



# COVERAGE ASSESSMENT

» SEMI-QUANTITATIVE EVALUATION OF ACCESS & COVERAGE



## POKOT CENTRAL SUB COUNTY, WEST POKOT COUNTY, KENYA

MAY/JUNE 2014, MOH & ACF-USA



Save the Children.



## ACKNOWLEDGEMENTS



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Action Against Hunger | ACF-USA (ACF) acknowledges the crucial role of the following parties in enabling achievement of the assessment objectives :

- The County Ministry of Health (MOH) for leading and taking part in the exercise.
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- ACF West Pokot County and Nairobi staff for the technical , logistics support and data collection

## ACRONYMS

**ACF**      Action Against Hunger International ACF-USA (ACF)



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<b>CBVs</b>	Community Based Volunteers
<b>CHMT</b>	County Health Management Team
<b>CHWs</b>	Community Health workers
<b>CME</b>	Continuous Medical Education
<b>CMN</b>	Coverage Monitoring Network
<b>CNO</b>	County Nutrition Officer
<b>H/W</b>	Health worker
<b>HINI</b>	High Impact Nutrition Interventions
<b>IMAM</b>	Integrated Management of Acute Malnutrition
<b>IYCN</b>	Infant and Young Child Nutrition
<b>KRCS</b>	Kenya Red Cross Society
<b>LQAS</b>	Lot Quality Assurance Sampling
<b>MAM</b>	Moderate Acute Malnutrition
<b>MIYCN</b>	Maternal Infant and Young Child Nutrition
<b>MOH</b>	Ministry of health
<b>MTMSG</b>	Mother-To-Mother Support Group
<b>MUAC</b>	Mid upper arm circumference
<b>NDMA</b>	National Drought Management Authority
<b>OJT</b>	On job Training
<b>OTP</b>	Outpatient Therapeutic Program
<b>RUSF</b>	Ready to Use Supplementary Food
<b>RUTF</b>	Ready to use Therapeutic food
<b>SAM</b>	Severe acute malnutrition
<b>SCHMT</b>	Sub County Health Management Team
<b>SFP</b>	Supplementary Feeding Program
<b>SLEAC</b>	Simplified LQAS Evaluation of Access and Coverage
<b>SQUEAC</b>	Semi-Quantitative evaluation of access and coverage
<b>TBA</b>	Traditional Birth Attendant
<b>TCA</b>	To Come Again
<b>THP</b>	Traditional health practitioner
<b>URTI</b>	Upper Respiratory Tract Infection
<b>WASH</b>	Water and Sanitation Hygiene

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## EXECUTIVE SUMMARY

Action Against Hunger International|ACF-USA (ACF) has supported implementation and scale up of high impact nutrition interventions (HINI<sup>1</sup>) in West Pokot County since August 2011. Currently, the organization implements HINI packages and WASH<sup>2</sup> programs in West Pokot County. Implementation of HINI in the county is undertaken through the MoH and the existing systems and structures.

A coverage assessment was conducted in May/June 2014 in Central Pokot by ACF in collaboration with the MOH. This was the first sub county specific coverage assessment following recommendations of the coverage assessment undertaken in 2013. The objective of the assessment in Central Pokot Sub County was to:

- Determine barriers and boosters for OTP and SFP program coverage
- Determine the coverage of the OTP and SFP program
- Provide recommendations and possible solutions to improve coverage of IMAM program

SQUEAC methodology was employed during the coverage assessment. In stage one quantitative and qualitative data revealed defaulting as a major reason for low coverage, with both programs consistently having high rates of defaulting (>15%). In depth interviews with caregivers of defaulting children indicated that competing priorities (agro-pastoralists), ignorance on effectiveness of the program, perception that therapeutic feeds caused diarrhea/vomiting/lethargy, missed opportunities due to lack of screening, frequent stock outs of rations, distance and the nomadic way of life (pastoralists) were majorly contributing to defaulting. These were capped by the weak defaulter tracing mechanism, with some facilities not having any mechanism to bring back defaulters in the program. In stage two, a hypothesis formulated from findings in stage one was tested using a small study and confirmed that both OTP and SFP program coverage were high (>50%) in agro-pastoral and low (<50%) in pastoral livelihood zones as defined by the decision rule (d). A wide area survey was conducted and results calculated using Bayesian estimate calculator unveiling **posterior point coverage** estimate of **32.5% (16.9%-53.5%)** and **30.4% (18.3%-45.8%)** for both **OTP** and **SFP** programs respectively.

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<sup>1</sup> High Impact Nutrition Intervention packages

<sup>2</sup> Water, Sanitation and Hygiene



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**Table 1:** Summary of IMAM program Barriers and possible recommendations

Barrier	Source	Recommendations	Implementation plan	Means of Verification	When	Responsible
Irregular and inadequately integrated outreaches	CHWs, Pastoralist, Caregivers	Chiefs, -Need for Partners to integrate IMAM activities, and harmonize them with link facilities	Map the outreach schedule (sites and dates) for harmonization by partners -Develop a checklist of what to be done during the outreaches and share with implementers -Involve key community leaders in sensitization and mobilization of outreach activities	27 outreach sites offering integrated services  Minimum Outreach checklist developed and shared among partners	By November 2014  October 2014	Community MOH/County Government Partners (ACF and KRCS)
Poor active case finding and defaulter tracing mechanism	Caregivers, Agropastoralists, Pastoralists, Health workers- In charges, Chiefs	-Need to increase active case finding at community level in order to capture cases that do not access the facility and defaulters to the program.	Community Strategy to develop database of all CHVs with respective operational areas. -Program to develop case finding reporting tools	1 CHVs Database developed.  Screening and referral tools produced and given to CHWs	October 2014  October 2014	MOH/County Government  Partners-ACF
Perception of RUTF & RUSF as food hence sharing	Agropastoralist, CHWs, Chiefs, Pastoralists, Traditional Health Practitioners, caregivers	-The program to sensitise and educate the community on the use of RUTF and RUSF their purpose as medicine	RUTF & RUSF distributed at the pharmacy with the normal prescription drugs -Strengthen integration of RUTF & RUSF with KEPI products -Including medicine component on use of RUT in all program activities	13 Health facilities dispense RUTF and RUSF at Pharmacies.	November 2014	MOH/County Government  Partners-ACF
Lack of program ownership by health workers Inadequate adherence to IMAM treatment protocols-routine medication	Observation, CHWs, Chiefs	-The need to strengthen integration of IMAM activities with the other treatment services by health workers -Intensive mentorship on admissions and IMAM treatment	Increase the frequent supervision by CHMT to ensure the component is integrated. -Use of CWC/MCH booklet as an entry point into the program -Closely follow up on individual facilities by DHMT for ownership	2 CHMT Supervision  8 DHMT Health facility supervision	November 2014  December 2014	MOH/County Government Partners.



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Poor documentation and reporting of progress and outcomes of SAM & MAM treatment	CHWs, Observation	protocols -There is need to strengthen capacity enhancement for health workers especially on documentation and reporting	Plan to increase capacity enhancement sessions on reporting and documentation. -Plan to incorporate monthly data collection for quality analysis and assessments, into program activities. -Frequent joint supportive supervision until component is understood.	1 Health facility reporting assessment conducted 2 CHMT support supervision conducted 8 DHMT health facility supervision	November 2014 November 2014 December 2014	MOH/County Government Partners.
Competing activities of caregivers	CHWs, Chiefs, Pastoralists, Caregivers, Agropastoralists	-Need for program to increase the number and frequency of outreach services and IMAM treatment days	IMAM services at Health facilities are part of other treatment services. Upgrade Outreach sites to health facilities and asses for new outreaches.	13 health facilities have fully integrated health services. 2 Outreach sites upgraded to Health facilities	March 2015 May 2015	MOH/County Government Partners.
Insufficient staffing and absenteeism at facility level	Caregivers, Agropastoralists, Pastoralists, Health Workers, Chiefs	-The CMOH to increase the number of nurses at facility level	Advocate for County government to post staff at facilities with work overload and understaffed.	Conduct continuous advocacy to the county to Implement County strategic plan which include health workers hiring.		MOH/County Government Partners.
RUTF stock out	Health workers, Caregivers, Village elders	-Program to enhance the capacity of the Distribution Officer to be able accurately and timely request for supplies	OJTS on stock management and supply request -Early reporting by health facilities to aid in timely restocking and long term projection of needs -Closely follow up on facility stocks	13 OJT session on stock management and early reporting	January 2015	MOH/County Government Partners.
Poor health seeking behaviours and stigma	Traditional Birth Attendance, Village elders, Health Workers, CHWs, Ca	-Need for program to sensitize and educate the community on issues of malnutrition	Plan to involve key community leaders in community sensitization and mobilization on issues of malnutrition -Use of MTMSGs and model mothers	20 Dialogue days Conducted	December 2014	MOH/County Government Partners





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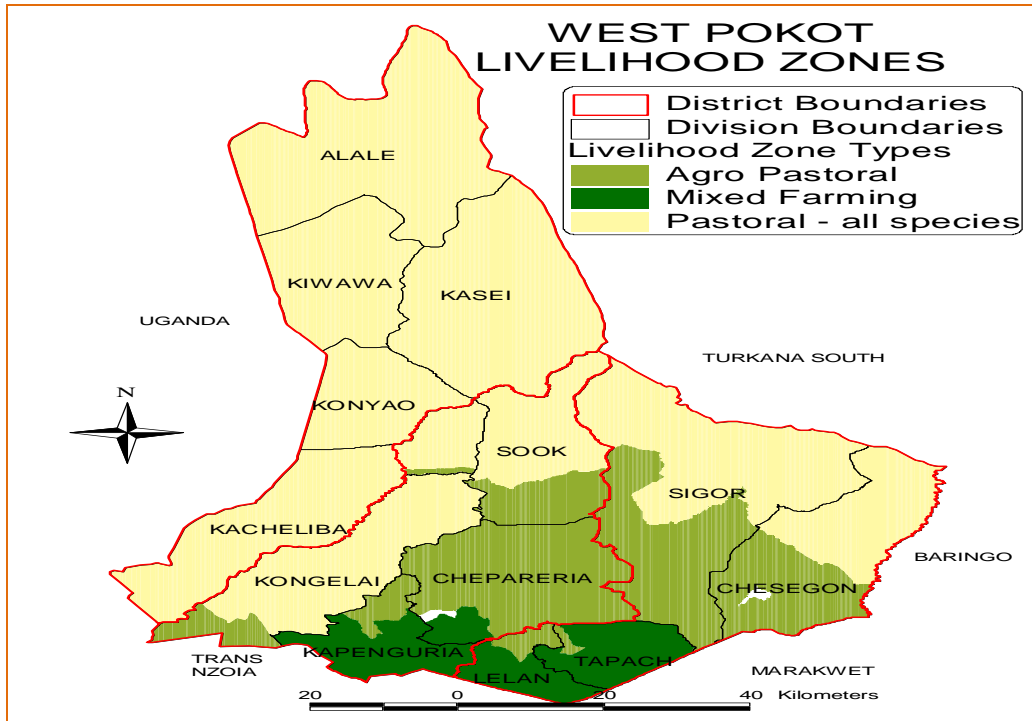


regivers

to sensitize and educate caregivers  
on child care practices



## 1.0 INTRODUCTION



**Figure 1:** West Pokot County Livelihood Zones

### 1.1 BACKGROUND INFORMATION

Central Pokot is one of the sub counties in the larger West Pokot County. The Sub County borders Elgeyo Marakwet to the South, Baringo to the East, Turkana South to the North and Pokot South to the South East. It covers an area of 2,380.1km<sup>2</sup> with an estimated population of 114, 097<sup>3</sup> . It has two distinct livelihood zones namely; Pastoral and Agro pastoral.

ACF-USA in partnership with MOH has supported the implementation and scale up of HINI packages and strengthening the health system in the Sub County since August 2011. Currently, the organization implements HINI packages and WASH programs in West Pokot County.

### 1.2 JUSTIFICATION

In the month of June 2012, ACF and Ministry of Health (MOH) conducted a coverage assessment using SQUEAC methodology for Outpatient Therapeutic Program (OTP) in the whole West Pokot County. The overall point coverage was estimated to be at 33.5%, below the sphere standard of 50% in rural areas. Possible recommendations were put forward some of which were acted upon by ACF, MOH and other stakeholders.

<sup>3</sup> Projection from KNBS 2009 census



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The current SQUEAC coverage assessment was carried out following a SLEAC investigation conducted in July 2013 with the overall Outpatient Therapeutic Program (OTP) and Supplementary Feeding Program (SFP) point coverage estimate being 21.7% (12.7%-30.7% C.I 95%) and 10.0% (6.7%-13.3% C.I 95%) respectively. Table 1 shows the present situation following actions taken by ACF and various partners on the SLEAC recommendations.

