Toolkit for CHW community-based treatment of uncomplicated wasting for children 6-59 months in the context of COVID-19

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ACRONYMS AND ABBREVIATIONS

CHW	Community Health Worker
GNC	Global Nutrition Cluster
GTAM	Global Technical Assistance Mechanism for Nutrition
ICCM	Integrated Community Case Management
IPC	Infection Prevention and Control
MAM	Moderate Acute Malnutrition
MoH	Ministry of Health
MUAC	Mid Upper Arm Circumference
OTP	Outpatient Therapeutic Program
PPE	Personal Protective Equipment
RUF	Ready-to-use food
RUTF	Ready-to-Use Therapeutic Food
SAM	Severe Acute Malnutrition
SFP	Supplementary Feeding Program
TSFP	Targeted Supplementary Feeding Program

INTRODUCTION

This document aims to provide an implementation protocol and simplified toolkit to assist implementers in providing treatment for uncomplicated wasting through community health workers (CHWs) in the context of COVID-19, based on current global recommendations. This document does not cover all mitigation and response measures applicable to COVID-19 case management, the management of wasting at the facility level or childhood illness, though endeavors to integrate relevant and emerging guidance wherever possible.

The program adaptations and recommendations below represent the minimum measures required in order to achieve safe CHW community-based treatment for uncomplicated wasting in the context of COVID-19. However, any programming should be conducted in coordination with and adherence to government guidance on COVID-19 public health actions and national protocols. Implementers can also find national nutrition cluster and global nutrition cluster (GNC) guidance on programmatic adaptation support in the context of COVID-19 here.

Background and approach

While the impact of COVID-19 on malnourished children is not yet known, current data indicate that patients with non-communicable diseases as well as older patients are at higher risk of complications and death from the disease. Patients who are immunosuppressed such as those with HIV and TB infection are assumed to be vulnerable. We also know that malnourished children have increased risk of death from other respiratory conditions and that the presence of severe acute malnutrition (SAM) can increase mortality from pneumonia 15-fold.[1] Malnourished children are immunocompromised and therefore may be at higher risk of becoming critically ill and/or death from COVID-19.

Every effort should be made to reduce malnourished children's and caregivers' exposure to COVID-19 whilst ensuring continuity of malnutrition detection and treatment, as untreated malnutrition also poses a significant risk to childhood mortality and morbidity. The recent brief from UNICEF and GNC on the management of child wasting in the context of COVID-19 states that in partial or full population mobility restrictions, **whenever possible, treatment for uncomplicated wasting should be delivered through CHWs or other community-based platforms at the community level using a no-touch, simplified treatment protocol.**[i] These 'simplified approaches' require adaptations to current wasting treatment protocols and delivery mechanisms which will be addressed in this document.

Essential programmatic adaptations

- **CHWs receive adequate training, equipment, supplies and medicines and supportive supervision to provide treatment for uncomplicated wasting at the community level.** While treatment of wasting by CHWs is not part of the 'traditional' integrated community case management (iCCM) package, growing evidence has demonstrated that with minimal training, CHWs are able to appropriately treat acute malnutrition in the community and that the approach can lead to early admissions and improved discharge outcomes.[2, 3, 4, 5]

i. Brief No. 1 Management of child wasting in the context of COVID-19, 27 March 2020 found here: https://www.ennonline.net/covid19wastingbrief

Furthermore, emerging evidence from a multi-country feasibility and acceptability study indicates that low-literate CHWs can also effectively provide treatment for wasting when they are equipped with a simplified toolkit and protocol.[ii] [6]

- **Caregivers are trained and equipped to assess their child's malnutrition status during the treatment visit and at home according to the Family mid upper arm circumference (MUAC) approach.** The Family MUAC approach, also known as Mother MUAC, is an established strategy to increase screening coverage and promote early detection of wasting and/or deterioration by training caregivers to assess MUAC and check for oedema at home.[7, 8,9] In the context of COVID-19, caregivers will also conduct these assessments during treatment visits with the CHW thereby eliminating the need for CHWs to directly touch any child. CHWs will be tasked to provide initial training for caregivers who are new to the approach as well as refresher training or coaching during subsequent treatment visits to ensure accurate assessment.
- **Treatment for uncomplicated severe and moderate wasting is simplified according to a series of evidence-based protocols that combine and simplify standard outpatient therapeutic program (OTP) and supplementary feeding program (SFP) treatment protocols.**[10,11,12] Admission, progress and discharge will be based on oedema and MUAC as the only anthrpometry criteria and children will be provided treatment using a reduced dosage of 2 or 1 sachets of one product, ready-to-use therapeutic food (RUTF), per day based on the MUAC or oedema status determined by the CHW and caregiver using the no-touch assessment approach during treatment visits.

Essential program requirements

- An existing community health worker or iCCM platform to integrate treatment for uncomplicated wasting, including a viable supervision structure and two-way communication mechanism to relay critical updates to and from CHWs and supervisors or health facility staff.
- An assessment of existing CHW coverage and capacity to understand the impacts and resource implications for adding in this new set of services, with particular attention to ensuring not overburdening CHWs.
- Pre-identification of referral health facilities and stabilization centers to which CHWs can refer cases of severe illness, severe COVID-19 and complicated cases of wasting.
- Allowance by national guidelines or protocol for CHW-led provision of routine medication as recommended by national protocols for treatment of uncomplicated wasting for children age 6-59 months or, in contexts where children are admitted for treatment at the health facility level, a referral mechanism whereby children can be transitioned to the CHWs for follow-up visits.
- Availability of essential commodities, medicinal supplies and other treatment supplies required to manage uncomplicated wasting (see Basic equipment and supply requirements) and a distribution strategy which minimizes stock outs and maximizes storage safety at the community/ CHW level.
- Ability of CHWs to record admission, follow-up and discharge information on children admitted for community based treatment.

ii. Simplified Tools for Community-Level Treatment of Acute Malnutrition found here: https://www.acutemalnutrition.org/en/Simplified-Approaches-Tools

Basic equipment and supply requirements for CHW treatment of uncomplicated wasting

INFECTION PREVENTION AND CONTROL SUPPLIES

- Soap and water
- Hand Sanitizer
- disinfectant
- 2 meter measuring tool (e.g. stick, rope, or chalk for marking)
- Minimum PPE according to local guidance (e.g. gloves, masks)

TREATMENT SUPPLIES

- Ready-to-use therapeutic food (RUTF)*
- Amoxicilin (250mg, 500mg dose)
- Albendazole (200mg, 400mg dose)
- Other medications as per national protocols (e.g. paracetamol)

TREATMENT TOOLS

- Standard MUAC tapes, marked at 90mm (e.g. sufficient quantity to distribute to caregivers)
- Family MUAC job aids (e.g. pictorial MUAC and oedema assessment cards, doll or cylinder object to demonstrate assessment procedures)
- Illustrated treatment flowchart job aid

PATIENT TRACKING TOOLS

- MoH patient registers
- Other standard MoH forms (e.g. stock supply cards)

Or, simplified tools

- Simplified treatment register (SAM, MAM or Combined, adapted to local language)
- Simplified dosage calculator job aid
- Simplified age and medication calculator

OTHER SUPPLIES

- Storage box with padlock
- Pen/pencil for writing
- RUTF feeding messages job aid

*In the absence of an adequate supply of RUTF, ready-to-use supplementary food (RUSF) can be used at the dosage recommended for RUTF for moderately wasted children or, temporarily, as a lifesaving measure, at the dosage recommended for RUTF for severely wasted children.

KEY PROGRAM RECOMMENDATIONS

Preparation

Alignment with national guidance and protocols

- Initiate necessary discussion with Ministries of Health and national coordination platforms/ nutrition clusters on context-specific simplifications of treatment protocols for CHW community-based treatment of wasting, including simplifying anthropometric criteria, dosage and distribution schedules of RUTF or other specialized ready-to-use food (RUF). Once context-specific simplifications are agreed upon, ensure coordination with health clusters, subnational government/authorities and community health platforms on any CHW trainings.
- Intensify efforts to build or strengthen the capacity of caregivers to detect and monitor their children's nutritional status using MUAC tapes by training and/or reinforcing the family MUAC approach and distributing tapes through existing programs.
- Initiate efforts to train CHWs and supervisors on treatment for uncomplicated wasting at the community level, including on-the-job or small group training at the health facility on no-touch assessment, family MUAC, the simplified treatment approach and key messages on COVID-19.

Alignment with existing iCCM [iii]

- Adaptations to standard protocols for integrated community case management (iCCM) are necessary and should be nuanced, depending on the transmission of COVID-19 at national and subnational levels and the availability of PPE.
- Continued care-seeking for sick children should be encouraged for the management of major causes of childhood illness as an essential community-based service in the context of COVID-19, including for malaria, pneumonia, diarrhea and wasting.
- The symptoms of COVID-19 in children are non-specific and overlap with symptoms of common childhood illnesses, especially pneumonia caused by other viral and bacterial pathogens, and malaria. This must be taken into account in the context of iCCM.
- All sick children in the community should be assessed and treated as per iCCM guidelines.
- If screening for COVID-19 has been implemented in settings with community transmission, community health workers delivering iCCM should be trained in national screening protocols and should know the definition of suspected cases of COVID-19, which may be based on a combination of symptoms, local epidemiology and other factors, such as an assessment of exposure risk.
- The iCCM protocol should be completed for all children, irrespective of screening result, and treatment should be initiated as per iCCM national guidelines, but ensuring that IPC precautions are used as appropriate.

iii. Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic. World Health Organization and the United Nations Children's Fund (UNICEF), 2020. Licence: CC BY-NC-SA 3.0 IGO. https://www.unicef.org/documents/community-based-health-care-outreach-campaigns-covid-19-pandemic

Alignment with Guidance on COVID-19

CHWs should adhere to a strict sickness policy and discontinue treatment services at least temporarily if they are suspected of having COVID-19.

- Train CHWs on infection prevention and control (IPC) and equip them with appropriate supplies and personal protective equipment (PPE) according to national public health guidance and protocols.
- Train CHWs on key messages on COVID-19 and provide job aids so they can effectively communicate information on prevention measures and home care management as well as mitigate the spread of misinformation and stigmatization in their communities that negatively impacts care seeking.
- Train CHWs on safe household visit procedures including appropriate IPC measures and use of mobile communication for follow-up and counselling with caregivers, if feasible. Advise CHWs to conduct critical household visits only if IPC can be maintained.
- CHWs may be reluctant to provide services. Implementers should proactively anticipate such concerns and strategize a response that empowers CHWs and enables them to safely continue providing treatment for uncomplicated wasting or to make an informed choice to discontinue treatment without penalty.

