of collecting qualitative data was to better orientate discussions and allow further detailed development of the coverage hypotheses, in-depth analysis of the existing information and routine programme data described in the methodology section. This data also provides vital information concerning the underlying causes of low or high programme coverage, including key barriers and accessibility of the services. The data was then separated and levelled using the Boosters, Barriers and Questions (BBQ) approach. These three issues are recorded separately and analysed: (1) Boosters, (2) Barriers and (3) Issues that need more investigation, listed as questions.

The findings of the qualitative data are that there are no differences in knowledge and attitudes towards the IMAM programme in all the 12 IDP camps.

4.2.1. Local Understanding of Malnutrition
The interviewees referred to malnutrition using 10 local terms, out of which « nafaqa darro » or « macluul » were most frequently used. Children suffering from Marasmus were referred to as caato, muwaad. This means skinny and weak. The most common terms for Kwashiorkor were cago barar and “Calool weynad” meaning oedema and big belly respectively.

Table 4: Local terms for malnutrition

<table>
<thead>
<tr>
<th>SOMALI</th>
<th>ENGLISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nafaqa darro</td>
<td>Malnutrition</td>
</tr>
<tr>
<td>2. Calool waynaad</td>
<td>Pot belly</td>
</tr>
<tr>
<td>3. Anamiya,( Dhiiq Yari)</td>
<td>Anaemia</td>
</tr>
<tr>
<td>4. Maliil</td>
<td>Severe</td>
</tr>
<tr>
<td>5. Caato,</td>
<td>Thin</td>
</tr>
<tr>
<td>6. Muwaad,</td>
<td>Very weak</td>
</tr>
<tr>
<td>7. Macluul,</td>
<td>Malnutrition</td>
</tr>
<tr>
<td>8. Uur waynaad</td>
<td>Big belly</td>
</tr>
<tr>
<td>9. Lafa lafo,</td>
<td>Very skinny/bonny</td>
</tr>
<tr>
<td>10. Caga Barar,</td>
<td>Oedema</td>
</tr>
<tr>
<td>11. Buskuut diiq</td>
<td>RUTF</td>
</tr>
<tr>
<td>12. Kaniiniga gooryanka</td>
<td>Albendzole</td>
</tr>
<tr>
<td>13. Qalajiye</td>
<td>Amoxycillin</td>
</tr>
</tbody>
</table>

The majority of the interviewed population demonstrated knowledge of the disease, including its causes, symptoms and effects. They were generally aware of the symptoms and as mentioned above used several terms to describe the condition. However, very few of them knew immediate causes of malnutrition and relationship between malnutrition and morbidities such as diarrhoea, measles and respiratory infections.
Some of the interviewed indicated that they know of children currently benefiting from CESVI’s CMAM programme; some had children admitted in the programme at some point. This is a clear indication that the 30 CHWs tasked with sensitizing the community in the IDP camps are generally doing a good job. Some of the respondents showed that they hear about malnutrition quite regularly as they usually participate in sensitization sessions conducted by CHWs. One thing that also came out was CHWs were and are still engaged in active case finding almost every day evidenced by their regular screening of potential cases as reported by the respondents. Moreover, stigmatisation of malnourished children is generally unheard of. None of the respondents interviewed indicated such discrimination exists. The local community in the IDP camps of Galkayo south believes that malnutrition is just like any other disease that is non-communicable. It is not a new disease that warrants suspicion but is rather a common phenomenon that comes as a result of issues like prolonged household food insecurity and common disease diarrhoea. On the contrary, malnourished children are supported and receive help from several quarters.

4.2.2. Therapeutic Itineraries
The prevailing majority of interviewees did not hesitate to talk about health centres as their first and only option to cure malnutrition. Even carers of malnourished children admitted that once they realised that their child was sick and/or he was screened for malnutrition, they set out on a journey to the health facility/OTP facility nearby. Quite often, mothers even brought their children for screening whenever they had feeling that the child was sick or malnourished. This supports data from the routine monitoring showing that majority of the admitted cases were self-referrals. Respondents indicated that RUTF (plumpy nuts) locally known as buskut diiq were generally given to malnourished children along with substances administered through the mouth during the first day of admission- a specific reference to vitamin A. Mothers/carers also indicated receiving medicine such Amoxycillin syrup (qalajiso), Albendazole (kaniiniga gooryaanka). The community also indicated using recitation of the Quran as a therapy to cure malnourished children- something largely prevalent in the Muslim world. Feeding the sick child with soup made from bone broth was also mentioned by some mothers. Although many respondents regarded RUTF as a medicine specifically meant for the malnourished, cases of intra-household sharing of RUTF were reported.

4.2.3 Understanding and Appreciation of IMAM Programme
A detailed investigation on the local understanding of the IMAM program supported by CESVI revealed that majority of the respondents indicated the existence of a programme that treats malnourished children. Some revealed that they have been to the OTP sites-personally- while others heard from the CHWs conducting awareness and sensitization. In all the 12 camps, knowledge on IMAM was evident and this is probably due to the presence of mobile OTP teams visiting each camp at least once every week. On the programme’s target population, majority revealed that it was malnourished children who are in need of treatment. Some indicated it was children less than five years even when others brought children aged above 6 years for admission criteria. This shows the need for more awareness and sensitization sessions to inform the community about the specificity of the program admission criteria regarding age span eligibility. On a brighter note, Majority of the respondents were well versed with admission criteria referring to the MUAC level for OTP cases as the ‘red level’. However, they wanted these criteria to be relaxed so that children in the ‘yellow range could be also admitted to the same programme. This points out the need for TSFP Program run by CESVI.
On the flipside, the local community greatly appreciates the Programme and desires the continuation and uptake of efforts. They believe that the Programme is beneficial and useful and goes a long way in treating malnutrition. Apart from information collected during the qualitative assessment, letters and notes fished from each facility’s beneficiary complain and feedback box, showed that the views aired by the writer reflect an aura of appreciation by local community. Dedicated staff who revealed they received training twice were involved in the IMAM programme.