**Table 2:** Present situation after SLEAC recommendations

Issues arising	Recommendations	Action Plan	Present situation/ Status
Previous rejection from the program	<ul style="list-style-type: none"> <li>-Ensure that rejected cases are handled carefully and made to understand reasons for non-admission.</li> <li>-Avoid central screening where even healthy children are asked to come for measurement.</li> </ul>	<ul style="list-style-type: none"> <li>-More CHWs or community volunteers identified and trained to assist with active case finding.</li> <li>-Encourage the caregiver to take the child to the volunteer in their settlement for MUAC or oedema check or take the child to OTP/SFP every time they suspect that s/he is becoming malnourished</li> </ul>	<ul style="list-style-type: none"> <li>&gt;41 community units trained on IMAM; a total of 1025 CHWS active case finding</li> <li>&gt;Linkage of caregivers with CHWs through community dialogue where they are encouraged to take children to the CHWS for nutrition screening and also to the nearest health facilities</li> <li>&gt;Sensitization of malnutrition to MTMSGs.</li> </ul>
Lack of Program awareness	<ul style="list-style-type: none"> <li>-Advocacy meetings at all levels with all partners in nutrition and health programmes and community leaders</li> <li>-Use of mass media especially local radio stations to raise program awareness and improve the community's understanding/recognition of malnutrition.</li> </ul>	<ul style="list-style-type: none"> <li>-Orientation of more people at community level including MTMSGs, TBAs, Reproductive Health Workers and teachers of ECDs in sensitisation and active case finding activities</li> <li>-Identify context specific channels of communication and develop culturally appropriate messages.</li> </ul>	<ul style="list-style-type: none"> <li>&gt;On -going during community dialogue days that encompass focussed group discussions and Key informant interviews with community leaders.</li> <li>&gt;Topics on IMAM and MIYCN.</li> </ul>
Ad hoc screening for malnutrition in existing services	<ul style="list-style-type: none"> <li>-Ensure integration of screening for malnutrition in the existing services to ensure no missed opportunities.</li> <li>-Compile screening reports for malnutrition.</li> </ul>	<ul style="list-style-type: none"> <li>Regular supervision to the health facilities and review of screening reports</li> </ul>	<ul style="list-style-type: none"> <li>Integration of the IMAM and MIYCN to the CWC is on-going in the health facilities</li> </ul>
Misconceptions around RUTF	<ul style="list-style-type: none"> <li>-Involve a wide range of people and methods to disseminate program information further with focus on the RUTF misconceptions.</li> </ul>	<ul style="list-style-type: none"> <li>-Initiate an advocacy component on RUTF use into the program through involving different key</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Reporting on stocks at the health facilities have much improved</li> <li>&gt;Community dialogue has made</li> </ul>



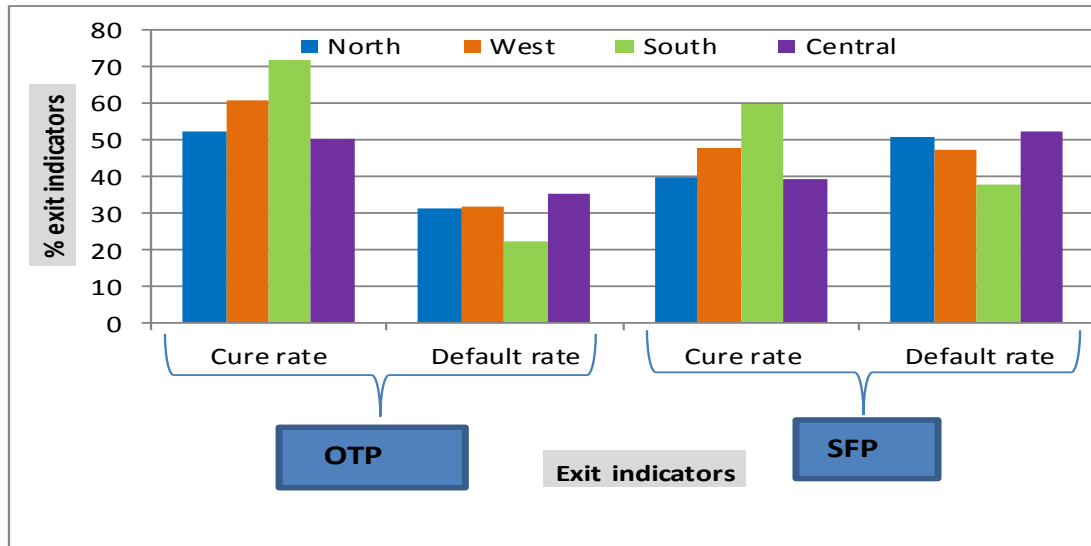
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<p>RUTF stock outs</p>	<p>-Ensure consistent supply of RUTF/RUSF</p>	<p>community figures. -Explore the use of media and also carers of children who have successfully been treated in the IMAM program as 'model caregivers' in disseminating program information -Have buffer stocks to avoid shortages</p>	<p>the communities have a better understanding on the RUTF/RUSF.  &gt;Meetings with WFP in March 2014 has improved consistency supply of the RUTF</p>
<p>Long distance and difficult terrain</p>	<p>-The program needs to increase the number and frequency of outreach services and distribution days.</p>	<p>-Advocate for support from government and other partners working in the County</p>	<p>&gt;New health facilities set up by the county government to bridge the gap of long distance and improve access to healthcare services. The ministry Health is yet to scale up the facilities to offer IMAM services. &gt;Number of outreach sites increased from 13 to 20; visited bi-weekly. &gt;Distribution of RUTF/RUSF is done daily at the health facilities There is repositioning of supplies before the start of rains to avoid stock outs due to impassable roads during the rains.</p>

The assessment findings classified Central Pokot as having Low coverage in both OTP and SFP compared to the other sub counties. The overall SAM and MAM point coverage were 15.8% and 14.8% respectively which were the least compared to the other Sub-counties.



**Figure 2:** West Pokot County OTP/SFP exit indicators

The coverage findings for both 2012 and 2013, and poor program indicators (figure 2) called for more detailed study to have an in-depth analysis of the sub county’s low coverage. There was the need to understand the boosters and barriers affecting both OTP and SFP programs in Central Pokot. The current study aimed at building up on what was earlier established from the previous coverage. Furthermore, Central Pokot Sub-County has two livelihood zones; Pastoral and Agro pastoral livelihood zones. This gives a good representation of the entire county thus the results can be inferred to the entire county.

### 1.3 COVERAGE ASSESSMENT OBJECTIVES

The specific objectives for the coverage assessment were;

- To determine OTP and SFP program coverage and establish the head line coverage estimates in Central Pokot Sub-County.
- To determine and show barriers and boosters for OTP and SFP coverage in the sub county.
- To provide recommendations and possible solutions to improve coverage of IMAM program.
- To capacity build MoH and program staff on the coverage methodology.



## 2.0 METHODOLOGY

The SQUEAC investigation process involved three stage techniques namely;

**Stage 1:** To identify Areas of Low and High Coverage, as well as reasons for coverage failure by showing barriers and boosters, using routine program data, quantitative and qualitative data.

**Stage 2:** Hypothesis verification and small area survey to confirm areas of high and low coverage and the reason for coverage failure identified in stage 1 using small area survey.

**Stage 3:** Wide area assessment and program coverage estimate using Bayesian technique.

## 3.0 RESULTS

### 3.1 STAGE 1: QUANTITATIVE AND QUALITATIVE DATA

In stage one, both quantitative and qualitative revealed defaulting as a major reason for low coverage, with both programs consistently having high rates of defaulting (>15%). In depth interviews with caregivers of defaulting children indicated that competing priorities (agro-pastoralists), ignorance on effectiveness of the program, frequent stock outs of rations, distance and the nomadic way of life (pastoralists) were majorly contributing to defaulting. This is capped by the weak defaulter tracing mechanism, with some facilities not having any mechanism to bring back defaulters in the program.

#### 3.1.1 QUANTITATIVE DATA

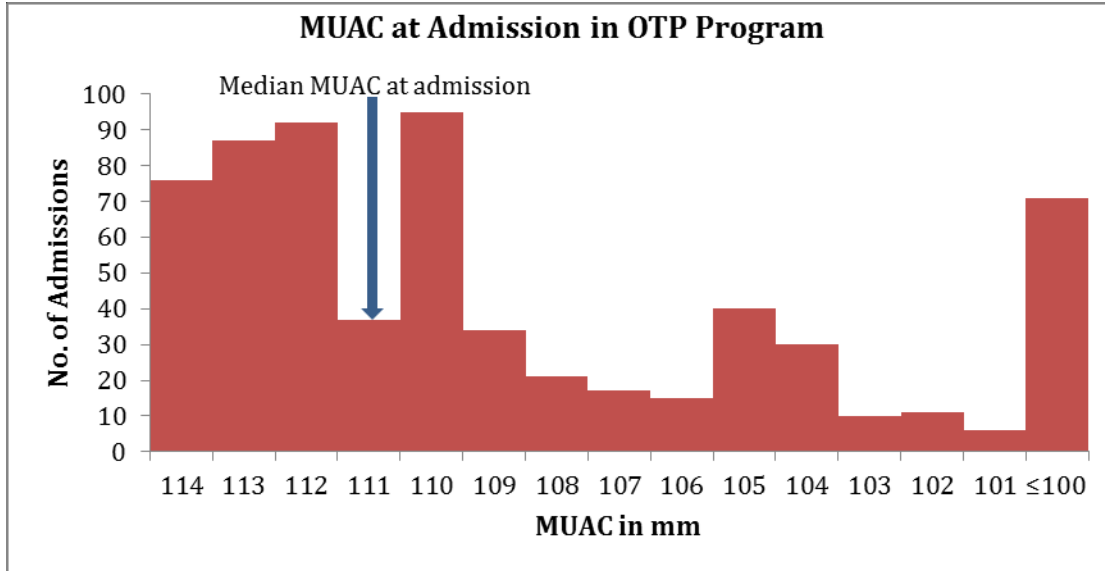
Quantitative data analysis for both the OTP and SFP programs covered between April 2013 and April 2014 to include admissions over time, MUAC at admission, exit indicators; cure rate, defaulter rate, non-respondent rate and death rate. Admissions and exit indicators graphs were plotted against seasonal calendars, collected from the community and supported by secondary data from the NDMA<sup>4</sup> surveillance system, to deduce patterns.

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<sup>4</sup> National Drought Management Authority

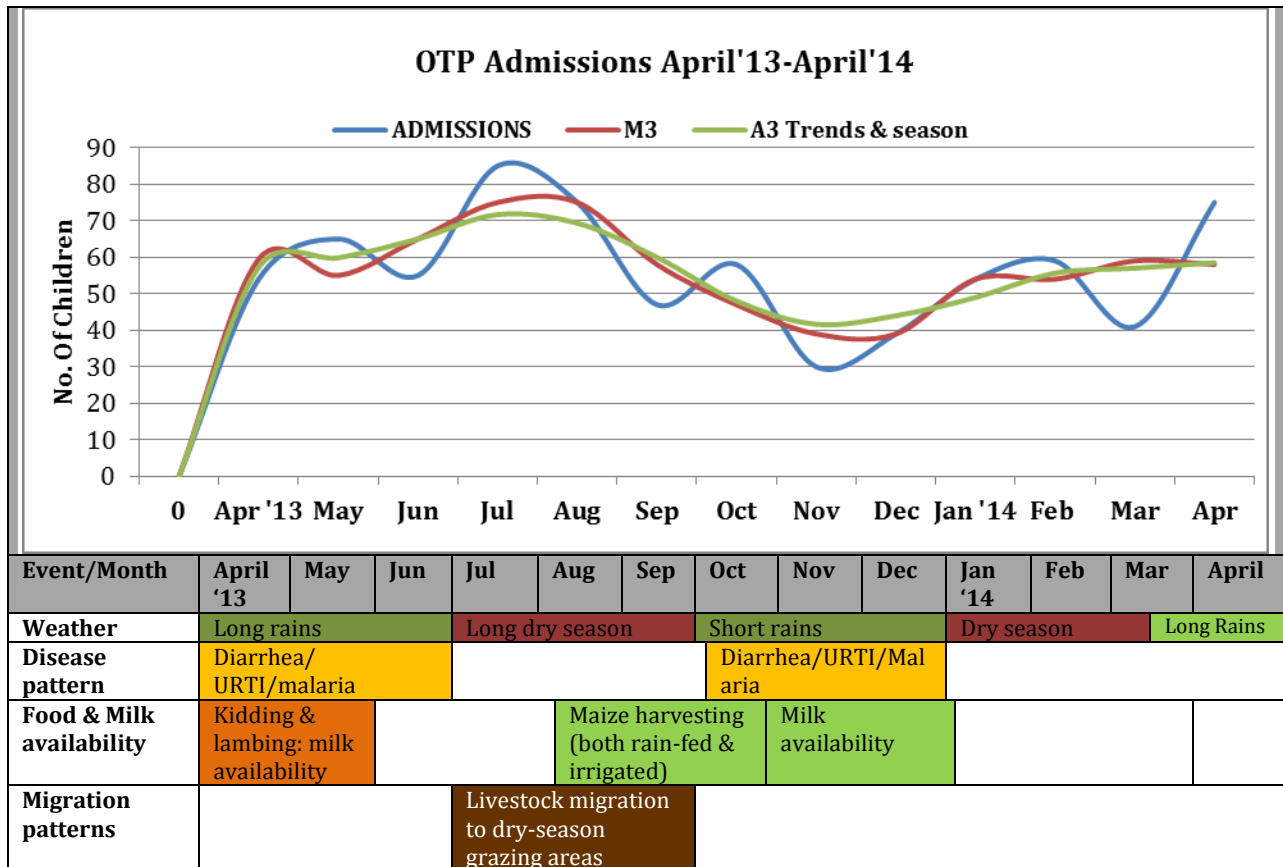


**3.1.1.1 PROGRAM ADMISSIONS OUTPATIENT THERAPEUTIC PROGRAM (OTP)**



**Figure 3:** Admissions by MUAC for OTP program

Figure 3 show that there were early admissions into the program with most admissions being between 114-111mm. The median MUAC at admission was 111mm. These were attributed to the intense On the Job Training sessions to the community health workers (CHWs), some active case finding with the assistance from the program staff and the referrals made by the NDMA field monitors after screening. The few cases of late admissions were attributed to late treatment seeking at the health facilities by few caregivers who seek treatment first from the traditional healers and also distance.



**Figure 4:** Admissions over time for OTP Program

The moving median and averages were used to describe admissions over time (Figure 4). The admissions were observed to decrease from July to December due to food availability, both rain-fed and irrigated agriculture. In addition, the long dry season caused migration of pastoralists to dry season grazing areas. Low admissions were recorded in the months of November 2013 and March 2014 with former being the lowest. These were attributed to the short and long rains harvest of maize and the availability of milk in March-April and November 2013.

Admissions increased from January to May 2014 during the short dry period attributed to food shortage and on the onset of the long rains, attributed to increased malaria and diarrhoea incidences. The highest admissions in July 2013 were attributed to referrals made during SLEAC coverage assessment in June and also due to the drought in the months of January to April 2013.