Supply Chain

- Intensify pre-positioning (with a minimum buffer stock of 2 months) of essential commodities for nutrition programming (e.g. RUTF and routine medicinal supplies) at national, health facility and community level in anticipation of supply chain disruptions.
- Quantify RUTF, medicinal supply and standard MUAC tape needs and/or develop a mechanism to periodically quantify needs based on projected caseload, presumed frequency of restocking and preferred buffer stock.
- Adapt replenishment procedures to avoid community shortages, limiting facility encounters through pre-dispensing and multi-month dispensing where supply levels permit.
- Develop targeted supply and distribution strategies for RUTF and routine medicinal supplies, assuming they may be in short supply or likely to be in high demand.
- Ensure safe and appropriate storage options are available at the community level and/or at the CHW home (e.g. provide secure storage boxes and/or engage village drug committees to oversee supply).
- Adapt supply management tools for CHWs; implement procedures for CHWs to track supplies, usage and report low stock or stock outs.
- Coordinate assessment, ordering and distribution of essential medicines, supplies (including PPE) and equipment with partners and community stakeholders.
- Coordinate assessment, ordering and distribution of essential medicines, supplies (including PPE) and equipment with partners and community stakeholders.
- Consider appropriate measures for infection prevention and control (including training) in the transport and distribution of supplies at all levels.

Implementation

Adapt Family MUAC

- Train and equip CHWs to safely teach/coach caregivers on how to assess MUAC and conduct oedema check on their own child. Advise CHWs to emphasize frequent at-home assessment by caregivers and timely care-seeking in the event of any illness or MUAC deterioration between follow-up visits.
- Whenever possible, CHWs should be supplied with sufficient MUAC tapes to give caregivers their own tape to use on children in their household and during the treatment visit. Otherwise, train CHWs on appropriate cleaning and disinfecting procedures for the MUAC tape.
- Where possible and appropriate, train and equip CHWs to ensure core data collection on caregiver MUAC measurements.

Adapt standard wasting treatment to a simplified approach

- Use a simplified admission criteria that is feasible for CHWs to admit, treat and discharge children age 6-59 months for CHW community-based treatment of uncomplicated wasting (e.g. MUAC and oedema +/++ only).[iv]
- Use a single product, RUTF, to treat uncomplicated wasting according to a simplified dosage: 2 sachets per day for uncomplicated severe wasting and 1 sachet per day for uncomplicated moderate wasting as determined by MUAC or oedema status.[v]
- Reduce the frequency of follow-up visits with CHWs to once every two weeks by increasing the take-home ration of RUTF; during full population mobility restriction, frequency may be reduced to once per month. If all life-saving health services are temporarily suspended, distribute RUTF commodities for up-to 8 weeks.
- Adapt standard MUAC tapes by pre-marking MUAC at 90mm for measurements < 90mm to trigger referral to an appropriate health facility; it is not recommended for CHWs to treat children with MUAC < 90mm in the community.
- Consider applying referral triggers for MUAC stagnation in the red MUAC color zone or regression from the yellow to red MUAC color zone in order to alert CHWs of non-response to treatment (e.g. 2 visits, or four weeks, in red MUAC zone triggers referral to appropriate health facility).

Adapt iCCM package to include treatment of uncomplicated wasting

- Deliver treatment for uncomplicated wasting in the community via iCCM community health worker platforms and/or through other existing CHW platforms able to refer caregivers and children to appropriate health facility care when necessary.
- Train CHWs on no-touch procedures to assess and refer children with any sign or symptom of severe disease (danger sign), including severe COVID-19, according to national protocol. Emphasize that CHWs will treat uncomplicated illness and/or cases of uncomplicated wasting only; any danger sign and/or complicated wasting will continue to require referral to a health facility or COVID-19 designated facility, if established as per national protocol.

[15] When barriers to providing the full continuum of care for severely and moderately wasted children, such as conflict with national protocol, commodity availability or capacity constraints, cannot be addressed, implementers should adapt the simplified treatment approach to, at minimum, ensure provision of treatment for uncomplicated severe wasting.
[16] In the absence of an adequate supply of RUTF, ready-to-use supplementary food (RUSF) can be used at the dosage recommended for RUTF for moderately wasted children or, temporarily, as a lifesaving measure, at the dosage recommended for RUTF for severely wasted children.

- Advise CHWs on appropriate, context-specific, modifications to iCCM + uncomplicated wasting treatment case management procedures. For example, if a child shows signs of illness, but has not yet deteriorated to severe disease (danger sign), CHWs may instruct caregivers to return for weekly versus bi-weekly follow-up.
- Establish two-way communication between CHWs and health facility supervisors, nutritionists and/or clinical staff so that CHWs are aware of appropriate referral points and so that facility-based providers can refer uncomplicated and/or resolved cases to the CHW to resume community-based treatment.

Monitoring

- Advise CHWs to conduct critical household visits while adhering to national guidelines, IPC and social distancing requirements in between follow-up treatment visits when there is cause for concern; for example, if a child is exhibiting poor response to wasting treatment or is sick.
- Establish two-way communication between CHWs and health facility supervisors in order to track usage and of routine medication and RUTF and anticipate demand.
- Whenever possible, CHWs should use national Ministry of Health (MoH) patient registers / or forms in order to maintain MoH required reporting procedures, admission and tracking of follow-up visits and treatment outcomes.
- If CHWs cannot be trained to use MoH monitoring tools or are not able to use them due to literacy requirements they can use the simplified tools which includes a simplified register and other job aids.
- In the absence of a dedicated community health information system, consider ways for data generated by CHW community-based treatment to be included and/or communicated through pre-defined and pre-agreed indicators used by national reporting systems.

KEY CONSIDERATIONS

Training Considerations

In-person trainings, which congregate groups of people should be temporarily suspended when they are not compliant with social/physical distancing recommendations. Existing digital health platforms may be leveraged for training, information access, and dialogue with the communities who seek services. Such platforms may help refer families to appropriate sources of health information or other social services.
Capacity building can be done through, informational content kits, FAQs and small video clips. Small video clips can be designed and circulated for easy understanding.

- Holding an ideal outreach with social distancing, handwashing and other precautionary measures in place.
- Protocols for identification of children with SAM or MAM by MUAC in the context of COVID.
- Importance of maintaining hand hygiene while conducting the session.
- Importance of maintaining social distancing at outreach session during COVID outbreak.

Training guidance and reference material to support remote training on simplified approaches in the context of COVID-19 is emerging. Resources can be found through the GNC Programmatic Adaptation Support in the Context of COVID-19 webpage. In addition, training videos on the simplified tools will be developed as a supplement to this document.

Implementers can refer to modules 1, 2 and 3 for information on family MUAC, the simplified treatment approach and step-by-step implementation guidance for CHWs as well Section 4 for a detailed description of the simplified tools.

Supervision considerations

Whenever possible, supervision should be conducted in line with supervision structures and processes recommended in national guidelines and protocols for community health workers and/or iCCM. However, implementers should conduct more frequent supervision as the approaches are rolled out. Also, in the context of COVID-19, supervisors should be targeted as early as possible to participate in on-the-job and/or small group training opportunities to learn about the simplified approaches. When mobility is restricted, implementers should consider replacing in-person supervision visits with remote supervision via direct mobile communication (phone, SMS, WhatsApp). Other options for supervisors to provide on-demand support to CHWs include setting up a phone “hotline” for answering questions and providing advice, and/or identifying a central phone line in each community (such as to another local CHW or community leader) which can be used to contact CHWs, supervisors and other health facility staff.

Innovations and best practices for supportive supervision as well as digital tools for continuous training reminders and data collection in the context of COVID-19 are emerging. Refer to the GNC Programmatic Adaptation Support in the Context of COVID-19 webpage for up to date strategies and guidance.

RESOURCES:

- Senegal COVID-19 hotline
- Nigeria COVID-19 hotline

Supply chain considerations

In the pandemic context with its associated impacts on care seeking and access, there may be an overall increased reliance on the community health workforce and increased utilization of medications and supplies at the community level. Strengthening supply chains, anticipating interruptions and preparing mitigation strategies is critical to maintaining the availability of essential medicines and supplies. Strategies should address: 1) commonly used supplies (e.g. higher volume products like RUTF) 2) any medicines or necessary products that are at risk for supply constraints due to increased demand and 3) supply and distribution mechanisms that reduce the number of visits to health facilities for replenishing supplies.

Where stock is available in the country, allocating at least one month of essential supplies at community level may help to reduce disruptions due to transportation delays. If supplies are sufficient, larger allocations can be made. When supplies are constrained, more frequent deliveries may be needed, and it will be important to have a plan to minimize exposure at health facilities or when delivering to the community-level. Options may include establishing secure pick up locations with timed appointments or secure drop off zones with access restricted to necessary personnel. For inventory management, additional flexibility may be required and where feasible, electronic systems should be used.

Existing information at national and sub-national levels of available stocks and storage capacity should inform these strategic choices, and when needed rapid assessments should be conducted electronically or by phone. Where possible, resources should be designated specifically for use by the community health workforce to ensure continuity of care.

Infection prevention and control (IPC) considerations

According to available evidence, COVID-19 is transmitted between people through close contact and droplets including by adults and children who are asymptomatic or have a mild case of the disease. Preventive and mitigation measures are therefore essential to ensure the health and wellbeing of CHWs and the community. CHWs must be appropriately trained and supported to implement IPC measures including the rational use of personal protective equipment (PPE) according to guidance established by local and national authorities and/ or recommended best practices on the prevention and control of COVID-19.[vi, vii, viii, ix]

[vi] Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected
[vii] Priorities for the Global COVID-19 Response: the Role of Community Health, Community Health Impact Coalition (CHIC)
[viii] Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19)
[ix] Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus (COVID-19) outbreak

BASIC PRINCIPLES FOR IPC BY CHWS PROVIDING TREATMENT FOR UNCOMPLICATED WASTING INCLUDE:

- Avoid any activity that attracts crowds. Adapt community-based services to ensure spatial distancing among clients (minimum 2 meters).
- Train and equip CHWs to communicate IPC measures to community members to reduce fear and stigmatization.
- Implement strict sickness policy according to national criteria; CHWs should discontinue treatment services at least temporarily if they are suspected of having COVID-19.
- If CHWs conduct household visits or provide services in his/her own house, it is advisable that CHWs identify a well-ventilated location outdoors for the consultation instead of entering the home and that they are provided with clear instructions on infection control. In scenarios where lockdowns are ordered, CHWs may be considered essential providers who are able to continue to access community members.
- Before, during and after each consultation, CHWs should practice frequent and appropriate handwashing with soap and clean water or use hand sanitizer.
- Sanitation of surfaces and equipment (thermometers, respiratory timers, MUAC tape) with alcohol or soap and water; if possible, CHWs should provide MUAC tapes to caregivers/families after instructing them on how to use them.
- Triage /screening of children using no direct contact; in the absence of PPE, utilize a no-touch policy (at minimum 1m, ideally 2m distance away) that focuses on history of symptoms and clinical observation of the malnourished child.

