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GUIDANCE ON END USER MONITORING USING CONTINUOUS SURVEYS

An Approach for Routine Monitoring of the Availability and Use of Ready-to-use Therapeutic Food (RUTF) at the Last Mile

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Acronyms

CHW	community health worker
CI	confidence interval
eLMIS	electronic logistics management information system
EUM	End User Monitoring
HF	health facility
LMIS	logistics management information system
ME	margin of error
mHealth	mobile health
MOH	Ministry of Health
RUTF	Ready-to-use Therapeutic Food
SAM	severe acute malnutrition
SDP	service delivery point
UNICEF	United Nations Children's Fund

Introduction

This is a companion document to *Routine Monitoring of the Availability and Use of Ready-to-use Therapeutic Food (RUTF) at the Last Mile: Options and Considerations for Implementing RUTF End User Monitoring*. The options and considerations document's goal is to discuss key considerations in selecting and refining an approach for EUM data collection. The purpose of **this** guide is to provide detailed guidance on how to carry out one particular method of data collection as an example: a continuous survey. Based on research of local capacity in six countries, interviews with UNICEF staff members in another three countries, and previous experience designing and implementing end-use verification in multiple countries, a continuous survey approach could be implemented in the majority of countries with limited upfront set up and training costs. This approach ensures that results are available soon after data collection so that nutrition program managers and supply managers can take follow-up action quickly. This document describes the continuous survey approach at a high level, discusses the statistical implications of the survey design, a presents the forms and indicators involved, details how to set up the survey and select sites to sample, and suggests how to identify data collectors and proceed with implementation of the survey. This guide is accompanied by a tool with detailed indicator tables, survey forms/questionnaires, and sample indicator calculations (please see Table 2 for indicators and Annex 1 for forms/questionnaires and sample calculations).

The continuous survey approach and tool are a starting point meant to be tailored for use in any given country, based on substantial stakeholder involvement and discussion. Consensus around the country's goals and priorities related to visibility into RUTF availability and use as well as other country contextual factors will drive country adaptations, as will learning from other countries that choose to implement EUM for RUTF. The advantages that make a continuous survey implementable in the majority of countries also means that it may not be the best option for some countries, such as countries that already have mature reporting systems and are seeking to extend the reach of EUM to the hardest-to-reach places and people, as a continuous survey is not well suited to this task. A continuous survey is also not the most appropriate approach for acute emergency contexts, as there are quicker and more targeted approaches available, though the relative ease and speed with which a continuous survey can be set up may make it more appropriate for more widespread, less acute emergency settings. That said, in emergency situations, EUM by continuous survey could be conducted more frequently, such as monthly or bi-weekly, to more quickly identify and resolve challenges.

1. What is a continuous survey?

A continuous survey differs from other survey methods in that it aims, through regular but small-scale collection efforts (which could be considered individually as small-scale surveys), to piece together a representative sample over a period of time, typically a

year. That is, a continuous survey is a hybrid form combining aspects of a large-scale survey, which seeks to collect a statistically representative sample during a single round of data collection, and a small-scale survey, which seeks to collect a non-statistical sample by visiting a small number of service delivery points over a single round of data collection. Like a large-scale survey, the sampling frame is created up front with enough health facilities included to reach a representative sample; unlike a large-scale survey, data collection is split into smaller chunks and performed over a period of time. Like a small-scale survey, an individual data collection round does not include enough facilities to be statistically representative; unlike a small-scale survey, which is typically stand-alone, a continuous survey employs multiple rounds of data collection over a planned timeframe.

In practical terms, a continuous survey is typically carried out by a relatively small team of data collectors, perhaps 20 depending on the sample sizes involved, who agree to be involved in several (typically one each quarter for a year) rounds of data collection. A sampling frame is identified at the start in order to achieve a representative sample, but that representative sample is then broken up into chunks and split over the quarterly data collection rounds. The time spent on each round of data collection depends on the sample sizes involved and the number of data collection teams deployed. Each round of data collection may involve either a mixture of selected service delivery points from all parts of the country, providing a non-statistical but country-wide sample for each round, or may involve all selected service delivery points from a sub-set of the regions identified in the country, helping reduce the cost and time required for each round of data collection, and providing a non-statistical sample of some regions but not others in each round. Either approach would build a statistical sample over the course of a year of rounds of data collection.

The chief advantages of a continuous survey are that it can typically be accomplished by a relatively small team of data collectors, while also creating a representative sample over time, and providing feedback with each round at regular intervals. The disadvantages are that each individual round is not statistically representative, and that this data collection approach requires some continuity and regular availability in the data collection team in order to minimize the need to repeatedly train new data collectors and to ensure that information is being collected in a uniform manner.

2. Will my sample be statistically representative at the individual patient level?

We do not anticipate that a continuous survey will provide a statistically representative sample of individuals undergoing SAM treatment. Rather, the continuous survey we propose here aims to collect a non-statistical sample of these individuals in the process of collecting a representative sample of health facilities. This is due to the difficulty of creating a random representative sample of SAM patients when the distribution of

these patients among individual health facilities is to a large degree uncertain. That is, in order to create a random, statistically representative sample of SAM patients, one would need a national list of all SAM patients that included those patient's names, contact information, exact location, and the name of the service delivery point from which they receive their RUTF supplies, and this list would have to be updated in real time as patients enter and exit treatment. Unfortunately few, if any, countries possess or maintain such a detailed list.

Further, for the purposes of a continuous survey, data collection at the household level will need to be limited to households that are associated with the specific service delivery points being surveyed. This is because first, from a practical perspective, any data collection team would likely need to rely on local knowledge once they reach the health facility to be surveyed in order to locate and plan a route to any surrounding households being surveyed.

Second, one feature of a continuous survey is that a data collection framework is created up front, but data collection takes place over an extended period. This is typically not a problem when the sampling frame is service delivery points, as the number of service delivery points in a country typically does not change radically or quickly. Thus when data collection is split over four quarters, the population of service delivery in existence in the fourth round of data collection is largely the same as it was in the first. The population of patients undergoing SAM treatment, on the other hand, will be changing constantly, both at the individual level (ideally the patients undergoing treatment at the beginning of the year are not the same patients who are undergoing treatment at the end of the year) and on the macro level, meaning that the total number of patients undergoing SAM treatment will vary over time, especially according to seasonal changes.

Third, a true random sample of patients receiving SAM treatment would be likely to result in a much more geographically widespread sample than is attained by sampling service delivery points, complicating data collection. That is, suppose the team selects five service delivery points in a given region to include in one round of data collection; these five service delivery points are necessarily located in at most five different communities, making the logistics of reaching each community within a short data collection period relatively simple. On the other hand, if the team randomly selected 30 or more individual patients to sample in the same region, they could potentially be located in 30 different communities, greatly complicating the logistics of reaching each community during a short data collection period.

The balance we have struck in this proposed approach is to suggest that up to 2-3 patients be included for household visits per service delivery point being surveyed. We believe that this will provide an informative though non-statistical sample of households, while also being practicable in terms of time and cost of data collection within the confines of a continuous survey. Additional "households" could be sampled through exit interviews conducted at the service delivery point (instead of at the patient's home). Since the availability of patients/caregivers for exit interviews depends on the schedule of distribution of RUTF of the particular service delivery point in question and how well it matches up to the data collection visit, as well as the total

caseload of patients at that particular facility, both of which cannot be known in detail before reaching the service delivery point for data collection, we also suggest that data collection teams conduct as many ad-hoc exit interviews as possible within the confines of their schedule of data collection, at their discretion.