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## 3.1.1.2 OTP PROGRAM EXITS

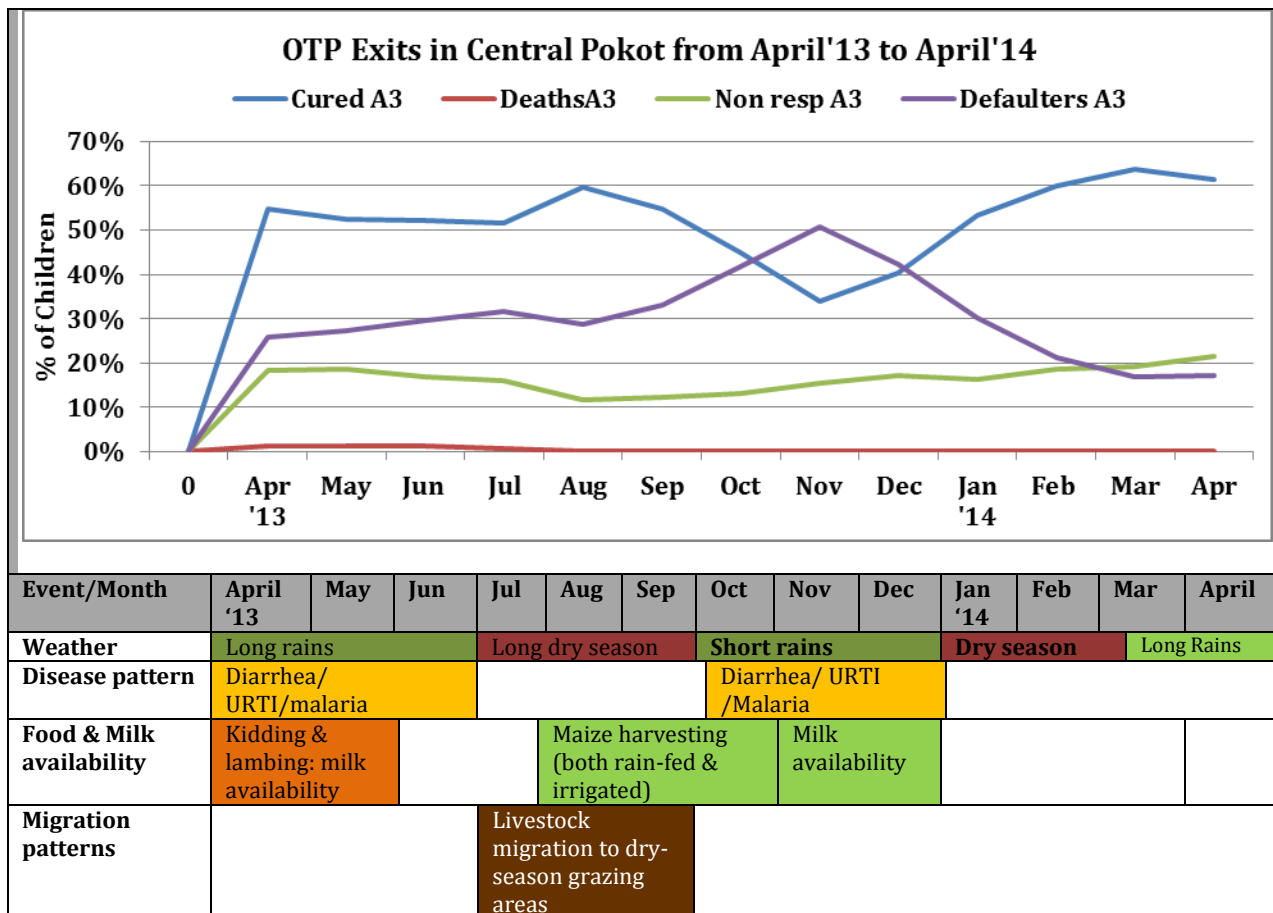
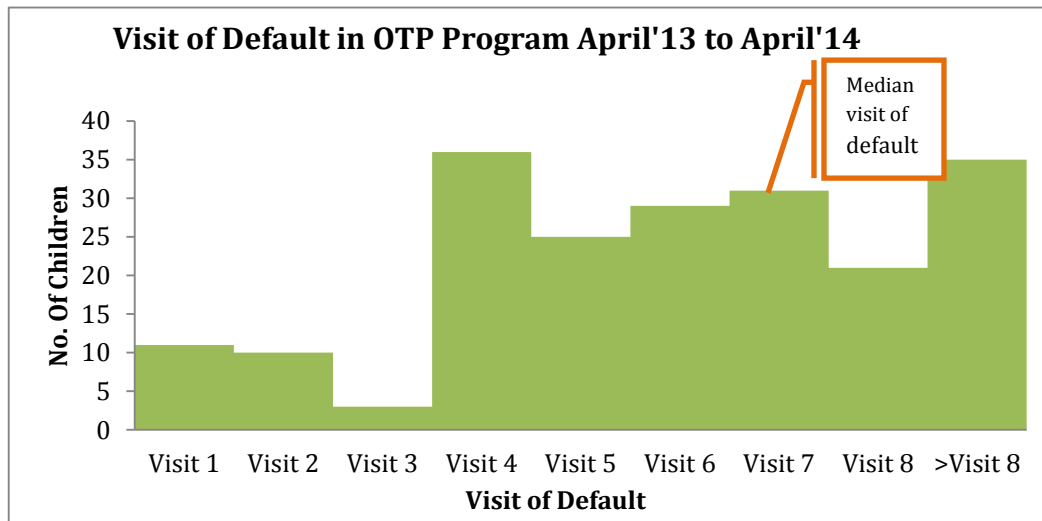


Figure 5: OTP standard program indicators

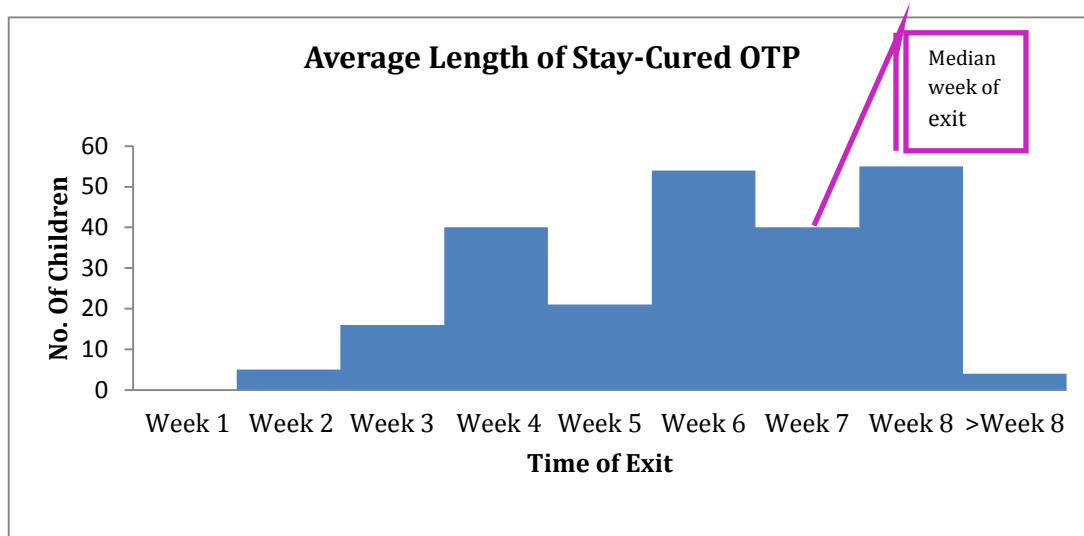


Figure 5 shows that the cure rates and the defaulter rates were below and above the sphere standards of 75% and 15% respectively. This is because the higher the defaulter rate the lower the cure rates. Both factors were attributed to competing activities and food and milk availability in some months leading to defaulting. The non-response cases recorded were as a result of absenteeism over time. There were deaths also in the months of April, May and June 2013. All the deaths were attributed to poor treatment seeking behaviours with health facilities being the secondary option, hence medical complications.



**Figure 6:** OTP Program Defaulting by week

The cases of defaulting in the first 3 visits were as a result of poor documentation and low compliance to treatment protocols by the service providers. The defaulting cases above visit 8 were as a result of sharing of commodities hence over staying in the program and also because of poor documentation. The median defaulting time is at visit 7; this indicates that the program was doing well in retention of clients.



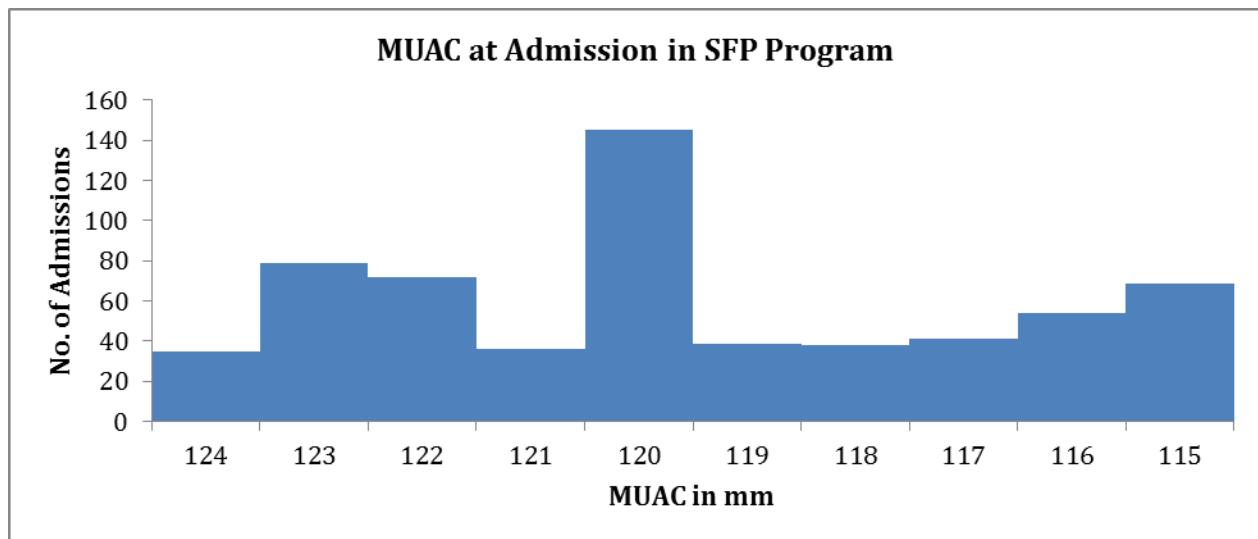
**Figure 7:** Average length of stay for cured in OTP Program



The few beneficiaries with long length of stays above visit 8 were as a result of sharing of commodities, presence of underlying illnesses and poor adherence to the TCA<sup>5</sup> dates. The cured cases recorded in weeks 2 and 3 are as a result of wrong admissions being discharged at early stages. The median average length of stay for OTP program is at week 7. This indicates that where treatment protocols are being observed, clients were curing early and the program was doing well.

### 3.1.1.3 PROGRAM ADMISSIONS SUPPLEMENTARY FEEDING PROGRAM (SFP)

The graph above shows that most of the beneficiaries were admitted between 124mm and 119mm with 120mm-119mm recording the highest. This shows that the program is doing well in terms of early admissions. This was attributed to training of CHWs in the community units in the Month of July, decentralization of MTMSGs to the villages, active case finding by CHWs, up scaling of outreaches and the referrals made by the NDMA field monitors after screening. However, the few late admissions (MUAC 119mm) were as a result of the few caregivers who did not know that their children had moderate acute malnutrition while others still felt that the outreaches were quite a distant. The median MUAC admission is 116-115mm. Upon triangulation, it was found out that most caregivers could not identify moderate acute malnutrition early, hence late admissions in areas without active community units.

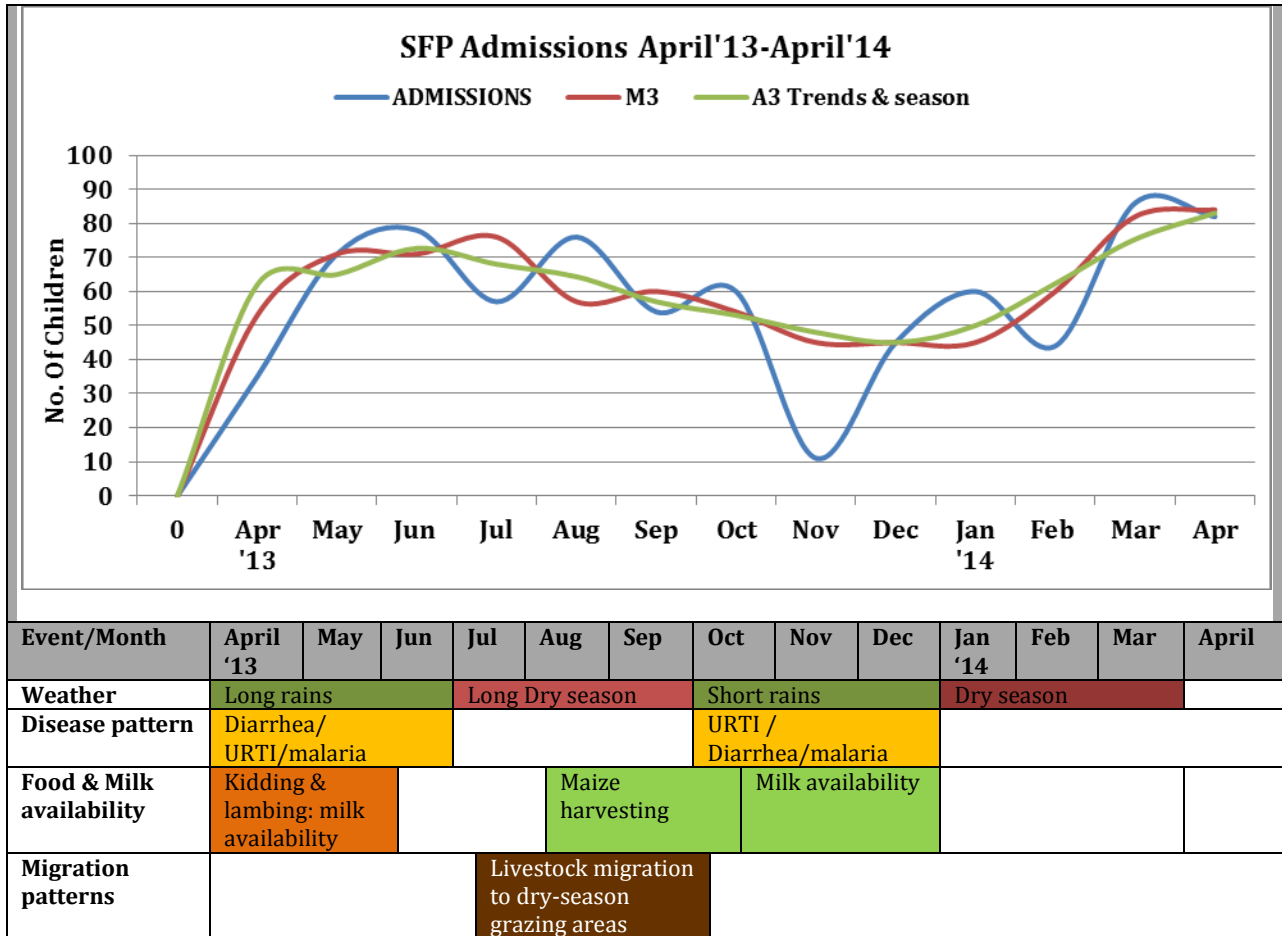


**Figure 8:** SFP Program admissions by MUAC

Figure 9 indicates that admissions were observed to decrease from July to December attributed to food availability in both rain-fed and irrigated agricultural areas and migration of pastoralists during the long dry season. Admissions increased from January to April 2014 during the short dry period and on the onset of the long rains. The months of May and June 2013 recorded high admissions. This was attributed to referrals made during the SLEAC coverage assessment carried out in June 2013. In the months of March and April there was movement of livestock to the grazing areas because of the dry season leading to lack of milk hence increased admissions (Fig.9)

However, low admissions were recorded in October and November 2013. These were attributed to RUSF stock outs, with September 2013 being the last month of stock delivery. In addition, there was food and milk availability since this is usually grains harvesting and the short rains had allowed growth of pasture.

