Acute malnutrition continues to effect the lives of millions of children around the world. In 2020, an estimated 45.4 million children were wasted – this figure represents 6.7% of children under the age of five globally. Of this number, 13.6 million are severely wasted, suffering from severe acute malnutrition (SAM)[1].

Community-Based Management of Acute Malnutrition (CMAM) was developed to address these unacceptably high rates of acute malnutrition. Evolving from the Community-Based Therapeutic Care (CTC) approach, CMAM seeks to reach as many children as possible through the provision of services at decentralised outpatient care sites. Early on in its history, CMAM was often used as an emergency intervention but has increasingly been integrated into routine health service delivery. More than 70 countries are currently implementing CMAM, with an increasing number moving towards integrated services[2]. While there has been consistent progress in the coverage of these critical services, it is currently estimated that approximately 80% of wasted children are not accessing the treatment they need[3].

The **CMAM Surge** approach complements routine CMAM services using health systems strengthening principles to ensure that health systems are better able to anticipate, prepare for and respond to increases in demand for acute malnutrition treatment services. A framework for the CMAM Surge approach was first proposed in 2010 as an alternative way to strengthen CMAM services with the aim of providing a more sustainable, less disjointed stop-start emergency response when caseloads increase[4]. Concern Worldwide used this initial framework to refine and pilot the current CMAM Surge model in Kenya in partnership with the Kenya Ministry of Health (MoH), beginning in 2012. To date, the approach has been implemented in 15 countries with support from multiple partners and donors (see Figure 1).

Concern is currently implementing the approach in eight countries[5]. The approach has been introduced and scaled up by other NGOs in collaboration with MoH in new countries and alongside Concern in its countries of operation, with significant coverage of the approach in Francophone West Africa, which has been supported by the West Africa CMAM Surge Taskforce[6]. The model was originally developed to manage increases in SAM caseload but has been modified to address other morbidities (malaria, diarrhoea and moderate acute malnutrition) alongside SAM. Although the evolution of CMAM Surge to this broader Health Surge approach is in its early stages, early indications are very promising in terms of the potential of this new approach to strengthen the management capacity of health facilities to respond to seasonal changes and surges of other common
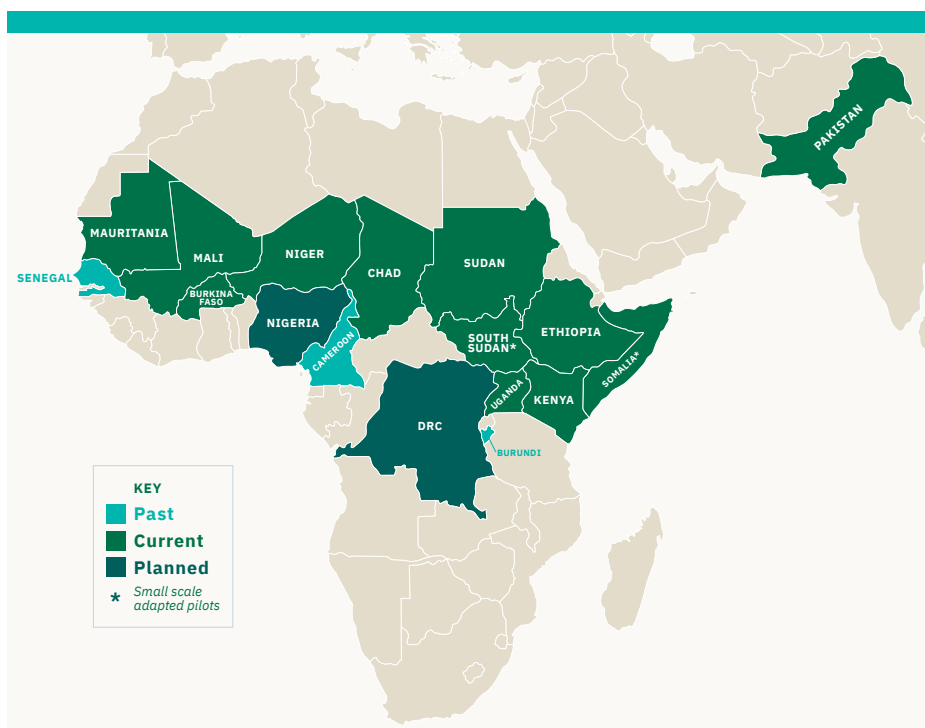

