

**Nominator:** the Nutrition team within the [International Rescue Committee](#). The team's work is focused on ensuring treatment to acutely malnourished children worldwide through direct service provision in contexts where treatment is not available as well as through governments that need our support in delivering treatment in humanitarian and development settings. They also develop and test innovations that optimize existing treatment strategies with the aim of reaching more children with treatment.

**Curator:** Paul Niehaus

**Question:** In July 2023, the World Health Organization (WHO) released [new global guidance](#) for treatment of acute malnutrition. WHO guidance is significant – it often shapes what policies and practices countries adopt. The recent guidelines introduced two major changes that have the potential to enable malnutrition treatment at much greater scale:

- (a) WHO recommended extending treatment to children who are moderately malnourished, particularly for those who are “at high-risk” according to specific criteria it has defined (see link above). This represents a change from the status quo in which only severe cases are treated.
- (b) WHO recommended training community-health workers (CHWs) to provide treatment at the community level. This represents a change from the status quo in which most treatment occurs at health facilities that can be hard to access, especially in areas of conflict and crisis.

The research question is how to implement these recommendations, so that the guidelines drive impact in practice. Specifically,

- (a) How in practice can organizations like the IRC screen and detect moderately malnourished children who are “at high risk” according to the WHO suggested criteria? Is it feasible to measure well all the indicators needed in order to do so—and if so, using what tools and with what training provided to health workers? If on the other hand it turns out that it is not feasible in some contexts to measure all these indicators, what are good alternative decision-making rules that use the measures that *can* be gathered to closely approximate the WHO's recommended decision-making rule?
- (b) How can organizations like the IRC train and equip CHWs to provide treatment at the community level according to the WHO recommendation? Is it feasible to screen for malnutrition and monitor children in treatment using all the WHO recommended criteria? Is there a simpler way to screen and monitor children? What are the operational implications of the WHO recommendation in terms of training, tools, supplies/equipment and supervision to ensure quality of care?

**Current state of knowledge** (as of 10/26/2023): On the question of the treatment of high-risk moderately malnourished children, the IRC knows of little available work. To their knowledge, no program has ever applied the kind of criteria that WHO suggests for the screening and identification of “high-risk” moderately malnourished children. Thus, they really are starting from scratch in terms of how to do this in practice: what tools are needed, what kind of training is necessary and how to embed the new screening into the existing system. Traditionally, community-based screening is done by measuring a child’s mid-upper arm (MUAC). However, the new recommendation suggests that screeners must use age, weight, anthropometric z-scores and screen for co-morbidities and social factors. In many contexts, official age documentation is not available, weigh scales are not available or not sufficiently accurate, and literacy and numeracy of CHWs is limited. Lastly, the implications of medical history varies by context as well as individual factors like a child’s age.

We do know that there may be simpler and yet equally accurate ways to screen and monitor children’s progress during treatment. For example, we know from population level data that MUAC and weight gain track each other; they are an adequate proxy for one another (as shown by [Chase et al. 2020](#)). However, we don’t know whether this is true on the individual level. When a child loses weight (a sign they are not improving in treatment), do they also lose MUAC? Meaning, could we detect weight-loss by just monitoring the MUAC which is easier to implement?

**Decision relevance:** If the IRC had the tools and practical guidance on how high-risk moderately malnourished children can be identified, this would help them (and similar organizations) adopt the new guideline and thus extend treatment of malnutrition to millions of children in need. If the IRC could show that MUAC can be used to monitor and discharge children safely, then the recommendation on extending the provision of treatment to the community-health worker level would be easier to adopt and implement, again leading to a big increase in the number of children reached by treatment.

Funders would still need to be persuaded to provide the funding required to extend treatment to these additional children. The theory of change here is therefore that if governments and NGOs were better able to estimate what they need (screening and training materials, human resources, type of training, support structures) in order to implement the new guidelines, they would consequently be better able to make a solid case to funders to increase funding, as well as better able to allocate existing funding across children.

**Timeline:** Both questions-- (1) How to screen high-risk moderately malnourished children and (2) How can we train and equip CHWs to provide treatment at the community level according to the WHO recommendation—will be relevant to answer in the coming 1-2 years as governments will engage in updating national malnutrition treatment protocols according to the latest WHO recommendations. The sooner the governments have evidence on how to operationalize the new guidelines, the more likely they are to adopt the changes. The learning and evidence generated will also address the WHO evidence gaps.

**Ideas & resources:** the IRC can provide thought partnership and a field site where testing of new tools can be done as well as data on children's response to treatment (MUAC and weight gain). UCSD researchers interested in engaging with the IRC should send a note expressing interest to [gradientfund@ucsd.edu](mailto:gradientfund@ucsd.edu).