<sup>5</sup> To Come Again-revisit time



**Figure 9:** SFP Program admissions over time

#### 3.1.1.4 SFP PROGRAM EXITS

Figure 10 shows that the program has not been doing well over time. The cure rates were below the sphere standards of 75% and the defaulter rates were above the sphere standards of 15%. This was attributed to RUSF stock outs due to erratic supply from the main warehouse with situation worsening between September and December 2013. More so, competing activities such as planting, casual labour and harvesting in agro-pastoral zones were also attributing factors. Some health facilities become inaccessible because of distance and poor terrain during the rainy season. Higher defaulter rate translates to low cure rates. This was attributed to lack of commodities in the health facilities leading to longer length of stay in the program.

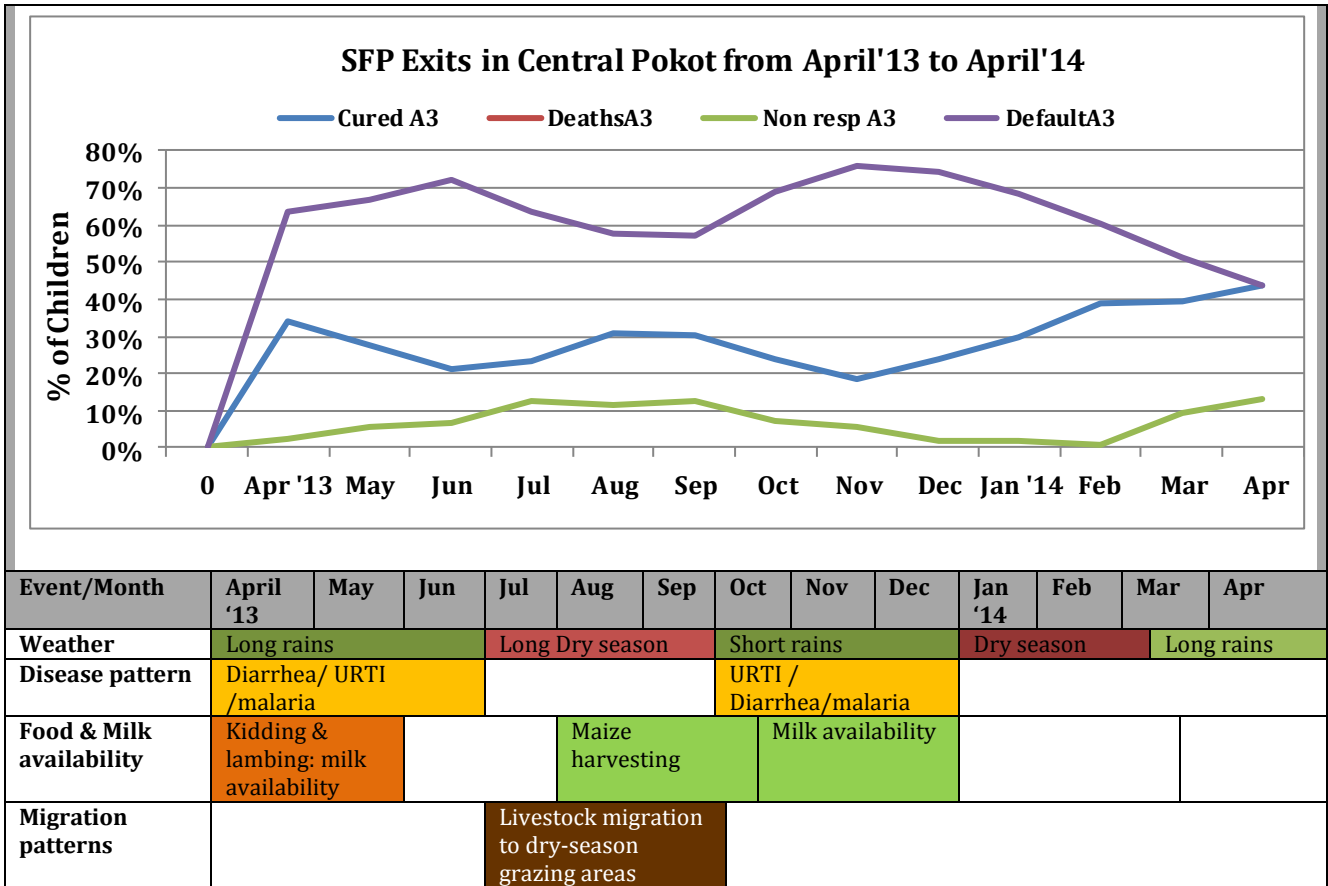


Figure 10: Standard SFP Program Exit indicators

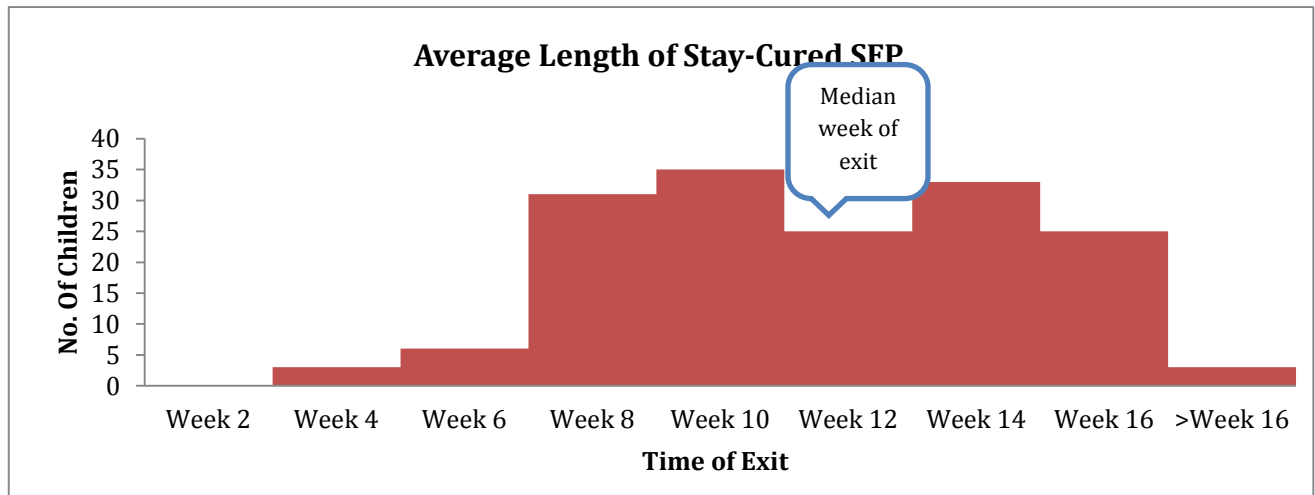
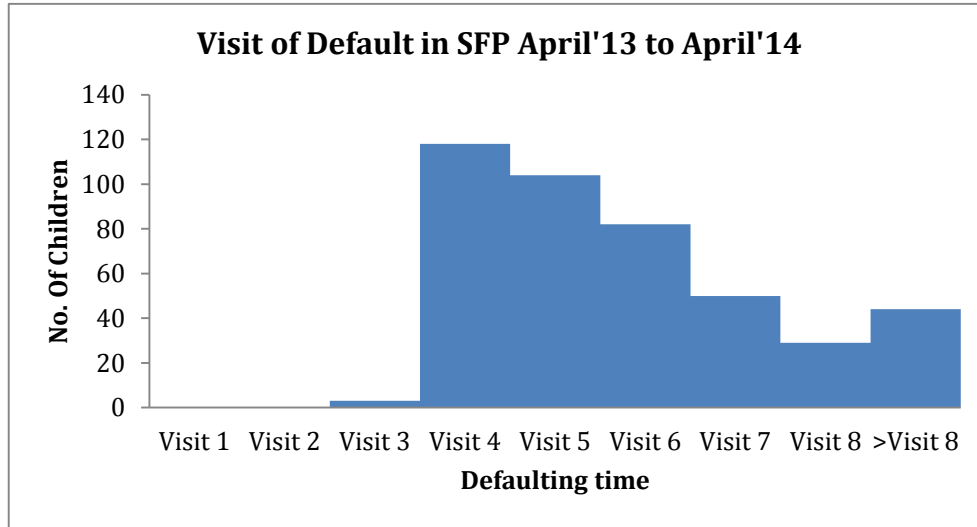


Figure 11: Average length of stay for cured in SFP Program

Figure 11 show that most discharges were between 8<sup>th</sup> and 16<sup>th</sup> week with the median being the 12<sup>th</sup> week which is visit 6. This indicates that most beneficiaries are admitted into the program early; hence don't



take long to cure. There were few discharges recorded after the 16<sup>th</sup> week indicating that the program was doing well since there were short lengths of stay. There were also exits in the 4<sup>th</sup> and 8<sup>th</sup> week. These cured early since they were cases of wrong admissions therefore could not continue being treated in the program.

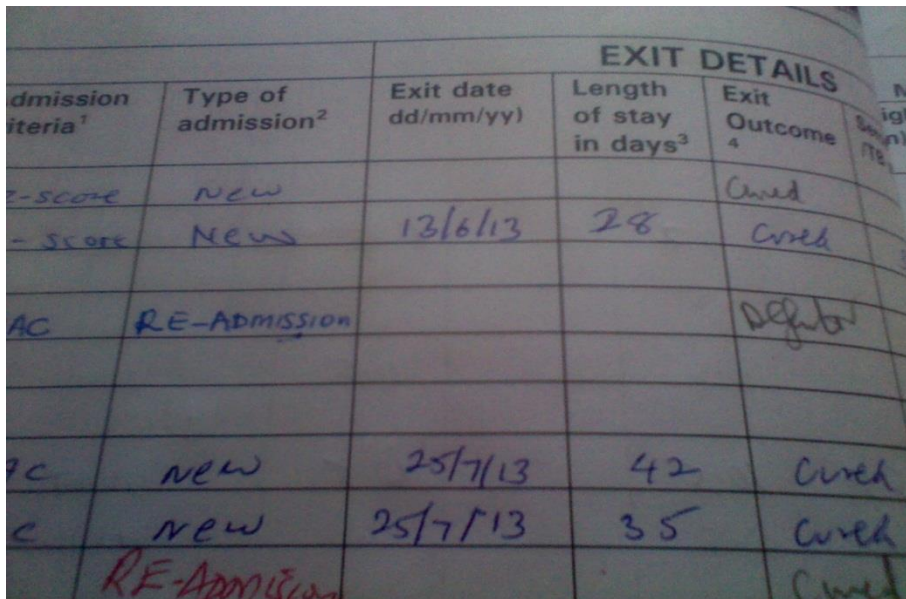


**Figure 12:** Defaulting time in SFP Program

Figure 12 above shows that many beneficiaries started defaulting in the 4<sup>th</sup> visit with the median being visit 5. This shows that there is poor retention of beneficiaries in the SFP program. This was attributed to lack of or insufficient SFP commodities, admission and defaulting of clients from another division, and insufficient follow up of the absent beneficiaries before they default.

### 3.1.1.5 DOCUMENTATION

Documentation and reporting are fundamental in process monitoring of IMAM program. Unduly filled OTP and SFP registers were observed in some of the facilities during data extraction. Upon enquiry, the OJT sessions were found to be consistently done in all health facilities, with the sessions being conducted at least bi-monthly. However, there was notable evidence of facility based CHWs being charged with filling the registers with the other health providers giving minimal or no assistance. These inadequately filled OTP and SFP registers in a number of health facilities is a clear indication that IMAM procedures are not adhered to. The probable reason for this is lack of IMAM program ownership by the health workers and inadequate staff to conduct all IMAM treatment procedures.

