

Chapter 9

Monitoring



Meetings with community leaders are vital for planning and continued feedback on the running of the programme and for discussing increased community involvement.

9. MONITORING

In order to know whether a CTC programme is making progress towards achieving its objectives, monitoring is essential.⁹ By systematically monitoring progress and impact during the course of a programme, strengths and weaknesses can be identified, informed judgements made, and timely adjustments carried out. Monitoring and evaluation (see Chapter 10) are also important in supporting institutional and sectoral learning and in aiding the continued development of CTC.

At the core of monitoring is the capacity to collect, manage and utilise key information. In a CTC programme, quantitative data is collected in the SFP, OTP and SC. Qualitative data is collected through consultation with affected communities and stakeholders at various stages of the programme. This chapter explains how these data are collated and analysed in order to monitor:

- The treatment the programme is providing;
- Its appropriateness;
- Its effectiveness; and
- Its coverage.

It is important to prioritise information needs. As CTC aims to integrate as much as possible with existing services, it is important to take into account the fact that data collection through programme sites will be carried out by front line health staff. Data collection requirements must be easily manageable if data is to be collected accurately. Systems need to be designed to minimise the demands placed on programme staff whilst providing sufficient information for essential monitoring.

9.1 Monitoring Individual Treatment

In a CTC programme children are transferred between the components (SC, OTP, SFP) as their condition improves or deteriorates. They may also move between the decentralised OTP and SFP programme sites if, for example, a new site is opened closer to the child's home or when the population is mobile. It is essential to be able to track children between the programme

⁹ Performance and impact monitoring takes place alongside other forms of monitoring performed by agencies, such as institutional, input, output and financial monitoring.

components and programme sites. To allow this, the links between the SC, OTP, SFP and programme sites have to be well managed. A child's progress in a CTC programme is closely monitored and recorded throughout their treatment. Medical checks, illnesses reported by the carer, medicines received, anthropometric measurements, appetite assessment, attendance and follow-up organised are all noted regularly. This information together with information on transfer and follow-up visits are used to ensure that a child's progress is monitored and problems identified in a timely manner and action taken. Key elements of a system to track and monitor the child are:

- The routine collection of medical, nutritional and follow-up data, recorded on cards and maintained in an efficient filing system.
- Supervision and case review.
- A clear numbering system.
- The effective exchange of information on individual children among the programme's components, and between the programme and the community.

9.1.1 CTC Cards

Children are monitored using CTC record cards and ration cards. Samples are given in Annexes 17, 27 and 29.

Record Cards. These are kept by the CTC teams or clinic workers at the site where the child is being treated. They are stored in a file with separate sections for:

- Transfers awaiting return. (This ensures that transfers are not overlooked and that follow-up takes place if they do not return. On return, monitoring continues on the same card).
- Defaulter cards awaiting return. (On return, monitoring can continue on the same card).
- Deaths.
- Recovered cases. (The cards of children who have recovered are usually kept separately because there are so many. It is useful to have these at the site to check any relapses).

The number of cards in the file represents the number of children currently in the programme. At the end of the day, this can be checked against tally sheets (see Section 9.3.3) to ensure that reporting is accurate.

Ration Cards. Carers are given a ration card to take home. This contains key information about the child and basic information on their progress (weight, height, ration received). This is the carer's record of the child's progress in the programme. It can be presented at any clinic visit to inform health workers of the child's progress.

9.1.2 Supervision and Case Review

It is essential to ensure that record cards are being filled in correctly. Supervisors should check that admissions and discharges are made according to protocols and that routine and supplemental medicines and RUTF have been given correctly. They must also regularly check that deterioration in the condition of the child is identified and acted upon according to the action protocol, and that absences and transfers are noted and followed up.

Health workers should review the management of children with static weight or weight loss or those that have not recovered after three months, at monthly meetings. They should discuss the information on the card, received from the carer and collected during follow-up in order to decide on appropriate action. These monthly meetings should also include a review of deaths occurring in the OTP and SC in order to identify any problems in the use of treatment and action protocols. These can be used as teaching examples to improve practice.

9.1.3 Numbering System

A unique registration number is given to each child when the child is first admitted into the SFP, OTP or SC. Each registration number is made up of three parts, for example:

NYL / 003 /OTP

NYL refers to the name of the programme site where RUTF or supplementary food is received, or the centre where inpatient treatment is given.

003 is the number allocated to the child (this runs in sequence from the previous child registered at that site or centre).

OTP refers to the programme component where the child entered the CTC. So it could equally be SFP or SC.

To ensure that children can be tracked, the full number allocated when a child enters the programme (either in SC, OTP or SFP) is retained until the child is discharged from the CTC programme.

To facilitate tracing and follow-up in the community, all registrations should follow this numbering system. It is quoted on all records concerning the child, i.e. on SC, OTP and SFP cards and registration books, ration cards, transfer slips and identity bracelets.

Returning defaulters retain the same number that they were first given, as they are still suffering from the same episode of malnutrition. Their treatment continues on the same monitoring card.

Readmissions after relapse are given a new number and a new card as they are suffering from a separate episode of malnutrition and therefore require full treatment again.

If the SC or SFP are run by a different agency, numbers should be allocated in the OTP. Care must be taken to ensure that the number appears on transfer slips that accompany the child to the SC or SFP. The other agency should put this number on their transfer slip when the child returns.

9.1.4 Exchange of Information

An important element of the monitoring system is the tracking and exchange of information on individual children between components and between the programme and the community.

Transfers to inpatient care. Contact between the components of the programme (often managed by different agencies) needs to be established to ensure that children are admitted and transferred with adequate information to ensure correct medical and nutritional treatment. It is also vital to make sure no children are lost in the transfer process between components by providing transport and by engaging outreach to follow them up at home.