Photo Credit: Adriane Ohanesian

MODULE 1: COMMUNITY-LED DETECTION & REFERRAL TO CHWS FOR TREATMENT

The Family MUAC approach, also known as Mother MUAC, is a community screening strategy which trains mothers and caregivers to screen their own children for malnutrition using a MUAC tape and by checking for oedema. Neither literacy nor numeracy skills are required, yet studies have shown that caregivers are able to identify wasting according to the color zones on the standard MUAC tape as effectively as CHWs[13]. Family MUAC is implemented around the world as way to increase early detection of wasting, to minimize need for hospitalization due to medical complications and to empower families to manage their children's health.

RESOURCES:

- The Family MUAC approach
- GOAL: Family MUAC Toolkit
- GOAL: Family MUAC in the context of COVID-19- Guidance Note
- The Family MUAC approach community of practice

Family MUAC as a no-touch assessment protocol

In the context of COVID-19, trained and equipped caregivers should continue to play an active role in assessing and monitoring their children at home. Caregivers should conduct MUAC measurement and oedema checks whenever their child is unwell or has low appetite as well as closely monitor their child for general illness and COVID-19 symptoms. For children who are receiving treatment for wasting, caregivers should be instructed to conduct MUAC and oedema checks once per week and to return to the CHW within 48 hours if there is any indication of deterioration or if the child is generally unwell.

CHWs will play a critical role in coaching caregivers through the MUAC and oedema assessment process during each treatment visit and may also be tasked to provide initial training for caregivers who have not yet been formally trained on the approach. Whenever possible, CHWs should be supplied with sufficient MUAC tapes to give caregivers their own tape for use at home and during the treatment visit. Caregivers should bring their MUAC tape to each follow-up visit. Otherwise, CHWs must clean and disinfect MUAC tapes between uses.

Considerations for implementing no-touch assessment

- The caregiver/child should sit in a designated area that is 2 meters away from the CHW.
- Caregivers should bring their own MUAC tape to the treatment visit with the CHW; otherwise, CHWs should provide caregivers a MUAC tape for their household at the end of the visit.

- CHWs should explain the assessment tool (MUAC tape), process and potential outcomes (color zones, oedema and related treatment protocols) before coaching and observing caregivers take MUAC and check for oedema.
- CHWs should first demonstrate how to take MUAC and check for oedema, repeating as necessary and using a doll and/or cylinder object to demonstrate from a 2 meter distance.
- CHWs should work with the caregivers to identify the color zone and read the numeric measurement, if possible, from a 2 meter distance.
- Together with the caregiver, the CHW will interpret and discuss the result before treatment is provided.
- CHWs should emphasize frequent at-home assessment and timely care-seeking in the event of any illness or MUAC deterioration between follow-up visits as well as proper storage and care for their MAUC tape.

Considerations for scaling up the Family MUAC approach

In addition to providing CHWs a safe alternative to 'with touch' assessment during treatment visits, the family MUAC approach can increase early detection of wasting by replacing mass screening and door-to-door screening activities found in most CMAM protocols but not recommended in the context of COVID-19. A such, larger scale efforts to strengthen caregivers' capacity to use MUAC tapes by increasing training and/or distributing tapes through existing programs must be intensified as a priority action to prepare and respond to wasting in the context of COVID-19. However, successful implementation will depend on the current coverage of the family MUAC approach and/or implementers' abilities to quickly and safely scale one-on-one or small group training in their context.

For example:

- In contexts already implementing family MUAC where more than 70% of the total women of child age bearing are trained, emphasis should be placed on refresher training of all caregivers of children currently enrolled in OTP or SFP treatment. Training can be conducted during the treatment visit or during home visits by CHWs. A MUAC tape should be provided to every caregiver who does not have one for the household. Implementers should reinforce sharing information with communities on this approach.
- In contexts already implementing family MUAC where 30% to 70% of the total women of child age bearing are trained, emphasis should be placed on refresher training for CHWs and health facility staff as well as all training for caregivers of children currently enrolled in OTP or SFP treatment. Implementers should consider the feasibility of small group trainings led by CHWs in the community or one-on-one training whilst upholding IPC and social distancing measures. A MUAC tape should be provided to every caregiver who does not have one for the household. Implementers should reinforce sharing information with communities on this approach.
- In contexts where family MUAC has not yet started or has trained less than 20% of the total womenof child age bearing, emphasis should be placed on familiarizing CHWs and health facility workers with the approach and training them on how to train caregivers. Also, implementers should begin sharing information with communities on the approach. For example, prior to training activities, general information should be provided to health

workers and CHWs using communication means such as webinar, WhatsApp group, video sharing. Then, training of communities and caregivers can be conducted as explained above.

Monitoring Family MUAC

Whenever possible, data collection on process and outcome indicators of the Family MUAC approach is recommended in order to inform things like coverage of caregivers trained, quality of training provided by CHWs, accuracy achieved by trained caregivers, frequency of assessment by caregivers and to monitor supply of standard MUAC tapes. Also, where possible and appropriate, CHWs themselves should be trained and equipped to collect core data collection on caregiver MUAC measurements. For example, indicators may include:

Outcome indicators:

- Percentage of correct caregiver MUAC measurements and oedema checks referenced against CHWs' determination of the child's status. (Note, since caregivers and CHWs will be adhering to a no-touch assessment process, 'correct' will be determined from a 2 meter distance and may refer to the MUAC color zone and oedema only).
- Percentage of caregiver self-referrals presenting to the CHW which are accurate.

Output indicators:

- Number of MUAC tapes distributed.
- Number of caregivers trained to MUAC screen their children and check for oedema.
- Number of self-referrals to CHWs by caregivers bringing their children for treatment after screening at home.

Adaptations and tools and resources to scale up training and monitor the Family MUAC approach in the context of COVID-19 are emerging. Refer to the early detection and management of infant and child wasting section on the GNC Programmatic Adaptation Support in the Context of COVID-19 webpage for up to date strategies and guidance.

MODULE 2: PROTOCOL MODIFICATIONS REQUIRED TO ENABLE TREATMENT BY CHWS

The simplified treatment protocol recommended for CHW community-based treatment of uncomplicated wasting is intended to combine and simplify standard outpatient therapeutic program (OTP) and targeted supplementary feeding program (TSFP) treatment protocols with the following key modifications: children age 6-59 months are admitted, monitored and discharged on MUAC and/or oedema status only; treatment dosage is given using one treatment product (RUTF) based on MUAC or oedema status; and children are given either 2 or 1 sachets per day.[x] The protocol is based on a series of evidence-based protocols that combine and simplify standard treatment protocols and is an appropriate adaptation for CHW community-based treatment in the context of COVID-19. The simplified treatment protocol does not require CHWs to measure height, weigh children or interpret RUTF dosage tables in order to provide a treatment dosage to meet estimated energy requirements.[14]

Similar to standard OTP and TSFP treatment protocols, children with a red MUAC <115mm and/or bipedal oedema (+/++) receive amoxicillin during admission and all children receive albendazole during the second visit. No other routine medication is provided on subsequent visits. However, if wasting treatment is delivered through the iCCM platform, CHWs may also give medications for iCCM illnesses (e.g. paracetamol, malaria treatment) as per clinical indication defined in national iCCM protocol.

Implementers should adapt discharge and referral criteria in the simplified treatment protocol below according to national CMAM guidelines and/ or based on program constraints in the context of COVID-19, including availability of RUTF, caseload, capacity of the CHWs providing treatment and accessibility to referral health facilities.

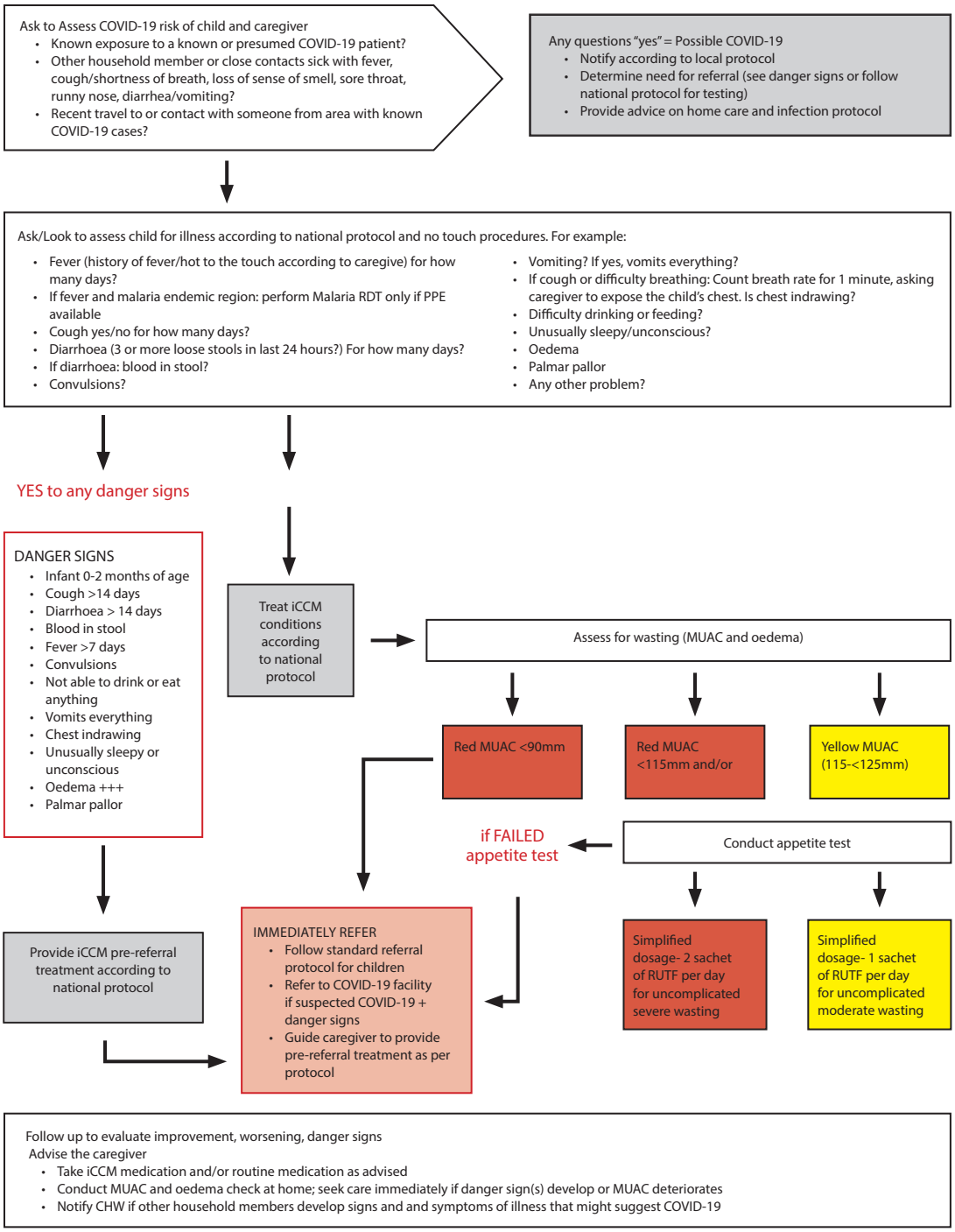
Implementers can refer to the community of practice on Simplified Approaches for the Management of Acute Malnutrition on EN-NET to request additional support on appropriate modifications to the simplified treatment protocol.