4.2.4 Screening and Referral
Community Health Workers were identified as the main actors for active case findings/referral activities in the IDP camps and complimented by traditional birth attendants. Most respondents even mentioned the name of the CHW involved in the screening. One such case alluding to this remarked “Hamdi, the CHW worker is the one involved in screening”. Daily screening was the norm in some of the camps visited and CHWs referred potential cases to the nearby OTP facility/Health post for re-screening and possible admission. For instance, in case a child needs to be referred to the health facility, CHW issue a reference/referral slip to the carer and clearly inform them to present the slip to the nearest facility or a specific OTP site for consultation. Most of the times, however, the CHWs accompanied the child and the carer to the nearby facility.

Since the local community were aware of the existence of a Programme that treats malnourished children, they usually brought their children with them for screening during OTP days and when attending sensitization sessions.

4.2.5 Sensitisation
The 30 CHWS spread across the 12 IDP camps were identified as the people engaged in community sensitisation activities even though they were at times supported by traditional birth attendants. Sensitization sessions were carried out six days in the week and touched on several key topics such as malnutrition, IYCF, household hygiene and sanitation, breastfeeding and pregnancy among others. On the other hand, Camp leaders/gatekeepers were only engaged in such activities rather tactically. However, their active participation is a key to successful community mobilisation as their opinion matters and could add leverage to behaviour change.

The non-engagement of key community figures is partially motivated by gender segregation of current sensitisation activities, which focus solely on women. However, given their role and decision-making power in the household and beyond, men should also be targeted and encouraged to assist.

4.2.6. Summary of Qualitative investigation
The results from qualitative data collection were largely similar across areas and health delivery units, therefore the results from focus group discussions and key informant interviews are combined for all sites. The data was triangulated for ensuring its reliability. Triangulation was done by asking similar questions to different sources and employing different methods of data collection.

The findings from the stage 1 & 2 revealed some key barriers and boosters’ factors which are affecting the overall coverage of the programme. Based on the evidence and impact on the coverage the barriers and boosters are marked from 1 to 6. As the individual scores vary for the barriers and boosters, so the average
score is considered. The total score of the booster is added to “zero” (i.e. lowest possible coverage) and the total scores of the barriers are subtracted from the 100% (i.e. highest possible coverage, table 5a).

Table 5a: Weightage for barriers and boosters is mentioned in the following table:

<table>
<thead>
<tr>
<th>Boosters</th>
<th>Weighted</th>
<th>Weighed</th>
<th>Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community leaders involved</td>
<td>5</td>
<td>2</td>
<td>Intra household RUTF Sharing</td>
</tr>
<tr>
<td>The community aware of the program benefits and routinely ask CHWs to screen for malnutrition</td>
<td>5</td>
<td>3</td>
<td>OTP/TSFP Interface problems Leading to high number of relapses</td>
</tr>
<tr>
<td>Continuous supply of RUTF is available</td>
<td>6</td>
<td>2</td>
<td>Opportunity cost for caretakers of SAM child</td>
</tr>
<tr>
<td>Mobile OTP teams who are present in every camp at least once a week</td>
<td>6</td>
<td>1</td>
<td>Misuse of z-score and MUAC during both admission and discharge</td>
</tr>
<tr>
<td>Community well aware of the program admission criteria</td>
<td>5</td>
<td>2</td>
<td>Insufficient community knowledge about admission criteria and relation of morbidities and malnutrition</td>
</tr>
<tr>
<td>Active and motivated CHWs</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early treatment seeking behaviour</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General good opinion of program by community</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admissions consistent with high coverage</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity- Camps close to OTP sites as well as health posts</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No stigma</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good program performance( high proportion cured low Mortality and low defaulting)</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short waiting times at OTP site</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active Community Case finding</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programme equally benefiting all ethnic groups</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficient tracing of defaulters and absentees</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum of Scores</td>
<td>84</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Sum of scores added to zero</td>
<td>(0+84/4)=8</td>
<td>(100-10)=90</td>
<td>Sum of scores subtracted from 100</td>
</tr>
<tr>
<td>Prior/mode</td>
<td>84+90/2=87%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The most common barriers to coverage and reasons for non-coverage are presented in Table 5b-c.