As a side note, refugee camp settings are a special case where due to the limited geography it may make sense to attempt a representative sample of patients. However this will depend on several factors specific to the particular situation, and so should be evaluated by an expert in monitoring design when designing an appropriate EUM approach.

3. Forms and Indicators

The data collection tool includes key indicators that measure availability, quality, and use. Since the main purpose of this tool is to assess whether RUTF is reaching patients, those indicators that determine the presence (availability) of RUTF have a higher priority than others. Additionally, the sources of information used to collect data on RUTF use may vary from country to country, particularly as countries differ in the presence and role of community health workers. Each country will need to review the indicators and determine if they are applicable and possible to collect in their programmatic context. Finally, guidelines for calculation of indicators included in the tool will likely need to be adapted based on country-specific tool variations, which may result in data collection variation.

3.1. Forms

The data collection tool consists of four primary forms or questionnaires. Table 1 describes the type of information each form collects and where it should be used.

The data collection tool also includes instructions on how to use each form and how to calculate the indicators. In all cases, the forms should be adapted to fit the unique country context, if only to use the proper terminology for a given country. As mentioned, if MOH or implementing partners are already using comparable forms, it may be more efficient to adapt or combine those for EUM.

Table 1: Data collection forms

Form Name	Location	Type of Survey Activity
Stock Status	Health Facility or other service delivery point (SDP)	Count RUTF stock and review stock records
Facility Survey	Health Facility or other SDP	Interview facility staff and review patient records and registers
Storage	Health Facility or other SDP/Storeroom	Observe storage area and conditions
Household	Household or Health Facility/SDP (exit interview)	Interview caregivers and observe RUTF use

In addition, Annex 1 is an example of a household respondent consent form that could be adapted for country-specific use.

3.2. RUTF End-Use Indicators

The data collection tool presents twenty-five total indicators that can be used to monitor end-use of RUTF, grouped into three categories: availability, quality, and use, in alignment with the domains in the RUTF EUM theory of change framework. The indicators are summarized in Table 2 below including their respective rationale, numerator/denominator, and form or source.

Table 2: "Minimum Standard" Set of RUTF EUM indicators

Indicator	Rationale	Numerator/Denominator
Availability		
Percentage of facilities surveyed with usable (undamaged, unexpired) RUTF in stock	To determine if RUTF is reaching and available at sampled facilities	*Numerator*: All facilities where Physical Inventory of usable RUTF ≠ 0
		Denominator: All facilities surveyed
Average number of days facilities surveyed were stocked out of RUTF in the last three months	To determine if there is a persistent problem with availability	*Numerator*: Total number of days stocked out across all facilities surveyed
		Denominator: All facilities surveyed
Percentage of facilities surveyed appropriately stocked according to established max/min policies, out of facilities that have records available	To determine extent of stock imbalances / whether quantity of product in stock is sufficient to meet user needs / and whether there is risk of stock out or expiry	Numerator: Number of facilities that have appropriate stock levels according to national min/max stock guidelines
		Denominator: All facilities surveyed
Percentage of facilities in [period] with usable RUTF on hand as per LMIS report	To determine if RUTF is reported as available at all facilities	*Numerator*: All facilities where reported balance of RUTF ≠ 0
		Denominator: All facilities that reported
Quality		
Percentage of facilities surveyed with expired RUTF	To determine if RUTF is expiring before being issued to patients	*Numerator:* Total number of facilities surveyed that had expired RUTF
		Denominator: All facilities surveyed
Percentage of facilities surveyed with damaged RUTF	To determine if RUTF is being damaged before reaching patients	*Numerator:* Total number of facilities surveyed that had damaged RUTF
		Denominator: All facilities surveyed

Indicator	Rationale	Numerator/Denominator
Average number of RUTF sachets that are unusable per facility	To determine the extent of problems with expiries and damages	*Numerator:* Total quantity of RUTF reported as unusable in all facilities surveyed
		Denominator: All facilities surveyed
Average percentage of proper storage practices for RUTF demonstrated by facilities	To measure the extent to which appropriate storage conditions exist	*Numerator:* Total score on a list of essential storage criteria demonstrated by all facilities surveyed
		Denominator: All facilities surveyed * total number of storage criteria assessed
Use		
Percentage of charts reviewed where child received correct amount of RUTF per national guidelines	To determine if correct quantities are being dispensed	*Numerator:* number of charts where the quantity dispensed is appropriate per national treatment guidelines
		Denominator: All charts surveyed
Percentage of facilities where nutrition staff know the correct quantity per day for a child per protocol	To determine if Health Facility staff understand how to use RUTF	*Numerator:* Number of facilities where the staff in charge of prescribing dosages correctly describe national protocol
		Denominator: All facilities surveyed
Percentage of facilities where staff report RUTF is being sold on the market	To determine is selling in the market is common	*Numerator:* Number of health facilities where at least one nutrition staff reported that RUTF is sold on the market
		Denominator: All facilities surveyed
Rate of recovery/cure for patients in outpatient SAM treatment	To determine if nutrition outcomes are improving	*Numerator:* Number of SAM patients in outpatient treatment discharged as recovered/cured in the last three months, from records reviewed
		Denominator: Total number of patient records reviewed where the child was not transferred to another treatment center
Average length of stay in treatment of children discharged as cured/recovered from SAM treatment	To determine how effective the treatment is for children in treatment	*Numerator*: Total number of days in treatment for all patients records reviewed that were discharged as cured/recovered
		Denominator: Total number of patients records reviewed that were discharged as cured/recovered

Indicator	Rationale	Numerator/Denominator
Average weight gain, in grams per kilogram per day, of children discharged as cured/recovered from SAM treatment	To determine how effective the treatment is for children in treatment	*Numerator*: sum of individual weight gains of patient records reviewed that were discharged as cured/recovered
		Denominator: Total number of patient records reviewed for patients that were discharged as cured/recovered
Percentage of caregivers that recognize RUTF and know what it is for	To determine if caregivers know what RUTF is and what it is used for	*Numerator:* Number of caregivers who answered correctly
		Denominator: All surveyed caregivers for SAM patients
Percentage of caregivers surveyed that received RUTF at last visit	To determine if caregivers were able to receive RUTF at last visit	*Numerator:* Number of caregivers who receive RUTF at the last visit
		Denominator: All surveyed caregivers for SAM patients
Percentage of caregivers surveyed that did not receive RUTF at last visit because it was stocked out	To determine if stock outs were a barrier to caregivers receiving RUTF at last visit	*Numerator:* Number of caregivers who did not receive RUTF at last visit because it was stocked out
		Denominator: All surveyed caregivers for SAM patients
Percentage of caregivers surveyed that did not receive RUTF at last visit because there were no appropriate staff to provide it	To determine if non-availability of staff was a barrier to caregivers receiving RUTF at last visit	*Numerator:* Number of caregivers who did not receive RUTF at last visit because there were no appropriate staff to provide it
		Denominator: All surveyed caregivers for SAM patients
Percent of caregivers who have the correct number of sachets of RUTF remaining on hand, per distribution schedule	To determine if caregivers are providing RUTF to patients at correct rate between HF visits	*Numerator:* Number of caregivers who had an appropriate number of sachets remaining on hand, per prescribed dosage and distribution schedule
		Denominator: All surveyed caregivers for SAM patients
Percentage of caregivers given the correct information on RUTF use by the health worker	To determine if health workers are providing appropriate instruction to caregivers in RUTF use	*Numerator:* Number of caregivers that correctly answer a series of questions on RUTF use
		Denominator: All surveyed caregivers for SAM patients

