

COVERAGE MONITORING NETWORK

SQUEAC Evaluation Preliminary Results



Districts: Wadajir, Weberi and Bondhere

Region: Benadir, Somalia

Date: 10th -29th March 2015

Programme: Concern Worldwide

Training Participants: ACF, Concern, SCI, Gredo, Wardi

Context

- **Population type:** Urban with IDPs integrated throughout
- **Main source of income:** casual labour
- **SAM rate:** 2.6% (urban) and 5.6% (IDP)
- **Programme type:** NGO implemented with SFP for OTP graduates
- **Key challenges:** limited MoH involvement, unannounced evictions from IDP camps, occasional conflict, frequent road blocks

[Show map](#)

OTPs:

Wadajir- 1x Concern, 1x Muslim Aid MCH

Weberi- 1x Concern, 1x SCI MCH

Bondhere- 1x Concern, 1x CISP MCH

Stabilization Centres: Hodan and Forlani (ACF), Benadir Hospital and SAACID

Community level screening: Concern, CISP, SCI, Youthink and Appcan

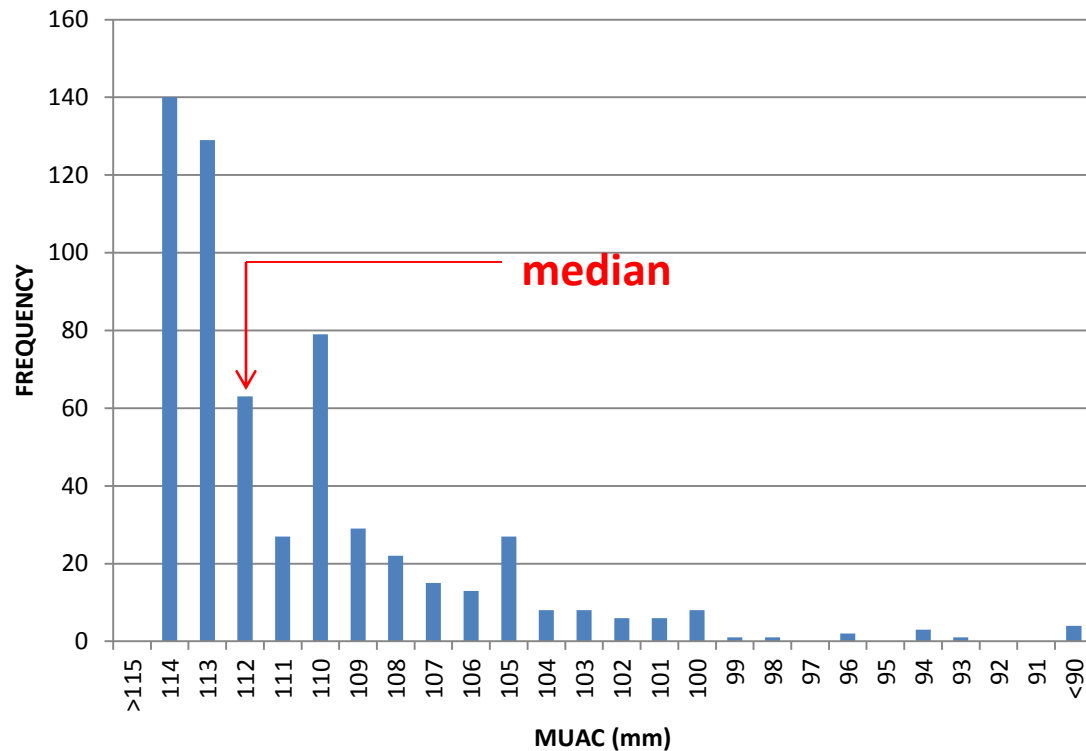
SQUEAC Methodology



Stage One: Quantitative Data Analysis

Source	Data Yielded
Monthly CMAM data	Admissions and discharges over time
Defaulter follow-up system	Number follow-up, reasons for default
CHW reporting	Screening and referral numbers by month
OTP card analysis for all OTPs November 2014-January 2015 (n=629)	MUAC on admission, length of stay, time to default, MUAC on default, location of admissions and defaulters

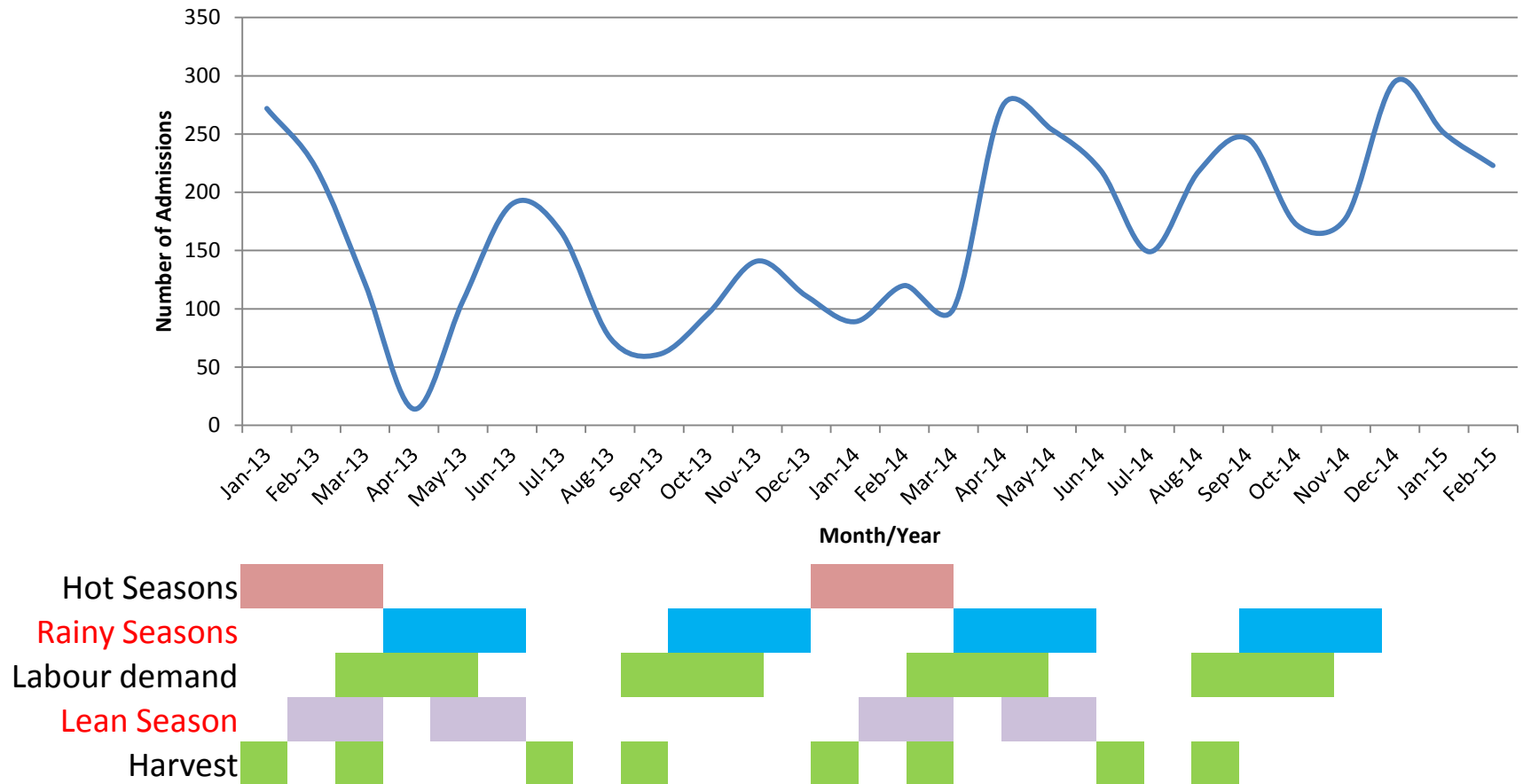
MUAC on admission (n=592)