Table 5b: Summary of results from qualitative investigations: Boosters to access

<table>
<thead>
<tr>
<th>Boosters</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Continuous supply of RUTF is available</td>
<td>Reviews of records as well as interviews with community members, CHWs, and carers of current and past cases revealed a continuous supply of RUTF.</td>
</tr>
<tr>
<td>2: The community aware of the programme benefits and routinely ask CHWs to screen for malnutrition</td>
<td>There is a general awareness about malnutrition among the community, specifically about the causes and signs of Marasmus. Oedema is rarely associated with, which is not surprising due to the low number of cases of Kwashiorkor (</td>
</tr>
<tr>
<td>3: Short waiting times at OTP site</td>
<td>Carers of malnourished children indicated the maximum waiting time was roughly 10 min. This was corroborated by OTP staff</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4: Community leaders involved</td>
<td>Field interviews indicate that the camp leaders were actively involved in the CMAM program. They were overly responsible for the smooth running of the programme in their respective camps</td>
</tr>
<tr>
<td>Mobile OTP teams who are present in every camp at least once a week</td>
<td>Three mobile teams operating across 12 OTP sites every week has boosted the programme’s coverage and reduces the rates of defaulting.</td>
</tr>
<tr>
<td>5. Community well aware of the program admission criteria</td>
<td>MUAC cut-off point was identified by community members, CHWs and programme beneficiaries correctly.</td>
</tr>
<tr>
<td>6. Proximity- Camps close to OTP sites as well as health posts</td>
<td>Analysis of distance from home location of each quarter as well as carers’ perception of distance confirmed distance is not a limiting factor to attend the program.</td>
</tr>
<tr>
<td>7: General good opinion of program by community</td>
<td>Interviews with different stakeholders in the community revealed that there is a very strong pressure to have every child in the program. This is a revealed preference and a proxy indicator of the desirability of the program</td>
</tr>
<tr>
<td>8: Active Community Case finding</td>
<td>CHWs are engaged in daily case finding and routine screening of all children in the camps. Mothers also bring their children for screening regularly.</td>
</tr>
<tr>
<td>Early treatment seeking behaviour</td>
<td>Tallies of MUAC on admission revealed that the majority of cases were admitted close to programme’s admission criteria</td>
</tr>
<tr>
<td>Plot of referral source (of program records) showing self-referrals</td>
<td>FGDs with community members found that they seek care first from mobile OTP and health posts</td>
</tr>
<tr>
<td>Active and motivated CHWs</td>
<td>Review of timetable of activities and field interviews confirm a continuous screening at community level.</td>
</tr>
<tr>
<td>Admissions consistent with high coverage</td>
<td>Plot of admission overtime (routine data) and stage of the program versus the disease, seasonal and critical events calendar revealed a smooth admission across time and facilities which is characteristic of a program that responds to its dynamic environment.</td>
</tr>
<tr>
<td>No stigma</td>
<td>Field interviews show that malnourished children are not stigmatised as their condition is non-communicable. The community also holds the belief that this just like a normal disease.</td>
</tr>
<tr>
<td>Good programme performance(high proportion cured, low Mortality and low defaulting)</td>
<td>Data from routine monitoring indicates the Programme’s observed cured, deaths, non-response and default rates are well within international norms for therapeutic feeding programs as defined by SPHERE.</td>
</tr>
<tr>
<td>Programme equally benefiting all ethnic groups</td>
<td>The inhabitants of the 12 camps come from different regions across Somalia. No discrimination of any kind was reported by any one ethnic group. The programme attends to all cases as received.</td>
</tr>
<tr>
<td>Efficient tracing of defaulters and absentees</td>
<td>As demonstrated in the quantitative analysis high defaulter rates are not a concern for this Programme. This is an indicator that there is an effective absentee follow-up and defaulter tracing system in place.</td>
</tr>
</tbody>
</table>
Table 5c: Summary of results from qualitative investigations: Barriers to access

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: OTP/TSFP Interface problems Leading to high number of relapses</td>
<td>This was the major problem affecting the coverage of the programme and contributing to high number of relapses. TSFP Program is managed by a local NGO and rations are distributed once every month. Further, there so much negligence and bureaucracy such that TSFP targeting and admission are skewed. Interviews with different stakeholders including beneficiaries indicated that SDRO are never straight forward and take them in circles whenever they are referred by CESVI. An MOU between the two partners is not honoured most of the times. These inconveniences generally deteriorate the condition of the recovering child and makes readmission almost inevitable.</td>
</tr>
<tr>
<td>2: Intra household RUTF Sharing</td>
<td>Sharing RUTF at home between the children of the same family or even with the parents is common and has been reported not only by OTP staff and CHWs but also by members of the community such as the camp leaders. However, careers of malnourished children refused to admit the existence of such things.</td>
</tr>
<tr>
<td>3: Opportunity cost for families seeking treatment from the IMAM programme</td>
<td>Careers of non-cured and non-covered SAM cases particularly single mothers reported have little time to take the sick child to OTP site or Health facilities as they need to look for casual labour to feed all the household members.</td>
</tr>
<tr>
<td>4: Insufficient community knowledge on enrolment criteria and immediate causes of malnutrition</td>
<td>This came out clearly from KII and to some extend also from FGDs. As much they the respondent have good information on malnutrition, they don’t know immediate causes neither able to connect the relation between diseases and malnutrition.</td>
</tr>
<tr>
<td>5: Misunderstanding on the use of W/H z-score in admission by programme staff</td>
<td>This is evident from the admission trends with children barely meeting the criteria admitted into the program. This is probably due to considerable pressure to meet some set targets.</td>
</tr>
</tbody>
</table>

4.3.0 Stage 2: Findings from the Small area Survey

All the four sites (2 will high admission and 2 with low admissions) were selected; high and low admissions was defined by the number of children under the age of five years in the area versus the percentage of children under the age of five years admitted to the OTPs with SAM (see Table 6 below).

Table 6: OTP sites with high and low Admissions.

<table>
<thead>
<tr>
<th>Block with high admission</th>
<th>% of U5 children admitted in OTP</th>
<th>Block with low admission</th>
<th>% of U5 children admitted in OTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buulo Jawan</td>
<td>15.2%</td>
<td>Hiran 2</td>
<td>4.9%</td>
</tr>
<tr>
<td>Buulo Noto</td>
<td>15.1%</td>
<td>Qorahey</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

A total of 102 children were screened during this stage out of which 26 were SAM cases.
Table 7: Decision Rule

<table>
<thead>
<tr>
<th>Camp</th>
<th>Total SAM cases</th>
<th>SAM case covered</th>
<th>Decision rule</th>
<th>classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qoraheyy</td>
<td>3</td>
<td>2</td>
<td>d = Total cases × 90/100 = 2</td>
<td>Since 2 is equal to 2, therefore coverage is equal to 90%</td>
</tr>
<tr>
<td>Hiran2</td>
<td>4</td>
<td>4</td>
<td>d = total cases × 90/100 = 3</td>
<td>Since 4 is &gt; 3.6, the coverage is greater than 90%</td>
</tr>
<tr>
<td>Buul Noto</td>
<td>3</td>
<td>2</td>
<td>d = Total cases × 90/100 = 2</td>
<td>Since 2 is equal to 2, therefore coverage is equal to 90%</td>
</tr>
<tr>
<td>Buulo Jawan</td>
<td>16</td>
<td>16</td>
<td>d = Total cases × 90/100 = 14.4</td>
<td>Since 16 &gt; 14, coverage is therefore greater than 90%</td>
</tr>
</tbody>
</table>

4.3.1 Stage 3: Findings from wide Area Survey

For this survey, 5 IDP camps out of the 12 IDP were selected to find the sample by using same case findings method used in small area survey. A total of 42 SAM cases were identified across the 5 IDP camps sampled. Of these, 27 cases were in the program, 11 were recovering cases while only 4 cases were not covered.