Indicator	Rationale	Numerator/Denominator
Percentage of caregivers that know the correct daily dose for the child	To determine if caregivers understand correct dosage of RUTF	*Numerator:* Number of caregivers who report the correct dosage, according to facility record of prescribed dosage
		Denominator: All surveyed caregivers for SAM patients
Percentage of caregivers that gave the correct quantity (correct number and fully finished) to their child the day before the survey	To determine if patients are receiving and finishing correct dosage	*Numerator:* Number of caregivers reporting they gave the correct quantity and it was fully finished the previous day
		Denominator: All surveyed caregivers for SAM patients
Percentage of caregivers that report sharing RUTF with other person/s in household	To determine extent of sharing	*Numerator:* Number of caregivers reporting they share RUTF
		Denominator: All surveyed caregivers for SAM patients
Percentage of caregivers that report RUTF is being sold or exchanged	To determine if there is leakage through selling/exchanging	*Numerator:* Number of caregivers reporting RUTF is sold/exchanged
		Denominator: All surveyed caregivers for SAM patients
Percentage of caregivers satisfied with the amount of RUTF they received	To determine level of satisfaction with the program	*Numerator:* Number of caregivers reporting satisfaction with quantity of RUTF received
		Denominator: All surveyed caregivers for SAM patients

4. Preparing and Conducting a Continuous Survey for EUM of RUTF

4.1. Determining the implementation strategy

- **Representativeness of data.** As much as possible, the sample size and selection of sample facilities should provide a good representation of the overall situation in the country or in target areas. Sampling strategies will likely include stratification of facilities and/or clustering (see below under “Selecting Facilities”). Possible stratification criteria could include: health facility type; geography (by province, for

example); districts with highest burden of malnutrition or SAM; facilities with greatest patient load; or facilities with a history of weak supply chain management.

- **Frequency of data collection.** For routine SAM programs, EUM by continuous survey should be conducted routinely, such as on a quarterly or bi-annual basis. In emergency situations, EUM by continuous survey may be conducted more frequently, such as monthly or bi-weekly, to more quickly identify and resolve challenges.

- **Managing local input into data collection tools.** Countries planning to use the indicators and forms outlined in this document should first review them in depth with relevant MOH divisions/units, and other key stakeholders to build consensus around the activity, its benefits, the types of information it can produce, and to obtain their buy-in and approval. Some stakeholders may want to incorporate additional indicators, commodities, or questions. Such additions (as feasible) can help ensure the EUM results are as useful as possible to in-country stakeholders, but should be balanced with other considerations. For instance, additional data collection can lengthen the time required to complete the survey at each facility, to the point of affecting the potential number of sites surveyed; lengthening surveys can also affect the quality of data collected at each site; and adding indicators, commodities, or questions to the survey can affect the resources required to carry out EUM.

- **Develop training materials.** Once the data collection tools are finalized, training materials must be developed for the data collectors to ensure that all data collectors share a correct understanding of each indicator involved and each piece of data they will be collecting.

4.2. Sampling and selecting sites for EUM

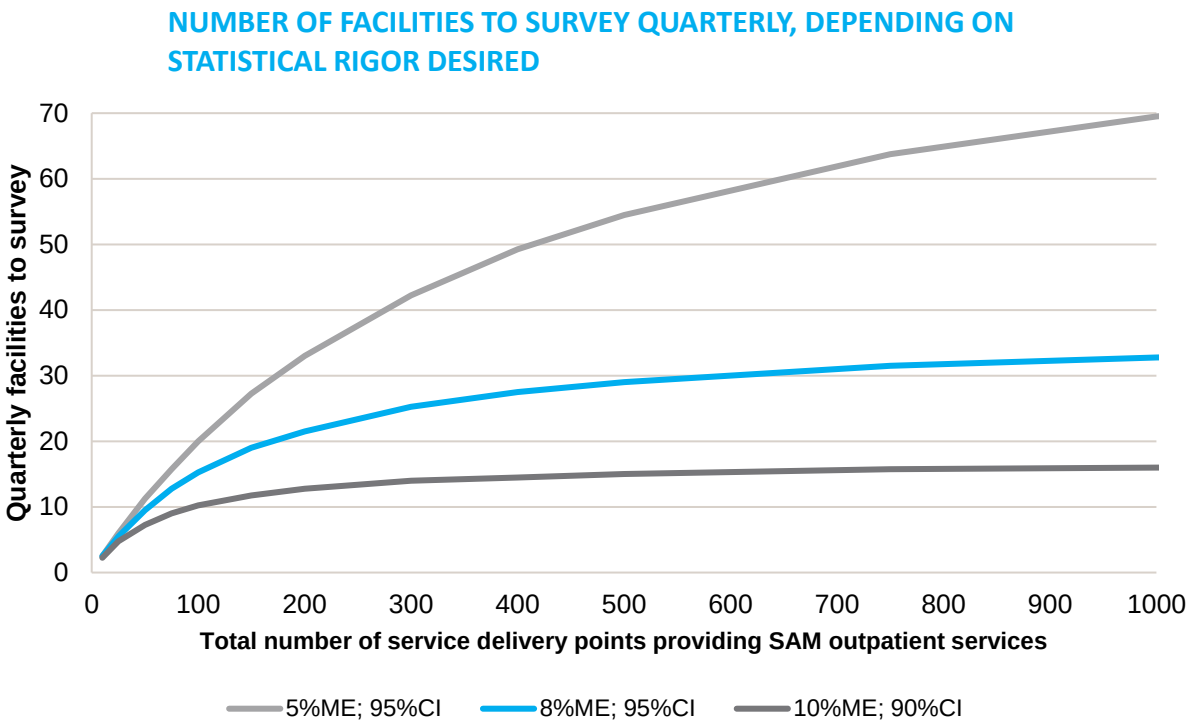
- **Determine total sample size.** The goal of EUM by continuous survey is to provide a representative sample of health facilities or service provision sites over the course of a year, as well as offer insights from beyond the facility, at the household. In general, larger total sample sizes increase the precision with which results are attained, though by definition larger sample sizes will be more difficult and expensive to collect. Ultimately the size of the sample will depend on the staff and resources available to conduct EUM surveys, and the desired level of precision according to the margin of error (ME) and confidence interval (CI) required.

  In statistical surveys, ME and CI interact to give the required sample size. Though the technical definitions are more complex, for practical purposes ME and CI can be thought of as follows: When collecting a statistical sample, the data collected will result in a precise estimated value for an indicator. ME describes how close to that precise estimated value the true value of the entire population is likely to be, while CI describes how likely it is that the true value of the entire population is within that ME from the estimated value. Please see Annex 2 for an example.