Admission criteria <sup>1</sup>	Type of admission <sup>2</sup>	EXIT DETAILS		
		Exit date (dd/mm/yy)	Length of stay in days <sup>3</sup>	Exit Outcome <sup>4</sup>
2-SCORE	NEW			Cured
2-SCORE	NEW	13/6/13	28	Cured
AC	RE-ADMISSION			Defaulted
PC	NEW	25/7/13	42	Cured
C	NEW	25/7/13	35	Cured
	RE-ADMISSION			Cured

**Figure 13:** A snapshot of an incomplete register on the Exit details

### 3.1.2 QUALITATIVE DATA ANALYSIS

Structured questions were used to collect qualitative data to confirm quantitative findings. Data were collected from as many different sources as possible, then cross-checked against each other for validity and confirmation. Boosters and barriers were then established from the qualitative findings. Concept maps were used to represent relationships between findings.

**Table 3:** Triangulation by Source and Method Summary

METHOD	SOURCE OF INFORMATION
Informal Group Discussions	Traditional Birth Attendants, Traditional Health Practitioners, Chiefs, Village elders, Pastoralists, Agro-pastoralists, Pastors, Caregivers of children <b>not</b> in program
In-depth interviews	Caregivers of children in program, Caregivers of defaulting children
Semi-structured interviews	Community Health Workers, Program staff/In-charges/Nurses, Caregivers of children <b>not</b> in program (on community screening)
Observation checklist	Program organization, registers, ration cards



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## 3.1.2.1 Overview of the qualitative data

Detailed triangulation of information by source and method unveiled the following barriers to OTP and SFP program coverage;

- 1. Local terms for Acute Malnutrition and associated Stigma-'Changulan'**-child looks thin. Associated with poor/inadequate feeding and sickness like diarrhea and vomiting. 'Kasiokoo'- Swollen body, cheeks, hands and feet, discolored hair. Some associate it with witch craft, while others associate it with poor feeding. Some caregivers, of the middle to high income status, were of ashamed of taking malnourished children to the health facility because the program is associated with poverty. During an in-depth interview with a caregiver of a defaulting child, it was realized that she had stopped attending to the program because her husband, a middle income business owner, did not want his child to take RUTF (plumpy nuts).
- 2. Poor health seeking behaviors** -some caregivers believed that there were some herbs and traditional practices that could cure childhood illnesses. During informal group interviews with Traditional Health Practitioners (THPs), Traditional Birth Attendants (TBAs), elderly men and pastoralists it was found out that severe acute malnutrition cases are cleansed by goat/sheep slaughtering and tying a piece of meat round the child's neck or waist. This leads to late treatment seeking in the health facilities.
- 3. Ignorance of OTP and SFP programs by some caregivers**-there was ignorance on the part of caregivers on the effectiveness of IMAM program. This was evident by caregivers not taking the children to the program upon screening, referral and even follows up by the CHWs. In an in-depth interview with some caregivers, they confessed that they did not think that the program would make a difference to their malnourished children.
- 4. Poor road infrastructure**-the Sub County has a poor terrain coupled with poor road networks. The chief, pastors, most caregivers and CHWs sited poor road infrastructure as a barrier which leads to inaccessibility to some facilities, whenever it rains, some areas are cut off from supplies/delivery of RUTF commodities and referral of patients.
- 5. Insufficient staffing** due to resignation with replacement of the same taking long to happen. **Frequent absenteeism of health workers** in the health facilities was also noted due to competing priorities like mass campaigns (polio campaigns), seminars and trainings. This was attributed insufficient staffing in the health facilities.
- 6. Lack of program ownership by the health workers** in some health facilities; IMAM program is left to the CHWs leading to compromised adherence to treatment protocol
- 7. Poor child care practices**-Some caregivers leave their children under the care of old grandmothers or other older children. This translates to decreased number of admissions, low cure rates, prolonged length of stay, high non respondents' rate and high defaulter rates.
- 8. Perception of RUTF and RUSF as food, not medicine and sharing**-upon triangulation from the community and CHWs it was found that, despite community education and awareness creation by





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health workers, still there was perception of RUTF and RUSF as food. It has led to sharing of RUTF. During distribution days caregivers of children not in program and in some instances the elderly, were seen coming to the facility to also have a share of the ration. Sharing has in turn increased length of stay and non-respondents' rate.

- 9. **Lack of awareness of and/or difficulty with identification of MAM by most caregivers;** some caregivers could not tell whether the child was malnourished or not despite their knowledge on existence of SFP program. This meant that most cases progressed to SAM if no early case finding.
- 10. **RUSF stock outs in some health facilities** -attributed to supply chain break down at the source. The inconsistency in supply of RUSF contributed to the high defaulter rate, high non response rate and low cure rates in the sub county.
- 11. **Inadequate adherence to IMAM treatment protocols and inaccurate MUAC measurements leading to perceived 'rejection'**-Most caregivers said that upon arrival at the health facilities their children were issued with rations only and no routine medication. On the other hand most referred cases from the community by community volunteers had inaccurate MUAC measurements therefore, felt that they were being denied admission.
- 12. **Lack of harmonization of Community Based Volunteers incentives by partners**-sometimes during active and passive screening, CBVs are incentivised by the supporting partners. However, this is not done uniformly, with Kenya Red Cross Society (KRCS) giving more than ACF. It is due to this difference that most CBVs feel that they belong to one partner. This affects their performance, especially on case finding.
- 13. **Perception that RUTF causes diarrhoea**-the CHWs highlighted that some caregivers complained that their children developed diarrhoea after taking RUTF (plumpy nuts). The allegation was further confirmed by two caregivers of defaulting children.

**Table 4:** Legend for sources of qualitative data

Source	Legend
Observation	*
Caregivers	#
Community Health Workers (CHWs)	$\alpha$
Community Based Volunteers (CBVs)	$\gamma$
Traditional Birth Attendants (TBAs)	$\beta$
Traditional Health Practitioners (THPs)	@
Chiefs	$\phi$
Pastors	$\sigma$
Village Elders	$a$
Health workers/In-charges/Nurses	$\Sigma$
Pastoralists	$\Omega$
Agro-pastoralists	$\omega$



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**Table 5:** Boosters and Barriers to OTP Program

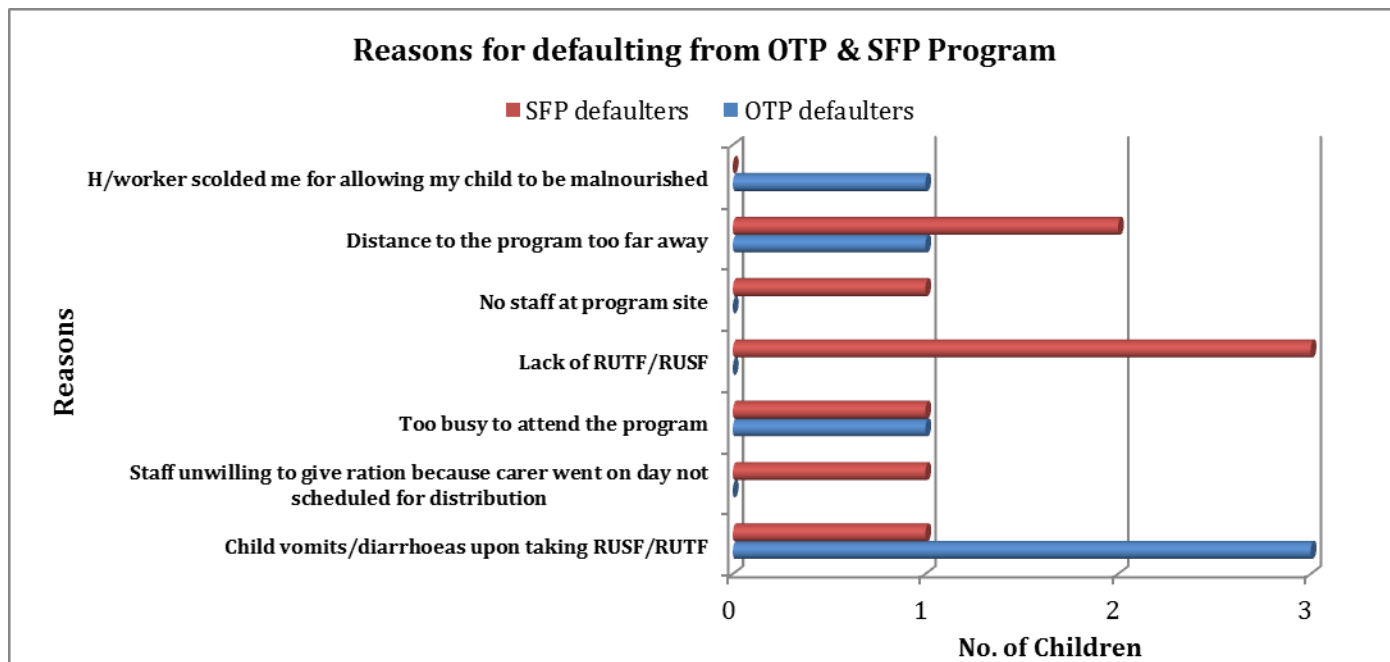
BOOSTER	SOURCE	BARRIER	SOURCE
Presence of IEC materials	*	Distance to the program site	α φ σ Ω @ #
Acknowledgement of the importance of OTP program by the community	α φ σ ω @	Migration of the pastoral population	α φ Ω @ #
Some active case finding	α Σ φ γ	Competing activities/priorities	α φ Ω # ω
Commitment of facility-based CHWs	φ # Σ	Poor documentation & inadequate tools- ration cards, reporting tools	α *
Rare RUTF stock outs	Σ # α	Poor infrastructure-roads & rough terrain	α φ σ #
Program awareness	α φ σ ω @ γ β	Perception of RUTF as food hence Sharing	ω γ α φ Ω @ #
Acknowledgement of importance of OJTs by health workers	Σ α	Lack of program ownership by health workers	φ α *
Some linkage between health facilities and community units	Σ α β	Irregular outreach services	γ α φ Ω #
Existence of integrated outreach services	# α φ ω a	Poor active case finding/defaulters tracing	# ω Ω Σ φ
		Insufficient health staff and absenteeism	# ω Ω Σ φ
		Stigma and ignorance on the importance of OTP program by some community members	γ σ # ω Ω φ
		Poor infrastructure-Poor roads/rough terrain & inadequate health facilities distribution	* # α γ φ σ
		Poor treatment seeking behaviours	β @ γ Σ α <sup>a</sup> #
		Poor child care practices	Σ # α φ
		Inadequate adherence to IMAM treatment protocols and inaccurate MUAC measurements leading to perceived 'rejection'	* # α φ
		Perception that RUTF cause diarrhoea	Σ # α
		Lack of harmonization of CHWs incentives by partners	γ α φ
		Inadequate stakeholders' involvement in IMAM activities at the community	Φ α σ #
		Insecurity-cattle rustling & border conflicts	Ω Σ α σ φ #



**Table 6:** Boosters and Barriers to SFP Program

BOOSTER	SOURCE	BARRIER	SOURCE
Presence of IEC materials	*	Distance to the program site	α φ σ Ω @ #
Acknowledgement of the importance of SFP program by the community	α φ σ ω @	Migration of the pastoral population	α φ Ω @ #
Some active case finding	α Σ φ γ	Competing activities/priorities	α φ Ω # ω
Commitment of facility-based CHWs	φ # Σ	Poor documentation & inadequate tools-ration cards, reporting tools	α *
Rare RUTF stock outs	Σ # α	Poor infrastructure-roads & rough terrain	α φ σ #
Existence of integrated outreach services	# α φ ω a	Perception of RUSF as food hence Sharing	ω γ α φ Ω @ #
Acknowledgement of importance of OJTs by health workers	Σ α	Lack of program ownership by health workers	φ α *
Some linkage between health facilities and community units	Σ α β	Irregular outreach services	γ α φ Ω #
		Poor active case finding/defaulters tracing	# ω Ω Σ φ
		Insufficient health staff and staff absenteeism	# ω Ω Σ φ
		Difficulty with identification of moderately acute malnourished children by caregivers	Σ # α φ
		Poor infrastructure-Poor roads/rough terrain & inadequate health facilities distribution	* # α γ φ σ
		Poor treatment seeking behaviours	β @ γ Σ α <sup>a</sup> #
		Poor child care practices	Σ # α φ
		Inadequate adherence to IMAM treatment protocols and inaccurate MUAC measurements leading to perceived 'rejection'	* # α φ
		Frequent RUSF stock outs and improper communication during stock in to caregivers	Σ γ # α
		Lack of harmonization of CHWs incentives by partners	γ α φ
		Inadequate stakeholders' involvement in IMAM activities at the community	Φ α σ #
		Insecurity due to cattle rustling & border conflicts	Ω Σ α σ φ #
		Ignorance on the importance of SFP program	Σ α γ σ # ω

Figure 14 highlights the major reasons for defaulting from the OTP and SFP programs from in depth interview with the caregivers of defaulting children



**Figure 14:** Reasons for defaulting from OTP & SFP Program

### 3.2 STAGE TWO: FORMULATION AND VERIFICATION OF HYPOTHESIS

The objective of this stage was to confirm areas of high and low coverage based on the boosters and barriers identified in Stage one. The hypothesis, ‘*there is High program coverage (>50%) in Agro-pastoral zones*’ and ‘*there is low program coverage in pastoral zones*’ (<50%) was formulated due to reasons highlighted in Table 5. The same hypothesis was developed for both OTP and SFP programs since the team felt that most boosters and barriers to the programs were similar.

Therefore, the assumption was that coverage is high in agro-pastoral areas compared to pastoral areas.

**Table 7:** Comparison of coverage in pastoral and agro-pastoral areas

Agro-pastoral livelihood zones	Pastoral livelihood zones
The populations are settled; little or no migration at all	They have seasonal migration in search of pasture and water
Most are closely distributed to the nearby health facilities	Health facilities are sparsely populated over long distances (at least 10km to the nearest facility)
Most community units are active	There are few and almost inactive community units
Populations have better health seeking behaviors	Populations have poor health seeking behaviors
	Prone to insecurity due to cattle raiding & border conflicts



A small study was conducted to test and verify the formulated hypothesis. In each pastoral and agro-pastoral livelihood a list villages were **purposively** selected, then three villages **randomly** selected from each livelihood. The teams were divided into two main groups during the data collection process. Data for both OTP and SFP programs were collected. Community key informants participated and assisted in identifying cases through active and adaptive case finding.