Table 8: wide area survey results for OTP coverage, August, 2016.

<table>
<thead>
<tr>
<th>Sampled IDP Camps</th>
<th>SAM Cases</th>
<th>Covered Cases</th>
<th>Non-covered cases</th>
<th>Recovering cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiiran 1</td>
<td>9</td>
<td>5</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Alanley</td>
<td>13</td>
<td>9</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Midnimo</td>
<td>11</td>
<td>8</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Bulo Noto</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Al Adala</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>27</td>
<td>4</td>
<td>11</td>
</tr>
</tbody>
</table>

4.3.2. Coverage Estimate

The programme coverage rate was calculated from the data of wide area survey through the pre-set Bayesian software. The survey likelihood data was summarized using the numerator and a denominator as shown below to calculate the coverage. The period coverage estimator was used because of the programme’s reasonably effective case-finding which results in timely identification and referral. Period coverage also takes into consideration both current and recovering cases as opposed to point coverage which only estimates current cases in the programme. Hence coverage was calculated as:

\[ \text{Period coverage} = \frac{\text{Number of Current cases and recovering cases in the programme}}{\text{number of current and recovering cases attending the program} + \text{number of current cases not in the program}} \]
The numerator and the denominator were obtained from the results for the wide area survey using the formula:

\[
\text{Period coverage} = \frac{27 + 11}{42} \times 100 = 90.5\%
\]

The data was analysed using the Bayes SQUEAC calculator. The wide area survey data of numerator (38) and denominator (42) were entered into the Bayes SQUEAC calculator. The programme coverage is estimated to be 90.8% (95% CI = 80.6%–95.8%). Therefore, coverage slightly exceeds (>90%) the minimum standard set by SPHERE for coverage in IDP camps.

**Figure 9:** Point coverage for OTP coverage, IDP camps, Galkaiyo, Somalia.

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**5.0 Conclusion**

In the IDP camps where CESV’s OTP programme has been running for 9 months the coverage of the nutrition treatment program was 90.8% ((95% CI = 80.6%–95.8%)), i.e., above the SPHERE standard set for selective feeding programs in camp settings (minimum coverage level >90% coverage for programs in camps).

The SQUEAC tool was used as a monitoring and an informative process of coverage determination of the CMAM program in Galkayo South IDP camps. It was a monitoring tool in the sense that it tracked implementation of the program against the requirements laid down in the IMAM international and national protocols, such as early treatment seeking, length of stay in the programme and care as long as it is needed, to mention a few.
Rigorous regular screening, motivated staff and CHWs, adherence to protocol, communities’ health seeking behaviour meeting programme’s case definition, and quality of service delivery as shown by high cure rates, low mortality and default rates were some of the boosters that helped the programme achieve high programme coverage. Furthermore the investigation found that:

- Mortality rate, early detection of SAM cases (admissions MUAC) and length of stay in the programme are above acceptable standards.
- Active cases finding and screening at house household level.
- Timely defaulter/absentee tracing
- Registers are kept well.
- Good knowledge regarding complications associated with SAM and key messages by OTP staff was observed.
- Identified barriers were intra-household sharing of RUTF, OTP/TSFP interface problems as well as misunderstanding on the use of Z-score for admission. Both routine data (OTP cards) analysis and observation in the OTP site revealed Children admitted with z-score but discharge with MUAC. Further it was noted that, in some instances ineligible children are admitted and this could be due to the pressure from both caretakers and the rush to achieve programme target. However, the program is appropriately using key community figures and the community network.

One of the principles of the IMAM model of care delivery is increasing the awareness of malnutrition in the community. The basic first step is for people to be able to recognize the signs of malnutrition. This is the primary objective of all community mobilization activities. However, rejection of healthy referrals was common with some mothers feeling aggrieved. At the time of the survey, carers of rejected referrals, the majority of which were moderately malnourished, received advice detailing that their child was not malnourished but at risk of developing malnutrition. Guidance provided included that carers should feed the child more food and that s/he be brought back to the nutrition centre should their condition worsen or they become ill. This guidance and explanation helped improve the community’s perception on the Programme.

Most of the OTP sites has no shelter against sun exposure both staffs and beneficiaries to high temperature. It is advisable to provide shelter. Further observation noted that there little triage and appetite test done at waiting area in addition to lack of sugar water.

6.0. Recommendations
To help the program maintain this high coverage, the following recommendations are made:

1. Immediately meet and hold dialogue with SDRO and WFP to discuss the challenges with RUSF stock out with view of ensuring regular and sufficient supply to reduce MAM cases deteriorating to SAM in addition to get a reliable MAM programme where cases graduating from OTP can be referred.
   - It is further recommended that If there will be no change this challenge to taken to other fora such as Clusters and Donors level.
   - As a temporary measure, it is recommend to treat all SAM cases till full recovery and discharging at >12.5 cm MUAC.
   - CESVI should consider looking for ways of start MAM programme in the near future.
2. Strengthen Key messages at all times until favourable outcome is achieved

Focus of key messages should:
- Use of Plumpynuts
- Importance of completing treatment and possibility of the child suffering again if not taken care of.
- Option of transfer to same programme in another location if and when the family want to move out
- Important of revisiting health facility/OPT site in case the child’s condition changes for worse.

 Open discussion with WFP on possibility of providing protection ration for household of SAM cases.

3. Do a refresher training for OTP staff with focus on:
- Admission and discharge criteria using Z-score.
- Data- proper and accurate filling of OTP cards and registers.
- Re-enforce on job training and one to one coaching.
- Calculation of LOS & AWG
- Terms-defaulter, relapse, new, return after defaulter, absentee, etc.

4. Organize community meetings to discuss the sharing of RUTF, enrollment criteria and cause of malnutrition. Encourage community leaders and Elders to educate their community on the immediate causes of malnutrition and programme target.