  The following figure illustrates the number of facilities that would need to be surveyed quarterly to achieve three illustrative levels of statistical rigor, depending on the ME

and CI desired. In general we believe that an 8% ME and a 95% CI would be a good balance for most countries between the reliability of the results achieved and the expense of data collection. However, we recognize that budget and time constraints may sometimes necessitate smaller sample sizes.

Figure 1: Number of facilities to survey quarterly, depending on statistical rigor desired



For simplicity, the following table outlines recommended sample sizes based on the number of health facilities or service delivery points that provide outpatient SAM services. The numbers here are based on an 8% ME and 95% CI.

Table 3: Recommended sample sizes

Total health facilities providing SAM services	Recommended sample size of HFs per quarter	Total recommended sample size of HFs per year
<100	16	64
100 - 200	22	88
200 - 500	29	116
500 - 1000	33	132
>1000	37	148

8% Margin of Error and 95% Confidence Interval

However, recognizing that it may not always be feasible to sample as many health facilities as would be required for this level of statistical rigor, we also present below a list of sample sizes based on a 10% ME and 90% CI, which we believe should be the minimum level of rigor that still results in statistically meaningful results. At this level of statistical rigor, estimates would be primarily useful for identifying the

approximate values of indicators, but statistically meaningful comparisons in how indicators change over time would be difficult to achieve.

Table 4: Recommended minimum sample sizes

Total health facilities providing SAM services	Minimum recommended sample size of HFs per quarter	Total minimum recommended sample size of HFs per year
<100	11	44
100 - 200	13	52
200 - 500	15	60
500 - 1000	16	64
>1000	17	68

10% Margin of Error and 90% Confidence Interval

As discussed in section 3 above, it would be difficult as well as costly to achieve a representative random sample of patients undergoing SAM treatment. We recommend two to three household visits per facility surveyed, with as many post-visit exit interviews as practical on the day of data collection, and believe this will provide a good, though non-statistical, picture of RUTF use at this level.

- **Select health facilities to visit.** The sampling frame from which the facilities are selected should include all health facilities providing outpatient SAM services and RUTF, including health posts, health centers and district or referral hospitals.

  Stratified random selection of health facilities will help ensure that the health facilities selected are representative of the facilities in the sample area. Stratification is the process of breaking up the sampling frame (in this case, all health facilities providing outpatient SAM treatment services) into smaller groups and ensuring that an appropriate number of health facilities are chosen from each smaller group. For example, suppose in Country A there are 500 health facilities, and of these 120 are to be surveyed. Suppose further that there are 10 regions in Country A. Stratification could be done simply by ensuring that 12 health facilities are selected (randomly) from each region to ensure even coverage of the sample. Or, even better if the health facilities aren't evenly spread across all regions, stratification could be done proportionally, with a number of health facilities selected (randomly) in each region according to the percent of all health facilities that are in that region. In our example, if Region 1 is particularly densely populated with health facilities, containing 20% of all health facilities while Region 10 contains only 5% of all health facilities, proportional stratification would mean randomly selecting 24 health facilities in Region 1, but only six in Region 10.

  For a continuous survey, the survey team should identify all facilities that will be surveyed over the course of the year at the beginning, and then divide those facilities over several rounds of data collection. This means that each facility to be included will be visited once, during one of the rounds of data collection; i.e. all facilities identified for survey will be visited just once over the (four, if quarterly) rounds of data collection over the course of a year.

Alternate facilities: Though as much care should be taken as possible to ensure that the facilities selected for data collection are open, functioning facilities, it is possible that during the course of data collection the data collection team will discover that some facilities selected for the sample are non-functional, inaccessible, or are simply closed on the day of the visit. In such cases the team should visit alternate facilities, replacing the unreachable facility with an alternate facility for data analysis purposes. The two primary methods for selecting these substitute or alternate sites are:

1. Randomly select, at the beginning of the year, additional alternate facilities to visit in case one or more of the originally sampled facilities is closed or unavailable.
2. While in the field, when the data collection team finds that a facility is unable to be surveyed, they select the nearest facility of the same type that is open. This last method may be more viable as it helps reduce transport requirements.

The sampling methodology for alternate facilities should be standardized across all data collection teams and detailed in the survey plan before data collection begins.

- **Select households to visit.** As discussed above, we recommend selecting 2-3 households to visit at each facility surveyed. Households to visit should be selected from the list or register of patients currently on RUTF treatment. The selection should either be systematically random or could be purposeful but should not be a sample of convenience. For example, a systematic random sample could be selected by asking data collectors to select the 3rd, 5th and 8th patient on the list. Purposeful selection could be done by asking the data collectors to select households that are nearby and households that are far away. The sampling methodology and instructions for selecting alternative households should be standardized across all of the data collection teams and detailed before data collection begins.

- **Select caregivers for exit interviews.** It may not be possible to sample for exit interviews if the number of patients seen in a day is low, therefore, as many as possible and practicable should be conducted, given the limits of the schedule of data collection. Countries may wish to set expectations for this before data collection begins, depending on priorities and resources available.

4.3. Preparing for the Survey

- **Prepare budget.** Costs for this activity include daily rates for project staff, transportation and per diem during the training and data collection periods, copying and/or reproduction costs, training costs, license and data storage costs if using a mobile health (mHealth) software application for data collection (e.g. Magpi, SurveyCTO, and others) and communication (e.g. mobile phone cards, faxes, email). In some cases, when suitable local health workers are not available, countries may need to budget for contracting outside personnel as data collectors.

- **Develop schedule.** Data collection for a continuous survey is typically done in four rounds over the course of a year, one per quarter. When developing a

schedule for each round of the activity, the following components should be included:

  - *Data collector training:* 3-5 days for initial training; 1-2 days for refresher training for subsequent rounds.

  - *Data collection:* The timeframe depends on the number of teams/people involved, whether the EUM activity is combined with other supervision activities, how many health facilities must be visited according to the sampling frame, and other factors. Other duties or commitments that the data collectors may have could compromise the quality of data collection if the timeframe is not realistic.

  - *Data analysis, indicator calculation, and report preparation:* Ideally should not take more than four weeks after data collection to ensure results are available for timely use.

- **Identify data collection team members and create teams.** Wherever possible, health workers knowledgeable about nutrition programs and supply chain management should be fielded as data collectors. These health workers can be a mix of people from within UNICEF, from implementing partner NGOs in country, and from national health service personnel, typically from national or regional/provincials levels and/or those with supervisory responsibilities over service delivery points or placed within national ministries, as deemed appropriate by UNICEF staff overseeing the activity.

  It is better to use the same data collectors for all visits across the year, if schedules permit. Selecting different personnel each time will mean that new staff members will need to be trained each time they need to be fielded. The personnel involved should block off the appropriate amount of time each quarter for field activities, which will typically involve the establishment and signing of terms of reference for participants at the beginning of the activity, to ensure that all people involved understand what is expected of them.