### 3.2.1 Hypothesis testing and verification for OTP Program

The following formula was used to confirm the hypothesis;  $d = \lfloor n \cdot p / 100 \rfloor$

**n**=sample size

**p** = 50% - SPHERE Standards Threshold for Rural areas

**d**=decision rule

**Table 8:** Small Area study results for OTP Program

Village	Livelihood Zones	n	In program	Not in program	Decision Rule (d)	No. of cases covered	OTP Coverage
Chesorkoi	Agro-pastoral	0	0	0	(d)=2.0	3>d	High coverage areas (>50%)
Chesirikio	Agro-pastoral	1	1	0			
Poto	Agro-pastoral	3	2	1			
<b>Total</b>		<b>4</b>	<b>3</b>	<b>1</b>			
Kaisa	Pastoral	0	0	0	(d)=2.5	3>d	Low coverage areas (<50%)
Cheptoch	Pastoral	3	0	3			
Pepel	Pastoral	2	0	2			
<b>Total</b>		<b>5</b>	<b>0</b>	<b>5</b>			

The hypothesis was confirmed that **Agro-pastoral** areas have **high OTP** program coverage and **pastoral** areas have **low OTP** program coverage.

### 3.2.2 Hypothesis testing and verification for SFP Program

The following formula was used to confirm the hypothesis;  $d = \lfloor n \cdot p / 100 \rfloor$

**n**=sample size

**p** = 50% - SPHERE Standards Threshold for Rural areas

**d**=decision rule



**Table 9:** Small Area study results for SFP Program

Village	Livelihood Zones	n	In program	Not in program	Decision Rule (d)	No. of cases covered	OTP Coverage
Chesorkoi	Agro-pastoral	0	0	0	(d)=2.0	3>d	High coverage areas (>50%)
Chesirikio	Agro-pastoral	4	3	1			
Sigilai	Agro-pastoral	0	0	0			
<b>Total</b>		<b>4</b>	<b>3</b>	<b>1</b>			
Kaisa	Pastoral	3	0	3	(d)=3.0	6>d	Low coverage areas (<50%)
Cheptoch	Pastoral	2	0	2			
Pepel	Pastoral	1	0	1			
<b>Total</b>		<b>6</b>	<b>0</b>	<b>6</b>			

The hypothesis was confirmed that **Agro-pastoral** areas have **high SFP** program coverage and **pastoral** areas have **low SFP** program coverage.

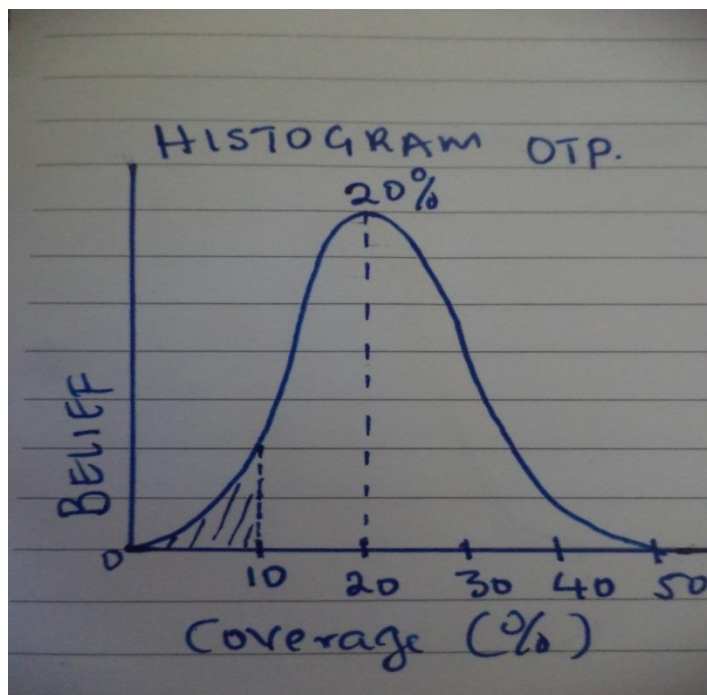
### 3.3 STAGE THREE: DEVELOPING THE PRIOR AND WIDE AREA SURVEY

The collected qualitative and quantitative data were used in determination of prior. It was established through the average of;

1. Weighted boosters and barriers- All the qualitative data was logically categorized as either a booster (positives) or a barrier (negatives) to the program with a score.
2. Unweighted boosters and barriers-The prior mode was developed by a physical count of the boosters (multiplied by a maximum value for each) then added to Minimum coverage (0%), while barriers (multiplied by a maximum value for each) were subtracted from the maximum coverage (100%), then the mean calculated.
3. Histogram-a belief for OTP and SFP program was derived from the collected data and also in relation to the previous assessment to ensure reliability. The minimum and the maximum values for both OTP and SFP programs were believed to be at 10% (due to some boosters) and 40% (due to many barriers) respectively.



### 3.3.1 Developing a PRIOR mode for OTP Program



**Figure 15:** Histogram prior showing belief OTP Program

**Table 10:** Weighted Boosters and Barriers for OTP Program

Booster	Score (%)		Barrier
Presence of IEC materials	2	5	Distance to the program site
Acknowledgement of OTP program	4	2	Migration of the pastoral population
Some active case finding	1	5	Competing activities/priorities by caregivers
Commitment of facility-based CHWs	3	4	Poor documentation & inadequate tools
Rare RUTF stock outs	4	2	Insecurity due to cattle rustling & border conflicts
Acknowledgement of importance of OJTs	5	3	Poor active case/defaulters finding
Program awareness	4	4	Insufficient health staff & Staff absenteeism
Linkage between facilities and community units	2	3	Stigma on malnutrition & ignorance on the importance of OTP
Existence of outreach services	3	5	Perception of RUTF as food; Sharing of RUTF



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	4	Inadequate adherence to IMAM treatment protocols & inaccurate MUAC measurements
	4	Lack of program ownership by health workers
	3	Poor treatment seeking behaviours
	4	Poor infrastructure-Poor roads/rough terrain & inadequate health facilities distribution
	4	Poor child care practices
	3	Irregular outreaches & some not integrated with IMAM activities
	2	Perception that RUTF causes diarrhoea
	3	Lack of harmonization of CHWs incentives
	3	Inadequate stakeholders' involvement in IMAM
<b>TOTAL</b>	<b>28.0%</b>	<b>63.0%</b>
		<b>TOTAL</b>

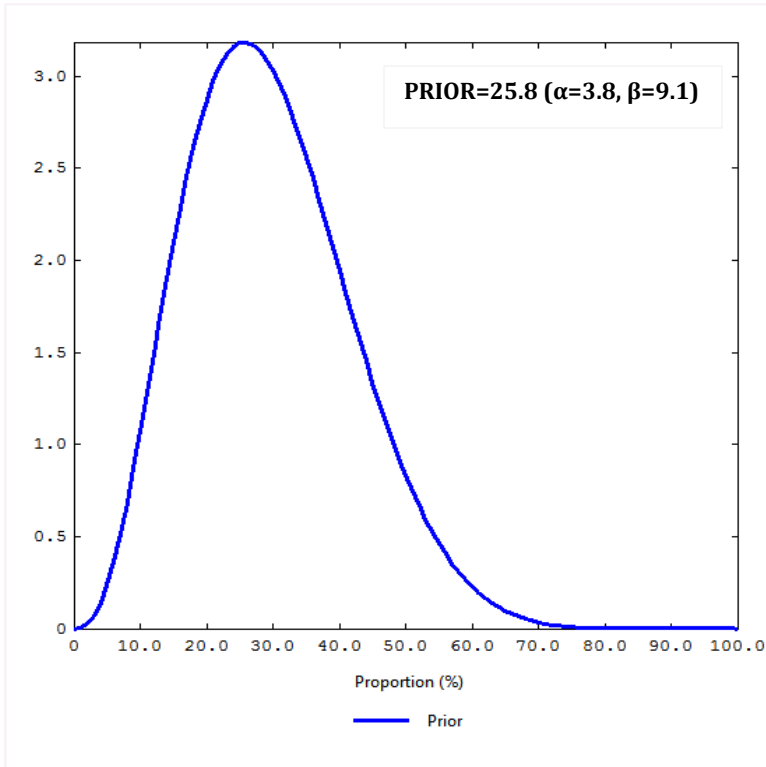
$$\text{Mean} = \frac{(0.0+28.0)+(100-63.0)}{2} = 32.5\%$$

$$\text{Un-weighted Boosters \& Barriers} = ((9.0\%*5) + (0.0\%)) + (100 \%- (19.0\%*5))/2 = 25.0\%$$

Histogram (belief) = 20.0%

$$\text{Average PRIOR mode} = \frac{(20.0+32.5+25.0)}{3} = 32.5\%; \text{ plotted using Bayesian calculator as follows;}$$





**Figure 16:** Bayesian PRIOR plot for OTP program

### 3.3.1.1 Calculating the Sample Size (SAM Cases)

The formula below was used to calculate the sample size for the wide area survey;

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

$n$ =minimum sample size, mode=25.8%, precision=3.5%,  $\alpha$ =3.8,  $\beta$ =9.1

$$n = \frac{\text{mode} \cdot (1 - \text{mode})}{\left(\frac{\text{precision}}{1.96}\right)^2} - 3.8 + 9.1 - 2$$

$$n = \frac{0.258 \cdot (1 - 0.258)}{\left(\frac{3.5}{1.96}\right)^2} - 3.8 + 9.1 - 2 \quad \mathbf{n=4 \text{ SAM cases}}$$

### 3.3.1.2 Calculation of the Sample (Number of Villages)

The number of villages to be visited was determined using the formula below:

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

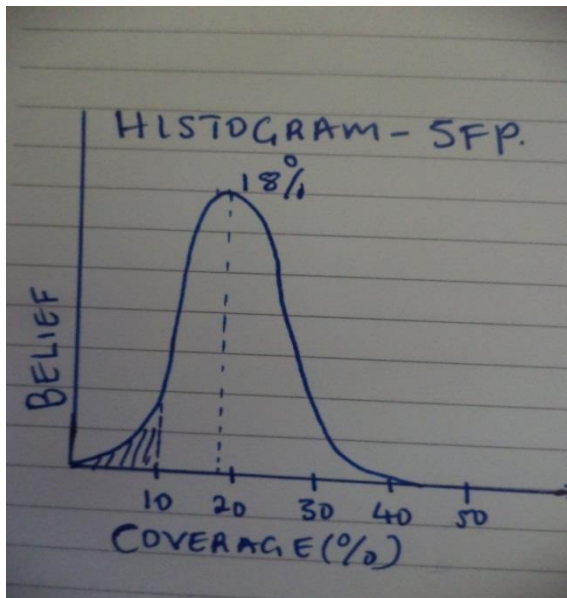
$$n \text{ villages} = \frac{4}{406 \times \frac{19.2}{100} \times \frac{0.5}{100\%}}$$

$n \text{ villages} = 18 \text{ villages}$



Average village population=406<sup>6</sup>  
 % population of <5 years=19.2%<sup>7</sup>  
 Prevalence of SAM=0.3%<sup>8</sup>  
 n=sample size (4)

### 3.3.2 Developing a PRIOR mode for SFP Program



**Figure 17:** Histogram Prior showing belief of the SFP program

**Table 11:** Weighted Boosters and Barriers for SFP Program

Booster	Score (%)		Barrier
Presence of IEC materials	2	5	Distance to the program site
Acknowledgement of SFP program	3	2	Migration of the pastoral population
Some active case finding	1	5	Competing activities/priorities
Commitment of facility-based CHWs	3	4	Poor documentation & inadequate tools
Existence of outreach services	3	2	Insecurity due to cattle rustling & border conflicts
Acknowledgement of importance of OJTs	5	3	Poor active case/defaulters finding
Program awareness	4	4	Insufficient health staff & Staff absenteeism
Linkage between facilities and	2	4	Frequent RUSF stock outs and improper

<sup>6</sup> Approximated from Kenya National Bureau of Statistics (KNBS) census 2009

<sup>7</sup> Approximated from Kenya National Bureau of Statistics (KNBS) census 2009

<sup>8</sup> Integrated SMART Survey for West Pokot County, March 2013



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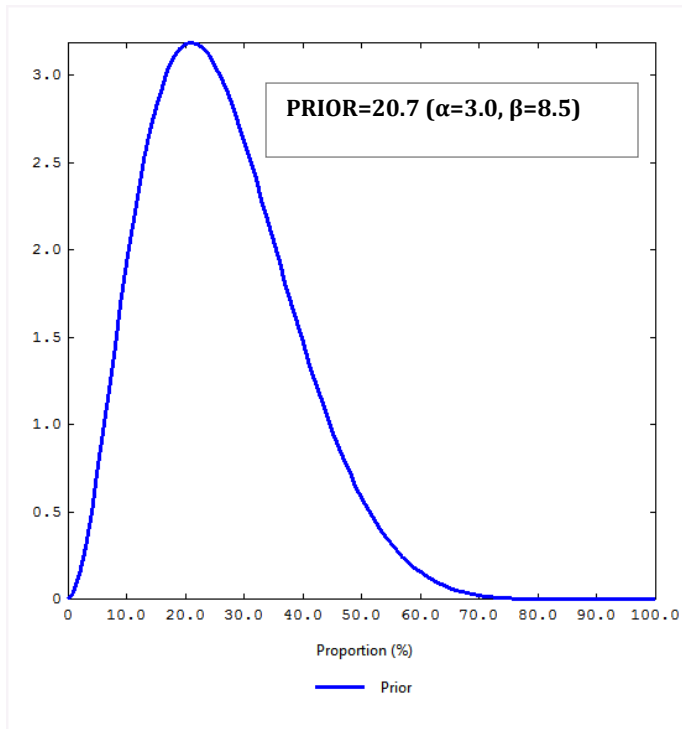
community units			communication during stock in to caregivers
	5		Perception of RUSF as food hence Sharing
	2		Difficulty with identification of moderately acute malnourished children by caregivers
	4		Inadequate adherence to IMAM treatment protocols & inaccurate MUAC measurements
	4		Lack of program ownership by health workers
	3		Poor treatment seeking behaviours
	4		Poor infrastructure-Poor roads/rough terrain & inadequate health facilities distribution
	4		Poor child care practices
	3		Irregular outreaches, some not integrated with IMAM activities
	3		Lack of harmonization of CHWs incentives
	3		Inadequate stakeholders' involvement in IMAM
	2		Ignorance on the importance of SFP program
<b>TOTAL</b>	<b>19.0%</b>	<b>66.0%</b>	<b>TOTAL</b>

$$\text{Weighted Mean} = \frac{(0.0+19.0)+(100-66.0)}{2} = 26.5\%$$

$$\text{Un-Weighted Boosters \& Barriers} = ((0.0 \% + (7.0\% * 5)) + (100 \% - (20.0\% * 5)) / 2 = 17.5\%$$