5. Ensure continuity of this IMAM programme. As the community is prone to chronic food insecurity (residents take one meal a day-supper-), the program should continue providing lifesaving nutrition services. Similarly, there is a need for MAM treatment as mentioned above. (i.e. SFP).

6. Introduce Sugar water to reduce risk of hypoglycaemia during period.

7. Strength Appetite test and triage system at waiting areas.
### 7.0. Annexes

**Annex1: SQUEAC Schedule - SQUEAC training in Galkaiyo, August 3rd to August 16th 2016.**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Facilitator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day -1: 01.08.2016</td>
<td>Meeting CESVI team in Nairobi</td>
<td>Mohamed and Hassan</td>
</tr>
</tbody>
</table>
| Day-2: 02.08.2016 | AM: Arriving Galkaiyo  
PM: Briefing on programme, SQUEAC, putting required tools/stationery together and finalising work plan with field team. | Mohamed                                          |
| Day-3: 03.08.2016 | Class room training  
AM:  
- Opening Session  
- Introductions  
- Participants expectations  
- Discuss the agenda  
- Overview of the SQUEAC methodology (all three stages)  
PM:  
- Group work- staff perceptions on the programme.  
- mapping the programme target areas  
- Identify programme key stakeholders for interview.  
- Start with Mind map  
- Theory  
- Start with stage one data collection method | Mohamed and Ahmed (Programme manager) |
| Day-4: 04.08.2016 | Classroom training  
Theory  
- Go through data collection methods/materials  
- Develop/adopt guide for FGD, and KII  
- Data analyse Practical exercise: | Mohamed/Assessment team |
<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Activity</th>
<th>Organizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day-5</td>
<td>05.08.2016</td>
<td>Stage one data collections and analysis. Practical exercise Developing Seasonal calendar</td>
<td>Mohamed/Assessment team</td>
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<tr>
<td></td>
<td></td>
<td>Classroom training AM: Analysing OTP data collections Start to develop graphs Pilot PM: Theory Start to develop graphs</td>
<td></td>
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<tr>
<td>Day-6</td>
<td>06.08.2016</td>
<td>Stage one data collections and analysis. Analysis of routine data and community assessment-FGDs and KIIs</td>
<td>Mohamed/Assessment team</td>
</tr>
<tr>
<td>Day-7</td>
<td>07.08.2016</td>
<td>Continuation of Stage one data collections and analysis. Analysis of routine data and community assessment-FGDs and KIIs</td>
<td>Mohamed/Assessment team</td>
</tr>
<tr>
<td>Day-8</td>
<td>08.08.2016</td>
<td>Restitution of stage1 and planning for stage 2</td>
<td>Mohamed/Assessment team</td>
</tr>
<tr>
<td>Day-9</td>
<td>09.08.2016</td>
<td>Theory/practical Stage – 2 data collection (Small area survey) Selection of sample blocks Go through the questionnaires Data analysis Bayesian software Setting up the prior</td>
<td>Mohamed/Assessment team</td>
</tr>
<tr>
<td>Day-10</td>
<td>10.08.2016</td>
<td>Restitution of stage 2 and planning for stage 3 Theory Estimate the sample size for wide area survey Selection of blocks for wide area survey</td>
<td>Mohamed/Assessment team</td>
</tr>
<tr>
<td>Day-11</td>
<td>11.08.2016</td>
<td>Data collection stage 3-continued. Exercise on how to estimation of coverage rate Discussion on Recommendation Discussion on Action plan</td>
<td>Mohamed/Assessment team</td>
</tr>
<tr>
<td>Day-12</td>
<td>12.08.2016</td>
<td>Restitution of stage 3 and data analysis</td>
<td>Mohamed/Assessment team</td>
</tr>
<tr>
<td>Day-13</td>
<td>13.08.2016</td>
<td>Days off.</td>
<td></td>
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<tr>
<td>Day-14</td>
<td>14.08.2016</td>
<td>AM: Restitution with key stakeholders-partners, LA, key community leaders PM: Debriefing with Programme staff</td>
<td>Mohamed/PM</td>
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<tr>
<td>15.08.2016</td>
<td></td>
<td>PM: Debriefing with Programme staff</td>
<td>Mohamed</td>
</tr>
<tr>
<td>16.08.2016</td>
<td></td>
<td>Return to Nairobi</td>
<td></td>
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</table>

**Annex 2: Investigation Team**

<table>
<thead>
<tr>
<th>FIRST NAME, SURNAME</th>
<th>GENDER (M/F)</th>
<th>POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mohamed Kusow</td>
<td>M</td>
<td>Consultant</td>
</tr>
<tr>
<td>Ahmed Mohamed Dahir</td>
<td>M</td>
<td>Nutrition Programme Manager</td>
</tr>
<tr>
<td>Saaid Abdullahi Abdul</td>
<td>M</td>
<td>Nutrition Programme Assistant</td>
</tr>
<tr>
<td>Abdallahi Hassan Isse</td>
<td>M</td>
<td>Enumerator</td>
</tr>
</tbody>
</table>
Ahmed Abdi Ali | M | Enumerator
---|---|---
Abdirizak Abdullahi Muse | M | Enumerator
Faysal Hassan Guled | M | Enumerator
Hussein Hassan Jimale | M | Enumerator
Hussein Adan Ibrahim | M | Enumerator
Nastexo Adan Adde | F | Enumerator
Abdirizak Farah Ali | M | Enumerator
Sowdo Ahmed Salan | F | Enumerator
Habiba Mohamed Hersi | F | Enumerator