SC deaths and defaulters. If a child is transferred from OTP to SC, his/her card remains in the OTP file. If that child does not return to the OTP site after one or two weeks, information should be sought from the SC team where possible, or through outreach workers or volunteers visiting the child's home. If a child dies in the SC or defaults, the SC team should pass this information on to the OTP site so that the team know not to expect them back and the card can be completed and filed.

OTP absences and defaulters. Absences and defaulters from the OTP should be followed up by outreach workers or volunteers and the carer encouraged to return with the child to complete treatment. If children do not return, the reason for defaulting should be recorded on the card to help health workers understand the family's circumstances and avoid further absences. In some cases, this information can help health workers to modify protocols (e.g. children may be allowed to attend every two weeks rather than weekly).

Deaths. If a child dies in the SFP, OTP or SC, a record is kept of their symptoms and the suspected diagnosis. For OTP and SFP this information is collected by outreach worker or volunteers and should be recorded on the child's card as it can help to identify problems in treatment and action protocols.

Non-cured. When follow-up visits are required for children not responding well in the programme, information collected by outreach workers or volunteers during follow-up visits is important for the analysis of underlying causes of non-recovery. Information received during follow-up should be recorded by the health worker, along with that reported by the carer, as additional information on the child's card. This is used in further discussion with the carer, and to inform decisions about whether to transfer the child for further investigation.

9.2 Monitoring the Appropriateness of the Programme

Quantitative indicators, such as mortality, default and cure rates, are complemented by qualitative information collected from the community. This two-way process helps to identify issues affecting the programme at a community level as well as to strengthen the community's sense of ownership of the programme.

Two kinds of community-level monitoring can be used: focus group discussions and interviews with key members of the community.

9.2.1 Focus Group Discussions

Focus groups discussions (FGDs) improve understanding of perceptions of a programme at community-level. They involve small groups of unrelated people who are brought together to discuss specific topics. The interaction between participants is analysed and a record made of individual opinions and collective ideas (focus groups are not intended as a way of rapidly conducting multiple interviews, developing consensus or making decisions).

An FGD should have between five and fifteen participants, identified according to the nature of the enquiry. They are selected on the basis of gender, age, ethnicity and religious, political or group affiliation to form a set of people either with similar positions and experience (e.g. carers of children in the CTC) or with different ones (e.g. mothers in the CTC programme and mothers not included in the programme).

The focus group format allows the direction of discussion to be guided and enables the issues raised by participants to be probed. It provides insight, not only into what people think but also why they think it (why mothers find it difficult to access CTC services, for example). They do not require a lot of resources.

On the negative side, the researcher has less control of proceedings than in individual interviews. While the introduction of new topic areas may be useful, it may distract from the original aims of the discussion, information may be difficult to analyse and the small size of the sample means that it may not be representative. Gathering all the participants in the same place at the same time can be difficult.

A CTC programme should consider using FGDs when:

- There is a gap in communication or understanding between groups or categories of people, or between programme staff and the target community.
- Issues relating to complex behaviour, motivation or perceptions (e.g. traditional treatments for malnutrition) need to be unravelled and analysed.
- Ideas from a group or community are needed.
- Information is needed to prepare for a large-scale study (e.g. a nutrition or coverage survey or a socio-cultural study).

FGDs should be avoided when:

- The situation is emotionally charged and drawing out information is likely to cause or intensify tensions.
- The researcher cannot ensure the confidentiality of sensitive information.
- Statistical projections or numerical data are needed.

Experience shows that, for the purposes of CTC programmes, FGDs are particularly useful in shedding light on:

Coverage. Whether individuals or groups in the community who could be in the programme are not, why this is so and how it could be changed.

Access. Whether there are barriers preventing people from accessing the programme and what might be done about them.

Recovery. Whether carers perceive changes in children treated in the programme and whether anything can be done to strengthen the recovery process.

Service delivery. Whether beneficiaries are happy with the CTC services they receive and the means of delivery, and whether either could be improved.

Cultural appropriateness. Whether the programme is culturally sensitive or doing something inappropriate.

Lessons learned. What should be done differently and what should be replicated in future programmes.

Suggestions for conducting and analysing FGDs are given in Annex 30.

9.2.2 Interviews with Key Community Members

A more comprehensive picture of the community's perspective can be obtained by conducting structured or semi-structured interviews with key members. Particular issues raised by FGDs can be explored, such as barriers to access and ways in which leaders can help the programme to reach more people. Thus community members can raise issues and also be involved in seeking solutions. This process helps to devise practical and feasible solutions in a particular context and to strengthen community ownership.

9.3 Monitoring the Effectiveness of the Programme

Quantitative data are collected on the outcome of all activities in a CTC programme, and standard indicators for nutritional interventions are calculated. This enables the effectiveness of programme activities to be monitored.

Routine programme data are collected in four categories:

- Total admissions, exits and the number of children in the programme;
- The number of admissions by category;
- The number of exits by category; and
- Additional information on exits, weight gains and lengths of stay.

These four categories represent the minimum information needed to effectively monitor a programme (they are explained in more detail in Sections 9.3.1 and 9.3.2). Data collection is kept to a minimum in order to make the process practical and sustainable. However in some circumstances it may be necessary to collect additional information (on gender or age distribution, for example, or place of origin, displaced/resident status, or whether the household is receiving a GFD) according to reporting needs and the context of the programme.

Total admissions, exits and number registered. Trends in total admissions, total exits and numbers registered help programme managers to see how quickly the programme is reaching the target population and the effect of any changes made in the programme (e.g. opening of new sites, recruitment of volunteers etc.). These trends can also show the effect of events such as public holidays and harvest times and trigger programme adjustments that might be required to accommodate them.