Findings:

- High median MUAC on admission (112mm) shows early presentation of SAM cases which indicates good case-finding
- 74% of admissions within target MUAC (110-114mm)
- Quality of measurements: slight digit preference for 105 and 110mm, but no admissions at <114mm
- Some, albeit low, amounts of very severe cases (<105mm)

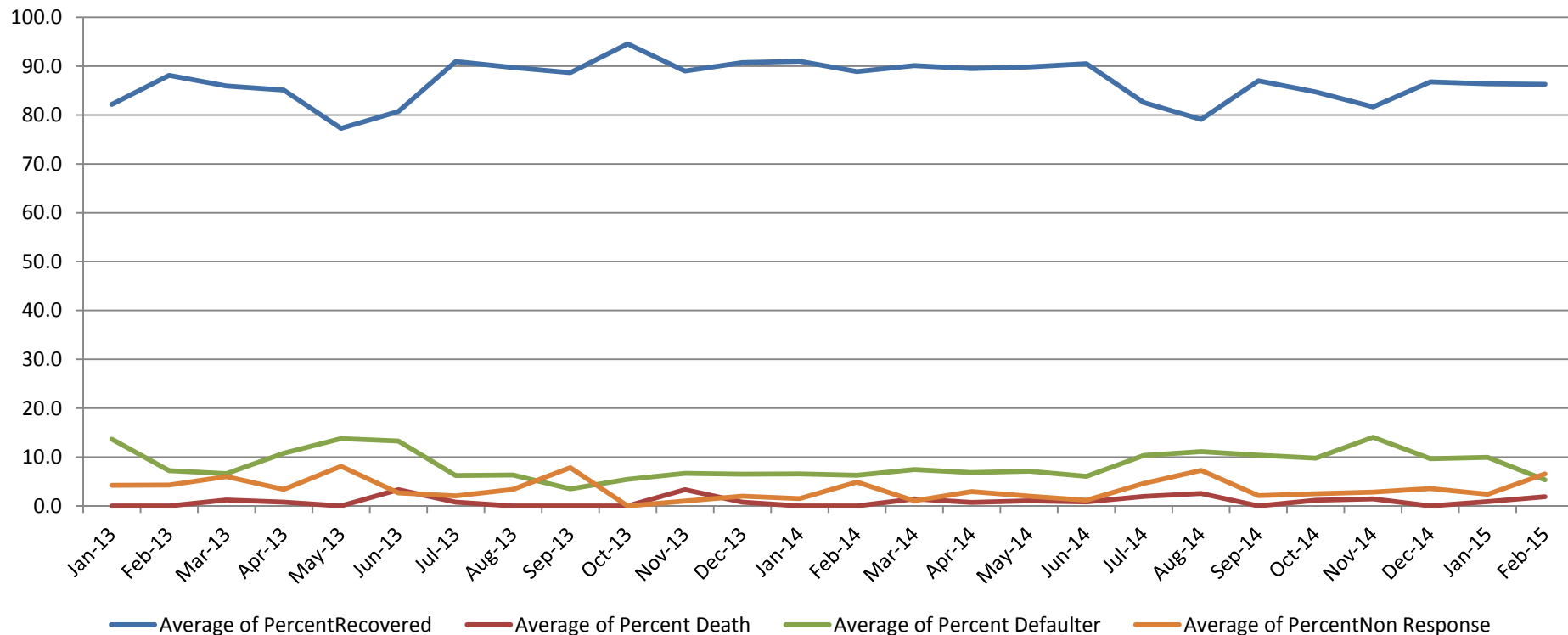
Total Admissions over time (Jan 2014-Feb 2015) for Concern OTPs



Findings:

- Rainy season and increase in malaria leads to increased admissions
- Lean seasons see peaks in admissions
- Demonstrates response to changing context
- 2014 increase in screening leading to increase in admissions - shows effective referral