Histogram (Belief) = 18.0%

$$\text{Average PRIOR mode} = \frac{(18.0+26.5+17.5)}{3} = 20.7\%; \text{ plotted using the Bayesian calculator as follows;}$$



**Figure 18:** Bayesian PRIOR plot for SFP program

### 3.3.2.1 Calculating the Sample Size (MAM Cases)

The formula below was used to calculate the sample size for the wide area survey;

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

$n$ =minimum sample size, mode=20.7%, precision=3.5%,  $\alpha$ =3.0,  $\beta$ =8.5

$$n = \frac{mode.(1-mode)}{\left(\frac{precision}{1.96}\right)^2} - 3.0 + 8.5 - 2$$

$$n = \frac{0.207.(1-0.207)}{\left(\frac{3.5}{1.96}\right)^2} - 3.0 + 8.5 - 2 \quad \mathbf{n=4 \text{ MAM cases}}$$

### 3.3.2.2 Calculation of the Sample (Number of Villages)

The number of villages to be visited was determined using the formula below:

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

$$n \text{ villages} = \frac{4}{406 \times \frac{19.2}{100} \times \frac{0.8}{100\%}}$$

$n \text{ villages}=18 \text{ villages}$



Average village population=406<sup>9</sup>  
 % population of <5 years=19.2%<sup>10</sup>  
 Prevalence of MAM=0.3%<sup>11</sup>  
 n=sample size (4)

### 3.3.3 Selecting villages for Wide area survey

Systematic Random Sampling procedure was used in selection of villages for wide area survey. Since there was no map of Central Pokot Sub County, spatial stratification method was used in selection of villages to be sampled where villages are sorted by sub location each with a list of villages. A random starting point between one and the sampling interval was picked, and then sampling interval was applied continually until the end of the list was reached.

Sampling interval= $N_{\text{villages}}/n_{\text{villages}}$  where N is the total number of villages, n is the required number of villages

The total number of villages in Central Pokot Sub County sampling frame (excluding the insecure sub locations) is 239; number of villages to be sampled was 18. Therefore, the sampling interval was;

**239/18=13.3** Random number picked was village number **7**. The sampling interval was applied continually until 18 villages were selected.

Active case finding method (house-to-house screening) was adopted in finding both SAM and MAM cases.

**Table 12: OTP Wide Area Survey findings**

CASE DEFINITION	NO. FOUND
SAM cases <u>NOT</u> in OTP (MUAC ≤11.4/OEDEMA)	6
SAM cases <u>IN</u> OTP (MUAC ≤11.4/OEDEMA)	4
SAM cases in OTP but <u>RECOVERED</u> (MUAC ≥11.5CM/NO OEDEMA)	6
<b>TOTAL SAM cases found (MUAC ≤11.4/OEDEMA)</b>	<b>10</b>
<b>OTP Program Point Coverage</b>	<b>32.5% (16.9%-53.5%)</b>

**Table 13: SFP Wide Area Survey findings**

CASE DEFINITION	NO. FOUND
MAM cases <u>NOT</u> in program (MUAC ≥11.5-≤12.4CM)	20
MAM cases <u>IN</u> program (MUAC ≥11.5-≤12.4CM)	10
MAM cases in program but <u>RECOVERED</u> (MUAC ≥12.5CM)	8
<b>TOTAL MAM cases found (MUAC ≥11.5-≤12.4)</b>	<b>30</b>
<b>SFP Program Point Coverage</b>	<b>30.4% (18.3%-45.8%)</b>

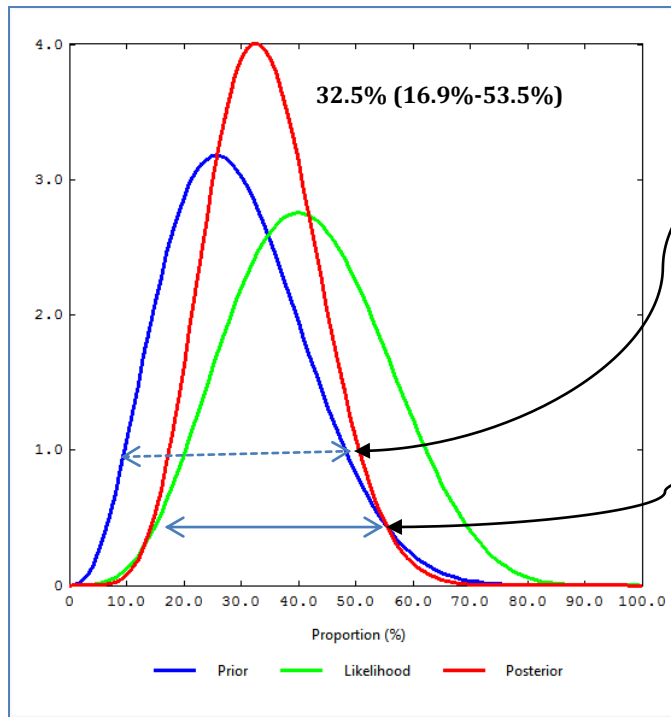
<sup>9</sup> Approximated from Kenya National Bureau of Statistics (KNBS) census 2009

<sup>10</sup> Approximated from Kenya National Bureau of Statistics (KNBS) census 2009

<sup>11</sup> Integrated SMART Survey for West Pokot County, March 2013

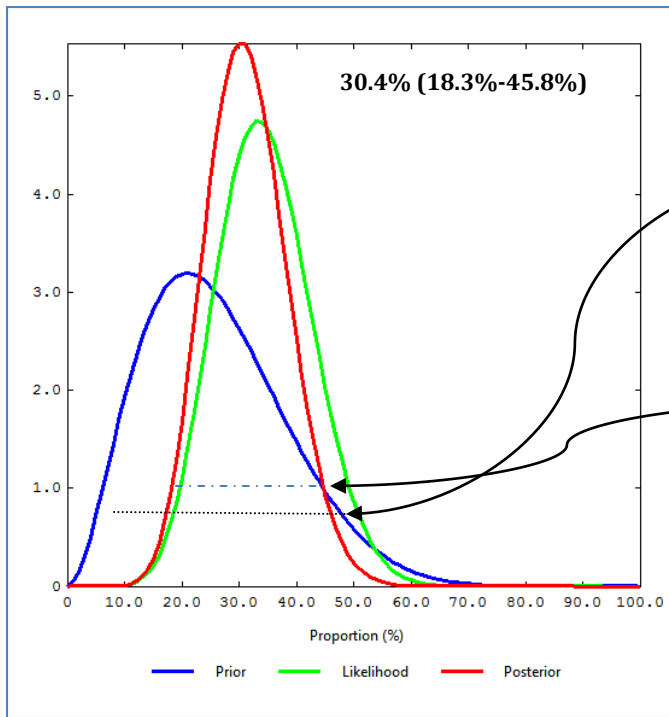


The results for both SAM and MAM were calculated using the Bayes SQUEAC coverage estimate calculator and plotted as shown in figures 21 (OTP) and 22 (SFP). Point coverage was suitable for both OTP and SFP programs to use owing to inadequate active case finding noted during the assessment, inadequate community screening and inadequate outreach services especially in the pastoral parts of Central Pokot Sub County.



The plot for the overall **OTP** program coverage shows a considerable **overlap** between the prior and the likelihood (prior and likelihood do not conflict). This indicates reliability in setting the prior and thus the qualitative data collected and thus the survey results can be used assertively. The **posterior** is **narrower** than the **prior** showing that the **likelihood survey** has **reduced uncertainty** on the coverage.

**Figure 19:** OTP program coverage estimate plot

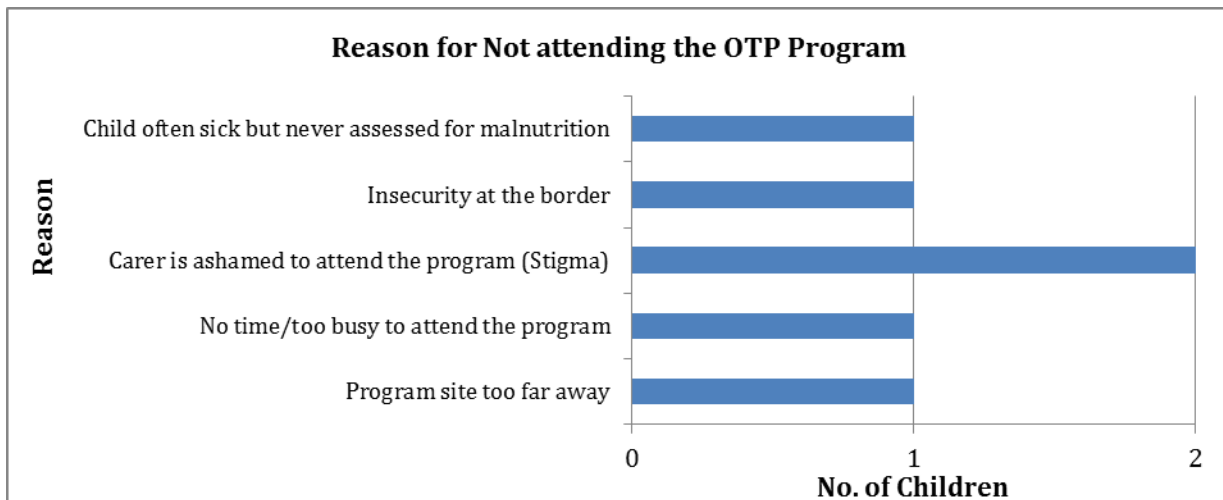


The plot for the overall **SFP program** coverage shows a considerable **overlap** between the **prior** and the **likelihood** (prior and likelihood do not conflict). This indicates reliability in setting the prior and thus the qualitative data collected. Hence, the survey results can be used assertively. The **posterior** is **narrower than the prior** showing that the **likelihood survey** has **reduced uncertainty** on the coverage.

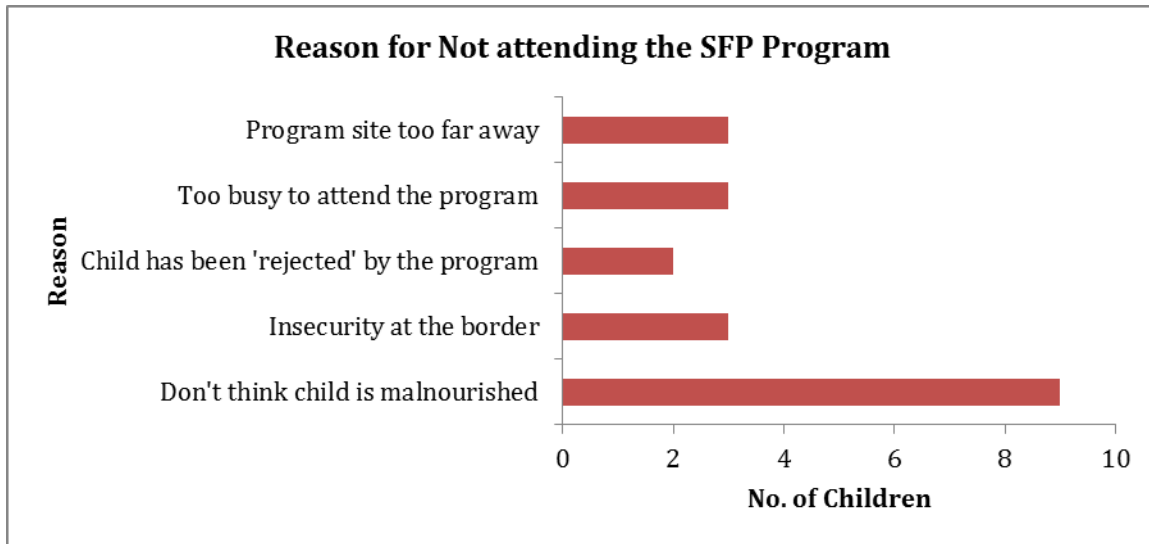
**Figure 20:** SFP program coverage estimate plot

### 3.3.4 Reason for Not attending the Program

During the case finding exercise a question guide was used on all the caregivers of children, both SAM (MUAC<115mm) and MAM (MUAC ≥115-≤124mm) cases, not in program. The responses are highlighted in figures 19 and 20 for OTP and SFP programs respectively.



**Figure 21:** Reasons for not attending the OTP program



**Figure 22:** Reasons for not attending the SFP program





## 4.0 CONCLUSION AND RECOMMENDATIONS

The current coverage estimate for Central Pokot Sub County **32.5% (16.9%-53.5%)** and **30.4% (18.3%-45.8%)** for OTP and SFP programs respectively. Despite some action points on the recommendations made from the previous coverage assessment being addressed, the coverage is below the minimum SPHERE standard of 50% for rural programs. The low coverage was attributed to some barriers identified during the investigation. Some recommendations to the barriers were made by the coverage assessment and Sub County health management teams as shown in table 14.