Admissions by category. Monitoring the composition of admissions by category can identify differences in the nature of malnutrition in different areas. It can also show trends over time, such as an increase in other admissions (adults and adolescents). If there is a significant difference in the composition of admissions between sites, it may be necessary to check for differences in the way particular groups are classified (e.g. how oedema is identified, or how the 'other' category is understood).

Outcomes/exits by category. Trends in outcomes/exits are monitored to identify any changes in the number of deaths, defaults or non-cured cases and to indicate areas that require further investigation.

Routine programme data is collected together in tally sheets (see Section 9.3.3 and Annex 31). The tally sheets are compiled into weekly and monthly reports for programme monitoring (see Section 9.3.3 and the CTC Manual CD).

A computerised database has also been developed to automatically compile information from the tally sheets. This is useful, but requires specific skills and equipment and may detract from the other activities of the field staff. Hand-written records and compilations can be as useful and are more likely to be accessible to all members of the team. Hand-drawn graphs also demonstrate trends and changes as effectively as computer-generated graphics. Monitoring and reporting based on the compilation of tally sheets is described here. Instructions for setting up and using a computerised database are given in Annex 32.

Programme data is collected by field staff every week. This allows continuous monitoring of activities, assessment of changes and trends and timely action. Monthly reporting is recommended for deeper analysis of programme outcomes and for the presentation of data to external agencies. More in-depth evaluations using extended databases, retrospective analysis of admission cards or specific coverage surveys or studies may be conducted as necessary. All routine monitoring data should be compared to key indicators of quality and appropriateness for CTC programmes (see the quality grid in Annex 6).

9.3.1 Admission and Exit Categories and Definitions

The following system for data collection can be used either where the same agency is managing OTP, SC and SFP, or where different agencies are managing different components.

In this system each OTP site collects information on the children it is treating. All severely malnourished children who arrive at the OTP sites are registered. Children who are then transferred to the SC, either immediately or after some time in the OTP, are recoded as transfers. When the child returns to the OTP from the SC, the child is recorded as 'from SC', not as a new admission. Severely malnourished children presenting directly to the SC are registered there as new admissions. When they arrive at the OTP after discharge they are also recorded as 'from SC'. This avoids double counting of new cases of severe malnutrition between the programmes. Data from the OTP and SC can be easily compiled on a monthly basis to give overall outcomes.

Admission and exit categories and definitions are given in the tables and notes below.

Figure 19: Admission and Exit Categories - SC

Category	Definition
ADMISSIONS	
New admissions	New cases that comply with admission criteria.
Other new admissions	Admissions who do not fulfil age criteria or anthropometrical criteria for admission. Examples include infants, clinically very wasted, moderate cases with medical complications, and previous admissions returning after referral to hospital.
Moved in – from OTP	Children transferred to SC from OTP according to the action protocol.
EXITS*	
Discharged to OTP**	Cases meeting programme discharge criteria.
Death	Cases who die whilst in the SC.
Defaulter	Cases are classified as defaulter after being absent from the SC for two days. This provides time for follow-up after the first absence to allow transfer to OTP.
Medical Referral out of programme***	Where the medical condition of the child requires referral out of the SC to hospital.

* Where an inpatient facility is also offering TFC care for a proportion of children e.g. due to the absence of an OTP in all areas, an additional exit category for discharged cured will need to be added.

** Though in this system children discharged to OTP should be considered a movement within the programme rather than as a true exit, they are included as such here and subsequent reporting to allow the success of the SC to be monitored i.e. the percentage of children stabilised successfully and discharged to OTP. They will not be counted when overall therapeutic programme outcomes are calculated (see Annex 33).

*** In other programme components, medical referrals are not counted as exits from the programme as they can continue their nutritional treatment with RUTF. For SC this option is given as children may not be able to continue their treatment in the SC if referral is to another health facility.

Figure 20: Admission and Exit Categories - OTP

Category	Definition
ADMISSIONS	
New admissions*	New cases that comply with admission criteria.
Other new admissions	Admissions who do not fulfil age criteria or anthropometrical criteria for admission. Examples include clinically very wasted moderate cases who had complications and need closer monitoring in OTP after stabilisation.
Moved in – from SC	Children discharged to OTP after stabilisation – includes both children previously registered in OTP and direct SC admissions.
Moved in – returned after default	Returned defaulters who, on return, have not yet reached programme discharge criteria.
Moved in – from other OTP site	Children moved from another OTP site to continue their treatment.
EXITS**	
Discharged cured	Cases meeting programme discharge criteria.
Death	Cases who die while registered in the programme (including those referred to a health facility for medical treatment while remaining registered in OTP).
Defaulter	Cases are classified as defaulter on their third absence. This provides time for follow-up after the first absence to encourage return.
Non-cured	Cases who do not meet discharge criteria after four months when all investigation and transfer options have been carried out. Or, medical referrals who do not return.
Moved out – to SC	Children who are transferred to the SC either when they first arrive at the OTP site or after deterioration during treatment in the OTP.
Moved out – to other OTP site***	Children moved to another OTP site to continue their treatment.

*** New Admissions**

- Includes all children presenting to the OTP site who are transferred immediately to the SC.
- Includes all children refusing transfer to the SC on presentation.
- Includes all children transferred from SFP to OTP due to deterioration in their condition.
- Direct admissions to the SC are recorded as 'from SC' when they arrive in the OTP because they will already have been recorded as new cases of malnutrition in the SC.

****Exits**

- Medical referrals from OTP to a hospital or medical facility other than the SC for medical treatment or investigation are not recorded as exits. However, if they fail to return they are recorded as non-cured.