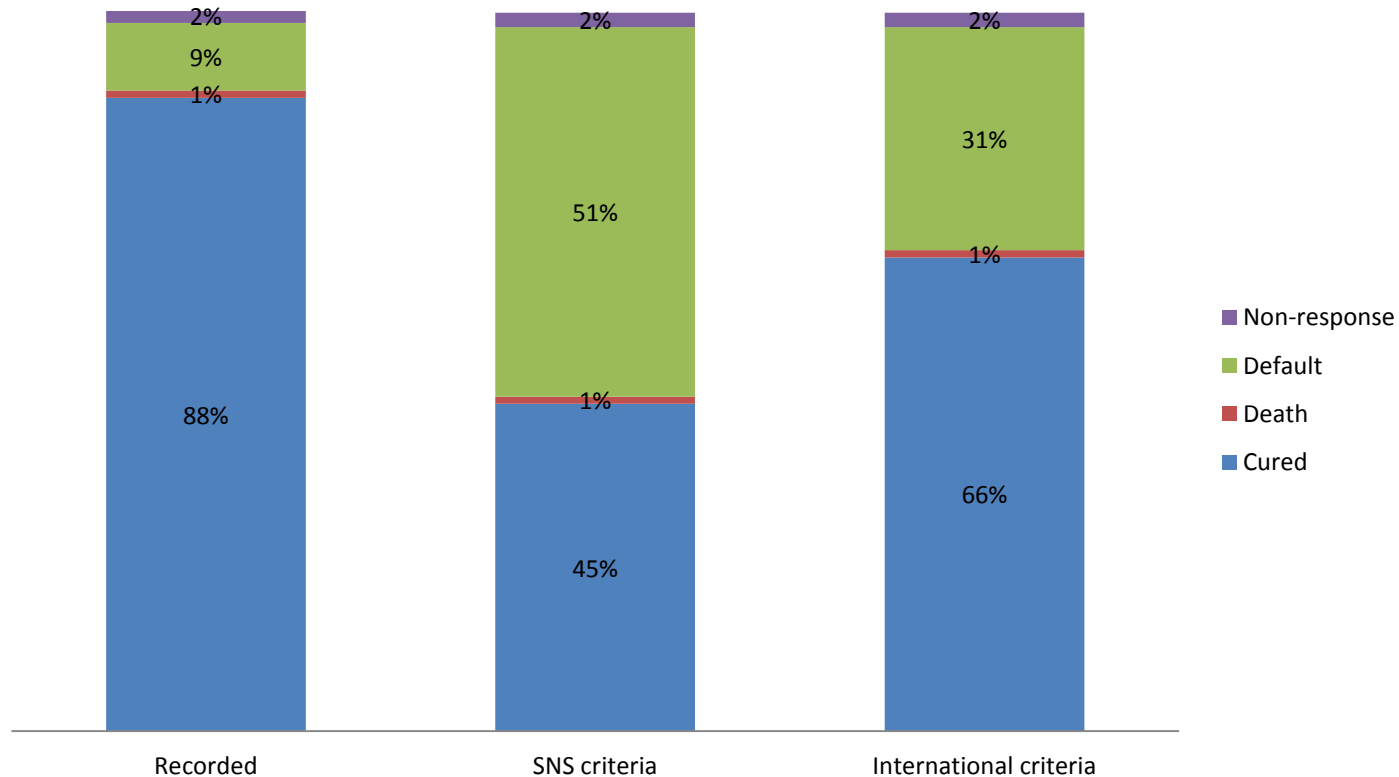
Average of Discharge Outcomes over time (Jan/2013-Feb/2015) (3 districts, 5 OTPs)



Findings:

- Reported outcomes well over SPHERE standards
- Low defaulting rates
- Low death
- Non-response higher than expected
- All round good performance

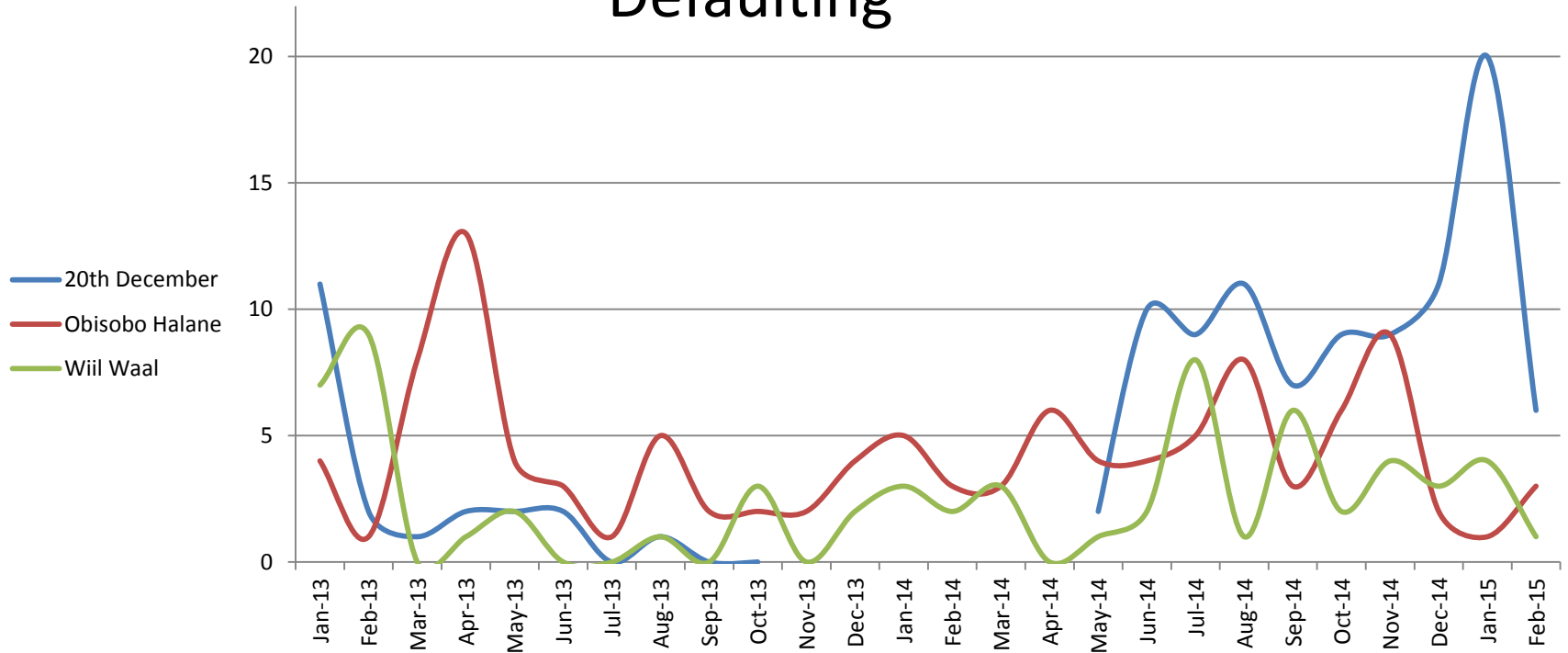
OTP Card Analysis



Findings:

- OTP card analysis yielded same outcomes as reported outcomes – shows accurate data management
- Generally very good filling of cards (clear and accurate)
- But many 'hidden defaulters'
- Insignificant amount of defaulters whilst still SAM (MUAC on default analysis showed)
- Many discharges after 3 weeks at 125mm MUAC also found
- Highlighted different understandings of discharge criteria (1 week, 2 weeks and 3 weeks commonly used)

Defaulting



Peak Labour demand

Road Blockages (Bondhere and Weberi)

Displacement in Bondhere

CM stopped in Weberi

Forced evictions of IDPs (all over)