**Table 14:** Possible Recommendations

Barrier	Recommendations	Action Plan	Process indicators	Responsible
<b>(1) Poor infrastructure-Poor roads/rough terrain, Distance to &amp; inadequate health facilities distribution</b>	<ul style="list-style-type: none"> <li>-Upscale outreach sites to bridge the gap</li> <li>-Need to upscale existing outreach sites to health facilities</li> </ul>	<ul style="list-style-type: none"> <li>-Increase the number of outreach sites</li> <li>-Community leaders to organize structures for storage of commodities</li> </ul>	<ul style="list-style-type: none"> <li>-No. of outreach sites started</li> <li>-No. of outreach sites up-scaled to dispensaries</li> <li>-No. of structures erected for storage of outreach commodities</li> </ul>	<ul style="list-style-type: none"> <li>Sub County Health Management Committee (SCHMT) and program partners (ACF and Kenya Red Cross Society-KRCS)</li> </ul>
<b>(2) Irregular outreaches, some not integrated with IMAM activities hence low turn up by the community</b>	<ul style="list-style-type: none"> <li>-Partners supporting outreaches to integrate them with IMAM activities, coordinate and harmonize them with link facilities</li> <li>-Intensify mobilization of outreaches to increase coverage</li> </ul>	<ul style="list-style-type: none"> <li>-Map the outreach schedule (sites and dates) for harmonization by partners</li> <li>-Develop a checklist of what to be done during the outreaches and share with implementers</li> <li>-Involve key community leaders in sensitization and mobilization of outreach activities</li> </ul>	<ul style="list-style-type: none"> <li>-No. of outreaches integrated</li> <li>-No. of follow ups and monitoring by SCHMT</li> <li>-No. of meetings held with the key community leaders and number of beneficiaries being reached</li> </ul>	<ul style="list-style-type: none"> <li>Monthly CNTF follow ups</li> </ul>



# COVERAGE ASSESSMENT

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<p><b>(3) Poor active case finding and defaulter tracing mechanisms</b></p>	<p>-Need to increase active case finding at community level in order to capture cases that do not access the facility and defaulters to the program.</p>	<p>-Community Strategy to develop database of all CBVs with respective operational areas. -Program to develop case reporting tools -Hold meetings and recruit community leaders into IMAM activities; share with them a list of all cases in the program per village</p>	<p>-Records on number of screenings and defaulter cases traced -Proportion of villages with recruited key community leaders -Number of meetings/dialogue days held in relation to sensitization of malnutrition with key community leaders -No. of accountability documents issued to partners by community strategy (MOH)</p>	<p>CNO, Partners, Program manager/coordinator &amp; Program staff</p>
<p><b>(4) Lack of involvement of key community leaders in IMAM activities</b></p>	<p>-Need for program to involve key community leaders in IMAM activities to support in community sensitization, mobilization and defaulter tracing for program ownership by community</p>	<p>-Channeling all the incentives through the community strategy (MOH) for ownership</p>	<p>-No. of accountability documents issued to partners by community strategy (MOH)</p>	
<p><b>(5) Lack of harmonization of CHWs incentives by partners</b></p>	<p>-Need for partners to harmonize incentives/support given to CBVs</p>	<p>-Channeling all the incentives through the community strategy (MOH) for ownership</p>	<p>-No. of accountability documents issued to partners by community strategy (MOH)</p>	
<p><b>(6) Perception of RUTF &amp; RUSF as food and not medicine hence sharing</b></p>	<p>-The program to sensitise and educate the community on the use of RUTF &amp; RUSF their purpose as medicine</p>	<p>-RUTF &amp; RUSF distributed at the pharmacy with the normal prescription drugs -Strengthen integration of RUTF &amp; RUSF with KEPI products -Including medicine component on use of RUTF in all program activities</p>	<p>-Number of Community dialogues and sensitization in a quarter -No. of monitoring/follow ups at the community level on adherence</p>	<p>CNO, Program Manager, Program staff Health workers &amp; CHWs</p>
<p><b>(7) Lack of program ownership by health workers with IMAM activities being left to facility based CHWs</b></p>	<p>-The need to strengthen integration of IMAM activities with the other treatment services by health workers</p>	<p>-Increase the frequent supervision by SCHMT to ensure the component is integrated. -Use of CWC/MCH booklet as an entry point into the program -Closely follow up on individual facilities by DHMT for ownership (spot checks) and during monthly in-charges meetings -Continuous Medical Education (CMEs) and OJTs with action points -Refresher trainings for both CHWs and health workers -Follow ups to be done during monthly in-charges meetings</p>	<p>-No. of supervisory visits done  -No. of CMEs, OJTs and refresher trainings conducted and no. of participants trained  -No. of follow ups done during monthly in-charges meetings</p>	<p>CMOH, Program Manager</p>
<p><b>(8) Inadequate adherence to IMAM treatment protocols-routine medication &amp; Inaccurate MUAC readings causing perception of 'rejection' by caregivers</b></p>	<p>-Intensive mentorship on admissions and IMAM treatment protocols</p>	<p>-Increase the frequent supervision by SCHMT to ensure the component is integrated. -Use of CWC/MCH booklet as an entry point into the program -Closely follow up on individual facilities by DHMT for ownership (spot checks) and during monthly in-charges meetings -Continuous Medical Education (CMEs) and OJTs with action points -Refresher trainings for both CHWs and health workers -Follow ups to be done during monthly in-charges meetings</p>	<p>-No. of CMEs, OJTs and refresher trainings conducted and no. of participants trained  -No. of follow ups done during monthly in-charges meetings</p>	
<p><b>(9) Poor documentation of progress and outcomes of SAM &amp; MAM treatment and inadequate reporting tools</b></p>	<p>-There is need to strengthen capacity enhancement for health workers especially on documentation and reporting on follow-up and outcomes of children in SAM and MAM treatment.</p>	<p>-Plan to increase capacity enhancement sessions on reporting and documentation. -Plan to incorporate monthly data collection for quality analysis and assessments, into program activities. -Frequent joint supportive supervision until component is</p>	<p>-Number, name, facility of persons in OJT sessions -Number of OJT sessions, Gap analysis based on OJT review and scoring -Number of support supervision meetings</p>	<p>CHMT, Program Manager</p>



# COVERAGE ASSESSMENT

» SEMI-QUANTITATIVE EVALUATION OF ACCESS & COVERAGE



	understood.	held	
<b>(10)Competing activities of caregivers</b>	-The program needs to increase the number and frequency of outreach services and IMAM treatment days.	-Initiate a more flexible distribution method so as to be able to accommodate caregivers who have competing activities	Joint outreach and facility work plans for partners with MOH CHMT, Program staff
<b>(11)Insufficient staffing and absenteeism at facility level</b>	-The MoH to increase the number of nurses at facility level	Lobby for more nurses to be posted at the facilities	No. of joint supervisory visits by CHMT No. of new nurses posted to the facilities CHMT (CMOH)
<b>(12)RUTF stock out</b>	-Enhance the Capacity of the District Nutrition Officer to be able to accurately and timely request for supplies.	-OJTS on stock management and supply request -Early reporting by health facilities to aid in timely restocking and long term projection of needs -Closely follow up on facility stocks	Number of OJT sessions on stock management and request MoH (CNO), Program staff, Program manager Donor (UNICEF & WFP)
<b>(13)Poor health seeking behaviours, stigma and poor child care practices</b>	-Need for program to sensitize and educate the community on issues of malnutrition	-Plan to involve key community leaders in community sensitization and mobilization on issues of malnutrition -Use of MTMSGs and model mothers to sensitize and educate caregivers on child care practices	-No. of dialogue days and meetings on sensitization held No. of caregivers reached through MTMSGs Program Manager, Program staff, Health workers

## 5.0 ANNEXES

### ANNEX 1

Table 15: Wide Area Survey findings

VILLAGE	TOTAL SCREENED	# SAM CASES FOUND (MUAC ≤11.4/OEDEMA)	SAM CASES NOT IN OTP (MUAC ≤11.4/OEDEMA)	SAM CASES IN OTP (MUAC ≤11.4/OEDEMA)	SAM CASES IN OTP BUT RECOVERED (MUAC ≥11.5CM/NO OEDEMA)	# MAM CASES FOUND (MUAC ≥11.5-≤12.4)	MAM CASES NOT IN PROGRAM (MUAC ≥11.5-≤12.4CM)	MAM CASES IN PROGRAM (MUAC ≥11.5-≤12.4CM)	CASES IN PROGRAM BUT RECOVERED (MUAC ≥12.5CM)
<b>Pkaling</b>	28	0	0	0	2	1	0	1	2
<b>Kamariony</b>	33	0	0	0	0	0	0	0	0
<b>Siron</b>	32	0	0	0	0	3	3	0	1
<b>ChepkoiKET</b>	88	1	0	1	0	3	3	0	1
<b>Kokwokochy</b>	52	2	1	1	0	3	1	2	0
<b>Kishoroi</b>	41	0	0	0	0	2	2	0	0
<b>Sala</b>	49	2	1	1	0	0	0	0	0
<b>Kapokono</b>	17	0	0	0	0	3	0	3	1



# COVERAGE ASSESSMENT

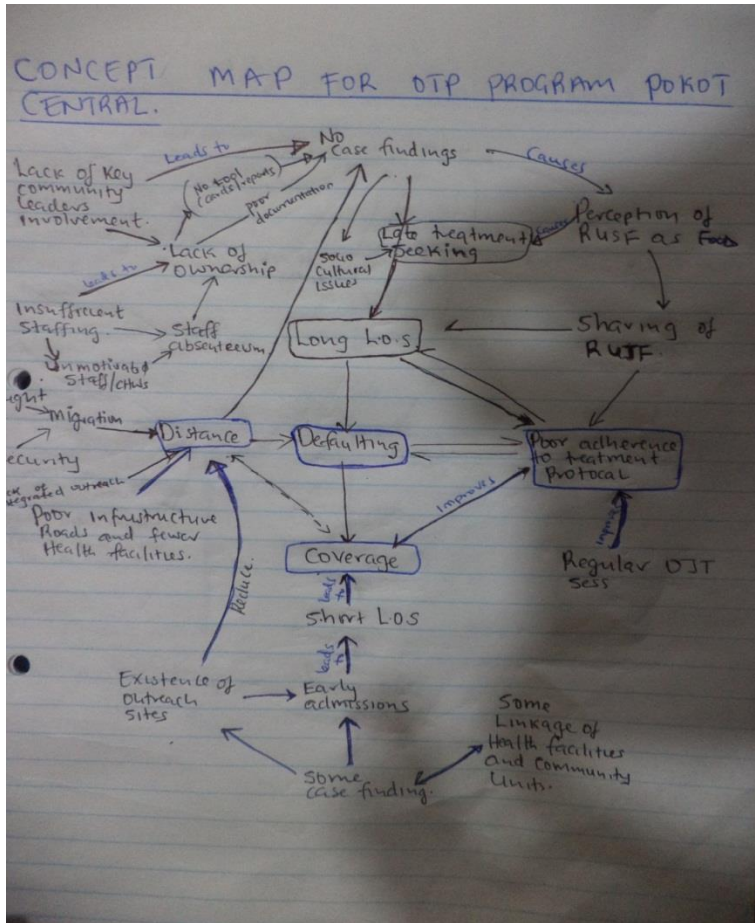
» SEMI-QUANTITATIVE EVALUATION OF ACCESS & COVERAGE



<b>Tosio</b>	54	0	0	0	0	3	2	1	1
<b>Kamologon</b>	32	0	0	0	0	0	0	0	0
<b>Akiriamet</b>	20	0	0	0	0	0	0	0	0
<b>Aimat</b>	49	3	2	1	1	0	0	0	0
<b>Chesir</b>	28	2	2	0	0	1	1	0	0
<b>Kapkaram</b>	60	0	0	0	0	2	2	0	0
<b>Sichot</b>	47	0	0	0	0	0	0	0	0
<b>Sonjiro</b>	38	0	0	0	3	2	2	0	0
<b>Koshiolo</b>	38	0	0	0	0	2	0	2	2
<b>Pachora</b>	44	0	0	0	0	1	0	1	0
<b>TOTAL</b>		<b>10</b>	<b>6</b>	<b>4</b>	<b>6</b>	<b>30</b>	<b>20</b>	<b>10</b>	<b>8</b>



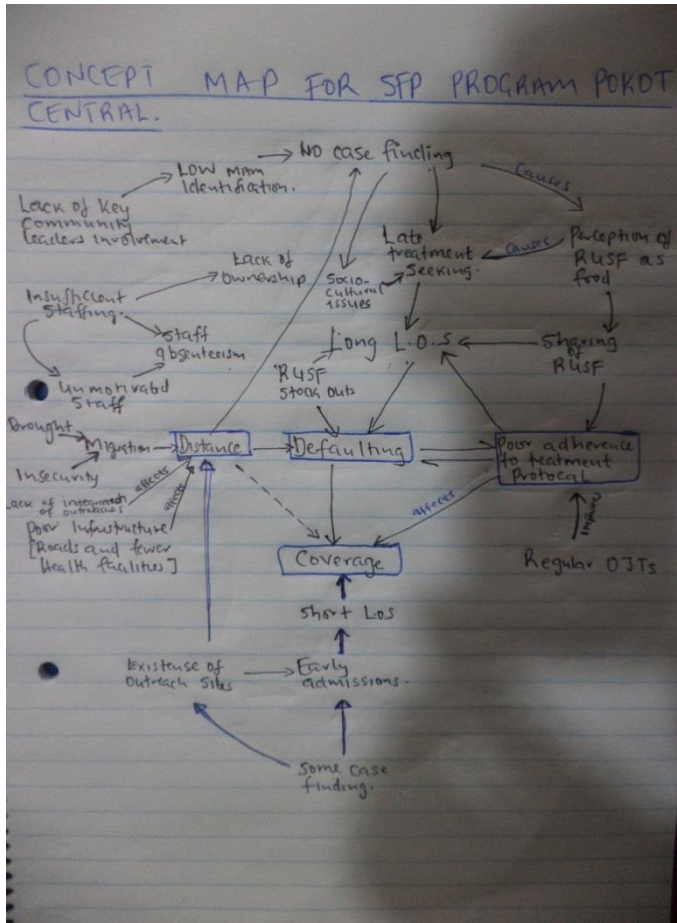
## ANNEX 2: A snapshot of Central Pokot OTP program



**Figure 23:** A snapshot of OTP program concept



### ANNEX 3: A snapshot of Central Pokot SFP program



**Figure 24:** A snapshot of SFP program concept