

Focus group discussion during the SQUEAC with caretakers of SAM children at the OTP in Mongo District

# High OTP coverage through the Ministry of Health in Chad

By Casie Tesfai



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where she specialized in CMAM and infant and young child feeding, particularly in emergencies. She holds an MSc in Public Health Nutrition from the London School of Hygiene and Tropical Medicine.

The author would like to acknowledge the contribution of the International Rescue Committee in Chad, notably Alain Toe, Franck Mpoyi Ntalaja and Dr Ido Charles Gnenassi who were integral members of the SQUEAC assessment team in Mongo District. The IRC team also wishes to thank the support of the MoH and partners in Mongo District, Guéra Region, Chad. The author would also like to thank Ruwan Ratnayake, the IRC Technical Advisor for Epidemiology for his technical support.

The community-based management of acute malnutrition (CMAM) has three key public health determinants of impact. The first is *access*, which is the degree to which patients with severe acute malnutrition (SAM) access treatment (through the out-patient therapeutic programme – OTP) early on in the course of their disease, which leads to uncomplicated cases and results in early recovery<sup>1</sup>.

The second key determinant of impact is *coverage*, which is the ability to reach as many severely malnourished children as possible. Coverage also depends on programme retention; from admission to cure (this is the absence of defaulting). A defaulter is a SAM case that should be in the programme, but is not. For rural areas, coverage should be at least 50%<sup>2</sup>, which means that 50% of SAM cases in the targeted area are in the programme. Both access and coverage depend on a strong community outreach and referral programme<sup>1</sup>.

The third key determinant of impact is *effectiveness* of treatment, whereby we expect a minimum of 75% of SAM patients discharged as recovered (or cured). To ensure effective treatment, standardised treatment protocols should be followed, staff supervised and supplies available (including drugs and ready-to-use therapeutic food (RUTF)). Effectiveness also depends on good coverage so that SAM patients are referred early and without complications which lead to better and faster outcomes. This also results in patient satisfaction and community acceptability<sup>1</sup>.

Both coverage and effectiveness affect programme outcomes. If a programme has low coverage, even with adequate recovery (cure) rates, few severely malnourished children will be recruited leaving the possibility that many may deteriorate in the community<sup>1</sup>.

## IRC in Chad

Mongo District in the rural Guera Region of Chad falls in the Sahel belt across Sub-Saharan Africa where acute malnutrition levels remain chronically high. Due to critical levels of acute malnutrition and under 5

mortality rates, the International Rescue Committee (IRC) began supporting the Ministry of Health (MoH) in Mongo District, Guera Region in Chad in April 2012 in the integration of OTPs in each of the 17 MoH primary healthcare facilities (PHC) and in the Stabilisation Centre (SC) located in the Mongo District hospital. The programme was developed in accordance with the MoH and UNICEF to complement existing services to enhance the programme effectiveness and to increase coverage.

## SQUEAC

OTP rural coverage in Chad was measured through the Semi-Quantitative Evaluation of Access and Coverage (SQUEAC), which covered all of Mongo District, excluding Mongo town.<sup>3</sup> SQUEAC relies on collecting a diversity of information, both quantitative and qualitative, from various sources and methods (triangulated) and collected exhaustively until no new information is found. Each piece of information is displayed visually (in a 'mind map') so that the complete picture of coverage is built up and new information is collected to investigate and verify different hypotheses as they are uncovered, such as reasons for defaulting. The final step of the SQUEAC is to conduct a coverage survey<sup>4</sup>.

