Case Study: Active and Adaptive Case-Finding in a Rural Setting

This case study describes the procedure used to conduct active and adaptive case-finding (see Box 3, page 65) during SQUEAC investigations in two rural districts of Niger.

The case-finding method described here was used for both the small-area surveys and the likelihood survey and was based on the following two principles:

> **The method is *active.*** SAM cases were specifically targeted. Case finders did not go house to house in the selected villages measuring all children aged between 6 and 59 months. Instead, only houses with children with locally understood and accepted descriptions of malnutrition and its signs were visited.
>
> **The method is *adaptive.*** At the outset, key informants helped with case-finding in the community, but other sources of information found during the survey were used to improve the search for cases.

Preparatory Research

For the active and adaptive case-finding method to be effective, research must be conducted during the qualitative phase of the SQUEAC investigation to determine:

- The appropriate case-finding question
- The most useful key informants to assist with case-finding
- Any context-specific factors affecting the case-finding process

The Case-Finding Question

Appropriate local terminology used by the population to describe the signs of SAM had to be identified and community definitions and aetiologies understood so that these could be used to facilitate the active search for cases. Carers of children with SAM enrolled in the CMAM program and carers of children recovering from SAM enrolled in the CMAM program were asked:

- To describe the condition of their child
- What terms should be used and how the signs should be described in local languages if we wanted to find children with the same condition in other villages
- To explain the signs and symptoms that led them to consult the CHW or attend the health centre

Pictures of children with SAM were shown to a wide variety of community members who were asked to name the local terms for particular signs (e.g., skin signs, hair signs, baggy-pants, thin arms, swollen feet), the conditions (i.e., severe wasting and kwashiorkor), and their causes. Care was taken to identify derogatory and insulting terms.

The research indicated that the following terms were understood and used by the community to describe children with malnutrition:

- *Tamowa* (flaccid and/or wrinkled skin)
- *Kwamaso* and *kwameshewa* (wasting)
- *Raama* (thin, wasted)
- *Tsimbirewa* (child is small and resembles an old man)
- *Koumbiri* (swelling)

The research also revealed that malnutrition was not always recognised as a specific condition but as the outcome of illnesses (predominantly diarrhoea and fever). It was considered important, therefore, to ask for children that currently had or were recovering from conditions such as:

- *Masas sara* (fever)
- *Zawo* (diarrhoea)

It should be noted that the information collected while determining the appropriate case-finding question is often useful in other aspects of a SQUEAC or SLEAC investigation. For example, these findings should be compared with program messages. If program messages do not match all of these findings (e.g., the program messages do not explicitly mention diarrhoea and fever or exclude some local language terms), there may be a negative impact on coverage. Also, if program messages use derogatory or insulting terms, there may be a negative impact on coverage, since not many people would proudly identify themselves as, for example, dirty, ignorant, drunken whores.

Identifying Key Informants

It was necessary to identify the types of people who, because of their position in the community or their contact with and knowledge of small children, were likely to be able to identify SAM children.

Such *key informants* would be able to direct survey teams to the homes of potential SAM cases and avoid the need to conduct a house-to-house search for SAM cases. Specifically:

Carers of children with SAM enrolled in the CMAM program and carers of children recovering from SAM enrolled in the CMAM program were asked:

> *Who would know which children were sick or had the same condition as your own child in the village and could help us find cases?*

A wide variety of community members were asked:

> *Who in your village is best placed to tell us about the health of young children and to know which children are sick?*

Treatment-seeking behaviours were also explored to see which people were first consulted for help and advice when a child became sick or wasted.

The following people were identified as useful key informants:

The *matrone* (senior TBA in a village)

The *kungiya* (women's leader)

Grandmothers and respected older women

Village and religious leaders

Traditional health practitioners

Village pharmacists

It should be noted that this information is often useful in other aspects of a SQUEAC or SLEAC investigation. For example, these findings should be compared with the types of people that are recruited as community-based case-finders or that are regularly and frequently contacted in program outreach activities. If some types of people are not recruited as community-based case-finders or are not in regular and frequent contact with the program, there may be a negative impact on coverage. Also, if carers initially seek treatment with traditional health practitioners and traditional health practitioners are not recruited as community-based case-finders or are not in regular and frequent contact with the program, there may be negative impact on coverage.