### Annex3: Questionnaires for Small Area and Wide Area Survey.

Name of IDP camp _____________
Name of sub camp _____________
Name or number of village_____________
Name of Child ________________
Team No ___________
1. DO YOU THINK YOUR CHILD IS MALNOURISHED?
☐ YES ☐ NO
2. ARE YOU AWARE OF THE EXISTENCE OF A PROGRAMME WHICH CAN HELP MALNOURISHED CHILDREN?
☐ YES ☐ NO (→ stop!)
   If yes, what is the program’s name?
3. WHY IS YOUR CHILD CURRENTLY NOT ENROLLED IN THE PROGRAMME?
   ☐ Too far (How long does it take to walk?--------hours)
   ☐ No time / too busy. What is the parent doing instead?_____________________
   ☐ Mother is sick
   ☐ The mother cannot carry more than one child
   ☐ The mother feels ashamed or shy about coming
   ☐ Security problems
   ☐ There is no one else who can take care of the other siblings
   ☐ The amount of RUTF was too little to justify the journey
   ☐ The child has been rejected by the programme already. When? _____ (approx.)
   ☐ Other parents’ children have been rejected
   My husband refused
   ☐ I thought it was necessary to be enrolled at the hospital first
   ☐ I do not think the programme can help my child (prefer traditional healer, etc.)
   ☐ Other reasons (spec. WAS YOUR CHILD PREVIOUSLY ADMITTED TO THE PROGRAMME?
   ☐ YES ☐ NO (→ stop!)
   If yes, why is he/she not enrolled anymore?
   ☐ Defaulted (when?....... why?.....)
   ☐ Condition improved and discharged by the programme (when?.......)
   ☐ Discharged because he/she was not recovering (when?.......)
   ☐ Other:______________________________
(Thank the carer) ify):
Annex 4: Case Finding Form.

<table>
<thead>
<tr>
<th>Child’s Name</th>
<th>Age (Months)</th>
<th>Mother’s name</th>
<th>Camp</th>
<th>MUAC (mm)</th>
<th>SAM case</th>
<th>SAM case covered</th>
<th>SAM case non covered</th>
<th>Recovering child</th>
</tr>
</thead>
<tbody>
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Annex 5: Community Guide - Women

Name of the Respondent ………………………………. Date of the Interview………………………….
Ethnicity…………………… Clan…………………… District………………………….
IDP Camp………………………………….. Health Zone………………………….

A) RESPONSIBILITIES
1. What are your usual daily activities?
2. Do you have any other, less regular responsibilities (week/month)?
3. Does someone help you?
4. If yes, who? How?
5. What do other family members do?

B) FEEDING PRACTICES
6. What staples are available/eaten in your household? Why?
7. Is there any food, which you or other family members cannot eat?
8. If yes, what? Why?
9. Is there any food, which you cannot eat when you are pregnant /breastfeeding?
10. If yes, what? Why?
11. Is there any food, which your children cannot eat?
12. If yes, what? Why? At what age?
13. How many meals do you eat per day in your household? Why?
14. How are meals shared among all members in your household? Why?

C) BREASTFEEDING / WEANING
15. Do you breastfeed your children?
16. If yes, until what age? How often?
17. Do you give your babies the first milk (« colostrum »)? Why? Why not?
18. Do you give your babies other types of food/drink?
19. If yes, which? At what age? Why?
21. Who advises you on breastfeeding practices?
22. Do you share your experience with other mothers in the community?
23. When? Where? Why?

D) PREGNANCY / CHILDBIRTH
24. What care do you receive when you are pregnant?
25. Who advises you during the pregnancy? Why? How?
26. Do you experience any difficulties during the pregnancy?
27. If yes, which? Why? What do you do to remedy them?
28. What role do fathers play during the pregnancy?
29. Do you think their role is sufficient? Why? Why not?
30. What change would you like to see in this respect? Why?
31. Where do you give birth? Why?
32. Who accompanies you? Why?
33. Would you like to give birth elsewhere/differently? Where? How?
34. What care do you receive after giving birth? Why?

E) CHILDHOOD DISEASES
35. Which childhood diseases are most frequent in your community?
36. Why?
37. Which therapeutic itineraries do you use to treat these diseases?
38. Why?

F) MALNUTRITION
39. (Show images of marasmus / kwashiorkor).
40. Are there children in your community which look like this?
41. If yes, which type is more frequent?
42. Is it a disease like others? Why? Why not?
43. Which local terms are used to describe it?
44. How is it perceived in the community? Why?
45. Is it a « new » disease?
46. If yes, since when? Why do you think this disease appeared in your community?
47. Do you think that this disease is stigmatised? Why?
48. How does this stigmatisation mark people’s behaviour and/or community relationships?

G) FAMILY PLANNING
49. Do you have sexual contact with your husband when pregnant?
50. Why? Why not?
51. Do you have sexual contact with your husband after giving birth?
52. If yes, after what time?
53. Do you wish to get pregnant after giving birth? Why? Why not?
54. Does your husband wish that you get pregnant after giving birth?
55. Why? Why not?
56. Do you know means of contraception?
57. If yes, which?
58. Do you use them? Why? Why not?

