What is Family MUAC?

The most practical and scalable means to detect acute malnutrition at community level is through the measurement and classification of mid-upper arm circumference (MUAC). It is the most common form of anthropometric screening used at community level to detect and refer children for acute malnutrition treatment. Historically, MUAC screening at community level has been the primary responsibility of community health workers (CHWs) or community volunteers (CHVs). However, there is mounting evidence to suggest that families can also play a significant role in carrying out MUAC screening in their own communities.

Family MUAC (or Mother MUAC as it is also sometimes called) is a community screening approach which empowers mothers, caregivers and other family members to screen their own children for acute malnutrition using color-coded MUAC tapes. Neither literacy or numeracy skills are required.

Why implement the Family MUAC approach?

The rationale for teaching mothers, caregivers and family members to measure and classify MUAC is to enhance the detection of acute malnutrition cases at community level and to increase the number of referrals for treatment within community or integrated management of acute malnutrition (CMAM/IMAM) programmes. Involving mothers and caregivers in MUAC screening enables them to develop a better understanding of the signs of malnutrition, be engaged in monitoring their children’s nutrition status and increases the frequency of child screening at community level. Family MUAC places families at the centre of malnutrition screening strategies, acknowledging they are best placed to detect the earliest signs of malnutrition.

In addition, frequent screenings may also lead to the earlier detection of acute malnutrition, which, if acted upon in a timely manner, can decrease mortality and morbidity related to malnutrition, reduce programme costs due to shorter treatment times and lower the proportion of children requiring expensive in-patient care for severe acute malnutrition (SAM) with complications.

How does the Family MUAC approach work in practice?

Implementing a Family MUAC activity normally involves five steps:

1. Contextual analysis

As a start, information on current acute malnutrition trends, anticipated caseloads and health service capacity should be gathered to determine whether existing CMAM/IMAM services can cope with an increase in admissions resulting from enhanced community screening. Additional information to collect can include current barriers to accessing treatment, baseline outpatient therapeutic programme (OTP) or supplementary feeding programme (SFP) coverage and functionality of existing CHW/CHV networks.

2. Identifying activities for Family MUAC

Determine: (i) who should be trained (e.g. mothers/caregivers, grandmothers, etc.) and whether additional community members need to be sensitized (e.g. village chiefs, religious leaders, traditional healers), (ii) what the coverage of the
intervention should be, (iii) whether individual or group trainings are more appropriate and, (iv) what language(s) are most appropriate for the trainings and (v) what timeframe, human resources and tools are needed, depending on the coverage of the activity.

3 Budgeting for Family MUAC

Though Family MUAC is less costly than a CHW-based screening approach, it does require a higher initial investment. Costs include the initial training sessions for the mothers/caregivers (including the costs related to providing trainers, providing transport for the trainers, providing supervisors and, in some cases, refreshments for participants) along with follow-up supervision costs and the purchase of MUAC tapes.

4 Implementing Family MUAC

Training on MUAC screening and oedema identification can take place in a number of different settings, including villages, individual households, Care Groups, health posts, at the hospital or at health facility triage. Trainers should be provided with a technical training on effectively engaging mothers/caregivers to use MUAC and detect oedema. In general, 30-40 minutes is sufficient to train a group of mothers/caregivers and it is recommended not to exceed 25 mothers per group. Messages should be clear and simple, in the local language, with practical demonstrations and hands-on screening practice.

5 Monitoring Family MUAC

The monitoring and follow-up of Family MUAC activities is essential to gauge whether mothers and caregivers are accurately screening their children and whether they are doing it on a regular basis. Monitoring can be done through ad-hoc spot-checks in targeted villages/households or by checking at the health facility the agreement between mothers’ measurements (i.e. mothers’ self-referrals) and health care worker measurements.

How do we know if Family MUAC is having an effect/impact?

The aim of Family MUAC is to promote regular acute malnutrition screening at household level, in order to increase the uptake and coverage of treatment services. This can be determined by documenting the median MUAC for health facility admissions and by comparing median MUAC before and after Family MUAC trainings. Pre- and post-intervention CMAM/IMAM coverage rates should also be assessed.

When implementing a Family MUAC activity...

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1 i.e. What the general population for the targeted villages is, and what the corresponding numbers of mothers/caretakers to be trained is.

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Find out more about Family MUAC:

Mauritania
Mother-led MUAC: Empowering mothers to detect malnutrition

Niger
Mothers screening for malnutrition by mid-upper arm circumference is non-inferior to community health workers: results from a large-scale pragmatic trial in rural Niger

Mothers Understand and Can do it (MUAC): a comparison of mothers and community health workers determining mid-upper arm circumference in 103 children aged from 6 months to 5 years.

Mother-MUAC – Teaching Mothers to Screen for Malnutrition, ALIMA, 2016

Watch: Mothers can do it: screening for malnutrition in Niger

India
Mothers Using MUAC to Screen Acute Malnutrition – Improving Care-Seeking & Self-Referral in the Fight Against Malnutrition.

Kenya
Comparing performance of mothers using simplified mid-upper arm circumference (MUAC) classification devices with an improved MUAC insertion tape in Isiolo County, Kenya.

Watch: Assessing Nutritional Status Using Oedema and Mother MUAC: Training Video

Do you have questions about implementing the Family MUAC Approach? Join the Family MUAC Community of Practice to access more information, share your experiences and connect with others: https://acutemalnutrition.org/en/Family-MUAC