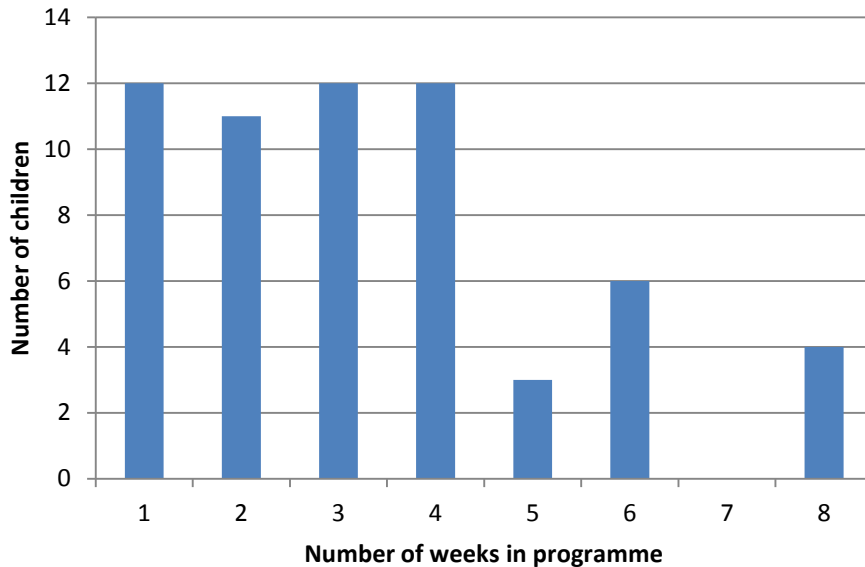
Increase in number of CHWs (all districts)

Findings:

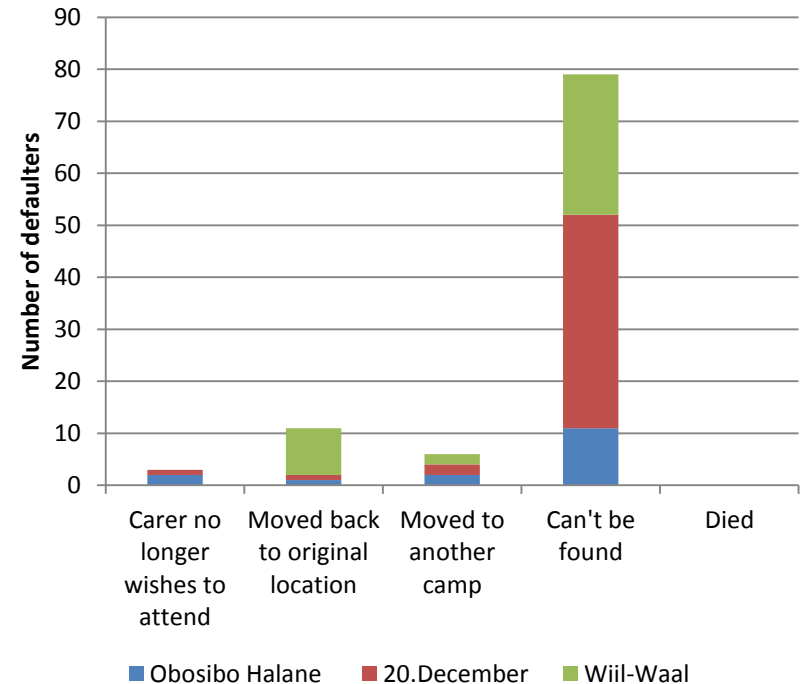
- Defaulting generally very low and not a major problem
- Defaulting generally correlates with admissions
- Increase in defaulting from May 2014, with admissions
- 20th December more defaulters, especially Dec-14-Jan 14 – due to ceasing of community activity
- Road blockages Jun-Jul 2014 increase in defaulting

Reasons for Default

Time to default for all OTPs from OTP card analysisi (n=60)



Reasons for default from defaulter tracing (n=99)

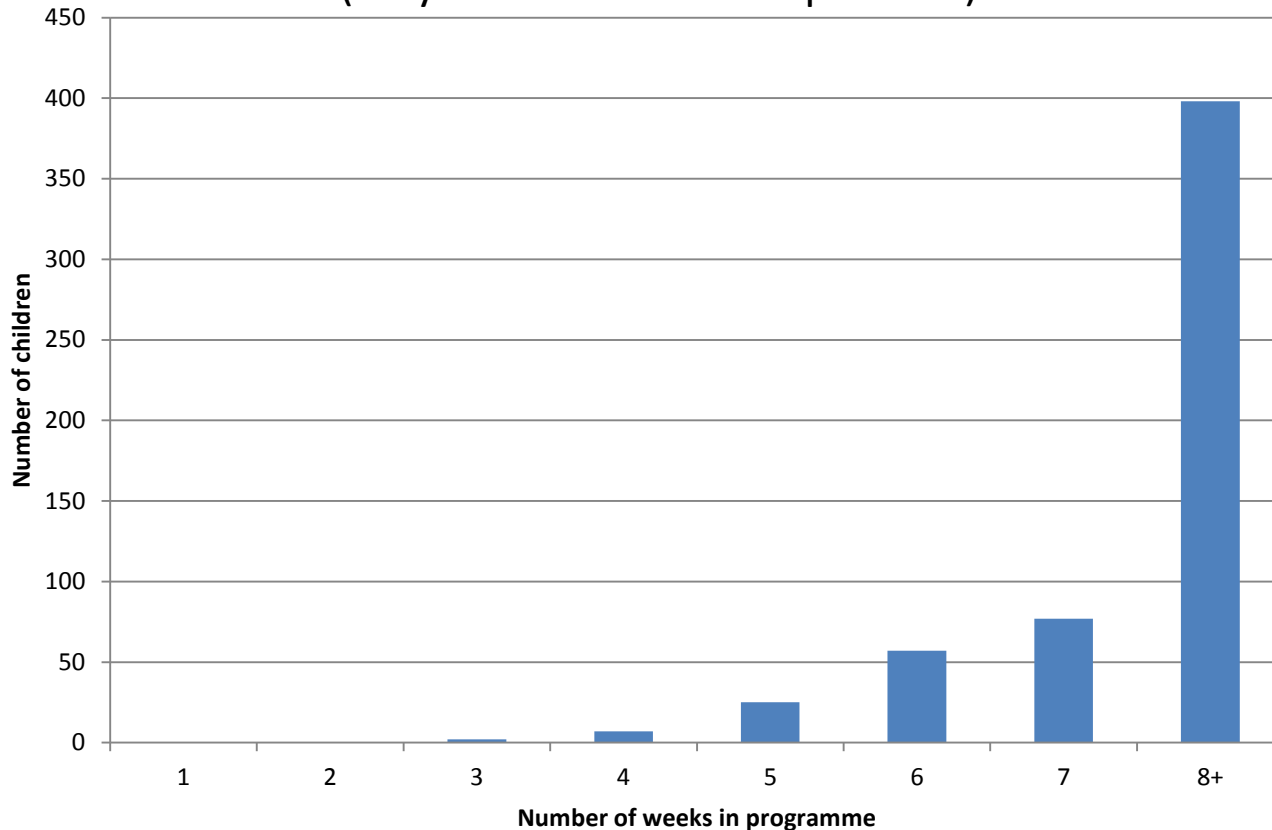


Findings:

- Most of defaulting happens after 1-4 weeks – often due to lack of awareness about required length of stay
- Only 99 out of 291 traced
- Defaulter tracing sheds some light on reasons but very limited due to many not found
- Qualitative data showed following potential reasons: father refuses carer to go, mother busy with other tasks work/other children, refusal to go to SC, discharged early.

Length of Stay

(only cured and non-responders)



Findings:

- Median Length of Stay over 8 weeks
- Considering high MUAC on admission this is unusual
- Further investigation showed: absenteeism not major problem, sharing/selling prominent, child not receiving full ration, children discharged late, no SFP for SAM graduates during this time
- No clear evidence for use of a minimum length of stay (as suspected)

Stage One: Qualitative Data Collection

What?

Having already analyzed the quantitative data and started to understand factors affecting coverage and areas of low and high coverage, we conducted qualitative research to get the views of various programme stakeholders



Who?

Programme level: Concern programme management staff, OTP/Health staff in all Concern OTPs as well as SCI, CISP and MA structures, and CHWs.

Community level: camp leaders, mullah, village leaders, TBAs, mothers, fathers, mother of SAM children, grandmothers and other key community figures.

Where?

All OTPs were visited, since it was feasible (n=6). The selection was spatially representative and covered all 3 districts. Both IDPs and urban areas were visited. Areas with particularly high or low admission were chosen, as well as high or low defaulting.

How?

Semi-structured interviews, informal group discussions and observations

A total of 62 interviews were conducted by 3 teams over 3 days in 18 different locations.

Qualitative Findings: Boosters

	Boosters	Sources
1	Frequent sharing of information about SAM and programme in community (Mother to Mother, neighbors etc.)	Mothers of non-SAM children, mothers of SAM children, key community figures, OTP staff, mothers of non-SAM children
2	Good awareness of malnutrition in community	Fathers, key community figures, mothers of non-SAM children, TBAs
3	Good CHW activity in community	TBAs, mothers of SAM, mothers of non-SAM
4	Good awareness of SAM programme in community	Fathers, TBA, CHW, key community figures, mothers of non-SAM children
5	High satisfaction with programme in community	Mothers of SAM children
6	Good understanding of treatment protocol amongst mothers of SAM children	Mothers of SAM children
7	Good geographical coverage of OTPs leading to low distances to travel	Teachers, mothers of SAM children, fathers, mothers of non-SAM
8	Absentee follow-up and defaulter tracing system in place	Concern programme staff
9	Efficient management of OTP leading to low waiting times	OTP staff, observations

Qualitative Findings: Barriers

	Barriers	Sources
1	Alternative health seeking behavior (initial recourse to pharmacy, sheikh or traditional doctors)	Non-concern CHWs, mothers of non-SAM, OTP staff
2	Sharing of RUTF with other children	Mothers of SAM children, TBA, OTP staff
3	Mother must stay at home to tend to other children/work	Mothers of non-SAM, OTP staff
4	Population movement due to IDP evictions	key community figures, CHW, routine programme data, secondary sources
5	Belief that RUTF causes diarrhea	OTP staff, TBAs
6	Delays in funding agreement between implementing agency and donor	Muslim Aid staff, Concern programme staff
7	Selling of RUTF	Mothers of SAM children, OTP staff, TBA
8	Lack of awareness that RUTF is a medicine and not a food	Concern programme staff
9	Father refuses to allow mother to attend OTP	CHWs, OTP staff, mothers of non-SAM children
10	Absence of system to ensure follow-up of OTP-SC transfers	OTP staff, mothers of SAM children, Concern staff, routine programme data
11	Multiple registrations in multiple OTPs	OTP card analysis, OTP staff, mothers of SAM children
12	Road blocks and barriers preventing access to OTP (for staff)	Concern programme staff
13	Absence of correct application of discharge criteria	OTP card analysis and OTP staff

Stage 2: Small Area Survey

Evidence

- Admissions data and qualitative indicated no particularly strong factor affecting coverage spatially (e.g. distance, security, OTP quality) other than the lack of CHWs screening in Muslim Aid areas of Wadajir
- Otherwise data suggested coverage was probably quite good throughout the 3 districts (good screening, good awareness, low defaulting)

Hypothesis

Coverage in the 3 districts is good (>65%) in all areas with the exception of the 2 most northern districts of Wadajir

Methodology - Small Area Survey

- Purposively selected 2 tables in MA divisions and 2 in Non-MA divisions
- Door-to-door case finding
- Uncovered and covered questionnaires to determine reasons

Small Area Survey: Results

Village	In MA area?	Total SAM	SAM uncovered	SAM covered
Ali Hussien	Yes	9	8	1
Soomali Aabow (IDP)	Yes	3	2	1
Bourbisharo	No	5	4	1
Sinai W2	No	4	2	2
Total		21	16	5

MA areas

$$d = \left\lfloor 12 \times \frac{65}{100} \right\rfloor = 8$$

Covered = 2

LQAS

$$d = n \times \frac{p}{100}$$

Non-MA areas

$$d = \left\lfloor 9 \times \frac{65}{100} \right\rfloor = 6$$

Covered = 3

Findings:

- Coverage is not acceptable in the MA areas, but neither it is acceptable in other areas
- Therefore this sample indicates that the presence of nutrition CHWs does not lead to acceptable coverage so **hypothesis is rejected**.
- No large disparities in coverage – can move ahead with Stage 3
- Reasons for covered (told by neighbors) and non-covered (knowledge and opportunity cost) extracted

Stage 2: Small Study on OTP/SC Interface

Evidence

- 27 inpatient referrals but only 7 transfers from SC
- OTP staff did not demonstrate convincing explanations for transfer system

Hypothesis

The most severe SAM cases are unaccounted for after being transferred to the SC and therefore having a negative effect on coverage

Methodology

Semi quantitative study involving interviews with OTP (Concern and CISP) and SC (ACF x2) staff, as well as analysis of OTP and SC data, including SC cards (n=58).