***** Moved In/Moved Out**

- These are not completely new admissions or full exits – they are movements between components or programmes offering nutritional care for severe malnutrition. They are recorded in tally sheets and databases to help sites keep track of their numbers, ensure an accurate reflection of programme activity and improve tracking of cases across different sites and between OTP and SC. Even when different agencies are managing OTP and SC it is important that children moving from OTP to SC are not considered to be full exits as outcomes must be followed up.
- Moved to and from SC can also include children moved to or from TFCs if these are in operation.

Figure 21: Admission and Exit Categories - SFP**SFP Children**

Category	Definition
ADMISSIONS	
New admissions	New cases that comply with admission criteria.
Other new admissions	Admissions that do not fulfil age criteria (e.g. teenagers, adults) or anthropometrical criteria for admission.
Moved in - from OTP	Discharged from OTP to SFP to continue recovery.
Moved in - returned	Returned defaulters who, on return, have not after default yet reached programme discharge criteria.
Moved in – from other SFP site	Children moved from another SFP site to continue their treatment.
EXITS	
Discharged cured	Cases meeting programme discharge criteria.
Death	Cases who die while registered in the programme.
Defaulter	Cases are classified as defaulter on their third absence. This provides time for follow-up after the first absence to encourage return.
Transfer to OTP/SC	This is used for children who deteriorate in the SFP and need to be transferred to the OTP or SC.
Non-cured	Cases who do not meet discharge criteria after four months where all investigation and transfer options have been carried out. Or, medical referrals who do not return.
Moved out – to other SFP site	Children moved to another SFP site to continue their treatment.

Pregnant and Lactating Women

Category	Definition
ADMISSIONS	
New admissions	New cases that comply with admission criteria.
EXITS	
Discharged cured	Cases meeting programme discharge criteria.
Death	Cases who die while registered in the programme.
Defaulter	Cases are classified as defaulter on their third absence. This provides time for follow-up after the first absence to encourage return.
Non-cured	Cases who do not meet discharge criteria after four months where all investigation and transfer options have been carried out. Or medical referrals who do not return.

9.3.2 Additional Routine Information

Other information is collected routinely to complement the data on admissions and exits and allow deeper analysis. Some can be included at the end of tally sheets. The following additional information is recommended:

Relapses (readmissions after discharge). A record of the number of readmissions helps programme managers to understand the situation outside the programme (interventions at the household level may be needed to address high readmission levels). It can also indicate that children are being discharged from the programme too early.

Other information can be collected and compiled separately. The following is recommended:

Cause of death. When a child dies in the SFP, OTP or SC, a record is kept of symptoms, suspected diagnosis and management. (In the OTP and SFP, this is collected where possible by outreach workers/volunteers). All of this information should be recorded on the child's card. Compiling this

information routinely (using a simple report form or spreadsheet) can help to identify problems with treatment and action protocols and show where training and supervision are needed.

Reasons for default. This information is collected either by outreach workers/volunteers and recorded on the child's card (or on a paper kept with the card), or through FGDs in the community. It can help to identify trends in defaulting and identify adjustments to the programme that should be considered (e.g. the need to open new sites to facilitate access).

Reasons for non-recovery (non-cured). Routine review of this information can help to identify common problems of non-recovery such as tuberculosis, HIV/AIDS, sharing food in the household or poor access to clean water. It can indicate the need for stronger sectoral links and advocacy for general ration distributions, directly observed therapy short course (DOTS) tuberculosis programmes or water and sanitation interventions.

Additional demographic information. Other information may be required (for instance by donors) and can be included at the end of tally sheets, covering areas such as gender, age, and residential status (displaced/resident/returnee).

Weight gain and length of stay. The weight gained and length of stay of each child should be calculated every month for OTP discharges recovered (only those who were classified as 'new admissions' to OTP). If a large number of children are discharged as recovered in a given month (over thirty), a random sample of cards can be taken (see Annex 34 for formula).

9.3.3 Tally Sheets and Compilation Reports

Routine data is collected in SFP, OTP and SC sites using tally sheets. It is then compiled into reports. Sample tally sheets are given in Annex 31. Tally sheets should be completed immediately after each CTC programme day. Tally sheet data from each site is compiled to form weekly and monthly reports. A separate row for number attending the programme in a given round can be added to the bottom of the tally sheets if this is required for logistical/justification of resources purposes.

During compilation, data is reorganised so that new therapeutic admissions can be separated out, avoiding double counting either within the programme (OTP and SC components) or between the programme and others run by other agencies (e.g. when a TFC run by another agency is the transfer centre for stabilisation).

Weekly compilation reports are compiled into monthly and yearly reports. Examples of these can be found on the CTC Manual CD.

Compilation reports for the different components (SFP, OTP, SC) can also be generated using an Excel spreadsheet and pivot table (instructions are given in Annex 32).

In order to compile information for SC and OTP components and get an overall picture of outcomes from therapeutic care the compilation reports can be used to calculate the overall programme outcomes for SC and OTP together (See Annex 33).

9.4 Monitoring Programme Coverage

The priority in CTC is to make treatment available to the greatest possible number of acutely malnourished children in an affected population. It is important, therefore, to assess the proportion of children in need of assistance who actually receive care in the programme, i.e. the coverage.

Coverage is usually expressed as a percentage. (For example, if there are 100 severely acutely malnourished children living in a programme area and 70 of them are in the programme, programme coverage is 70%).

