4. Use of FAMILY MUAC in the context of COVID-19 22nd April - Version 1.0

The Family MUAC approach is one of UNICEF and the Global Technical Advisory Mechanisms priority actions to support preparation and response to acute malnutrition in the context of COVID-19, see the March 27th guidance brief for the Management of Child Wasting in the context of COVID-19, *'Priority Action 4. Intensify efforts to strengthen the capacity of mothers and caregivers to detect and monitor their children's nutritional status using low-literacy/numeracy tools including Mid-Upper Arm Circumference (MUAC) tapes'*. However, some countries have raised concerns around its feasibility, given the current context and the restrictions applied. GOAL believes it can be undertaken with relative ease and safely, whist maintaining social distancing and wider IPC measures. There are various permutations:

Option 1) As per other lifesaving distribution mechanisms, **small groups** can be trained with 1 x individual/HH (ideally with 1 x child present). Max' 10 HH members. Use a local space close to HH's gathered.

Step 1: CHW/Volunteer to set-up the area where the training will be conducted, respecting social distancing.

1.a. Set-up a hand-washing station with water and soap

1.b. Mark a square using a stick or ash on the ground for each participant to sit in – min' 2 meters apart

1.c. Place a clean MUAC tape in each square (use soap/water)

Step 2: Set up safe queuing by placing a stone with a minimum of 2 meters between each. When participants arrive, ask each person (carer-child pair) to stand next to a stone.

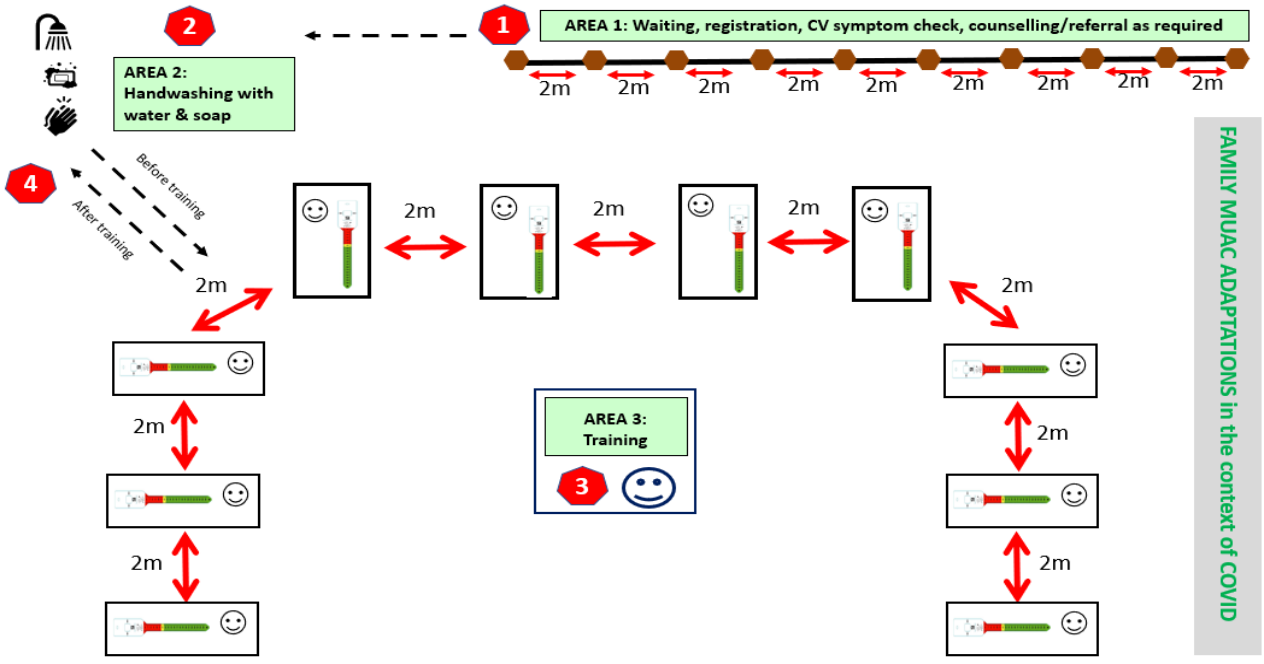
Step 3: Welcome each participant one-by-one by respecting social distancing. Record attendance (name, village, phone number). Go through the symptoms checklist individually to ascertain none are displaying symptoms. **If none**, move ahead and ask them to 1) wash their hands thoroughly with soap and 2) to go to a square. **If someone is displaying symptoms**, they should be asked to remain next to their stone. Their information should be recorded, plus a mobile contact for community follow-up. Explain why they cannot attend the training, issue them with a MUAC tape with simple instructions on use, provide key IPC messages and ask them to return home to self-isolate (as per guidance).

Step 4: Share key messages on COVID-19 to the group, explain why some have returned home, with an emphasis on community support/case management to prevent stigma. Answer questions and address misinformation.

Step 5: Move ahead and demonstrate the use of MUAC for children 6-59m and PLW if relevant, plus detection of oedema in children and explain referral mechanism. If participants have attended with a child, practice use of MUAC. Answer questions.