Findings

- SC data only shows 4 admissions from Concern OTPs (referral origin rarely detailed)
- SC staff did not demonstrate effective system for transfers from and to OTP
- Absence of an adequate referral system (use of telephone number and referral slips is not enough) from OTP to SC and SC to OTP
- Limited communication between OTP and SC
- Insufficient data manager at SC and OTP level for transfers
- Hypothesis confirmed, despite inconclusive quantitative data

Developing the Prior

Four methods were used in calculation of the prior mode:

Method	Influence on prior	Prior
Simple scoring of boosters and barriers	Prior reflects <u>number</u> of barriers and boosters	40%
Weighted scoring of boosters and barriers	Prior reflects number and <u>relative importance</u> of barriers and boosters (next slide)	50.75%
Mindmapping	Prior reflects <u>number of findings</u> indicated in the Mindmap that are both negative and positive	47.5%
Histogram prior	Prior reflects <u>views</u> of SQUEAC team	47.5%

Then average from the four methods was taken as the final prior.

Developing the Prior: Weighted scores

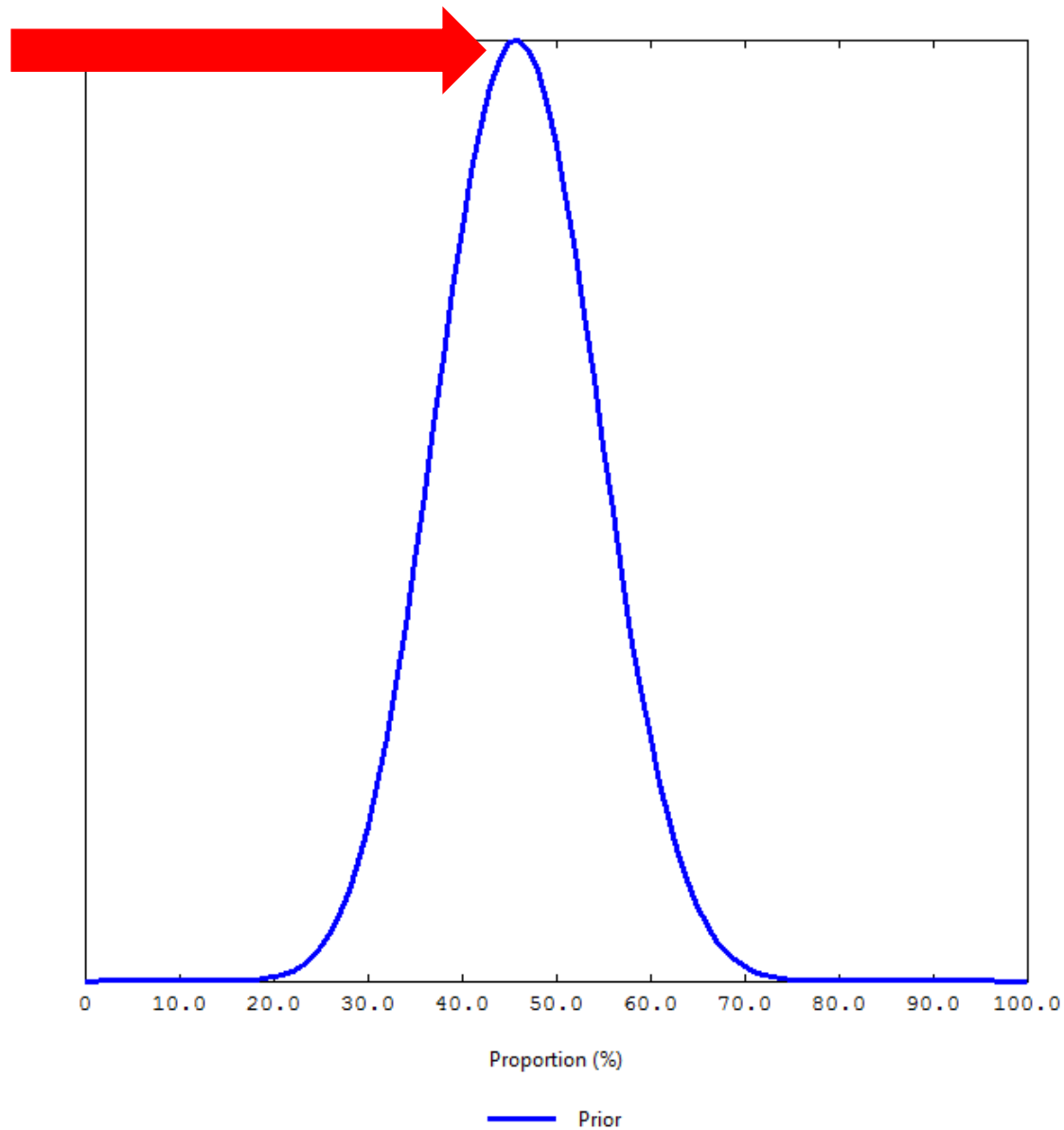
<i>Positive Factors (Boosters)</i>		<i>Negative Factors (Barriers)</i>	
Good understanding of treatment protocol amongst mothers of SAM children	2	Sharing of RUTF with other children	3
Good awareness of SAM programme in community	3	Selling of RUTF	2
Frequent sharing of information about SAM and programme in community (Mother to Mother, neighbours etc.)	4.5	Lack of awareness that RUTF is a medicine and not a food	2
Good CHW activity in community	3.5	Alternative health seeking behaviour (initial recourse to pharmacy, shiekh or traditional doctors)	5
Good awareness of malnutrition in community	4	Absence of correct application of discharge criteria	0.5
High satisfaction with programme in community	3	Belief that RUTF causes diarrhoea	2
Efficient management of OTP leading to low waiting times	1	Multiple registrations in multiple OTPs, Absence of system to ensure follow-up of OTP-SC transfers, Road blocks and barriers preventing access to OTP (for staff)	1 (each)
Good geographical coverage of OTPs leading to low distances to travel	3	Father refuses to allow mother to attend OTP	1
Absentee follow-up and defaulter tracing system in place	2	Mother must stay at home to tend to other children/work	2
		Population movement due to IDP evictions	2
		Delays in funding agreement between implementing agency and donor	2
Totals	26		24.5

The Prior

Prior mode
46%

$\alpha = 16.1$

$\beta = 18.9$



Stage 3: Wide Area Survey

Objective

To sample a random and spatial selection of primary sampling units (tabeles/camps) in order to achieve the minimum sample size to produce a reliable coverage estimation.