- **Prepare database for entering and analyzing data (if necessary).** Before beginning the EUM data collection, the layout of the form questions and response fields will need review. Based on the indicators selected, the questions/responses will need to be coded and a database set up to capture the data generated. If using a mHealth survey software application, the database or output will be generated (as .csv, Excel, or Access) based on the forms that are created for the activity. Otherwise, Excel, Access, SPSS, Stata, or any other commonly used program can be used to develop the database. Analysis for the required indicators consists of simple frequencies and tables, so there should not be a need to program sophisticated statistical analyses. To facilitate and standardize the process for some of the indicators, built-in formulas or calculations may speed up the process and reduce risk of error or need for recalculation. Country-specific design and development of databases and preparation for analysis should be part of a preliminary phase of testing or

piloting the continuous survey for EUM of RUTF, and will become examples from which other countries can learn.

- **Training.** An initial training of 3-5 days is recommended to field test and finalize the tool alongside training on proper survey methodology and the importance of quality, unbiased data.

  To assist in planning, a competency framework has been developed that outlines the skills required to collect the full range of indicators listed below. This competency framework can assist countries in determining which staff have the appropriate skills for conducting data collection and which staff may require training.

Table 1: Skills and knowledge required for EUM

Topic	Skills required
Physical count	Data collectors must know how to count the usable products, this includes separating usable from unusable products, understanding importance of unit of issue, ensuring that products are counted in all parts of a facility (not just the storeroom), and familiarity with standard packaging
Expiry dates	Data collectors must understand how to find and read an expiry date
Storage	Data collectors must understand good storage practices and be able to assess the storage conditions in a storage area
Chart reviews	Data collectors must be able to find information in charts and extract the correct information for each question
Interview techniques	Data collectors must understand good interview techniques to ensure good data quality and so as not to bias the respondents' answers If countries elect to include collection of qualitative information, data collectors must be able to probe/formulate follow-up questions

In addition to training data collectors it is necessary to ensure program managers have the skills to analyze and take action on data. Staff need to have the skills or be trained in how to organize, visualize and interpret the data.

Periodic refresher training is also recommended; how often this is needed depends on data collector turn-over and frequency of the EUM visits. Even with data collectors who remain with the activity, periodic refresher trainings are still recommended, in order to ensure that the entire team remains consistent in their data collection methods.

Country-specific design and development of training materials should be part of a preliminary phase of testing or piloting the country-specific continuous survey for EUM of RUTF, and will become examples from which other countries can learn.

- **Data collection**. Often, letters of introduction to the health facilities may be needed in order for health facilities to permit outside personnel to inspect the premises or answer questions. These letters should be arranged before data collectors start visiting health facilities.

  Most of the data required for this exercise can be obtained from a smaller or lower-level facility in three hours by a team of two data collectors; assuming an early start and no more than two hours of travel time. If possible, the data collectors would attempt to conduct household visits that same day or the next day.

  It is advisable to include the local nutrition focal person who will have knowledge of the location of health facilities (and can find staff who may have briefly left the site) and can facilitate access to these facilities, though the actual names of the facilities selected to be surveyed should not be disclosed to district offices before the day of the visit. It is also advisable to allow time to initially meet with the local (district, county, regional, or provincial) medical officer responsible for the facilities that will be visited.

  As households will be selected on the day of visit, it is recommended that the data collector call the caregiver while still at the health facility to ensure they are home. It will also likely be necessary to have health facility staff or a CHW accompany the data collector to guide them and introduce them to the caregiver at the household.

- **Quality assurance.** A quality assurance protocol should be implemented to make certain that the data collected is accurate. For example, if using mHealth software, the survey coordinators should review completed forms at the end of each day to scan for general issues across all of the teams or identify specific teams or data collectors who need to make changes. Teams can be contacted and instructed to return to sites or adjust as needed to rectify data issues. Following the week of data collection, the coordinator for the activity and/or the designated individual responsible for the analysis should review and clean all of the data that has been submitted before calculating the required indicators.

- **Technical assistance.** Countries may require specialized technical assistance for some of the above tasks, for instance for facilitating stakeholders in making key survey tailoring decisions, doing stratified random selection of health facilities to visit from the sampling frame, designing reports, or setting up a database. If capacity for these tasks is not easily accessible locally, UNICEF or partners may be able to provide technical assistance to help countries design and set up their continuous survey and during the first round of data collection, with subsequent rounds needing little or no technical assistance.

5. Reporting & Dissemination of Results

The data collection tool provided includes an example indicator calculation sheet detailing how each indicator can be calculated from the data collected. Though some of these calculations may need to be modified according to any country-specific changes to the data collection forms and indicators made for a given country's implementation, we believe that the calculations are straightforward enough that they should be able to be performed by technically savvy staff without specialized training. Standard reporting templates should be designed during any testing or piloting of the continuous survey for EUM of RUTF; though they will need to be tailored to the particular implementation of any given country.

Data availability alone is not enough for supply chains and health systems to improve performance and get critical health products into the hands of clients. In addition to building end user monitoring activities or systems it is important to plan how the results will be disseminated to stakeholders, and to process the data and prepare the results in a format that is quick to produce, easy to review, and usable for stakeholders for to make decisions and take actions to improve performance. For example, a short report could be generated after each round of data collection using a primarily graphic format and very limited narrative focusing on key observations, necessary context, actions taken, and recommendations for next steps. The key observations and recommendations section should highlight trends that may not be apparent from the data alone and guide the way forward. It is important to keep the report concise and succinct to ensure that stakeholders can easily use and follow-up necessary actions taken and next steps – for instance as part of existing operational and strategic meetings in the health system.

Annex 1: Continuous Survey Data Collection Forms

RUTF END USER MONITORING TOOL

Facility Identification Questionnaire

	DATE OF VISIT	D D M M YY
	DATA COLLECTOR	
	NAME OF FACILITY	
	FACILITY CODE	
	TYPE OF FACILITY	1. Hospital 2. Health Center 3. Therapeutic Feeding unit
	FACILITY OPERATED BY:	1. Government 2. NGO 3. UNICEF 4. Private 5. Faith-based organization
	NAME OF [PROVINCE/STATE]	
	PROVINCE/STATE CODE	
	NAME OF [DISTRICT or other geographic/administrative designation]	
	DISTRICT CODE	
	NAME(S) AND TITLE OF HEALTH FACILITY RESPONDENT(S)	
1		
2		
3		
4		
	NAME(S) AND TITLE OF HOUSEHOLD RESPONDENT(S)	
1		
2		
3		
4		

RUTF END USER MONITORING TOOL

Facility Survey Questionnaire

Interview the facility staff person in charge of prescribing RUTF dosage to patients today

FS01 Do you have the treatment protocol book/guidelines/job aid? Can you show it to me?
(Mark the response below with an X)

a). Yes, shown	
b). Yes, not seen	
c). No	

FS02 Can you describe the national dosage guidelines for me? How much should you prescribe for [band 1], [band 2], [band 3]?
(Mark "Yes" if the interviewee correctly described the treatment guidelines, in terms of number of sachets to prescribe, for each weight band below)

[Band 1]	
[Band 2]	
[Band 3]	

Interview all facility staff that work in SAM treatment, asking if they are aware of anyone selling or exchanging RUTF in the market

FS03 Have you seen or heard of anyone selling or exchanging RUTF at home or in the local market?