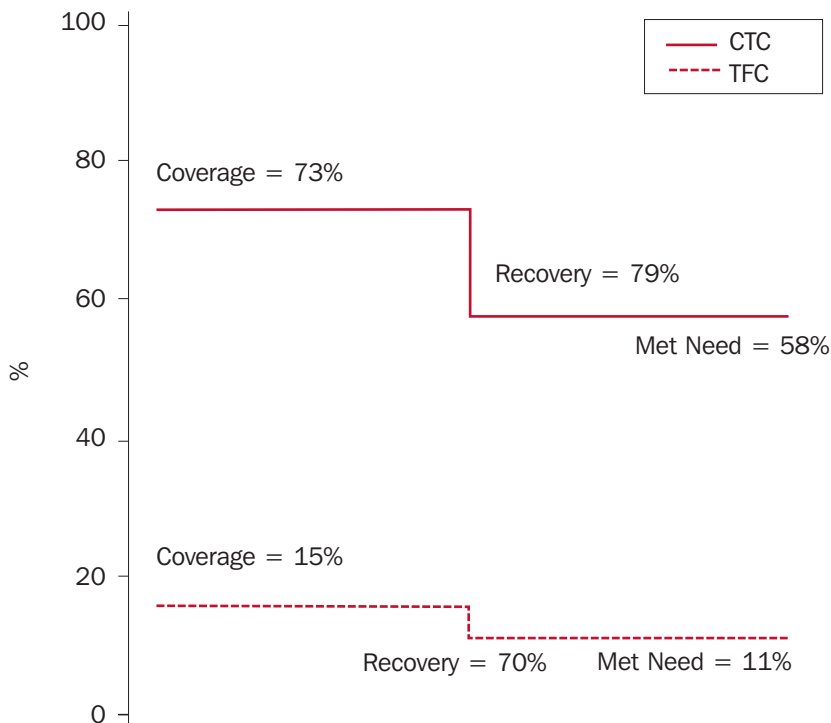
Coverage is one of the most important indicators of how well a programme is meeting need. A high coverage programme with a low cure rate may be better at meeting need than a low coverage programme with a high cure rate. See Figure 22 for a hypothetical illustration of this.

Met need is the product of the coverage and the cure rate. If, for example, a programme has a coverage of 70% and a cure rate of 90% then met need can be calculated as:

$$((70/100) \times (90/100)) \times 100 = 63\%$$

Thus we can say that the programme is meeting 63% of need.

High quality programmes have both high coverage and high cure rates.

Figure 22: Coverage, Cure Rate and Impact

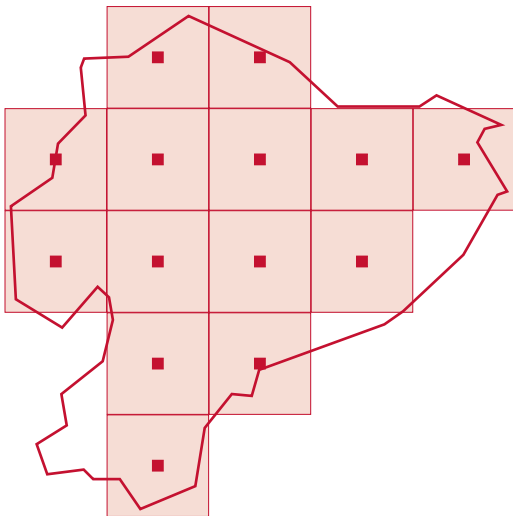
9.4.1 Coverage Surveys

The coverage of a CTC programme is mapped and estimated using a technique called the CSAS Coverage Survey Method. (Myatt et al., 2005). CSAS stands for centric systematic area sampling and refers to the way communities are selected for sampling. It is performed as follows.

Step 1. Find a map of the programme area showing the location of towns and villages. A 1:50,000 scale map is ideal.

Step 2. Draw a grid over the map. The squares in the grid should be small enough that it can be reasonably assumed that coverage will be similar throughout the square. A square of 10 km x 10 km is small enough in most circumstances.

Step 3. Identify the squares to sample. Select squares with about 50% or more of their area inside the programme area.

Figure 23: Identifying Squares to Sample

Step 4. Identify the communities to sample. Select the community closest to the centre of each square. If the prevalence of malnutrition is low, it may be necessary to select more than one community from each square. Try to select the communities to be sampled and the order in which they should be sampled before visiting the area represented by the square.

Step 5. Identify cases in the community. A community is visited and cases are identified using an active case-finding method. It is usually sufficient to ask community health workers, traditional birth attendants, traditional healers and other key informants to take you to see ‘children who are sick, thin, have swollen legs or feet, or attending a feeding programme’ and then ask the mothers of confirmed cases to help identify other cases. It is helpful to use the local terms for thin, wasted, oedema, kwashiorkor, baggy-pants, sickness, feeding programme, wrist-band etc. It is important that the case-finding method used finds all, or nearly all, cases in the sampled communities (see Annex 35 for information on identifying how well a case-finding procedure works). Each suspected case is confirmed by applying the programme’s entry criteria. When a confirmed case is identified, find out whether the child is in the OTP.¹⁰ It is important to follow up on children

¹⁰ If a child who should be in the OTP is found to be in the SFP, the child should be recorded as not covered and referred to the OTP.

reported to be in an SC or at a programme site on the day of the survey. When a child is found who meets the entry criteria but is not in the programme, it is useful to ask the mother or carer why not - this information can help to identify problems with information, outreach and community referral activities. All cases found who are not already in the programme should be referred to the OTP.

Step 6. Record the data. It is necessary to record the number of cases found, the number of cases found that are in the programme, and the number of children who are in the programme but who are not currently cases (i.e. children now in recovery who were recently severely acutely malnourished) for each sampled square.