Sampling methodology

Step 1: Villages

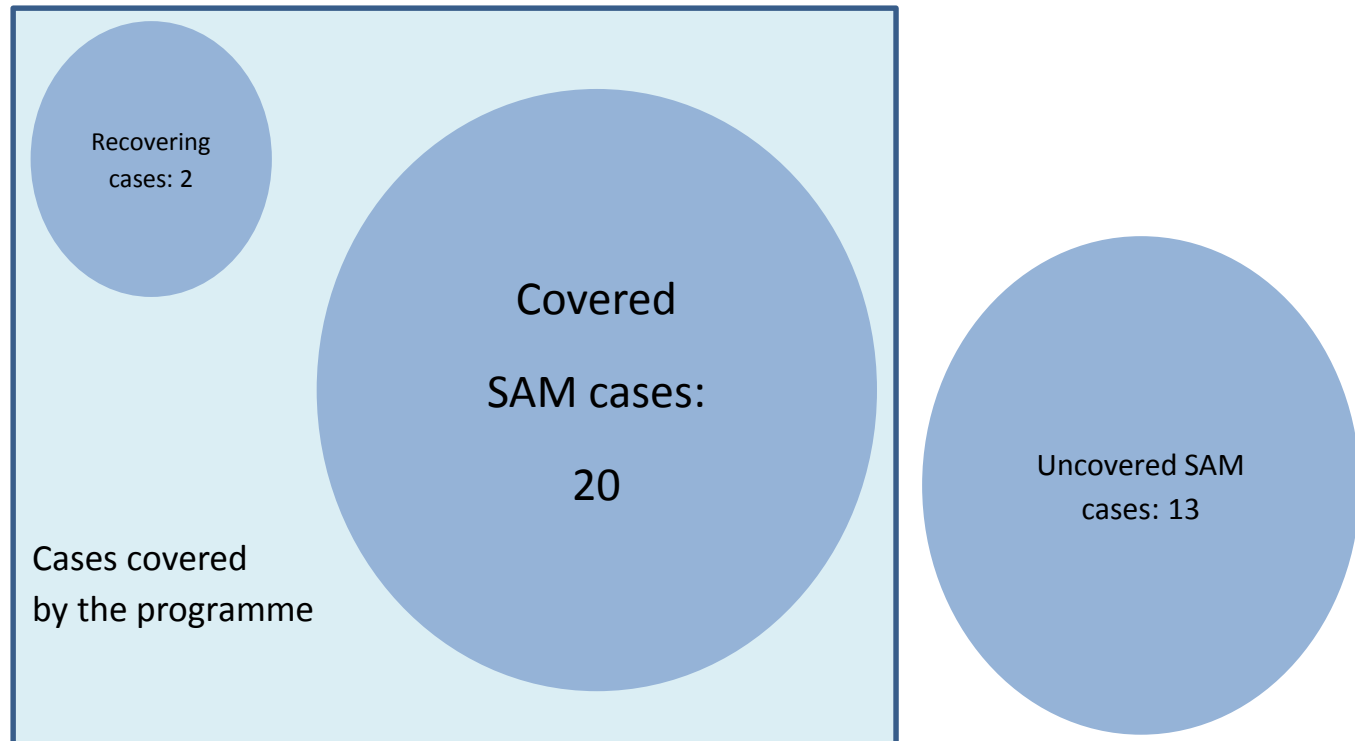
Due to poor tabele level data, used a 2 stage selection process
1. selected sub-divisions using the spatially stratified sampling method
2. selected tabele randomly (hat method) when in district.

Step 2: SAM children

Active and adaptive case-finding usually cannot be used in camp/urban environments so door-to-door case-finding, of all SAM children was employed.

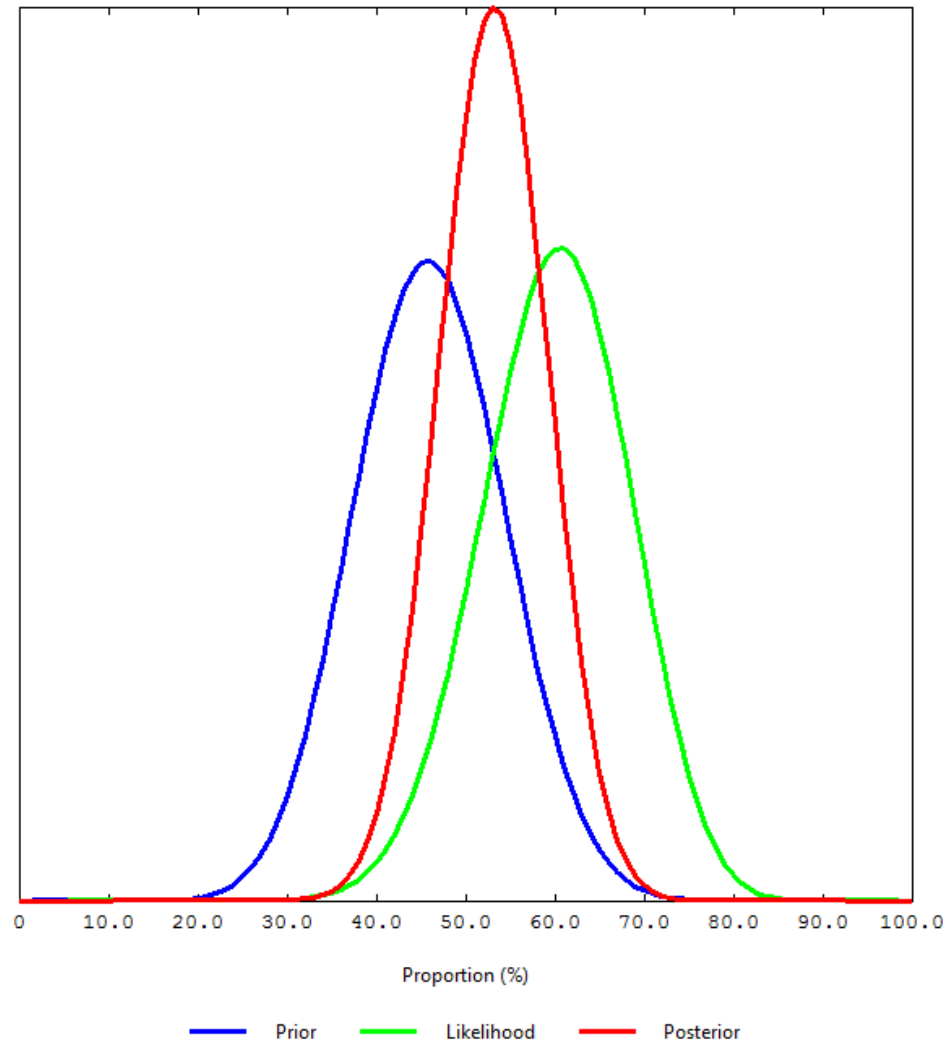
Stage 3: Wide Area Survey

So far wide-area survey of 13 tabelle/camps, 26 SAM cases, plus 2 recovering cases were found:



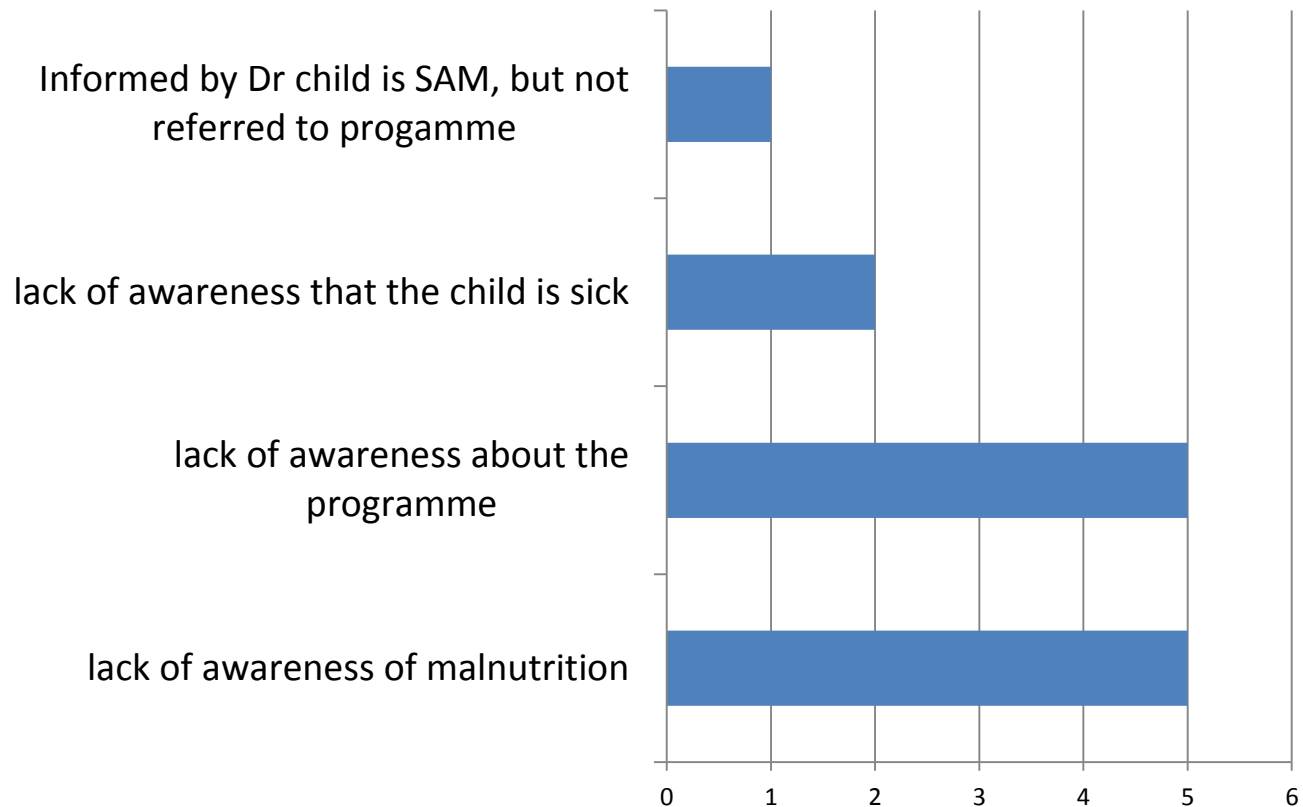
Stage 3: Posterior

53.3% [CI 95%: 41.7%-64.6%]



Stage 3: Barriers

Barriers to access determined from uncovered cases discovered during Wide Area-Survey (n= 33)



Preliminary Conclusions

OTP level

1. Good quality care provided in OTP
2. Good data quality data and aggregate analysis
3. Confusion over discharge criteria. Problematic but not causing any huge risk.
4. Children not receiving full ration leading to long length of stay
5. Good supply due to SNS approach

Community Level

1. Early case-finding in all OTPs
2. Good awareness of programme and SAM in community, but evidence to suggest that SAM is not seen as a disease and RUTF not seen as medicine
3. Community mobilisation limited to screening (mass and door to door) and coordination with community leaders to facilitate it
4. Limited coordination with other actors (NGOs) at community level
5. Very little screening in Muslim Aid area

Other

1. Strong evidence to suggest SAM kids are not getting full ration
2. Good perception of programme in community – effective and good quality
3. Kids transferred from OTP to SC are unaccounted for

Preliminary Recommendations

In community

- Develop comprehensive community mobilization strategy rooted in Somalia Community Health Guidelines – link with key influencers as well as other NGO partners
- Allocate CHWs to specific areas and recruit from those areas, including women
- Link with IYCF approach to further sensitize on RUTF as medicine not food (new messaging needed) to ensure SAM child gets full treatment, and SAM can be identified (at facility level as well). Need to rectify erroneous understanding of SAM and RUTF.

Monitor programme performance regularly using SQUEAC tools

Decrease **defaulters** and improve defaulter follow-up: better analysis and action

Donor and Supply

- find immediate solution to cover MA areas temporarily
- advocate for investigation into leakage of large quantities of RUTF (2 pronged approach – decrease demand market and limit supply)

Coordinate **future coverage efforts** with all partners

Improve recording of means (e.g. CHW) and origin of admission

At facility

- Investigate multiple registration, sharing and selling challenge – be clear on objectives, avoid policing tactics.
- follow-up and investigate specific cases of LOS
- Improve SC referral service – provide escort and full package of support
- Clarify and re-train on discharge criteria
- Ensure local OTP is used and inform on transfer potential

The Team!