## Average CMAM coverage

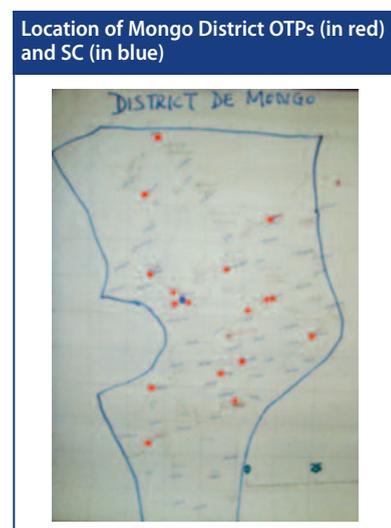
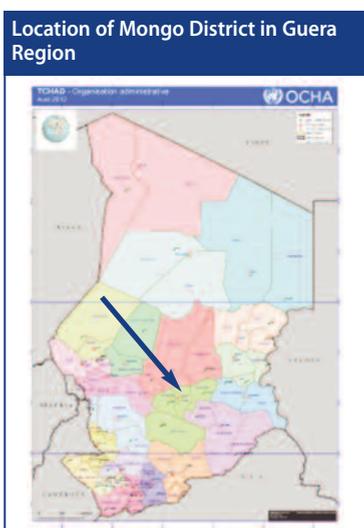
The average coverage of 13 SQUEAC coverage assessments from 2012 by the Coverage Monitoring Network (CMN)<sup>5</sup> was 40% with coverage in 12 assessments ranging from 14% to 59%. Only the refugee camps in Ethiopia achieved coverage higher than 75%. The average coverage of countries close to Chad, including Sudan, South Sudan and Burkina Faso, was 43% for the programmes that were assessed.<sup>6</sup> This is only a small example of SQUEAC coverage assessments, but what is becoming clear is that it can be challenging to achieve a high level of CMAM coverage.

## Integration into MoH

There is currently notable commitment and recognition for the importance of integrating CMAM services into existing MoH structures to ensure uninterrupted services as emergen-

<sup>1</sup> Myatt M et al. 2012. Semi-Quantitative Evaluation of Access and Coverage (SQUEAC)/ Simplified Lot Quality Assurance Sampling Evaluation of Access and Coverage (SLEAC) Technical Reference. FHI 360/FANTA.  
<sup>2</sup> Sphere Project. Sphere Handbook: Humanitarian Charter and Minimum Standards in Disaster Response. 2011.

<sup>3</sup> Full report and methodology available upon request  
<sup>4</sup> See other articles in this issue of Field Exchange that describe SQUEAC.  
<sup>5</sup> <http://www.coverage-monitoring.org/>  
<sup>6</sup> Coverage Monitoring Network (2012). Visit <http://www.coverage-monitoring.org/> and see news piece in this issue of Field Exchange.



Source: OCHA Chad April 2012

cies abate and funding comes to an end.<sup>7,8</sup> As CMAM has been scaled up to more than 65 countries including Chad, community outreach – which is very important to ensure coverage – remains the weakest link. Many countries have not yet conducted coverage assessments to identify current programme barriers or whether programmes are meeting projected outcomes.<sup>4</sup> It's estimated that since 2009, the global scale-up of CMAM services has increased by more than 100%, where almost 2 million children have been treated for SAM. However it's estimated that this is less than 10% of the actual global SAM caseload.<sup>9</sup> Given the current global scale-up of CMAM, increasing coverage of existing services would reach even more SAM patients.

### Support to the MoH in Chad

UNICEF supports the MoH in Mongo District through a combination of essential supplies, training, supervision and RUTF. The MoH provides a combination of essential OTP staff, essential drugs and supplies, supervision and storage. In partnership with WFP, the MoH also provides a food ration to the caretakers in the SC. It is important to note that the MoH is involved in leadership and coordination of CMAM at the district level and the nutrition focal point is involved in the activities of partners. IRC with donor support<sup>10</sup> provides a combination of support to the MoH which include the following key inputs:

- Technical staff for supervision and on the job training
- Trainings for MoH District staff on the national CMAM protocol
- Supervision, monitoring and evaluation and encouraging joint visits with MoH
- Supplies, materials and essential drugs
- Rehabilitation to enhance waiting areas for OTP patients
- Transport for referrals to the SC (or reimbursement of transport costs)

- Support to maintain the cold chain
- Mass sensitisation campaigns through local radio and theatrical groups to increase community awareness about the OTP programme
- Incentives for 200 community based volunteers (CBV) on a weekly basis who conduct routine screening and referral of SAM cases.