Figure 24: Recording Data from a Sampled Square

X	Y	Cases	Covered	In Programme (cases & non cases)
1	2	7	4	7
1	3	5	3	4
2	1	3	1	1
2	2	7	6	11
2	3	4	3	7
2	4	5	2	3
2	5	4	1	3
3	1	5	2	6
3	2	7	7	10
3	3	9	6	6
3	4	4	2	8
4	2	4	3	3
4	3	2	1	3
5	2	4	3	4

Key:

X: The x (east-west) co-ordinate of the sampled square.

Y: The y (north-south) co-ordinate of the sampled square.

Cases: The number of cases of severe acute malnutrition found in the sampled communities in the sampled square identified by X and Y.

Covered: The number of “cases” currently enrolled in the programme.

In Programme (cases and non cases): The number of children who are currently enrolled in the programme (both cases and non cases) found in the sampled communities in the sampled square identified by X and Y.

Step 7. Calculate coverage. Two estimates of coverage should be calculated from the data: the point coverage estimate and the period coverage estimate. The point coverage estimate shows how well the programme is doing at the time of the survey. The period coverage estimate shows how well the programme has been doing in the recent past.

Point coverage is calculated using the following formula:

$$\begin{aligned} & \text{(Number of cases attending the feeding programme)} \\ & \text{Divided by (total number of cases)} \\ & \text{Multiplied by 100} \end{aligned}$$

Period coverage is calculated using the following formula:

$$\begin{aligned} & \text{Number of respondents attending the feeding programme} \\ & \text{Divided by (number of cases not attending the feeding programme} \\ & \text{+ number of respondents attending the feeding programme)} \\ & \text{Multiplied by 100} \end{aligned}$$

For example, in the first square in Figure 23, represented by the first row of data in Figure 24, there are seven cases and four of these cases are already in the programme. There are also a total of seven children (cases and non-cases) who are currently in the programme (i.e. severely acutely malnourished children and those now in recovery who were recently severely undernourished).

The point coverage estimate is:

$$\begin{aligned} \text{Point coverage} &= (4 / 7) \times 100 \\ &= 57\% \end{aligned}$$

The period coverage estimate is:

$$\begin{aligned} \text{Period coverage} &= [7 / ((7 - 4) + 7)] \times 100 \\ &= (7 / 10) \times 100 \\ &= 70\% \end{aligned}$$

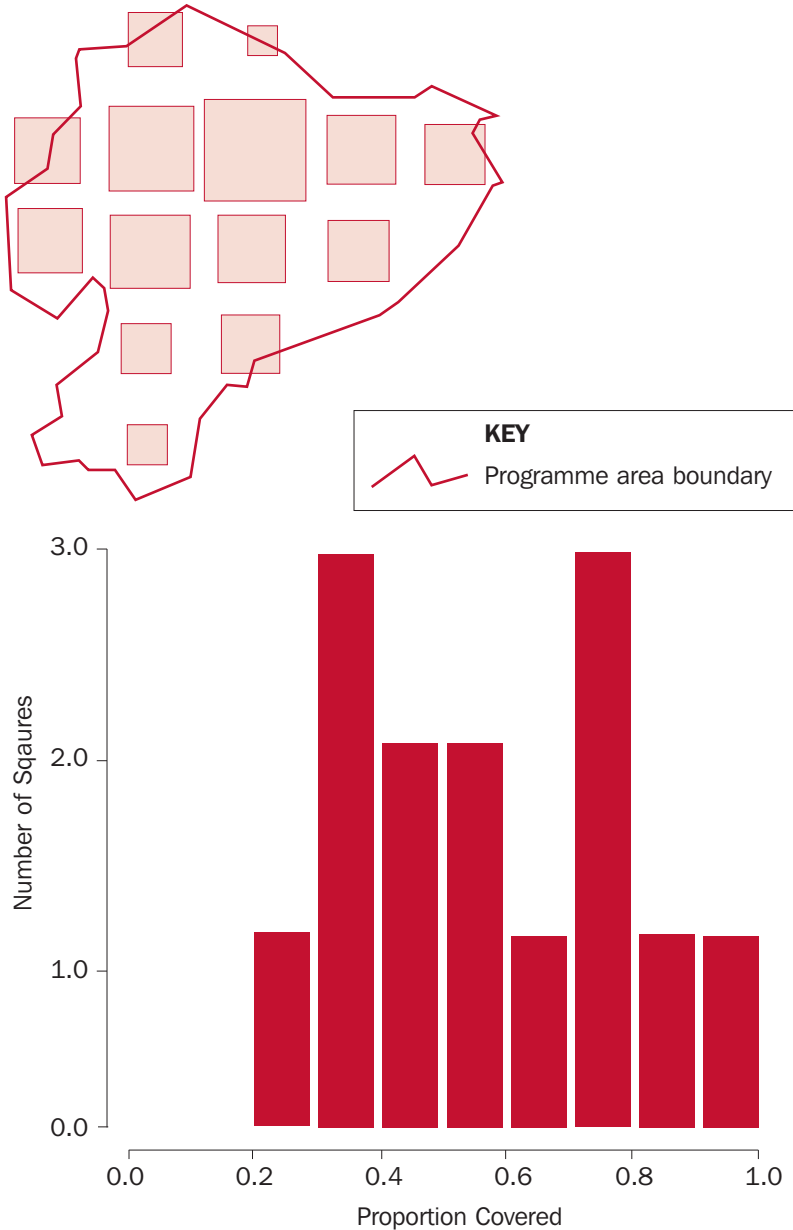
Figure 25: Other Examples for Recording Data Taken From Figure 24

X	Y	Cases Covered	In Programme (cases & non cases)	Point Coverage (covered / cases) x 100	Peroid Coverage In programme / ((cases - covered) + in programme) x 100	
1	2	7	4	7	$(4/7) \times 100 = 57\%$	$7 / ((7-4) + 7) \times 100 = 70\%$
1	3	5	3	4	$(3/5) \times 100 = 60\%$	$4 / ((5-3) + 4) \times 100 = 67\%$
2	1	3	1	1	$(1/3) \times 100 = 33\%$	$1 / ((3-1) + 1) \times 100 = 33\%$
2	2	7	6	11	$(6/7) \times 100 = 86\%$	$11 / ((7-6) + 11) \times 100 = 92\%$

These are calculated for each square as well as for all squares together. Sometimes a weighted method is used to calculate the coverage estimates for all squares together, but this is not essential. Annex 36 describes how to calculate a weighted coverage estimate.