[x] In the absence of an adequate supply of RUTF, ready-to-use supplementary food (RUSF) can be used at the dosage recommended for RUTF for moderately wasted children or, temporarily, as a lifesaving measure, at the dosage recommended for RUTF for severely wasted children.

CHW COMMUNITY-BASED SIMPLIFIED TREATMENT PROTOCOL		
ADMISSION CRITERIA	Red or yellow MUAC (90 to <125mm) AND/OR bipedal oedema (+/++) AND clinically uncomplicated (i.e. passes appetite test, no Integrated Management of Childhood Illness (IMCI) danger signs/ no serious medical complications) Note: It is not recommended for CHWs to treat extremely wasted children in the community. MUAC < 90mm and/or oedema +++ should trigger referral to appropriate referral health facility or stabilization center	
TREATMENT FREQUENCY	Every 14 days Note: CHWs should also emphasize weekly at-home MUAC and oedema assessment and timely care-seeking in the event of any MUAC deterioration or illness that occurs between scheduled follow-up visits.	
DOSAGE	Red MUAC (90 - <115mm and/or bipedal oedema (+/++)): 2 sachets RUTF /day (1000 kcal/day)	Yellow MUAC (115 to <125mm): 1 sachet RUTF/day (500 kcal/day)
TRANSITION FROM 2 TO 1 RUTF (or per national protocol):	Two consecutive measurements at or above 115mm and no oedema	
DISCHARGE CRITERIA (or per national protocol)	cured	Green MUAC (≥125mm) for 2 consecutive measurements and no oedema
	default	Absent for 2 consecutive visits
	non-recovered	Has not achieved discharge criteria within 8 visits (16 weeks)
DISCHARGE PROCEDURES	Discharge ration of 7 RUTF sachets based on supply availability Counselling on at-home MUAC and oedema assessment, danger signs and care-seeking, key COVID-19 messages and other health education as appropriate.	
ROUTINE MEDICAL TREATMENT (or per national protocol)	For children with red MUAC (90 - <115mm and/or bipedal oedema (+/++) on admission): ▪ Amoxicillin: Give first dose on admission and then give remainder to caregiver with instructions to give twice daily for 7 days - 6-11 months: 250mg - 12-59 months: 500mg For children with red or yellow MUAC (90 - <125mm and/or bipedal oedema (+/++) on admission): ▪ Deworming: one dose (albendazole) on the second visit (children >1 year) - 12-23 months: 200mg - 24-59 months: 400mg	

Assessment and treatment for uncomplicated wasting by CHWs

CHWs will provide treatment for uncomplicated wasting taking into account COVID-19 risk assessment, danger sign and nutrition assessment using a 'no-touch' policy and additional referral triggers (e.g. MUAC ≤90mm, failed appetite test). For treatment delivered through iCCM platforms, implementers should consult national iCCM protocols to ensure optimal integration/adaptation of CHW community-based treatment of uncomplicated wasting. Examples of integrated decision-making are provided in the step by step guidance in module 3, but should not be considered comprehensive.



Procedures and frequency of assessment during treatment for uncomplicated wasting

CHWs and caregivers will work together to safely assess children for uncomplicated wasting using a no-touch approach. CHWs will provide treatment and counseling from a 2 meter distance and/or in adherence to national guidance on IPC and the use of PPE; Caregivers will conduct MUAC and oedema check at home and seek care immediately if danger sign(s) develop of MUAC deteriorates. The following procedures are described in detail in Module 3: Step-by-step guidance for CHW community-based treatment for uncomplicated wasting.

STEP	PROVIDER	PROCEDURE	FREQUENCY
1	CHW	Become acquainted with caregiver and child in the context of COVID-19	Every treatment visit
2	CHW	Assess for presence/ exposure to COVID-19	Every treatment visit
3	CHW	Assess for Integrated Management of Childhood Illness (IMCI) danger signs using 'no-touch' assessment	Every treatment visit
4	caregiver	Conduct oedema (+/++) check	Every treatment visit
4	caregiver, observed by CHW	Conduct MUAC assessment	Every treatment visit
5	caregiver, observed by CHW	Conduct appetite test	First (admission) visit and upon request of CHW if caregiver reports low appetite at home
6	CHW	Calculate and provide bi-weekly dosage of RUTF	Every treatment visit
7	CHW	Fill in patient register	Every treatment visit
8	CHW	Provide routine medical treatment	According to national protocol
9	CHW	Provision of health and nutrition education, including key RUTF feeding messages and key COVID-19 messages	Every treatment visit
OTHER PROCEDURES			
	CHW	Home visit	According to national protocol and/or when there is cause for concern
	caregiver	Conduct MUAC assessment and odema check	Weekly at home

MODULE 3: STEP-BY-STEP GUIDANCE FOR CHW COMUNITY-BASED TREATMENT OF UNCOMPLICATED WASTING

The CHW simplified toolkit

A simplified toolkit has been developed to support CHWs provide treatment for uncomplicated wasting and conduct patient tracking on a simplified treatment register. The toolkit consists of:

1. Simplified treatment register (SAM register, MAM register or combined register)
2. Dosage calculator job aid
3. Age and medication calculator job aid
4. Illustrated assessment and treatment process job aid
5. RUTF feeding messages job aid

The simplified toolkit is described in detail in Module 4: The CHW simplified toolkit. It can be deployed in part or full depending on implementers' preference and CHW capacity. In particular, it is recommended to use the simplified treatment register as a substitute for typical MoH monitoring tools (e.g. OTP/TSFP patient register, forms) for treatment if CHWs have not received adequate training on them and/or when CHWs do not have the experience or capacity to navigate them. The simplified patient register can also be used by low-literate CHWs.

The simplified tools are available in English and French; some tools can be modified for other languages by updating fillable fields before printing.

Training videos are available to familiarize implementers with the CHW simplified toolkit including how to use the simplified treatment registers and interpret the various pictorial icons as well as how to use the age and medication calculator job aid. These videos and the State of Acute Malnutrition website https://www.acutemalnutrition.org/en/Simplified-Tools-Covid

Step-by-Step Guidance

On Admission

STEP 1 | **CHW TO BECOME ACQUAINTED WITH CAREGIVER AND CHILD IN THE CONTEXT OF COVID-19**

CHWs should acquaint themselves with caregivers, taking the time to explain the IPC measures they will use during assessment (e.g. PPE used, social distance, no-touch Family MUAC protocol), the simplified treatment their child will receive if they qualify and any additional steps / treatments which may be given (e.g. other treatment as part of the iCCM package).

EXAMPLE:

- Greet the caregiver and ask name of child
- CHW, caregiver and child to wash their hands using soap and clean water or hand sanitizer before the consultation
- Ask caregiver the reason for the visit (e.g. Family MUAC self-referral, other illness)
- Ask the age of the child (child must be 6-59 months)
- Ask if they have been referred from the health facility to receive or continue wasting treatment
- If the child is meant to continue treatment, determine what follow-up week the child is on

STEP 2 CHW TO ASSESS FOR PRESENCE OR EXPOSURE TO COVID-19

CHWs should assess all caregivers and children to determine if they are a suspect or probable case of COVID-19 according to national guidance on the case definition for COVID-19. Even if they are not deemed suspected cases, timely care-seeking should be emphasized, as the symptoms of COVID-19 are non-specific and similar to those of common illnesses such as cough, fever and diarrhea.

RESOURCES:

- UNICEF — Community-based healthcare, including outreach and campaigns, in the context of the COVID-19 pandemic.
- World Health Organization guidance on case definition for COVID-19
- UNICEF – Social stigma associated with COVID-19

EXAMPLE:

To assess COVID-19 risk of child and caregiver:

- Exhibit mild or moderate symptoms according to the case definition used?
- Known exposure to a known or presumed COVID-19 patient?
- Other household members or close contacts sick with fever, cough/shortness of breath, loss of sense of smell, sore throat, runny nose, diarrhea or vomiting?
- Recent travel or contact with someone from area with known COVID-19 cases?

DECISION	
If YES → possible COVID-19 → CONTINUE ▪ Determine need for referral (see IMCI danger signs Step 3 or follow national protocol for testing) ▪ Notify according to local protocol, if applicable	**If NO → CONTINUE**

STEP 3 — CHW TO ASSESS FOR INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS (IMCI) DANGER SIGNS USING A 'NO-TOUCH' APPROACH

Danger signs must be ruled out before CHWs can treat children for wasting as illness associated with a general danger sign indicates a medical complication(s) which may require urgent treatment or referral to inpatient care. Also, any child who is suspected COVID-19 with a danger sign(s) should be referred to the health facility or COVID-19 designated facility, if established according to national guidance. CHWs will assess for general danger signs on admission and on every subsequent visit.

In the context of COVID-19, assessment will be conducted using a 'no-touch' approach. CHWs will ask the caregiver medical history and observe the child for signs of medical complications. Observation procedures will include the caregiver removing or lifting up their child's clothing for easier observation of signs such as difficulty breathing or rashes.

RESOURCE:

- UNICEF — Community-based healthcare, including outreach and campaigns, in the context of the COVID-19 pandemic.

EXAMPLE:

Adapted/according to national protocol:

ASK

- Cough for 14 or more days
- Diarrhea for 14 days or blood in stool
- Fever for 7 or more days
- Convulsions
- Unable to breastfeed or drink
- Vomits everything

LOOK

- Chest in-drawing (caregiver to lift child's shirt)
- Unconscious or abnormally sleepy
- Palmar pallor

If CHWs provide iCCM treatment

Count breath rate per minute
In malaria endemic region, follow national protocol

DECISION (CHW DOES NOT PROVIDE ICCM TREATMENTS)

If YES → refer	**If NO → CONTINUE**

DECISION (CHW PROVIDES ICCM TREATMENTS)

If YES → provide pre-referral treatment according to national protocol → **REFER**	If NO + iCCM illness identified → provide treatment according to national protocol → **CONTINUE** If NO + no iCCM illness → **CONTINUE**

STEP 4

CHW TO ASSESS FOR PRESENCE OF WASTING BY INSTRUCTING CAREGIVER TO PERFORM MUAC MEASUREMENT AND CHECK FOR BIPEDAL OEDEMA (+/++).

CHWs will continue to adhere to a 'no-touch' assessment approach by demonstrating and/or observing the caregiver assess their own child's MUAC from a safe distance (2 m), using their own MUAC tape. CHWs will also demonstrate and observe caregivers assess for bipedal odema (+/++). CHWs will determine the MUAC color zone and the numeric MUAC measurement, if feasible, as well as oedema status. CHWs should work with the caregivers to identify the color zone and read the numeric measurement from a 2 m distance. The CHW and caregiver will interpret and discuss the result before treatment is provided.