Possible responses: *Yes*=1 *No*=0	

FS04 What is the frequency of scheduled distributions at this health center?

Possible answers: *Weekly*=1 *bi-weekly*=2 *other*=3	

Pull the charts of 20 patients currently undergoing treatment at this facility. If fewer than 20 patients are currently undergoing treatment, pull the charts for all patients currently undergoing treatment

FS05 How many current patients' charts are you able to review at this facility today? (up to 20)

Number of charts: ____

For each chart, fill in the matrix below, based on the most recent entry in the patient's chart:

FS06

	(i.) What was the child's weight as of the most recent entry on their chart?	(ii.) Number of sachets actually dispensed at most recent visit
Chart 1		
Chart 2		
Chart 3		
Chart 4		
Chart 5		
Chart 6		
Chart 7		
Chart 8		
Chart 9		
Chart 10		
Chart 11		
Chart 12		
Chart 13		
Chart 14		
Chart 15		
Chart 16		
Chart 17		
Chart 18		
Chart 19		
Chart 20		

Now pull the facility's outpatient logbook, and review the entries for the 20 most recent patients to be discharged from outpatient treatment (successfully or unsuccessfully) in the past 3 months.
If fewer than 20 patients have been discharged from outpatient treatment in the last three months, review the entries for all patients that were discharged from outpatient treatment in the last three months.

FS07	How many patients' entries that completed treatment in the past three months are you able to review today? (up to 20) Number of patients:	

For each patient, fill in the matrix below, based on the entries in the facility's outpatient logbook

FS08	(i.) What was the child's weight on admission, in kilograms?	(ii.) How many days was the child in treatment at this facility?	(iii.) Was the child successfully discharged as cured/recovered from this facility? Possible responses: *Yes*=1 *No*=0	(iv.) If the answer in column (iii.) is 0, was the child transferred to another facility before treatment was completed? Possible responses: *Yes*=1 *No*=0 *N/A*=0	(v.) What was the child's weight as of the final entry, in kilograms? (whether or not the child completed treatment successfully)
Patient 1					
Patient 2					
Patient 3					
Patient 4					
Patient 5					
Patient 6					
Patient 7					
Patient 8					
Patient 9					
Patient 10					
Patient 11					
Patient 12					
Patient 13					
Patient 14					
Patient 15					
Patient 16					
Patient 17					
Patient 18					
Patient 19					
Patient 20					

RUTF END USER MONITORING TOOL
Stock Status Questionnaire

Note: before starting data collection, program managers should decide on a common meaning of "past three months" that all data collectors will share.
This may mean the past three complete calendar months, i.e. January - March for a data collection occurring in mid-April, or the most recent 90 days, i.e. January 16 - April 15 for a data collection starting on April 16.

			Note:
SS01	What is the physical count of usable (undamaged, unexpired) RUTF sachets today?		Include all RUTF from all places in the facility where RUTF is found
SS02	Is there usable RUTF in stock today? Possible response Yes=1 No =0		If the physical count of usable RUTF is anything other than 0, then the answer to this question should be "Yes"
SS03	Is there any RUTF at this facility that is expired as of today's visit? Possible response Yes=1 No =0		Consider all expired RUTF in the facility, even if it has been set aside for destruction
SS04	Is there any RUTF at this facility that is damaged as of today's visit? (sachet ripped, perforated, opened, nibbled by pests, or otherwise damaged so as to be unusable) Possible response Yes=1 No =0		Consider all damaged RUTF in the facility, even if it was already counted as expired and even if it has been set aside for destruction
SS05	What is the physical count of unusable (damaged or expired) RUTF sachets today?		Include all damaged or expired RUTF in the facility
SS06	Is there a stock card or stock ledger for RUTF? Possible response Yes=1 No =0		Check for a stock card/ledger both in the dispensing room and in the storage room/pharmacy, if applicable. If a stock card/ledger for RUTF exists anywhere at the facility, mark "Yes"

SS07	Does the stock card or stock ledger have complete records for the past 3 months? Possible response Yes=1 No=0		"Complete records" here means that the stock card/ledger has been regularly updated and contains date ranges for the past 3 months without significant gaps
SS08	According to the stock card or stock ledger how many days in the last three months has RUTF been stocked out?		Count up the days where the stock card/ledger indicates that the stock was 0
SS09	Is there a register or tally that records how many sachets of RUTF were dispensed to patients/caregivers? Can you show it to me? *Possible response* Yes, shown to interviewer=1 Yes, not shown to interviewer=0 No=0		This should be separate from the stock card, and should count RUTF sachets actually distributed to patients or their caregivers
SS10	If there is a register or tally card, does it contain complete records of RUTF distributed to patients/caregivers for the most recent three months? If there is no register or tally card, does the stock card or stock ledger contain complete records of RUTF removed from stock or distributed to patients/caregivers for the most recent three months? Possible response Yes=1 No=0		"Complete records" here means that the register or tally card has been regularly updated and contains date ranges for the past 3 months without significant gaps
SS11	According to the tally, what quantity of RUTF was dispensed to patients/caregivers from this site during the most recent three months?		Count up all the RUTF that was recorded as dispensed on the register/tally card within the past three months

RUTF END USER MONITORING TOOL				
Storage Conditions Questionnaire				
Please assess the place where the RUTF are primarily stored at this facility (typically a store room or pharmacy if available, or a treatment room for smaller facilities) on the criteria below		**Yes**	**No**	**N/A**
ST01	Cartons and products are in good condition (not crushed, perforated, stained, or otherwise visibly damaged)			
ST02	There is no evidence of rodents or insects in the storage area. (Visually inspect the storage area for evidence of rodents [droppings] or insects that can damage or contaminate the products.)			
ST03	RUTFs are stored in a dry, well-lit, well-ventilated storeroom. (Visually inspect roof, walls, and floor of storeroom.)			
ST04	Cartons and products are protected from direct sunlight			
ST05	Storage area is dry and free of water penetration			
ST06	Commodities stored away from insecticides, chemicals, hazardous materials, old files, office supplies, and equipment			
ST07	Cartons stored on shelves or pallets, off the floor			
ST08	Expired, damaged or other unusable commodities stored away from usable commodities			
ST09	RUTF are stored and organized to enable FEFO (First-to-expire, first-out) procedures and are accessible for counting and general stock management			
ST10	Products are stacked at least 30 cm away from the walls and other rows or stacks of products (to prevent contact with outer walls and allow access to products) and stacked not more than 2.5 meters high			
ST11	RUTF are arranged on shelves with identification labels, expiry dates, and manufacturing dates clearly visible.			
ST12	Nutritional products are stored within the appropriate temperature range (less than 40 degrees Centigrade) on the day of the visit			
ST13	Storage area is secured with a lock and key, but is accessible during normal working hours. Access is limited to authorized personnel			
ST14	Fire safety equipment is available and accessible. (Any item identified as being used to promote fire safety should be considered.)			