KEY
- Past
- Current
- Planned
- * Small scale adapted pilots

FIGURE 1: *Mapping of CMAM Surge Implementation based on known partner support as of end 2021. (Partner refers to NGO, UNICEF or WFP)*

childhood illnesses, as well as capacity fluctuations in the health facility (HF)[7, 8].

The CMAM Surge approach has **eight basic steps** (see Figure 2) to help government health teams respond to increases in SAM caseloads. These steps link an analysis of the local context, risks, health system capacity and needs to specific response actions. A summary of the 8-step process is outlined below:
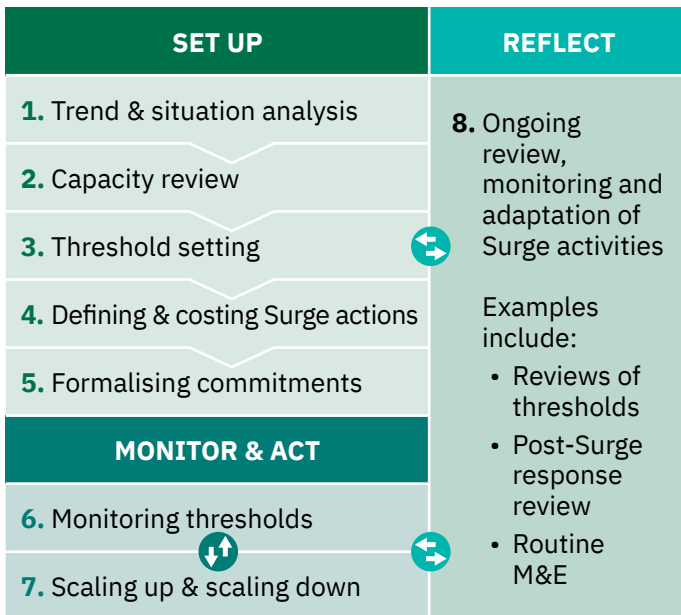
SET UP	REFLECT
1. Trend & situation analysis	**8.** Ongoing review, monitoring and adaptation of Surge activities
2. Capacity review	
3. Threshold setting	
4. Defining & costing Surge actions	Examples include:
5. Formalising commitments	• Reviews of thresholds
MONITOR & ACT	• Post-Surge response review
6. Monitoring thresholds	• Routine M&E
7. Scaling up & scaling down	

FIGURE 2: *The CMAM Surge Approach*

Step 1: Trends and Situation Analysis – historical morbidity data from the HF is gathered and plotted on a wall chart, alongside a seasonal and events calendar. This information is contrasted with malnutrition trends, with the objective of identifying potential risk factors for malnutrition in that community.

Step 2: Capacity Review – the capacity of the HF to manage CMAM services during normal times is assessed and gaps are identified. The HF also reflects on its past experience of managing peaks in demand for CMAM services.

Step 3: Threshold setting – HF specific thresholds are set based on the capacity to maintain quality of care with increasing new SAM admissions. Generally, four phases (normal, alert, serious, emergency) are defined, based on the incremental level of support that would be required to protect the quality of service delivery.

Step 4: Defining and Costing Surge Actions – specific 'Surge' actions are defined for alert, serious and emergency phases as part of the Surge package. In the 'normal' phases, prevention and preparedness actions are documented, in addition to actions to address the gaps identified during the capacity review. Actions which have a cost implication are budgeted.

Step 5: Formalising Engagements – agreements are made between the HF and both government and non-

government actors across health system levels to identify who will provide support for the specific actions if a threshold is breached.

Step 6: Monitoring Trends - thresholds are monitored on an ongoing basis by HF staff using routine health facility data to ensure action is taken as soon as a caseload increase is detected. On a monthly basis, other morbidities are plotted and the seasonal and events calendar are updated. If a risk factor is identified, preparedness or prevention actions may be triggered.