RESOURCES:

- The Family MUAC approach
- Checking for oedema (+,++,+++)

TOOL:

- Standard MUAC tape marked at 90 mm (preferably belonging to the caregiver, or disinfected by the CHW between use)

EXAMPLE:

If caregiver has NOT received training on MUAC measurement:	**If caregiver has received training on MUAC measurement:**
▪ CHW to explain MUAC tape to caregiver, including the implications for treatment according to the color zones and/or presence of oedema ▪ CHW to demonstrate taking MUAC ▪ CHW to demonstrate checking for bipedal oedema ▪ CHW to oversee caregiver perform MUAC and oedema check ▪ Provide positive coaching as necessary ▪ CHW to identify MUAC color zone and numeric measurement from a safe distance	▪ CHW to demonstrate checking for bipedal oedema ▪ CHW to oversee caregiver perform MUAC and oedema check, ▪ Provide positive coaching as necessary ▪ CHW to identify MUAC color zone and numeric measurement from a safe distance

DECISION
If MUAC < 90mm or oedema +++ ➡ REFER
If MUAC ≥ 125mm, no oedema + no danger signs + no suspected COVID-19 ➡ STOP and encourage caregiver, the child does not need treatment
If MUAC ≥ 125mm, no oedema + suspected COVID-19 ➡ STOP and encourage caregiver, the child is well nourished + provide guidance for supportive care, fever management and IPC according to the national protocol
If MUAC 115mm to <125mm or bipedal oedema (+/++) ➡ CONTINUE

STEP 5 CHW TO CONDUCT APPETITE TEST

In addition to being examined for medical complications (Step 3), children who are identified as having a MUAC 90 - <115mm or bipedal oedema must show they have an appetite. Only children who are determined clinically well and alert (pass general danger sign assessment) AND have appetite (pass the appetite test) can be treated for wasting by the CHW. Poor appetite indicates that a child may have a significant infection or metabolic abnormality requiring admission to an inpatient facility. Also, a child with poor appetite is unlikely to take the amount of RUTF given to them.

CHWs must give all children with red MUAC (MUAC 90 - <115mm) or bipedal oedema (+/++) an appetite test on admission to find out whether they can eat RUTF, and may administer additional appetite tests during subsequent treatment visits if there is reason to believe the child does not have a good appetite. If a child does not pass the appetite test, it is critical that the CHW refer them to an appropriate health facility for medical complications or stabilization center for complicated wasting.

RESOURCES:

- How to Give an Appetite Test (Linked material to the NACS User's Guide Module 4)
- VIDEO: Appetite testing techniques

EXAMPLE:

- Ask the caregiver and child to wash their hands with soap and water
- Take the caregiver and child to a quiet, private and ventilated area
- Give caregiver a sachet of RUTF and show how to open it and eat it from the packet
- Do not force the child to eat the RUTF, children may need gentle encouragement to eat, especially if they are sick
- Using the caregiver's own cup, offer plenty of safe and clean drinking water to the child while eating the RUTF
- Watch to see how much the child eats at least 1/3 of the sachet (or ask the caregiver to give it to the child and watch how much the child eats); the test should take a short time, but may take up to 30 minutes

DECISION

If child does not eat 1/3 of the sachet, they have failed appetite test ➡ **REFER**

If child eats 1/3 of the sachet, they have passed the appetite test ➡ **CONTINUE**

STEP 6 CHW TO CALCULATE BI-WEEKLY (2-WEEK) DOSAGE OF RUTF

According to the simplified treatment protocol, children will receive a dosage of 2 or 1 sachets of RUTF per day, based on their MUAC or oedema status. In the context of COVID-19 it is recommended to provide all children a 2-week ration in order to reduce the frequency of follow-up. To assist accurate calculation of the bi-weekly dosage, CHWs can use the simplified treatment dosage calculator job aid, or any similar locally made counting aid, to pile sachets for 14 days or 7 days, twice.

RESOURCE:

- Simplified treatment protocol

TOOL:

- CHW simplified treatment dosage calculator job aid

EXAMPLE:

RED MUAC

90 - <115mm and/or oedema (+/++)
2 sachets RUTF/day

YELLOW MUAC

115 to <125mm
1 sachet RUTF/day

SCENARIO:

If child has red MUAC of 110mm ➡ CHW will give 2 sachets of RUTF per day for 14 days or 28 sachets total

If child has yellow MUAC of 120mm ➡ CHW will give child 1 sachet of RUTF per day for 14 days or 14 sachets total

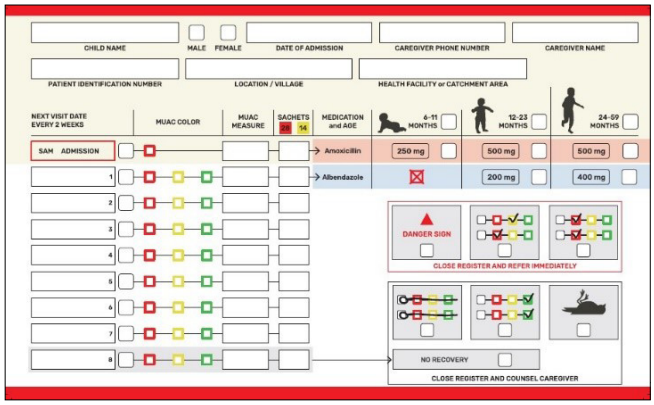
STEP 7 CHW TO FILL IN PATIENT REGISTER, INCLUDING IDENTIFYING INFORMATION AND ADMISSION TREATMENT PROVIDED

Whenever possible, CHWs should use MoH patient registers or forms to maintain MoH required reporting procedures, including assignment of patient IDs, admission and tracking of follow-up visits (even if frequency is modified) and treatment outcomes. However if CHWs cannot be trained to use MoH monitoring tools or are not able to use them due to literacy requirements they can use the simplified register.

In the context of COVID-19, CHWs should request a mobile phone contact number from the caregiver, if available, in order to conduct remote follow-up as they are able.

TOOL: Patient register (MoH or CHW simplified register)

EXAMPLE:



CHWs will open a new page for each child upon admission. During admission, CHWs will record identifying information of the caregiver and child (name, patient ID, age, sex, location, phone number) as well as the routine medication, MUAC status and RUTF treatments given (Step 6, 8, 11). CHWs will refer back to the child's individual page to record their treatment for every subsequent visit including discharge criteria or referral made.

STEP 8

CHW TO PROVIDE AMOXICILLIN FOR CHILDREN ADMITTED ON MUAC 90 - <115MM AND/OR OEDEMA AND COMPLETE PATIENT RECORD FOR ADMISSION IN THE PATIENT REGISTER

In contexts where CHWs are allowed to provide routine medication, CHWs will give amoxicillin to children who are admitted on MUAC 90 - <115 mm and/or who have oedema according to the child's age. CHWs will provide the first dose during the treatment visit and instruct caregivers on how to give the remaining doses at home.

In contexts where children are admitted for treatment at the health facility level and transitioned to the CHW for follow-up visits, CHWs will fill in identifying information on the register and provide RUTF only if the child has not received any from the health facility and passes an appetite test. Otherwise, CHWs should conduct the treatment visit as a follow-up visit.

If using the simplified register, CHWs will complete the patient record by filling in date of admission, selecting MUAC color and entering numeric value, number of sachets and dosage of amoxicillin provided.

RESOURCE: Simplified treatment protocol

TOOL: Patient register (MoH or CHW simplified register)

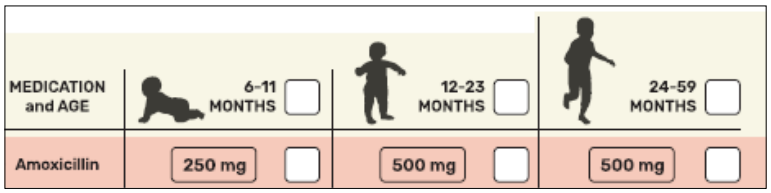
EXAMPLE:

6-11 months 250mg amoxicillin	12-23 months 500mg amoxicillin	24-59 months 500mg amoxicillin

SCENARIO:

- If child is 6-11 months à CHW will give 1 amoxicillin pill (250mg) during the treatment visit and instruct the caregiver to give one pill in the morning and one in the evening for 5 days.
- If child is 12-59 months à CHW will give 2 amoxicillin pills (250mg) during the treatment visit and instruct the caregiver to give two pill in the morning and two in the evening for 5 days.

SIMPLIFIED REGISTER ICONS:



STEP 9 CHW TO PROVIDE RUTF FEEDING INSTRUCTIONS AND KEY COVID-19 MESSAGES TO CAREGIVER

CHWs will share RUTF feeding instructions as well as other important messages on COVID-19 patient care and infection prevention before the end of the treatment visit.

RESOURCES:

- Key Messages for Individual Counselling for Caregivers of Children 6-59 months in Outpatient care, p.145
- Home care for patients with COVID-19 presenting with mild symptoms

EXAMPLE:

RUTF FEEDING MESSAGES:

- Wash your and your child's hands frequently during the day. Use alcohol-based hand sanitizer or a diluted chlorine solution if you can.
- Before giving RUTF, breastfeed your child.
- RUTF is a medicine for your child. It should not be shared.
- Malnourished children are often sick and do not like to eat. Give small regular meals of RUTF and encourage the child to eat often but do not force them to eat. Your child should have (2 or 1) sachets a day.
- Always offer the child plenty of safe and clean water to drink or breast milk while he or she is eating RUTF.
- Mothers should continue breastfeeding, taking care to wash and disinfect hands before and after breastfeeding and wear a mask during breastfeeding if you have cough, fever and shortness of breath.
- Do NOT put masks on young children
- Especially if someone in the house is sick, clean and disinfect routinely-used surfaces and feeding utensils before and after handling

COVID-19 MESSAGES (modify according to national guidance on COVID-19):

- As soon as a household member shows signs of possibly having the illness, they need to self-isolate and remain isolated for 14 days.
- Individuals are most contagious when they start showing symptoms.
- If possible, sick family members should wear a surgical or cloth mask when near other family members, unless they are having difficulty breathing while wearing a mask.
- Caregivers should maintain social distance as much as possible when caring for their sick family member, wearing a surgical or cloth mask.
- If sick family members develop shortness of breath or experience respiratory distress, they need to go to a health facility. If they are having respiratory difficulty, should be put in prone position, lying flat on their stomach
- If possible, daily movement is important in order to prevent clotting. However, there should not be too much movement as it will exert the patient
- Sick individuals should drink enough safe clean water to stay hydrated, but not to overhydrate as this could be bad for the lungs
- Caregivers should ensure that sick family members continue to eat. They should eat soft foods like porridge.
- Mothers should continue breastfeeding even if she or the infant become sick with suspected or confirmed COIVD-19 or any other illness.
- Any information from the MoH such as how to notify or where to seek support (e.g. hotline to call for support, appropriate referral health facility etc.).