Step 8. Plot the data. Coverage data is plotted as a mesh map and as a histogram (see Figure 26). The length of the sides of the filled squares on the mesh map reflects the level of coverage found in each square (calculated in step 7). Small open squares may be used to indicate survey squares with zero coverage. It may be useful to mark the approximate location of feeding centres, programme sites, health posts and roads on the map. This may help in interpreting the results of the coverage survey. The height of the columns in the histogram reflects the number of squares in which a particular range of coverage was found.

Figure 26: Plotting Coverage Data



9.4.2 Interpreting Survey Results

There are two components to evaluating coverage:

Overall coverage. The coverage estimate calculated for all squares together. CTC programmes usually achieve an overall coverage of 65% or higher for both point and period coverage.

Coverage in each square. Coverage should be similar in each square. The mesh map and histogram show how equitable the programme is. A programme should aim for even and high coverage across the entire programme area. If there are squares with low or zero coverage, it may be necessary to modify the programme to avoid excluding children in these areas, e.g. by increasing outreach activities and/or opening new programme sites in low or zero coverage squares.

The point and period coverage estimates should be compared. In many situations they will be similar. Differences may have more than one explanation and can be difficult to interpret. For example, a period coverage estimate that is considerably higher than the point coverage estimate could result from a premature relaxation of outreach activities; alternatively it may be because uncovered cases are difficult to recruit or retain in the programme. Asking the mothers of uncovered cases why their children are not in the programme may help to explain a difference between the point and period coverage estimates.

Chapter 10

Evaluation



Continuous monitoring and evaluation is built into the design of CTC programmes

10. EVALUATION

10.1 Why Evaluate?

Evaluation is often seen as having two distinct aims: lesson-learning and accountability. In fact, these aims work together. Programmes need to be evaluated to see where and how they can be improved. Evaluations offer an opportunity to stand back and take an analytical look at performance to date. At the same time, an organisation using public resources to implement a CTC programme needs to be held to account: Is it doing the work well? Should more funds be committed to this sort of work? How do beneficiaries perceive the programme?

In some respects, the process of evaluation is similar to that of monitoring and both require collection and analysis of similar forms of information. However, monitoring describes an on-going process, in which managers use data analysis to identify areas of concern and make regular adjustments to a programme. Evaluation also involves such analysis, but it is also a more wide-ranging enquiry, looking beyond the confines of the programme at broader contextual, social, economic and political issues. Monitoring is generally carried out 'in-house' by agency staff, while evaluations tend to be more independent exercises. They may use personnel external to the implementing organisation: the presence of an independent evaluator can enhance the accountability function of evaluations. It can also result in a more objective and analytical look at the programme.

Evaluations provide a written record that is circulated amongst stakeholders. Sometimes (particularly in emergency operations) they are the only historical record of an intervention. As such, they are important as documentation of what happened and as a means to learn lessons that may be applied from one context to another.

10.2 Definition, Criteria and Questions

An evaluation is 'an examination, as systematic and objective as possible, of an on-going or completed project or programme, its design, implementation and results, with the aim of determining its efficiency, effectiveness, impact, sustainability and the relevance of its objectives' (OECD/DAC, 1991).

The evaluation criteria of efficiency, effectiveness, impact, sustainability and relevance evolved from the evaluation of development programmes. For humanitarian programmes, it has been customary to add other criteria, such as coherence, coverage and timeliness, as well as to adapt the original criteria to make them more relevant. All these criteria are briefly discussed below.¹¹ Included in the discussion of each criterion is a set of questions that could be asked by evaluators – this is intended to stimulate thinking, but is not an exhaustive list.

10.2.1 Design

Evaluators are interested in a programme's design and implementation, as well as in its outputs. How was the need for a CTC programme identified? On the basis of what information? Who requested the programme? Did it complement existing health programmes? What was the target population? Was the baseline analysis of need correct? What would have happened if no programme had taken place? What alternatives were considered? Did the implementing agency base its design upon the most recent literature? Does the same agency run both SFP and OTP programmes, and were these compatible? What assumptions were made and what risk analysis carried out? Did the implementing agency work closely with government counterparts, or did it set up a parallel programme? What level of staff input was included in the proposal, and was this necessary? How were beneficiaries involved in programme design? Was adequate provision made for managing and implementing the programme?

10.2.2 Efficiency

Efficiency (or cost-efficiency) measures the outputs – qualitative and quantitative – in relation to the inputs. Evaluations look at the costs of the programme and analyse whether these could have been lower for the same level of output. For humanitarian programmes, it might be useful to look at whether expatriate staff were flown in when suitable local staff were available, or whether therapeutic foods were imported when these could have been manufactured locally. Were transport systems run in an organised and rational manner? Did an agency incur high overhead costs in order to implement the programme, and were these necessary? Is it

¹¹ For a detailed discussion of evaluation criteria, see Hallam, A. *Good Practice Review: Evaluating Humanitarian Assistance Programmes in Complex Emergencies*, Relief and Rehabilitation Network, ODI, 1998.

possible to work out cost per child or adult treated? Is it possible to work out cost per life saved? Were staff management systems efficiently run? Were staff aware of programme goals, and kept informed of any changes? Were appropriate financial and administrative procedures in place?