### Period coverage in Mongo District

From the SQUEAC assessment conducted in Mongo District, the period coverage<sup>11</sup> was 74% with an OTP cure rate of 77%.<sup>12</sup> A total sample size of 163<sup>13</sup> current and recovering SAM cases were found in the coverage survey, where 123<sup>14</sup> were covered by the OTP.

The coverage for each OTP catchment area is shown in the map in Figure 1 of Mongo District where coverage is patchier in the northern part of the District.

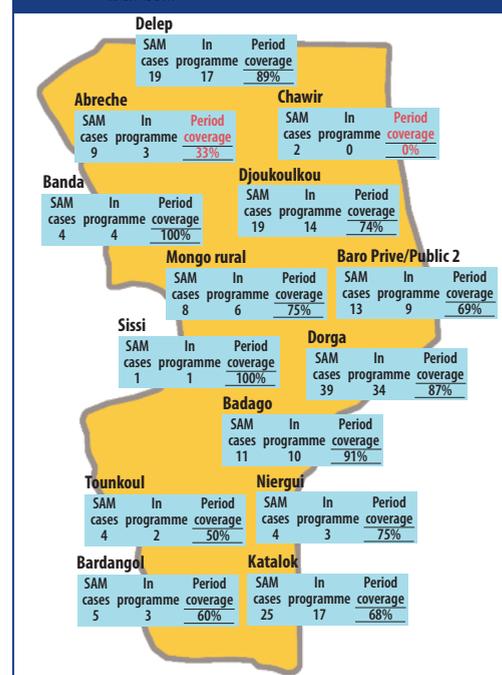
### OTP access

There is strong evidence that mortality in children substantially increases at a MUAC cut-off of 115 mm and this risk increases as the MUAC gets smaller.<sup>15</sup> It is therefore important that children are identified early on in the course of SAM so that they have a lower mortality risk, lower complications and faster recovery. Figure 2 shows that the majority of admissions are early presenters as they are close to 115 mm and fortunately there are very few critically late admissions. Early treatment seeking and timely case finding results in a less complicated cohort of incident cases leading to faster recoveries<sup>16</sup>, which is reflected in the short treatment episodes (average 5 weeks) and high recovery rates of the OTPs (77%).

### OTP effectiveness

To ensure the OTP programmes achieve the met need of SAM patients, effectiveness is also important so that a high number are discharged from the programme recovered (cured). Figure

Figure 1: Spatial period coverage map for Mongo District



NB: 'In programme' includes both SAM cases (MUAC < 11.5 cm) and recovering cases (former SAM cases that have already achieved a MUAC ≥ 11.5 cm but not yet discharged from the OTP)

3 shows the OTPs in Mongo District meet the acceptable thresholds for effectiveness except during the peak in admissions from June to July, where coverage is likely to be lower. The peak in defaulting also correlates with the peak in women's labour demands as they prepare for the harvest. This is also the period when access is hindered by the rainy season which fills up the rivers and cuts off roads for the population to access the OTPs.

<sup>7</sup> Deconinck, H et al. (FANTA). Review of Community-based Acute Malnutrition (CMAM) in the post-emergency context: synthesis of lessons on integration of CMAM into National Health Systems: Ethiopia, Malawi and Niger (2008).  
<sup>8</sup> ENN. Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons. January 2012.  
<sup>9</sup> Treatment of 2 million cases out of a 20 million SAM caseload. Global caseload estimate based on weight for height z score.  
<sup>10</sup> ECHO and OFDA  
<sup>11</sup> Period coverage includes new SAM cases and recovering cases in the OTP  
<sup>12</sup> Total cured divided by total discharged (not including transfers) since the start of the programme  
<sup>13</sup> Total SAM cases (110) + recovering cases (53) = 163  
<sup>14</sup> 70 SAM cases in OTP + 53 recovering cases in OTP = 123  
<sup>15</sup> Myatt M, Khara T, Collins, S. A review of methods to detect cases of severely malnourished children in the community for their admission into community-based therapeutic care programmes. Food and Nutrition Bulletin, vol. 27, no. 3 (supplement), 2006  
<sup>16</sup> Myatt M et al. 2012. Semi-Quantitative Evaluation of Access and Coverage (SQUEAC)/ Simplified Lot Quality Assurance Sampling Evaluation of Access and Coverage (SLEAC) Technical Reference. FHI 360/FANTA