STEP 10 CHW TO PROVIDE FOLLOW-UP VISIT INSTRUCTIONS TO CAREGIVER

Before the end of the treatment visit CHWs should reiterate key messages about the treatment being provided and COVID-19 infection prevention messages as well as answer any questions from the caregiver. CHWs may re-observe caregivers taking MUAC to ensure that they are comfortable with the measurement steps and should remind caregivers to conduct weekly MUAC screenings and to notify the CHW if their child's health deteriorates.

RESOURCE:

- Home care for patients with COVID-19 presenting with mild symptoms

Follow-up visits

Repeat: When the caregiver and child return for follow-up assessment and treatment, CHWs will identify the child's patient record in the MoH patient register or page in the simplified treatment register and conduct the treatment visit according to Step 1 to Step 6 of the Admission visit. Then, CHWs will provide routine medication according to Step11.

STEP 11 CHW TO PROVIDE ALBENDAZOLE FOR CHILDREN 12-59 MONTHS ADMITTED FOR TREATMENT AND COMPLETE PATIENT RECORD FOR VISIT 2 ON THE SIMPLIFIED TREATMENT REGISTER

In contexts where CHWs are allowed to provide routine medication, CHWs will give albendazole to children 12-59 months who were admitted for treatment according to the child's age. CHWs will provide the full dose during the treatment visit.

If using the simplified register, CHWs will also complete the Visit 1 patient record by filling in visit date, selecting MUAC color and entering numeric value, number of sachets and dosage of albendazole provided. If the child does not return for the follow-up visit, CHWs should strike through a complete MUAC line on the simplified register to denote a missed visit.

RESOURCE: Simplified treatment protocol

TOOL: Patient register (MoH or CHW simplified register)

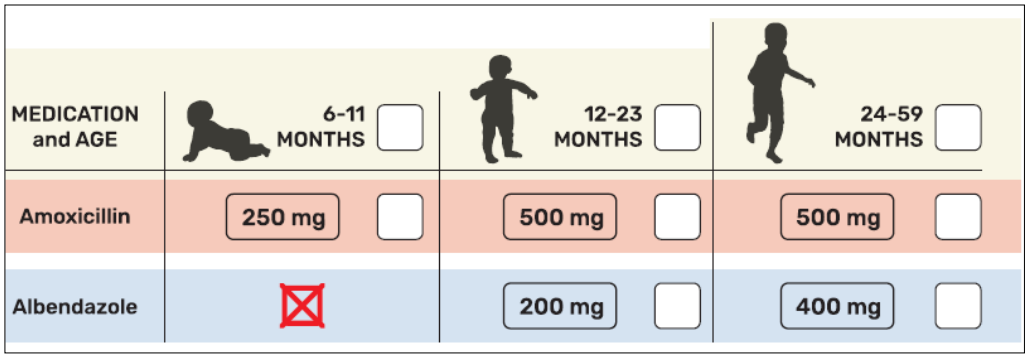
EXAMPLE:

12-23 months 200mg albendazole	24-59 months 400mg albendazole

SCENARIO:

- If child is 12-23 months à CHW will give a half of 1 albendazole pill during the treatment
- If child is 24-59 months à CHW will give 1 full albendazole pill during the treatment visit

SIMPLIFIED REGISTER ICONS:



Repeat: CHW to conduct the remainder of the treatment visit according to **step 9 to step 10.**

Follow-up (all subsequent visits)

When the caregiver and child returns for follow-up assessment and treatment CHWs will, again, assess for danger signs, MUAC and oedema and provide treatment until the child has reached a discharge criteria: cured, default, non-recovered, death (as per national protocol) or the child is referred to an appropriate health facility for medical complications or stabilization center for complicated wasting . CHWs will identify the child's patient record in the MoH patient register or page in the simplified treatment register and conduct the remainder of the treatment visits, up to 8 visits (16 weeks) according to step 1 to step 10, excluding the provision of amoxicillin in Step 8.

For children who are admitted on MUAC 90 - <115mm or bipedal oedema (+/++), CHWs will reduce the daily ration from 2 to 1 sachets after the child has achieved two consecutive visits (4 weeks) with MUAC ≥115mm and no oedema. Implementers may choose to adapt the transition ration based on supply availability or national protocol.

RESOURCE: Simplified treatment protocol

EXAMPLE:

CORRECT DOSAGE

VISIT	MUAC	SACHETS
Admission	112	28
2	114	28
3	115	28
4	117	28
5	120	14

INCORRECT DOSAGE

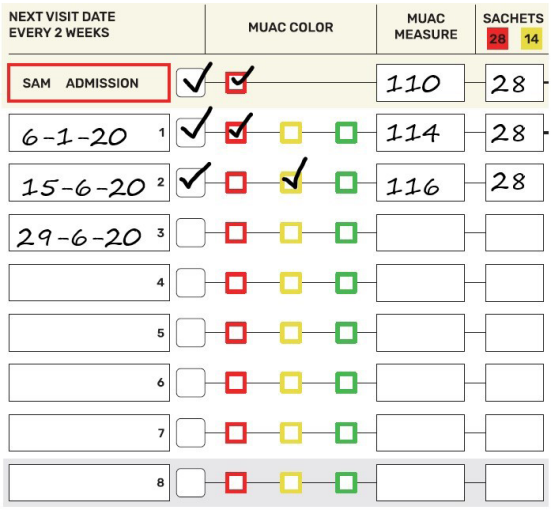
VISIT	MUAC	SACHETS
Admission	112	28
2	114	28
3	115	14
4	117	14
5	120	14

Repeat: CHW to record follow-up visit anthropometry, RUTF dosage given and any additional information required by patient registers /or forms on a bi-weekly basis.

If using the simplified register, CHWs will record every visit by filling in visit date, selecting MUAC color and entering numeric value and number of sachets provided. If the child does not return for the follow-up visit, CHWs should strike through a complete MUAC line on the simplified register to denote a missed visit.

TOOL: Patient register (MoH or CHW simplified register)

EXAMPLE:



CHWs will refer back to the child's individual page in the simplified treatment register to record visit date, MUAC color, numeric MUAC measure and number of sachets provided during every (bi-weekly) subsequent treatment visit until the child is discharged or referred from community-based treatment.

Critical household visits

According to the key program recommendations in this toolkit, implementers should consider training and equipping CHWs to safely conduct critical household visits according to national protocol and/or when CHWs are concerned for the child's health during the course of community based treatment. In particular, if a child presents to the CHW having an illness, low appetite or appears unwell but has not yet deteriorated to the threshold of a 'danger sign', CHWs should not wait for the next bi-weekly treatment visit to reassess the child. Advise CHWs to conduct critical household visits while adhering to national guidelines, IPC and social distancing requirements in between follow-up treatment visits.

RESOURCE: UNICEF — Community-based healthcare, including outreach and campaigns, in the context of the COVID-19 pandemic.

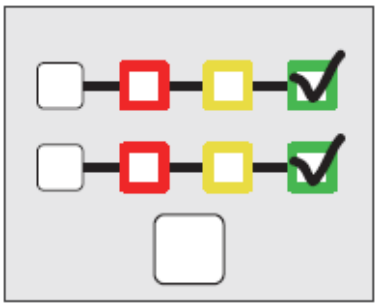
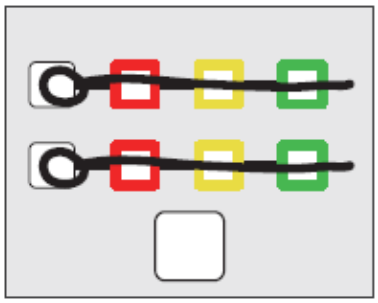
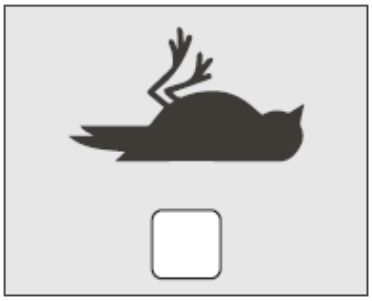
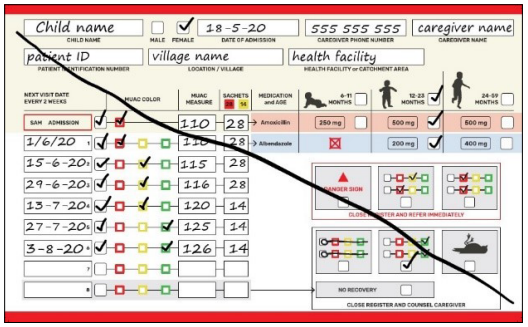
Discharge criteria

According to the simplified treatment protocol, patients will be discharged from treatment when one of the following discharge criteria is met: cured, default, non-recovered, death. Discharge criteria for CHW community based treatment should be adapted from national protocol criteria for default and non-recovery whenever possible or align with the simplified treatment protocol.

If using the simplified register, CHWs will record the discharge outcome on the patient register page by selecting the appropriate icon or marking as non-recovered on the last treatment visit. When a child has met a discharge outcome the CHW will also strike through the entire register page as indication that the child will not return for treatment. If the child requires treatment for uncomplicated wasting after they have been discharged, CHWs will open a new register page and enroll the child as a new patient.

RESOURCE: Simplified treatment protocol
TOOL: Patient register (MoH or CHW simplified register)

EXAMPLE:

	**Cured:** MUAC ≥ 125mm for 2 consecutive visits and no oedema Once recovered, CHW should counsel the caregiver by sharing supportive and encouraging messages acknowledging the child's recovery and the important role they played. The CHW should also reinforce breastfeeding, appropriate complementary feeding and regular MUAC and oedema assessment at home.
	**Default:** Absent for 2 consecutive visits Defaulter tracing procedures should be adapted from national protocol and/or implementer guidance.
	**Death:** child has died If the child dies during treatment, the CHW should notify their supervisor according to national protocol and/or implementer guidance.
	**Non-recovered:** child has not achieved discharge criteria within 16 weeks If the child does not recover, counsel the caregiver and recommend referral to the health facility according to national protocol and/or implementer guidance.
	Register page is closed after the child is discharged.

Referral criteria

In addition to adhering to national protocols to refer children with danger signs and/or danger signs + suspected COVID-19 or failed appetite test to the health facility, implementers should consider applying additional referral triggers to ensure that CHWs do not unknowingly prolong treatment of complicated cases of wasting at the community level. For example, MUAC deterioration or stagnation may indicate the presence of co-morbidities which are not easily identified by 'no-touch' danger sign assessment procedures. Additional recommended referral triggers include:

- Referral for MUAC stagnation: particularly in the red MUAC 90 - < 115 zone, if the CHW detects that MUAC has not increased at all within 2 visits (i.e. 4 weeks on a bi-weekly follow-up schedule), the child may require additional medical investigation.
- Referral for MUAC regression: particularly in the red MUAC 90 - <115 zone, if the CHW detects that MUAC has decreased from the previous visit, the child may require additional medical investigation.