10.2.3 Effectiveness/Impact

Effectiveness measures the extent to which a programme achieves progress towards its purpose, and whether this can be expected to happen on the basis of the outputs of the project. Impact, on the other hand, looks at the wider effects of the programme – social, economic, technical and environmental. Impacts can be short-term or long-term, intended or unintended, positive or negative. Impact studies ask whether the programme has made a real difference to beneficiaries.

Regarding effectiveness and impact, the evaluator would want to know whether there was an effective system for monitoring the progress of children within the programme. Were record cards maintained in an efficient filing system? Were regular meetings held to discuss the progress of programme participants? Was action taken to resolve difficulties? Was analysis carried out to determine why some eligible children were not in the programme? Were discussions held with local communities to determine whether the programme was meeting their needs?

Regarding impact, it is important to collect standard data used to assess selective feeding programmes. This includes data on:

- Death rates;
- Default rates;
- Recovery;
- Rate of weight gain; and
- Coverage.

All this data should be available from routine monitoring systems. If it is not, this suggests that the programme is not being adequately managed.

Impact evaluation also needs to look beyond the immediate actions of the programme, and assess the effects on the wider community. What happens to the siblings of those in the programme? Are there any adverse effects from participating in the programme? Is there any stigma attached? Do mothers queuing for admission to the programme or for RUTF distributions miss out on other important activities (market days, other health campaigns

etc) and can such adverse impacts be mitigated? Are local health posts included in the programme? What is the impact on staff morale of having a CTC programme alongside existing facilities? Have local health staff had training in new CTC techniques?

10.2.4 Sustainability/Connectedness

Sustainability is a recognised evaluation criterion when looking at development programmes. It is not always considered appropriate when evaluating an emergency programme, as the intervention may be designed to meet urgent, one-off needs rather than continuing over time. However, many emergencies are chronic in nature, or recur frequently in the same location, so the distinction between emergency and development programmes becomes blurred. For these reasons, many humanitarian programme evaluators use the criterion of connectedness. This refers to the need 'to ensure that activities of a short-term emergency nature are carried out in a context which takes longer-term and interconnected problems into account' (Minear, 1994). As CTC programmes take place in a wide variety of contexts, it is useful to consider these two criteria together. Relevant questions here include: What will happen when the programme closes? Will local health structures take over the management of the programme, where this has been started by an NGO? Who will guarantee the longer-term provision of RUTF and other programme inputs? Have short-term decisions made when the programme was set up led to long-term problems?

10.2.5 Relevance/Appropriateness

Relevance is concerned with assessing whether the programme is in line with local needs and priorities, and whether it is the most appropriate intervention. Timeliness can be considered under this criterion: if a programme to treat severe acute malnutrition as an emergency intervention is not able to gear up until after the peak of the emergency, this reduces its relevance. When did the programme start? How did this relate to the onset of the problem (e.g. famine, chronic food insecurity)? Was the programme culturally appropriate? Were foodstuffs palatable and acceptable to the local population? Did inclusion in the programme make excessive demands upon families and communities? Were women able to access the programme given cultural norms?

10.2.6 Coherence

Coherence evaluation looks at the wider environment in which an intervention has taken place. Does it make sense vis-à-vis the political, diplomatic, economic and military policies of international and local actors? This is an issue of particular importance when looking at emergency interventions as there may be many different actors involved at the same time, working in a fluid and changing environment. Did the implementing agency coordinate its activities with other organisations and with local structures? Were general distributions also going on? Was health care available? Was water and sanitation provision adequate? Was the programme in line with local government health priorities? In conflict situations, were opposing parties informed of the reasons for the programme, and were humanitarian principles upheld? Was the protection of beneficiaries affected (for better or worse) by the way the programme was implemented? Was staff security taken seriously?

10.2.7 Coverage

Coverage concerns whether all those in need have been considered, as discussed above. It is an essential criterion when looking at emergency and developmental interventions. An efficiently managed intervention that meets an important specific need is not enough if it excludes the bulk of the affected population. Were any children excluded from the programme? Were there gender/age/geographical biases to programme participation? Were children excluded because they belonged to certain ethnic groups, or because they were in conflict areas?

10.3 Indicators for Assessing Quality and Appropriateness

Annex 6 gives indicators to assess the quality and appropriateness of a CTC programme.

10.4 Information Sources

An evaluation draws on existing monitoring data and project and programme reports. Analysis of monitoring data is generally complemented by interviews with key informants, including the beneficiary population. Consideration needs to be given to ensuring that a representative sample of the local population is canvassed for their views, whether this is through semi-structured interviews or more formal questionnaire and survey methods (see Sections 9.2.1. and 9.2.2). It is important that non-participants are also

interviewed and their opinions taken into account in the evaluation analysis. Evaluators also need to talk to government officials, staff of other NGOs, UN agency personnel and coordination bodies, as well as project personnel.

10.5 Completing the Evaluation Process

It is important that evaluators feed back to those involved in the programme. While the evaluator(s) is/are still in-country, there should be a verbal feedback session to staff and other stakeholders, where appropriate. This allows for factual errors and misconceptions to be corrected, and for programme staff to provide further information on outcomes. It also provides an opportunity for lesson-learning. Similarly, a draft report should be circulated to those involved before the evaluation report is finalised. At some point, key stakeholders should have an opportunity to discuss and either accept or reject the findings and recommendations of the evaluation.

Once the evaluation is completed, there should be a follow-up process, in which the agency checks to see whether recommendations that were accepted have been implemented. The agency also needs to have a system for incorporating institutional level lessons into its systems and procedures, and for disseminating lessons more widely, where appropriate.