Table 1: Distance and defaulting amongst OTP beneficiaries

Distance (time-to-travel)	Admissions	Defaulters	Grouped distance (time-to-travel)	Admissions	Defaulters	Defaulters/Admissions x 100
10 minutes	205	20	≤30 minutes	276	25	9%
15 minutes	16	2				
20 minutes	7	0				
30 minutes	48	3				
45 minutes	10	3	> 30 minutes	458	24	5%
60 minutes	97	3				
90 minutes	69	5				
120 minutes	93	2				
150 minutes	21	0				
≥180 minutes	168	11				

Figure 2: Timeliness of admissions – Mongo District OTPs

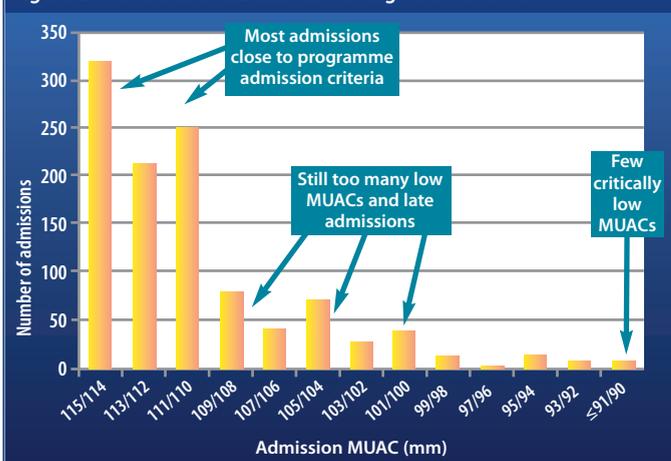


Figure 3: OTP performance indicators – Mongo District

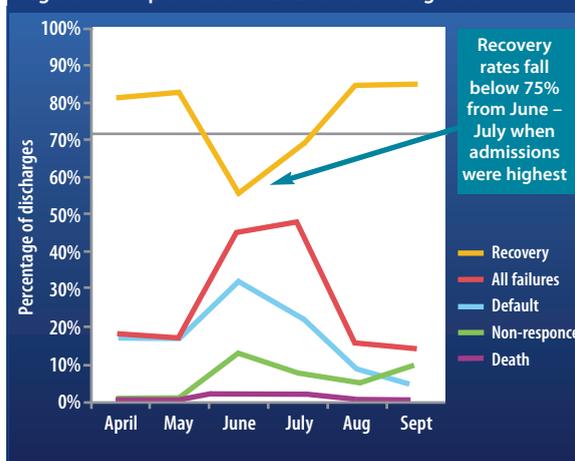
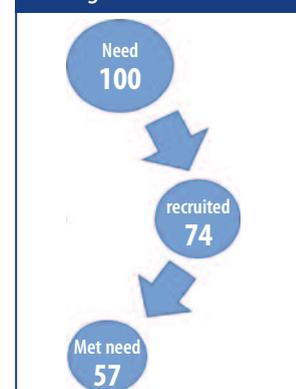


Figure 4: Overall OTP performance: the 'met need' of 100 SAM cases in Mongo District