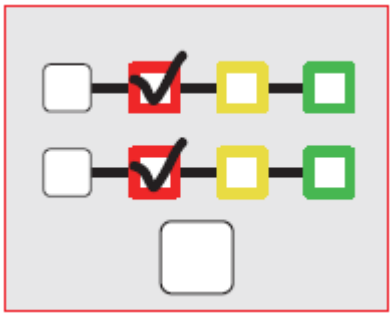
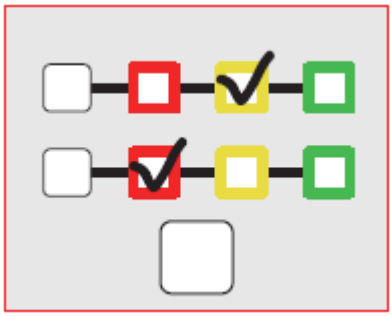
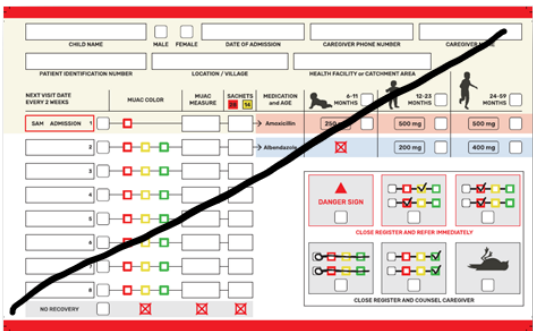
If using the simplified register, CHWs will record the reason for referral on the patient register page by selecting the appropriate icon (general danger sign, MUAC stagnation, or MUAC regression). When a child is referred, the CHW will also strike through the entire register page as indication that the child will not return for treatment. If it is a challenge for CHWs to accurately read MUAC measurements, whether due to literacy requirements, ability of caregivers to conduct assessment and/or difficulty reading from a 2 meter distance, implementers should institute the following referral triggers based on MUAC color zone:

- **Referral for MUAC stagnation:** If the CHW detects that red MUAC has not increased at all within 2 visits (i.e. 4 weeks on a bi-weekly follow-up schedule), the child may require additional medical investigation.
- **Referral for MUAC regression:** If the CHW detects that MUAC has deteriorated from red to the pre-marked MUAC < 90mm or from yellow to red from the previous visit, the child may require additional medical investigation.

In the context of widespread transmission of COVID-19, implementers should weigh the risk of prolonged treatment for wasting by a CHW versus the risk of exposure and transmission of COVID-19 to caregivers and children if required to go to the health facility. For example, though MUAC deterioration or stagnation indicates a potentially dangerous non-response to treatment, implementers could consider strategies to conduct interim follow-up, additional counseling and/or get a second opinion from a supervisor or clinician on a case by case basis as they are able.

RESOURCE: Simplified treatment protocol
TOOL: Patient register (MoH or CHW simplified register)

EXAMPLE:

	**Referral:** Child has been referred to the health facility or stabilization center for stagnation in the red MUAC zone (e.g. for 2 consecutive visits or other criteria adapted from national protocol or implementer guidance).
	**Referral:** Child has been referred to the health facility or stabilization center for MUAC regression (e.g. from yellow to red color zone or other criteria adapted from national protocol or implementer guidance).
	**Referral:** Child has been referred to the health facility or stabilization center for a danger sign or other criteria established by the implementer.
	Register page is closed after the child is referred.

MODULE 4:
THE CHW SIMPLIFIED TOOLKIT

The simplified toolkit for community-based treatment of uncomplicated wasting has been contextualized and tested in South Sudan, Nigeria, Malawi, and Kenya.[15] The toolkit accommodates literate and low-literate providers by enabling CHWs to assess children based on MUAC color zones or numeric measurement as well as track patient treatment status and outcomes using an icon-based patient register.

Training videos are available to familiarize implementers with the CHW simplified toolkit including how to use the simplified treatment registers and interpret the various pictorial icons as well as how to use the age and medication calculator job aid.

These videos and print files are posted on the State of Acute Malnutrition website at https://www.acutemalnutrition.org/en/Simplified-Tools-Covid

Standard MUAC tape

CHWs will use a standard MUAC tape to train or demonstrate and observe caregivers assess their child's MUAC status. CHWs should provide MUAC tapes to caregivers/families after instructing them on how to use them. Importantly, if MUAC tapes have to be re-used they should be sanitized after each use with alcohol or soap and water.

The standard MUAC tape should be pre-marked at the 90mm line so that MUAC < 90mm triggers referral to an appropriate health facility or stabilization center. It is not recommended for CHWs to treat children with MUAC < 90mm in the community.

Simplified treatment register

The simplified treatment register can be used by CHWs to document caregiver and child information, admission and subsequent visit dates, MUAC reading (color and numeric), dosage of RUTF given, routine medication provided and the discharge outcome. The register also includes a section to remind CHWs of key referral criteria as well as to record when a critical referral is made.

Implementers will have the option of instituting an individual or combined register system to admit children and track follow-up. Either, CHWs can use separate registers to admit children on MUAC 90 - < 115 or oedema +/++ and MUAC 115 to <125, or they can use one register which accommodates both admission criteria. However, to avoid confusion, patient tracking should be completed on the same register page (and register) from admission through discharge; CHWs should not transfer a child's patient record from one register to another.

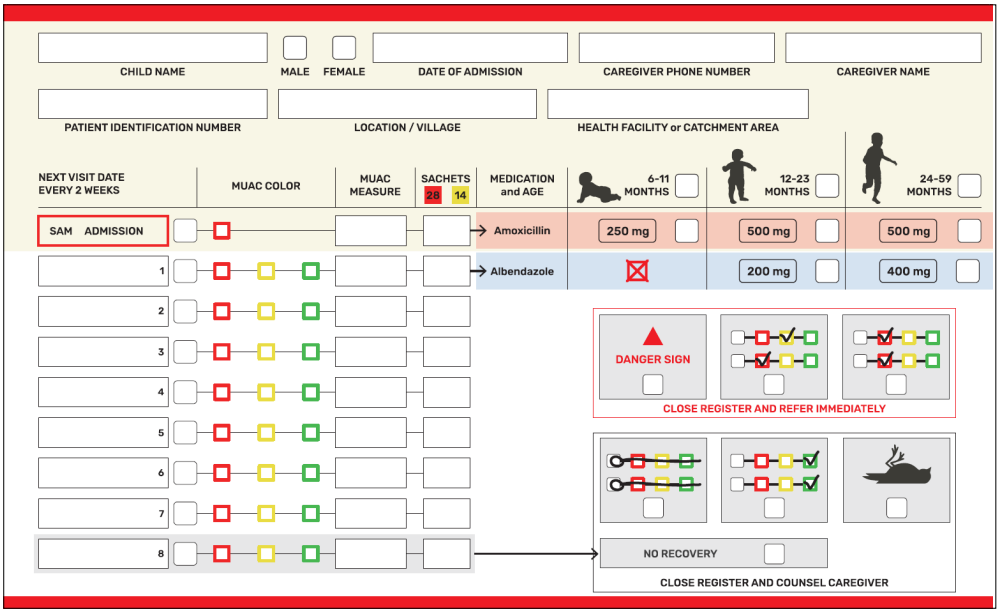
An individual register system (SAM or MAM) may be appropriate if:

- CHWs are trained and equipped to treat SAM only or MAM only
- Implementers wish to keep SAM and MAM records completely separate
- CHWs are lower capacity and/or may find it difficult to differentiate two admission procedures on the same register

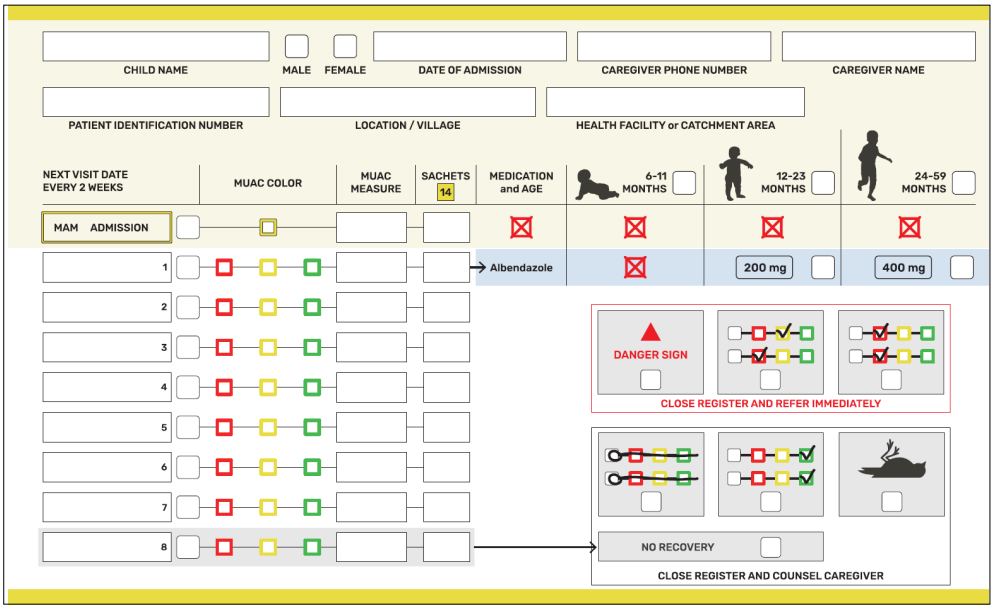
A combined register system (SAM and MAM) may be appropriate if:

- Implementers need to limit printing production to one register
- CHWs are high capacity and/or will have no difficulty differentiating two admission procedures on the same register

