Community-based Management of Acute Malnutrition (CMAM) is an effective approach to treat child acute malnutrition, but its coverage remains suboptimal in many countries. There is a lack of community-based data that allows for the evaluation of the causes of treatment initiation and adherence on child, caregiver and household level. Also, previous studies found that one out of two to four children who were successfully discharged from CMAM treatment, relapses within six months, which affects CMAM’s (cost-) effectiveness. The frequent occurrence of such relapse suggests that the causal factors underlying acute malnutrition have not been sufficiently addressed, and that CMAM procedures could be strengthened with complementary interventions.

Project Summary

The overall aim of the project is to better understand barriers and promoting factors that are associated with CMAM coverage as well as causal factors related to post-treatment relapse of moderate (MAM) and severe (SAM) acute malnutrition. The project has two main objectives:

- To identify factors that determine treatment initiation and compliance for SAM and MAM;
- To identify factors that determine post-treatment relapse from SAM and MAM

For this analysis, determinants at episode, child, main caregiver, and household-level will be considered.

A secondary objective is to estimate the burden of acute malnutrition more accurately by calculating the incidence conversion factors for SAM and MAM. These factors allow to convert SAM and MAM prevalence data into a theoretical case-load for treatment programmes. In addition, the robustness of the estimates will be tested by varying contextual factors.

To achieve all of these objectives, the authors will conduct a secondary analysis of the PROMIS repeated cross-sectional survey (~4,200 children) and cohort data (~3,200 children), a cluster randomised controlled trial on integrating preventive services into screening for acute malnutrition conducted in Burkina Faso and Mali.
Expected Impact

Identifying causes of treatment initiation and adherence to the CMAM treatment protocol will allow health care providers to target CMAM programmes in households with MAM or SAM children less likely to participate in existing CMAM services.

These findings will guide future research and implementers of CMAM programmes to develop novel and/or complementary approaches to strengthen CMAM’s effectiveness. An in-depth analysis of post-treatment relapse patterns and its causal factors will inform on how to strengthen the current CMAM strategy with accompanying measures during the post-treatment phase to prevent that children relapse into acute malnutrition.

As an example of such accompanying measures, the project will test if caregivers exposed to monthly behaviour change communication sessions on optimal infant and young child feeding practices and their children to small-quantity lipid nutrient supplements can lower MAM and SAM relapse rates. Based on these findings, novel interventions can be proposed and evaluated through carefully designed studies to ultimately demonstrate their effectiveness.

Finally, the MAM and SAM incidence correction factor obtained from the project’s cohort data and the associated robustness analysis will allow to obtain better estimates of the burden of acute malnutrition. More accurate estimates of the number of SAM and MAM cases are crucial for adequate planning by governments and agencies to implement CMAM in a cost-efficient way.