Step 6: Ask each participant to leave one by one, after washing their hand.

This can be **implemented through the Community Led Action (CLA) neighbourhood units, or through separate sessions**.



See Nutrition Schematic Adaptations for COVID to view diagram in detail

Option 2) CHW can go house to house and conduct **one-on-one training** with a HH representative, whilst respecting social distancing and IPC measures. This will take longer but may be more suitable to some contexts. This can be **implemented through the Community Led Action (CLA) neighbourhood units, or through separate sessions.**

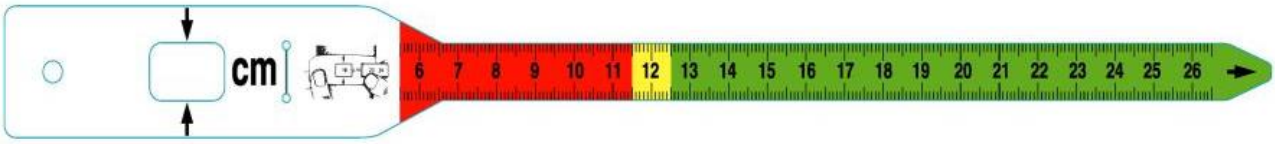
Option 3) CHWs can either work with **small groups, or** go **house to house**, using tablets/phones (maybe on a selfie stick or placed somewhere temporarily) with videos for individual HH members to watch. Short instructional videos can be used to demonstrate how to assess children/PLWs for acute MN and key messages provided. Any videos produced would need to be translated, but guidance on narrative inclusions can be provided. This can be **implemented through the Community Led Action (CLA) neighbourhood units, or through separate sessions.**

Option 4) For other contexts where the above is not thought feasible, please engage the TT for additional ideas.

Normally, regular Family-MUAC trainings only take 20-30mins, so an adapted and simplified version could be quicker. Short videos could be made: https://www.youtube.com/watch?v=vW0St0NbWWY – this is not the best example, rather illustrative. We already have a short, written guide detailing how to take a MUAC and assess for kwashiorkor with images that can be used to accompany training see below:

Training Aid for ToT: MUAC and Kwashiorkor for Acute MN

1. Mid-Upper Arm Circumference (MUAC)



1.1. Children 6 - 59 months

- Children in this age range whose MUAC is <11.5cm is considered severely acutely malnourished (SAM). This is commonly shown as 'red' on the MUAC tape.
- Children in this age range whose MUAC is >11.5cm, but <12.5cm is considered moderately acutely malnourished (MAM). This is commonly shown as 'yellow' on the MUAC tape.

MUAC measures in children give us a very good indication of their nutritional status, but they also provide us with a very strong indicator of the 'risk' the child is at, of dying from malnutrition i.e. if tape is red, the risk is severe, if the tape is yellow, the risk is moderate. MUAC tapes are quick and easy to use, they do not require specific age data and they are cheap and portable for field-based use.

How to take the MUAC properly

When taking the MUAC, ENSURE THAT YOU:

1. Bend the LEFT arm to 90 degrees and estimate the mid-point – mark with a pen.
2. Straighten the arm and wrap the MUAC around the pen mark: the tape should be in contact with the arm but should not be squeezing the arm, just hugging the surface.
3. Read the MUAC reading to the nearest mm and record the measurement.

1.2. Pregnant and Lactating Women (PLW)

Malnutrition is all too common in PLW due to the increased metabolic and nutritional demands during pregnancy and whilst lactating, sometimes combined with reduced intake. It is generally accepted that on average during the last two trimesters of pregnancy, a woman will need an additional ~400kcal and whilst breastfeeding her baby up to 12 months an additional ~550kcl. As with children, MUAC cut-offs can be used to indicate a status of malnutrition in PLW. Benchmarks vary from country to country, <23cm is frequently used where resources allow, if however resources are limited and case-load is high, this benchmark is sometimes reduced to <21cm. NB: UNICEF tapes for children (11.5cm/12.5cm) use a 21cm cut-off which is often suitable for emergency contexts.

2. Nutritional Oedema: Kwashiorkor

Always check for the presence of bilateral oedema:

1. Place both thumbs on the top of each of the child's feet (both feet at the same time). Give a good press for 3 long seconds. Take your thumbs away, if there is an indentation remaining in both feet, the child has nutritional oedema. This is called bilateral pitting oedema. This type of MN is called Kwashiorkor.
2. If the child has bilateral oedema of the feet (called grade 1 oedema), check if there is oedema in the legs (grade 2) and in the hands and in the face (grade 3). If it has reached the hands/face, this will illustrate a seriously advanced stage of kwashiorkor. If the child has kwashiorkor, it is advised that they are referred with urgency to a health facility with an outpatient therapeutic centre and stabilisation centre unit.

Note: A child with severe kwashiorkor is at a high risk of mortality and should NOT be treated by health workers unfamiliar with the management of kwashiorkor, as this is very dangerous. Oral Rehydration Solution (ORS) should NEVER be given to a child with kwashiorkor.

Example of children with kwashiorkor and illustrating the pitting oedema