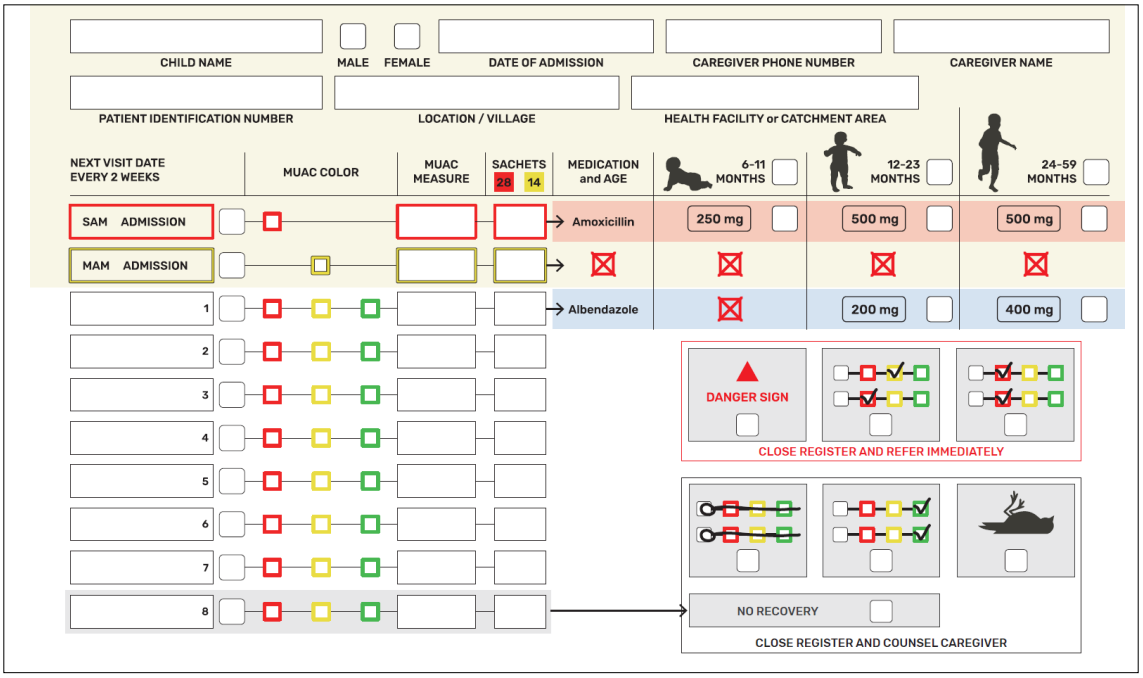
SAM treatment register



MAM treatment register

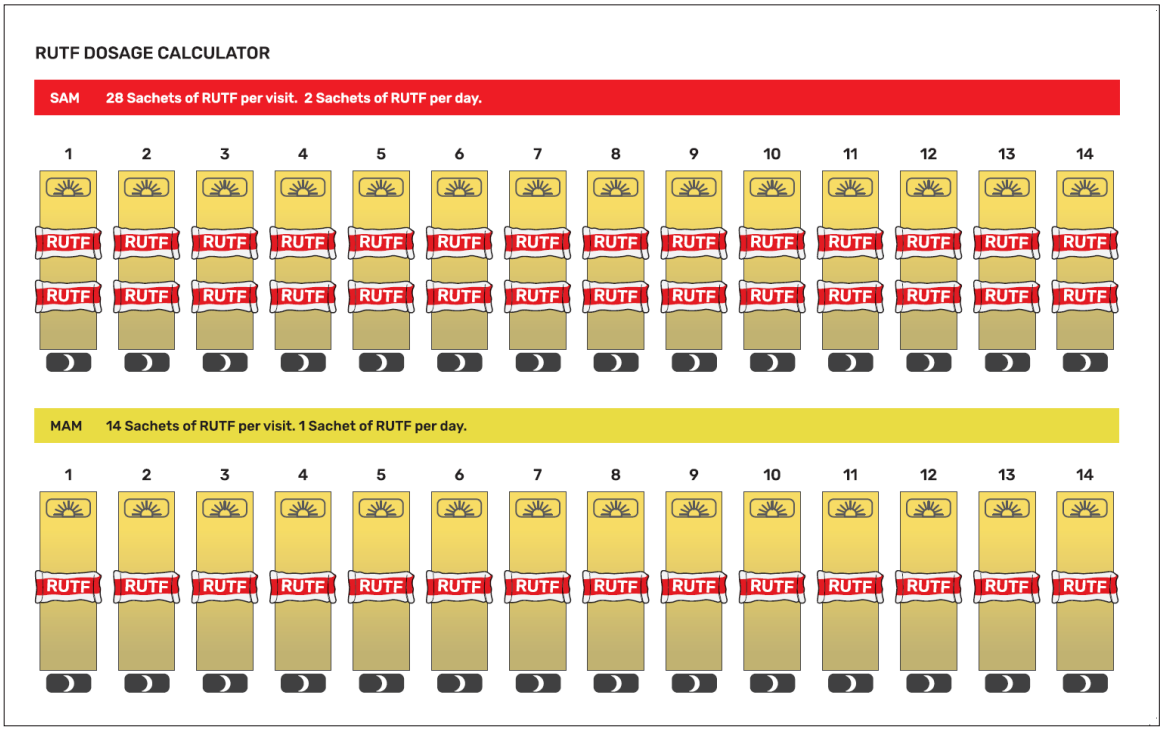


Combined treatment register



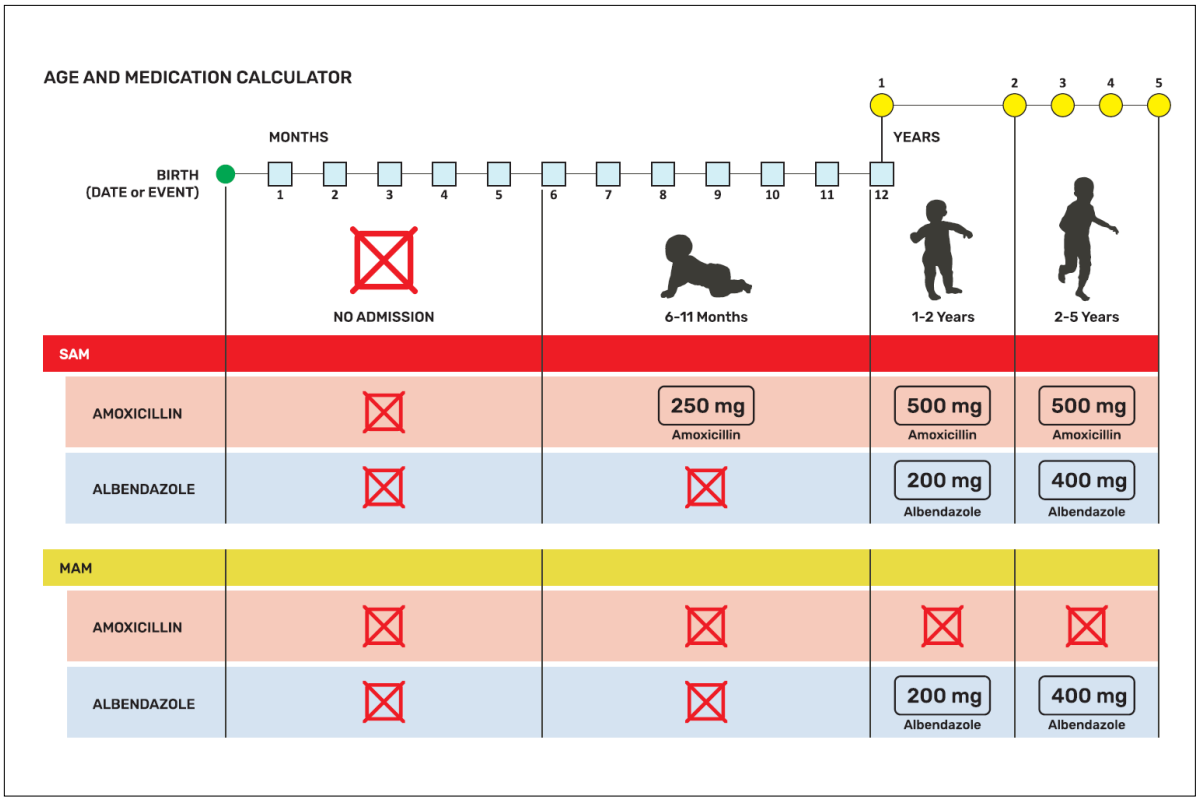
Dosage calculator job aid

The dosage calculator can be used to remind CHWs of the dosage of RUTF they should provide based on the child's red or yellow MUAC.



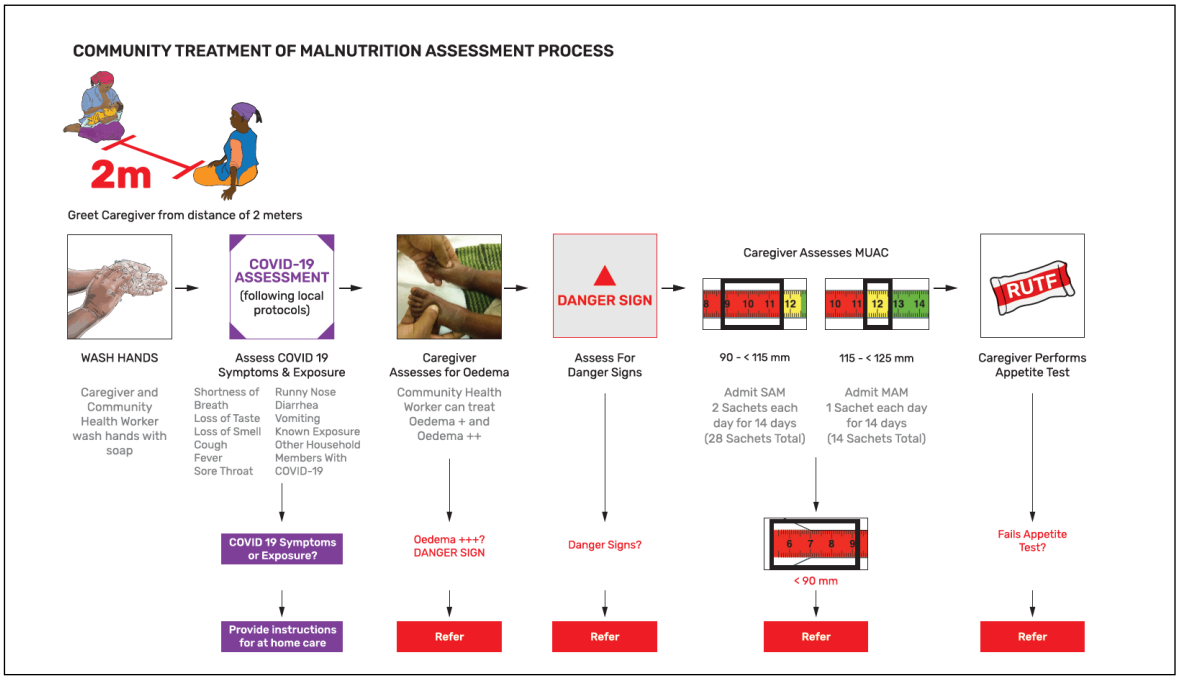
Age and medication calculator job aid

The age and medication calculator can be used to assist CHWs determine a child's age by providing a process to guide themselves and caregivers through a counting process to determine the child's age. The job aid also reminds CHWs of the appropriate routine medication associated with the child's age.



Illustrated treatment flowchart

The illustrated treatment flowchart job aid can be used to remind CHWs of the critical steps related to conducting assessment and providing treatment for uncomplicated wasting. The job aid reminds CHWs to assess for danger signs and COVID-19 exposure and symptoms; to rule out oedema +++ and/or a MUAC <90mm; and to conduct an appetite test before finally admitting a child for treatment.



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