Step 7: Scaling Up and Scaling Down – when a threshold is crossed the HF moves from routine implementation into a higher phase of action (alert, serious, emergency) based on the severity of the shock, triggering the pre-agreed-upon actions and capacity support ('scale up'). Once the situation stabilises the actions are 'scaled down'.

Step 8: Review – ongoing review is critical to the success of CMAM Surge. Capacity, thresholds and Surge actions are all reviewed on an ongoing basis and adapted as indicated. In addition, the HF completes 'post-surge' evaluations to review the impact and efficiency of a surge response.

The status of each HF can also be reported to the higher-level health authority (e.g. district health management team), which can in turn monitor trends across a wider segment of the health system and trigger a higher-level national response if the situation continues to deteriorate.

Like all health systems strengthening approaches, CMAM Surge is a long-term approach that increases system capacity over time. However, evaluations of the approach show that with long-term investment, progress towards health system resilience and shock-responsiveness can be gained[9]. Other promising findings from evaluations of the approach include:

- Health facility staff understand and appreciate the value of data collection and reporting and feel empowered by using their data to take action.

- Acute malnutrition treatment is viewed as a routine health service of equal importance to other morbidities rather than as an add-on activity.

- Linkages between communities and health facilities are strengthened, particularly when communities are involved in the analysis steps of CMAM Surge setup.

In November 2020, a Global CMAM Surge Technical Working Group was established to ensure coordination of CMAM/Health Surge activities to maximize quality, effectiveness, and learning.

For more information about CMAM Surge and to access tools, resources and the latest evaluations visit: *www.concern.net/resources/cmam-surge-approach* or contact *cmamsurge@concern.net*

RAHILA PARAIZO, *Head of Koweit Health Facility, Tahoua Department explaining the Surge wall charts (May 2021)*

References

1   United Nations Children's Fund (UNICEF), World Health Organization, International Bank for Reconstruction and Development/The World Bank. Levels and trends in child malnutrition: key findings of the 2021 edition of the joint child malnutrition estimates. New York: United Nations Children's Fund; 2021. Licence: CC BY-NC-SA 3.0 IGO.

2   UNICEF. 2014. Nutridash 2013: Global Report on the Pilot Year. New York: UNICEF. Available at: *https://unicefeapronutritionwashtoolkit.files.wordpress. com/2017/09/unicef-global-nutridash-report-2013.pdf*

3   UNICEF (2020). Global Action Plan on Childhood Wasting

4   Peter Hailey and Daniel Tewoldeberha (2010). Suggested New Design Framework for CMAM Programming. Field Exchange 39, September 2010. p41. *www.ennonline.net/fex/39/suggested*

5   Chad, Ethiopia, Kenya, Niger, Pakistan, Sudan, South Sudan (pilot) and Somalia. Concern also previously supported the approach in Uganda, Sierra Leone (Surge for Malaria), Burundi

6   Diane Moyer, Amanda Yourchuck and Patricia Hoorelbeke (). The role of coordination in CMAM Surge scale-up in West and Central Francophone Africa. Field Exchange 64, January 2021. p27. *www.ennonline.net/fex/64/cmamsurgewestcentralafrica*

7   Concern Worldwide. Health Surge Learning Paper #1: An Introduction to the Health Surge Approach. November 2021

8   Erin McCloskey, Kate Golden and Amanda Yourchuck (). Expanding CMAM Surge beyond nutrition – towards a broader Health Surge approach. Field Exchange 64, January 2021. p35. *www.ennonline.net/fex/64/cmamsurgehealthsurge*

9   Fortnam, M., Hailey, P., Balfour, N., Sheen, K., Lea, R. (2021) 'Innovation history of the CMAM Surge approach', Maintains Working Paper, Centre for Humanitarian Change and Oxford Policy Management, Oxford

Enhanced
Responses to
Nutrition
Emergencies

CONCERN
worldwide

Funded by
the European Union

JUNE 2020 – MAY 2023

PILOT PROGRAMMATIC PARTNERSHIP