**Table 2: Priority issues to address to improve coverage**

Recommendations	
Organisation	Reduce waiting time for beneficiaries
	Improve follow-up and referral between the OTP and SFP
Quality of programme	Ensure OTP staff are following the national treatment protocol
	Ensure admission criteria are adhered to so that no SAM patient is refused admission
	Implement a tally sheet for tracking community referrals and 'real cases' that meet the admission criteria
	Follow-up all early defaulters to ensure timely re-admission
Communication	Improve the communication between health personnel and beneficiaries
	Ensure flexibility of OTP staff to meet needs of beneficiaries
Access	Develop a strategy to prevent defaulters due to lack of access during the rainy season
Coverage	Improve coverage of northern and southern OTP catchment areas
	Enhancing identification of SAM cases through active and adaptive case finding including local terminology and assistance from key informants

**OTP barriers**

It is important to note that often OTP staff perceived different reasons for OTP barriers (such as distance or poor treatment seeking behaviour) than those cited by the community or caretakers, which shows the importance of triangulation throughout the SQUEAC assessment. For example, distance was not found to be positively associated with defaulting as shown in Table 1.

The SQUEAC also allowed the community to provide thorough feedback on OTP programme performance and the barriers they face which is a valuable result of the assessment.

The reasons that were cited from caretakers who had a SAM child who was not currently in the OTP included the following: previous rejection; discharged as cured recently (so a relapse or an error); no time due to workload or social engagements; the child was found to be enrolled in the wrong programme (SFP) or the child had been previously discharged as a non-respondent.

The reasons for defaulting cited by caretakers included the following: no time due to workload or social engagements and lack of

flexibility of the OTP to accommodate their absence; illness of caretakers; distance including nomadic movements and lack of access during the rainy season.

**Conclusion**

It was overwhelmingly observed that the community is well aware and in favour of the OTP services in Mongo District. Many caretakers reported that their children recover very quickly and gain weight when taking RUTF. This very good treatment seeking behaviour is evident in the fact that distance did not increase defaulting. Clearly caretakers are motivated and come from even very long distances.

The support to a network of 200 CBVs in Mongo District has clearly resulted in not only a motivated and active routine network of screening, but a network that has achieved mostly a very high level of coverage even in distant areas. This thorough case-finding and early treatment seeking results in mostly uncomplicated cases that can be cured quickly and cheaply.

The active participation and CMAM leadership of the MoH in Mongo District and Guéra Region has also created an enabling environ-

ment to achieve positive programme results, as well as support from partners to ensure a continuous pipeline of RUTF and supplies. The support and supervision to the OTP staff and to the CBVs has also helped achieve a high level of quality care and routine case finding and referral. As the MoH continues to increase their capacity and experience in CMAM, it will be interesting to explore more ways to increase the sustainability of what works.

Figure 4 shows the overall performance of the OTP programmes in Mongo District combining the effect of both coverage and effectiveness. This is the 'met need' of 100 SAM children given the current OTP coverage and recovery rates. The OTPs in Mongo District with a coverage rate of 74% and an average recovery rate of 77%, has a met need of 57 out of 100 SAM children.

**Recommendations**

To sustain and improve the current level of coverage, there are a few priority issues to be addressed, i.e. barriers for SAM cases not currently in the OTP (see Table 2). Early defaulters should also be prioritised and followed-up immediately to ensure a timely recovery. Many discharged caretakers refused to be followed-up in the supplementary feeding programme and a strategy should be developed to ensure adequate follow-up of SAM cases to avoid relapses.

The results of the SQUEAC assessment were presented to the MoH and partners in Mongo District who recommended that partners and donors in Chad invest in more coverage assessments. Furthermore, there is a need to develop a technical consortium to share experiences of what works in the country context so that this can be replicated with a view to scale-up and achieve good coverage in other parts of Chad.

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**People in aid**



*The Coverage Monitoring Network (CMN) team who participated in training on the SQUEAC coverage assessment methodology in Kenya in October and November 2012 (see field article).*

Mark Myatt, Kenya, 2012