Annex 6: Interviewing OTP Staff
CMAM INVOLVEMENT AND CHALLENGES
1. How long have you been working on CMAM?
a. Are all staff in the clinic involved/trained on CMAM?
2. Who trained you on CMAM?
a. Have you had refresher training?
b. Is there any additional training you feel you need?
3. What contact/support have you had with the focal people/Ministry to help you in your job?
4. What difficulties, if any, do you have on the CMAM day?
   a. High number of patients
   b. Time
   c. Completing paperwork accurately and keeping up to date
CALENDAR
5. What are the main childhood diseases you see in the clinic?
   a. Which is the most common? Rank.
   b. What time of year do they occur?
6. What do you think are the causes of malnutrition here?
REFERRAL
7. How do children usually come to the clinic for CMAM?
   a. Referred by volunteer
   b. Heard about it from other beneficiary
   c. Heard about it from other person in the village
   d. Heard about it at the clinic
   e. Heard via the radio/town crier etc.
   f. Other source
   g. Rank in order
REFERRAL AND FOLLOW UP
8. Do children who are referred by the volunteer come with a referral slip/paper? a. What do you do with the referral slips?
9. Does the volunteer check that children they have referred actually present at the clinic?
   a. Do you report back to volunteers on the number of children you have seen that are referred by them?
10. Have you had any wrong referrals from the volunteer?
    a. How many?
    b. What was the problem?
    c. What did you do?
    d. Did you report back to the volunteer?
11. How do you refer patients to the stabilisation centre?
    a. Do you give them a slip?
    b. How do you know if they have arrived at the SC?
    c. Do you know what happens to them?
    d. When patients are referred back do they come with any paperwork?
REJECTION
12. How many healthy children have presented at the CMAM clinic?
    a. How many every week?
    b. Why do you think these mothers come with healthy children?
13. What do you say to mothers of healthy children?
    a. What words do you use?
    b. What explanation do you give?
    c. How do mothers react?
DEFAULTING
14. How many children are absent for more than 1 week during the course of treatment?
    a. Why do you think this is?
15. How many children default?
    a. Why do you think this is?
    b. Is there a pattern
16. What do you do when a child has not turned up for treatment? Probe for:
    a. Absentees
    b. Defaulters
17. Do you think husbands of mothers whose children are malnourished would stop/have stopped them from taking the child to the OTP site?
18. How could we encourage children to return for treatment?
19. What barriers prevent mothers from bringing their children to the OTP?
20. If I wanted to find children with the same problem in your community
   a. What would be what be a better question to ask
   b. what questions should I avoid asking
   Who do you think would be best to identify such children your settlement
21. Is there any stigma associated with malnutrition in this area?

COMMUNICATIONS
22. How often do you see the volunteers?
23. How do you communicate with the volunteers?
24. Do you ask volunteers to follow up on absentees / defaulters?
   a. Why/why not?
   b. How do they report back?
   c. Have any children returned?

IMPROVEMENTS
25. What improvements could be made to CMAM?
   a. More information/training
   b. 2nd day for CMAM
   c. Contact with Ministry staff/local people

26. What messages do you want us to pass to the people organising CMAM?

Annex 7: Questionnaire Village/religious leaders and key community figures

KNOWLEDGE OF CMAM
1. Are you aware of any nutrition service at your local clinic?
2. Who told you about it?
3. When did you hear about it?
4. What do you know about it?
   a. Target children?
   b. Admission criteria?
   c. Treatment given?
   d. Free treatment?
   e. OTP day?
   f. Identification of children?

ROLE / SENSTITISATION
5. Have you told others about the service? How? When?
   a. Usual channels/message dissemination?

BARRIERS
6. Are you aware of any children who need treatment but are unable to access services?
   a. What stops them coming? (Distance/family/beliefs/other)
   b. How could we reach these children/encourage them to attend?

KNOWLEDGE OF CASES
7. Do you know any children receiving treatment?
   a. What can you tell me about them?

8. Do you know any children who have defaulted/stopped coming?
   a. Why is that?
   b. How can we encourage them to return for treatment?
   c. What do other key community figures think of it?
   d. If I wanted to find all malnourished children with the same problem in your community
      i. what would be a better question to ask
ii. what questions should I avoid asking
iii. who do you think would be best to identify such children your settlement
iv. What do people in this area say/think of families with such children? (Probe if there is any stigma of malnutrition in the area/settlement?)

COMMUNICATIONS
9. Do you know who the volunteer is for this service?
   a. When did you last see them?
   b. What do they do? (frequency and organisation of activities)

10. Have you had any feedback from the volunteer/clinic staff/MoH officials about the service?
    a. Do you know what the results are?

PERCEPTIONS OF CMAM
11. What are people saying about CMAM?
12. What do you think of the service?

IMPROVEMENTS
13. How can we improve the service?
14. Do you have any messages for those running the service?

Annex 8: Questionnaire Beneficiaries

UNDERSTANDING OF MALNUTRITION
1. When did you first notice that your child was unwell?
   a. What was wrong with him?
   b. What symptoms did he have?
   c. What did you do to help the child get better?
   d. If malnutrition is not mentioned - What do you think causes malnutrition?

OUTREACH
2. How did you first hear about the service?
   a. Who told you?
   b. Have you heard about it from any other source since?
   c. Who is telling people about it in your settlement?

3. What did you hear about it?
4. What made you come?

TIME
5. How long has your child been attending the clinic?
6. How long do you think is the treatment for?

EXPLANATION FROM NURSE
7. What did the clinic staff tell you about your child’s condition?
8. What were you told about the treatment?
9. What do the staff call the treatment?
   a. What do you call the treatment?
   b. What are some of the negative things being said about this treatment/programme in the community

OTHER CASES/CASE REFERRAL
10. Do you know of other children who have the same problem but are not attending the clinic?
    a. If yes, why not?
11. Have you told anyone else to bring their child to the clinic?
    a. Why/why not?
    b. If I wanted to find children with the same problem in your community
       i. what would be what be a better question to ask
       ii. what questions should I avoid asking
       iii. who do you think would be best to identify such children your settlement
12. Is there any stigma associated with malnutrition in your settlement?

DISTANCE
13. How far is it from your home to the clinic? a. How do you get here? Walk/transport?
   b. How long does it take?
   c. Determine the farthest distance travelled
14. Do you have any other reason to come to this clinic/this place? e.g. how far is their market

STANDARDS OF SERVICE
15. What do you think of the service?
   a. What are the strengths/good things?
   b. What are the weaknesses?
   c. What could be improved?
16. How long do you usually wait before the nurse sees you?
17. How much time do you spend with the nurse? a. How does the staff treat you?
   b. Have you ever been scolded? Why?
18. How do you normally give RUTF to the children?
   a. Can you explain what the OTP staff tells on how you should give the RUTF to the child?
   b. How many times and sachets in a day
   c. Have there been any shortages the OTP site on any week? (Probe for the exact dates)
   d. Have you ever not received the full amount / or received something else instead?

ABSENCE/DEFAULTING
19. How easy is it for you to come every week?
   a. What makes it difficult for you to come/what stops you from coming sometimes?
20. Do you think husbands of mothers whose children are malnourished would stop/have stopped them from taking the child to the OTP site?
21. Do you know of any children who have stopped coming?
   a. Why is that?
   b. How can we encourage these children to return and continue the treatment?