RUTF END USER MONITORING TOOL
Household Questionnaire
[Placeholder for consent form, see Annex 2]

HH01	Date of visit	
HH02	Name of Province	
HH03	Name of District	
HH04	Name of village	
HH05	Name of data collector	
HH06	Name of child	

HH07	Prescribed daily dose per health facility records	Sachets

CAREGIVER INTERVIEW

HH08	Do you recognize the sachet of [RUTF name, i.e. plumpy nut]? [Show sample sachet]	1. Yes 2. No
HH09	Do you know what this is for? (possible answers)	a). Treatment of malnutrition ☐ b). Given to all children ☐ c). Given to pregnant women ☐ d). Other (specify) _____
HH10	When was the last time you went to collect plumpy nut for child [NAME]?	

HH11	When you last went to collect plumpy nut, were you able to receive child [NAME]'s ration?	1. Yes 2. No
HH12	If you were not able to receive child [NAME]'s ration of plumpy nut at the clinic during the most recent distribution day, why not?	1. Clinic did not have any ☐ 2. There were no staff that could provide it ☐ 3. Other reason (specify) _____
HH13	How many sachets did the child [NAME] eat yesterday?	Sachets
HH14	Was the child [NAME] able to finish his or her complete daily ration yesterday?	1. Yes 2. No
HH15	Were you told by the health worker how many sachets of this plumpy nut that the child [NAME] should eat per day?	1. Yes 2. No
HH16	IF 'YES' TO HH15 ABOVE, ASK: How many Sachets per day?	Sachets
HH17	How many days from now is the next scheduled distribution when you expect to receive more plumpy nut?	Days
HH18	How many sachets of plumpy nut do you have in the house today? (ask to see the sachets and count them)	Sachets
HH19	Were you told by the health worker to return to the clinic if the child [NAME] refuses to eat the plumpy nut or becomes ill?	1. Yes 2. No
HH20	Has anyone other than the child [NAME] eaten the plumpy nut for the child [NAME]?	1. Yes 2. No
HH21	Were you told by the health worker that this plumpy nut is medicine for the child [NAME] and should not be shared?	1. Yes 2. No
HH22	**IF 'YES' TO HH20 ABOVE, ASK:** what were the reasons of sharing the child [NAME] plumpy nuts with someone? Tick all that apply	a). person was sick too ☐ b). tasted good ☐ c). person was very hungry / had no food ☐ d). child did not like the plumpy nut ☐ e). other reasons (specify)_____
HH23	Were you told by the health worker that this plumpy nut is medicine for the child [NAME] and should never be sold?	1. Yes 2. No
HH24	Have you seen plumpy nut for sale or exchange anywhere outside the clinic?	1. Yes 2. No

HH25	Are you satisfied with the quantity of plumpy nut that the child [NAME] received from the clinic?		1. Yes 2. No
HH26	If no, what are the reasons as to why you are not satisfied with the quantity of plumpy nut?	a). too little to feed the child b). too little to share with other members c). quantity received is less than quantity that the child [NAME] was told to eat d). other reasons (specify)_____	☐ ☐ ☐

RUTF END USER MONITORING TOOL			
Example Indicator Calculations			
	Indicator	**Calculation method**	
		Numerator	**Denominator**
1	Percentage of facilities surveyed with usable (undamaged, unexpired) RUTF in stock	Sum, for all facilities surveyed, of box SS02	Total number of facilities surveyed
2	Average number of days facilities surveyed were stocked out of RUTF in the last three months	Sum, for all facilities where box SS07 = 1, of box SS08	Sum, for all facilities surveyed, of box SS07
3	Percentage of facilities surveyed appropriately stocked according to established max/min policies, out of facilities with that have records available	Sum, for all facilities surveyed, of column (F.) in the chart below	Sum, for all facilities surveyed, of column (A.) in the chart below

For all facilities surveyed:	(A.) Complete records available? (Answer from box SS10)	(B.) Three month consumption (Answer from box SS11)	(C.) Average Monthly Consumption: if (A.) = 1, divide (B.) by 3. otherwise leave blank	(D.) Physical count (Answer from box SS01)	(E.) Months of Stock: if (A.) = 1, divide (D.) by (C.). Otherwise leave blank	(F.) Stocked according to plan: = 1 if (E.) is between established min and max, otherwise = 0
[Facility 1]						
[Facility 2]						
[...]						

4	Percentage of facilities in [period] with usable RUTF on hand as per LMIS report	From most recent LMIS report, total number of facilities where stock on hand is reported as greater than 0	From most recent LMIS report, total number of facilities that submitted a report where amount of stock on hand was indicated (even if it was 0)
5	Percentage of facilities surveyed with expired RUTF	Sum, for all facilities surveyed, of box SS03	Total number of facilities surveyed

6	Percentage of facilities surveyed with damaged RUTF	Sum, for all facilities surveyed, of box SS04	Total number of facilities surveyed
7	Average number of RUTF sachets that are unusable per facility	Sum, for all facilities surveyed, of box SS05	Total number of facilities surveyed
8	Average percentage of proper storage practices for RUTF demonstrated by facilities	Total number of "Yes" answers from question ST1 to ST14, for all facilities surveyed	Total number of facilities surveyed multiplied by 14 (for the number of storage practices surveyed)
9	Percentage of charts reviewed where child received correct amount of RUTF per national guidelines	Sum, for all charts reviewed for question FS06 at all facilities surveyed, of column (G.) in the chart below	Total number of charts reviewed for question FS06 at all facilities surveyed where column (E.) in the chart below does not = X

For all charts under question FS06 at all facilities surveyed:	(A.)	(B.)	(C.)	(D.)	(E.)	(F.)	(G.)
	Child's weight (Answer from box FS06-(i.))	Sachets actually dispensed (Answer from box FS06-(ii.))	Frequency of dispensing (Answer from box FS05)	Theoretical daily dosage, based on national guidelines (Compare weight from (A.) with national guidelines)	Theoretical amount to dispense: if (C.) = 1 or 2, multiply (C.) * 7 days * (D.); if (C.) = 3, mark "X"	Discrepancy in dispensed: If (E.) does not = X, subtract (E.) from (B.). If the result is a negative number, multiply by -1 to make positive	Correct amount dispensed: = 1 if (F.) is less than (D.); otherwise = 0
Chart 1							
Chart 2							
[...]							

10	Percentage of facilities where nutrition staff know the correct quantity per day for a child per protocol	Total number of facilities surveyed for which box FS02 is "Yes" for all weight bands included	Total number of facilities surveyed
11	Percentage of facilities where staff report RUTF is being sold on the market	Total number of facilities surveyed for which box FS03 = 1	Total number of facilities surveyed
12	Rate of recovery/cure for patients in outpatient SAM treatment	Sum, for all patient files reviewed for question FS08-(iii.) at all facilities surveyed	Total number of patient files reviewed for question FS08 for which box FS08-(iv.) = 0
13	Average length of stay in treatment of children graduating from SAM treatment	Sum, for all patient files reviewed for question FS08 at all facilities surveyed for whom the answer in box FS08-(v.) = 1, of box FS08-(iv.)	Sum, for all patient files reviewed for question FS08 at all facilities surveyed, of box FS08-(v.)
14	Average weight gain, in grams per kilogram per day, of children graduating from SAM treatment	Sum, for all patient files reviewed for question FS08 at all facilities surveyed, of column (I.) in the chart below	Sum, for all patient files reviewed for question FS08 at all facilities surveyed, of column (E.) in the chart below

For all patient records under question FS08 at all facilities surveyed:	(A.)	(B.)	(C.)	(D.)	(E.)	(F.)	(G.)
	Weight on admission (Answer from box FS08-(i.))	Treatment days (Answer from box FS08-(ii.))	Successfully treated (Answer from box FS08-(iii.))	Final weight (Answer from box FS08-(v.)	Weight gain: if (C.) = 1, subtract (D.) from (A.); otherwise leave blank	Weight gain in g/kg: if (C.) = 1, divide (E.) by (A.); otherwise leave blank	Weight gain in g/kg/day: if (C.) = 1, divide (F.) by (B.); otherwise leave blank
Patient 1							
Patient 2							
[...]							