Context-Specific Factors Affecting the Case-Finding Process

Any potential cultural or practical constraints that could influence the conduct of the case-finding had to be identified to ensure that these were taken into account and the method adapted accordingly if necessary. Specifically:

- Community members were asked about daily activity patterns so as to inform timing of case-finding activities (e.g., to know when carers and children are likely to be at home, to avoid sampling at meal times or on market days).
- Cultural norms regarding the acceptability of male case-finders speaking to women and entering houses and compounds were discussed with the SQUEAC team and verified during village visits.
- Observations were made with respect to the general structure of villages.

No major constraints were identified. However, findings showed that it was important to establish if any hamlets were attached to the village or if the village was made up of more than one cluster of houses so that these populations were not overlooked during sampling.

Survey Stage

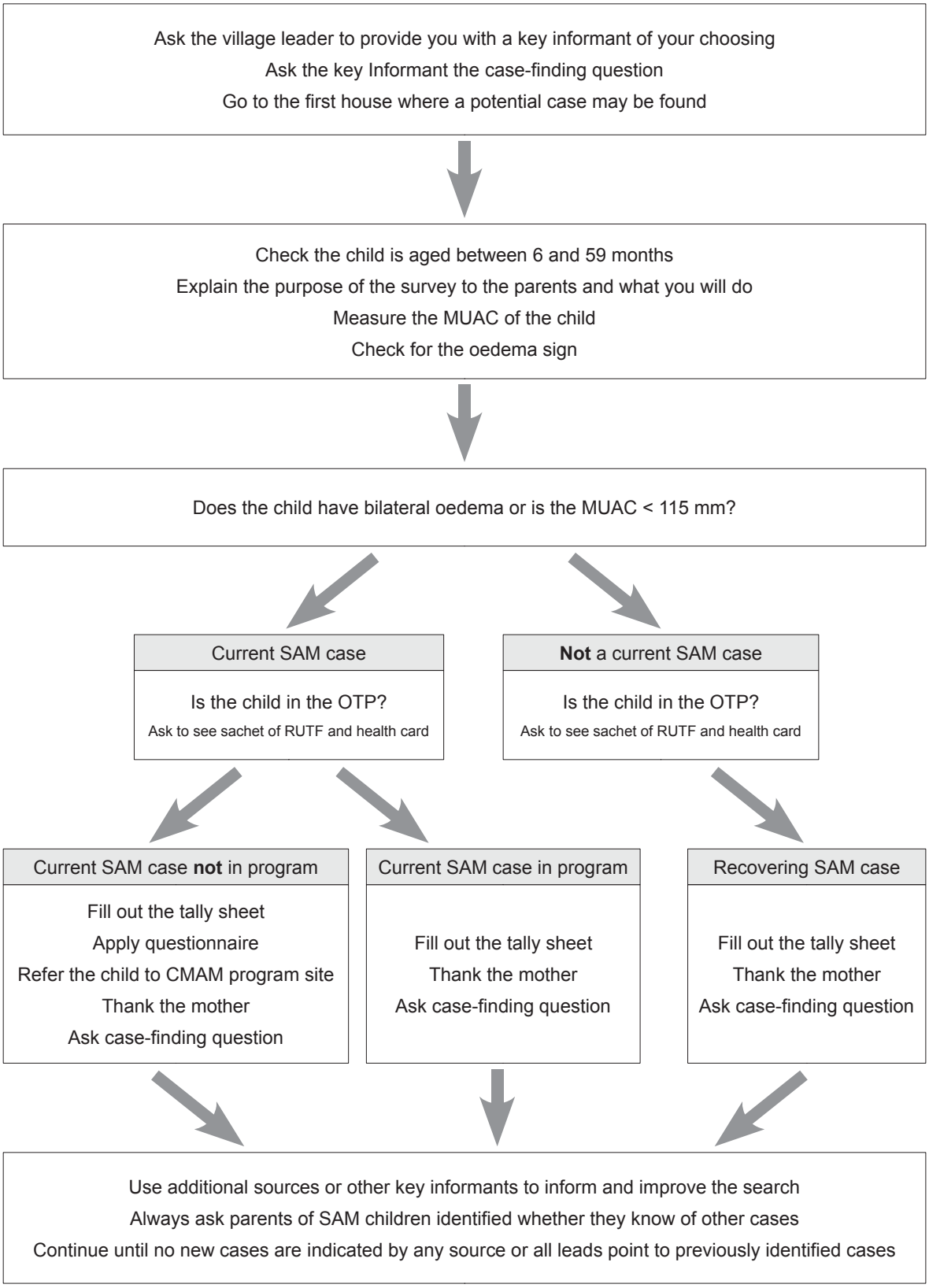
Active and adaptive case-finding proceeded in the following way in each village selected for the surveys:

1. The survey team presented themselves to the village leaders and requested the help of a key informant.
2. The case-finding question and, in addition, knowledge of children attending a feeding program were asked of the key informant.
3. The team arrived at the first house indicated by the key informant and, after checking that the identified child was aged between 6 and 59 months and explaining the purpose of the visit to the carers, the team measured the identified child as a potential case.
4. If the child was found to be a SAM case, confirmation was sought as to whether the child was enrolled in the CMAM program. If the child was **not** in the CMAM program, then a short questionnaire (similar to that shown in Box 2, page 49) was administered to discover the reasons for coverage failure and the child was referred to the nearest CMAM program site. If the child was **not** currently a SAM case, confirmation was sought as to whether the child was enrolled in the CMAM program to check whether the child was a recovering SAM case.
5. All cases identified (i.e., covered and uncovered SAM cases and recovering SAM cases in the CMAM program) were noted on a tally sheet.
6. Before proceeding to the next potential SAM case known to the key informant, the carers of the case just identified were asked if they knew of any children with a similar condition or who were in a feeding program.

Case-finding was considered to be exhaustive when no new leads to potential cases were forthcoming and when information given by different sources (e.g., key informants and carers) identified children that had already been seen by the team.

The survey process is summarised in **Figure 95**.

Figure 95. The survey process using active and adaptive case-finding



Observations

The case-finding method targeted SAM cases and recovering SAM cases. Case-finding was quicker and more effective than if a blanket screening method had been used. It was possible for each survey team to sample at least two villages per day, even when villages had more than 3,000 inhabitants.

Using familiar terms and definitions understood by the community enabled a large number of cases to be identified, including many severe kwashiorkor cases whose condition had not been recognised as malnutrition.

Potential cases were identified that were not in the village at the time of the survey because they had gone to a CMAM program site. The names of these children were checked on the CMAM register in the health centre at the end of the day and their current measurements verified on the beneficiary card to determine whether they were current or recovering SAM cases.

The *matrone* (the senior TBA in a village) proved to be a very useful key informant and was the usual starting point. Her knowledge was often supplemented by that of the *kungiya* (women's leader) as the search progressed.

A *snowball effect* was often seen once the first SAM case was identified. The carer of the first case gave information on another child with the same signs as her own, the carer of that case and their neighbours in turn gave leads to further potential cases, the carers of these cases in turn knew of other cases, and so on.

During the search, a number of carers with uncovered SAM cases also approached the case-finding team, having heard of the survey from others in the village.

Summary

Before undertaking active and adaptive case-finding determine:

> **The case-finding question.** Appropriate definitions, terms, and descriptions for malnutrition, its signs, and its aetiology in the local language(s).
>
> **Key informants.** People that have frequent contact with small children or know which children are or have recently been sick.
>
> **Context-specific factors affecting the case-finding process.** These are cultural or practical constraints that need to be considered.