PERCEPTION OF CMAM/FEEDBACK
22. What are people saying about the service in your settlement?
23. Have you any messages you want us to give to the people running the service?

Annex 9: Questionnaire for Volunteers

ROLE
1. How long have you been a volunteer?
2. What are your main activities?
3. How often do you do these activities?
4. What are do you cover for case finding? a. How long does it take you?
5. How do you decide which children to measure?

EXPLANATION
6. What do you tell the mother when you identify a case?
   a. Do any mothers refuse to go to the clinic? Why?
7. What do you say about the new treatment?
8. What name do you call the treatment? a. What do the mothers call it?
   b. If I wanted to find children with the same problem in your community
      i. what would be a better question to ask?
      ii. what questions should I avoid asking
      iii. who do you think would be best to identify such children your settlement
9. Is there any stigma associated with malnutrition in this area/settlement?

REFERRAL AND FOLLOW UP
10. Do you give the mother a referral slip/paper when you refer the child to the clinic?
    a. Why/why not?
    b. How do you know if the child actually went to the clinic?
11. Are you aware of any children who have stopped coming?
   a. Why is that?
   b. How can we encourage them to return?
   c. Do you think husbands of mothers whose children are malnourished would stop them from taking the child to the OTP site?
12. Are you ever asked to follow up on cases who are absent / have defaulted?
   a. How does the nurse communicate with you?
   b. How do you report back?
COMMUNICATIONS
13. How often are you in contact with clinic staff?
14. Have clinic staff told you how many children are being treated/how many have been cured/how many have defaulted?
15. Have you had any further contact with children you have referred?
   a. Do you know how many were cured?
   b. Do you know if any defaulted? Why?
16. What have mothers said to you about CMAM?
   a. What are people saying/thinking about CMAM?
17. Have you talked with village / religious leaders or other people about CMAM since it started?
IMPROVEMENTS
18. How do you think CMAM could be improved?
19. What would help you in your job as a volunteer? a. Do you enjoy being a volunteer?
   b. What difficulties, if any, do you have doing your job as a volunteer?
20. Is there anything else you want to say/any message for those running the service?

Annex 10: Questionnaire Community Members (Men)
PERSONAL & COMMUNITY PROFILE
Responsibilities
☐ Are you in contact with clinic staff?
☐ Do you have any other, less regular responsibilities (week/month)? If yes, explain.
☐ Does someone help you? If yes, who? How?
☐ What do other family members do?
Feeding practices
☐ What staples are available/eaten in your household? Why?
☐ Is there any food, which you or other family members cannot eat? If yes, what? Why?
☐ Is there any food, which women cannot eat when they are pregnant / breastfeeding? If yes, what? Why?
☐ Is there any food, which children cannot eat? If yes, what? Why? At what age?
☐ How many meals do you eat per day in your household? Why?
☐ How are meals shared among all members in your household? Why?
Breastfeeding / weaning
☐ Do women breastfeed children? If yes, until what age? How often? §
Do they give babies the first milk (« colostrum »)? Why? Why not?
☐ Do they give babies other types of food/drink? If yes, what? At what age? Why?
☐ Do they experience any problems when breastfeeding? If yes, which? Why?
☐ Do they breastfeed children when pregnant? Why? Why not?
☐ Who advises them on breastfeeding practices?
Pregnancy / Childbirth
☐ What care do women receive when they are pregnant?
☐ Who advises them during the pregnancy? Why? How?
☐ Do they experience any difficulties during the pregnancy? If yes, which? Why? What do they do to remedy them?
☐ What role do you play during the pregnancy?
☐ Do you think your role is sufficient? Why? Why not?
Family planning

- Do you have sexual contact with your wife when she’s pregnant? Why? Why not?
- Do you have sexual contact with your wife after giving birth? If yes, after what time?
- Do you wish your wife to get pregnant after giving birth? Why? Why not?
- Does your wife wish to get pregnant after giving birth? Why? Why not?
- Do you know means of contraception? If yes, which? §  Do you use them? Why? Why not?

Childhood diseases

- Which childhood diseases are the most frequent in your community? Why?
- What are causes of these diseases?
- Which therapeutic itineraries do you use? Why?

Malnutrition (show images of marasmus / kwashiorkor)

- Are there children in your community who look like this? If yes, which type is more frequent?
- Is it a disease like others? Why? Why not?
- Which local terms are used to describe it?
- How is it perceived in the community? Why?
- Is it a « new » disease? If yes, since when? Why do you think this disease appeared in your community? §
- Do you think that this condition is stigmatised? Why?
- How does this stigmatisation mark people’s behaviour and/or community relationships?
- How are its causes and symptoms described?
- Which therapeutic itineraries are used to treat this disease? Why?

AWARENESS OF CMAM PROGRAMME

- Have you heard about CMAM programme? If yes, from whom? What did you hear?
- Do you hear about CMAM programme often? How often?
- Do you know which children are targeted by the programme?
- Do you know which treatment they receive?
- What do you think about this treatment?
- How is it perceived in the community? Why?
- What do you think about CMAM programme?
- How is it perceived in the community? Why?
- Are there any obstacles/barriers to the use of this programme? If yes, explain.

COVERAGE / REJECTION / DEFAULTING

- Are there many children in your community who benefit from CMAM programme?
- Do you know other children in your community who need this service? If yes, why aren’t they in the programme?
- Do you know any children who were rejected? Why?
- Do you know any children who abandoned the treatment? Why? If yes, how could we motivate them to return?

SENSITISATION & SCREENING

- Who sensitises the community? How often? On what subjects?
- Do you assist in sensitisation sessions? Why? Why not?
- What do you think of those sessions? Are they interesting? Boring? Why?
- Do you think the sensitisation is sufficient? Why? Why not?
- How should it be reinforced?
- Are there people in your community who measure children?
- If yes, who? How often? How?