15	Percentage of caregivers that recognize RUTF and know what it is for	Sum, for all household interviews completed, where the answer to HH08 = 1 and the answer to HH09 = (a.)	Total number of household interviews completed
16	Percentage of patients/caregivers surveyed that received RUTF at last visit	Sum, for all household interviews completed, where the answer to HH11 = 1	Total number of household interviews completed
17	Percentage of patients/caregivers surveyed that did not receive RUTF at last visit because it was stocked out	Sum, for all household interviews completed, where the answer to HH11 = 1 and the answer to HH12 = 1	Total number of household interviews completed
18	Percentage of caregivers surveyed that did not receive RUTF at last visit because there were no trained staff to provide it	Sum, for all household interviews completed, where the answer to HH11 = 1 and the answer to HH12 = 1	Total number of household interviews completed
19	Percent of caregivers who have the correct number of sachets of RUTF remaining on hand, per distribution schedule	Sum, for all household interviews completed, of column (F.) in the chart below	Total number of household interviews completed

For all household interviews conducted:	(A.)	(B.)	(C.)	(D.)	(E.)	(F.)
	Sachets per day understood by caregiver (Answer from box HH16 if HH15 = 1; otherwise mark "X")	Days until next distribution (Answer from box HH17)	Sachets on hand (Answer from box HH18)	Theoretical sachets to have: multiply (A.) by (B.)	Discrepancy: subtract (C.) from (D.). If the answer is negative, multiply by -1 to turn positive	Correct amount on hand: = 1 if (E.) is less than or equal to (A); otherwise = 0
Caregiver 1						
Caregiver 2						
[...]						

20	Percentage of caregivers given the correct information on RUTF use by the health worker	Sum, for all household interviews completed, of column (I.) in the chart below	Total number of household interviews completed
21	Percentage of caregivers that know the correct daily dose for the child	Sum, for all household interviews completed, of column (E.) in the chart below	Total number of household interviews completed
22	Percentage of caregivers that gave the correct quantity (correct number and fully finished) to their child the day before the survey	Sum, for all household interviews completed, of column (D.) in the chart below	Total number of household interviews completed

For all household interviews conducted:	(A.)	(B.)	(C.)	(D.)	(E.)	(F.)	(G.)	(H.)	(I.)
	Sachets per day per chart (Answer from box HH07)	Sachets per day understood by caregiver (Answer from box HH16)	Number of sachets eaten yesterday (Answer from box HH13)	Correct number of sachets eaten yesterday: = 1 if (A.) = (C.); otherwise = 0	Correct number of sachets told: = 1 if (A.) = (B.); otherwise = 0	Return to clinic (Answer from box HH19)	Medicine for child only (Answer from box HH20)	Medicine not to be sold (Answer from box HH23)	Given correct info: if the answers in (E.) through (H.) are all 1, put 1 here. Otherwise put 0
Caregiver 1									
Caregiver 2									
[...]									

23	Percentage of caregivers that report sharing RUTF with other person/s in household	Sum, for all household interviews completed, for which box HH21 = 1	Total number of household interviews completed
24	Percentage of caregivers that report RUTF is being sold or exchanged	Sum, for all household interviews completed, for which box HH24 = 1	Total number of household interviews completed
25	Percentage of caregivers satisfied with the amount of RUTF they received	Sum, for all household interviews completed, for which box HH25 = 1	Total number of household interviews completed

Annex 2: Example Household Respondent Consent Form

Annex 2: Example Household Respondent Consent Form

Example Household Respondent Consent Form
Adapted from Afghanistan EUM

INFORMATION AND INFORMED CONSENT FORM FOR CAREGIVERS

Hello, my name is _____ and I am an interviewer with the Ministry of Public Health [Ministry of Health of Country] and UNICEF. The Ministry of Public Health and UNICEF are focused on ensuring that all children in [Country] have access to quality nutrition services and care, and that parents and families are provided with knowledge and resources to support their role as their child's caregivers. To ensure that the current nutrition services and supplies meet the standards, the Ministry of Public Health and UNICEF are conducting a user survey in this community, and requesting caregivers of children to participate.

Ask the household health for consent: Your household has been randomly selected and we wish to have your permission to interview the caregiver of the child. By caregiver, we mean the adult person who assumes the most responsibility in caring for the health and well-being of the child

May we proceed? 1. Yes 2. No

Read to caregiver: You've been selected randomly and we wish, with your permission, to interview you. The information you provide will be confidential and will help us improve the services that we provide to children. The interview will take between 10-15 minutes of your time. Your participation in this survey is voluntary. If you don't want to be in the survey, it is OK. If you want to be in the survey now and change your mind later, that's OK too. You can stop at any time. If you agree to participate, you can decide not to answer certain questions and can stop the interview at any time. Your decision about whether to participate in this survey or to answer any specific questions will in no way affect any services that you receive.

Before you say yes or no to being in this survey, we will answer any questions you have. If you join the survey, you can ask me questions at any time. Do you have any questions now? [Pause & answer all questions] If you have any questions later, you may contact the survey coordinator at _____.

Do you agree to participate in the survey 1. Yes 2. No

By responding Yes to the agreement, you have consented to provide useful information. Thank you.

For Interviewer:

RESPONDENT AGREES TO BE INTERVIEWED . . . 1

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 END

Annex 3: Example: statistical significance, margin of error, and confidence interval

Annex 3: Example: statistical significance, margin of error, and confidence interval

Example: statistical significance, margin of error, and confidence interval

Since margin of error and confidence interval are important factors to consider in sampling, and since some stakeholders may not have a background in statistics, the following brief example is meant to illustrate what they are and how they interact.

Suppose there are 416 health facilities in your country, and you would like to know how many of them are open on Friday evenings. You have decided that you would like your sample to provide an estimate with a 5% ME and a 95% CI, which dictates that you need to collect data at 200 out of the 416 health facilities. 200 is a lot of facilities to survey, but it is certainly more manageable than 416; however the price you pay is that at the end of your survey you can't be completely sure of what would have happened if you had surveyed all 416 facilities. You go and collect all your data, and you find that 160 out of the 200 surveyed health facilities are open on Friday evenings. You therefore calculate the indicator as 160/200 = 80% of facilities are open on Friday evenings. The 5% ME tells you that the true percent of facilities that are open on Friday evenings among all 416 health facilities in your country is likely somewhere between 80% plus or minus 5%, that is, somewhere between 75% and 85%. How likely? The 95% CI tells you essentially that there is a 95% chance that the true value among all 416 health facilities lies within the margin of error, that is, between 75% and 85%.

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