Global

What we know: Community-based management of acute malnutrition (CMAM) Surge aims to enable wasting treatment services within health systems to respond quickly and effectively to surges in demand.

What this article adds: This article synthesises lessons learned from eight years of CMAM Surge programming across multiple countries. Findings from independent evaluations show the key strengths of the approach to be its relevance and acceptability to staff and institutions from national to facility levels, its ability to empower health facility staff, improved understanding and use of data for decision-making, particularly at health-facility level and of the causes of severe wasting and the integration of wasting management into health services and systems. Wasting admissions data have been used to manage community health services and better understand and respond to spikes in other morbidities in different locations. Areas to strengthen include the monitoring and use of data to inform decision-making at district-level, the systematic involvement of community stakeholders and the testing of a community-level Surge process and more frequent review and revision of Surge thresholds in response to contextual changes. Consensus on the next steps include testing, documenting and developing guidance for a Health Surge approach (expanding CMAM Surge beyond wasting management), capturing CMAM Surge’s contribution to health system strengthening and resilience, evaluation and adaptation of the approach for fragile contexts and embedding CMAM Surge data in early warning and to inform early action and wasting prevention efforts. The Global CMAM Surge Technical Working Group, led by Concern Worldwide, will continue to drive an active learning and development agenda.

Eight years on from the first community-based management of acute malnutrition (CMAM) Surge pilot in Kenya, a wealth of experience and learning across a variety of contexts has been generated. During this time, independent evaluations have been undertaken of four of Concern Worldwide (Concern)’s CMAM Surge programmes in East and West Africa and several regional and global CMAM Surge learning and consultation meetings have taken place (Table 1). This article synthesises themes that have emerged from these evaluations and consultations, identifying the approach’s strengths, country-led innovations and areas to develop. It also proposes key areas for further exploration.

Strengths of the CMAM Surge approach

- Significant relevance and acceptability of the approach
- Empowerment of health facility staff to make decisions about their work
- Improved understanding, utilisation and appreciation of data for decision making
- Strengthened relationships with local authorities

Evaluations that have taken place to date highlight several strengths of the CMAM Surge approach that are consistent across the country experiences. The following sections highlight a selection of those commonalities that emerged from the publications and events listed in Table 1.

Significant relevance and acceptability of the approach

All three evaluations across different implementation contexts concluded that the CMAM Surge approach is highly relevant and acceptable. This is likely because the CMAM Surge approach places leadership at health facility level with health facility staff driving the identification of and response to surges in demand for services. Facility staff also recognise the relevance of the approach beyond the management of wasting and see how they can extend its principles to a broad range of health services.

“This approach is very important not only to certain disease entities but also to strengthen the overall health systems”

Health Centre staff member, Bati Woreda, Ethiopia

The acceptability and relevance of the CMAM Surge approach is further evidenced by the national-level support it has garnered from various governments. For example, based on the success of the pilot in Kenya, the Kenyan Ministry of Health (MoH) has demonstrated a clear commitment to the...
continued scale-up of the CMAM Surge approach by developing its own national Integrated Management of Acute Malnutrition (IMAM) Surge Operational Guidance in 2016.\(^1\) It has also prioritised its roll-out in Kenya’s vulnerable arid and semi-arid lands (ASAL) with the support from UNICEF, Concern and other international non-governmental organisations (INGOs).\(^2\) CMAM Surge has also been incorporated into the national IMAM Guidelines for Uganda\(^3\) and Afghanistan\(^4\) and is noted in global CMAM training guidance.\(^5\) The success of Concern’s initial CMAM Surge activities in Niger has spurred the expansion of the approach across Francophone West and Central Africa with many different partners adapting CMAM Surge to their countries and contexts.\(^6\) National-level CMAM Surge guidance and scale-up plans are currently under development in Niger and Mali. Endorsement by European Civil Protection and Humanitarian Aid Operations (ECHO) through the inclusion of CMAM Surge in their Humanitarian Implement Plans (HIP) has encouraged partners and facilitated the expansion of CMAM Surge.

### Empowerment of health facility staff to make decisions about their work

One of the most significant findings from all countries was a change in the mindset of health facility staff in terms of their ability to identify and address challenges without necessarily calling on external support. Within hierarchical health systems that are often dependent on external support during a shock, facility staff can feel disempowered in decision-making processes. In contrast, the CMAM Surge approach puts health facility staff in charge of deciding when and what measures are required to cope with changing case loads. Results from all the evaluations clearly show that health facility staff find this aspect of CMAM Surge empowering; they mention feeling significantly more confident, self-sufficient and more able to take initiative.

> “The CMAM Surge approach allows us to always know where we are and what to expect. If we did not have it, we would feel less confident in our work. It really helps us to plan our activities”

Nurse-in-Charge at Barmou Facility, Tahoua, Niger

> “In regard to the supplies, I am more alert than before about having more or having reserve of supplies for those [clients] who need medicine, those who need plumpy nut [RUTF] and others…”

Health Extension Worker, Bati Health Post, Ethiopia

### Improved understanding, utilisation and appreciation of data for decision making

In many developing health systems, the collection and transmission of data for child wasting is undertaken as a reporting requirement. Health facility staff do not always see the value in the numbers because they are not linked to decision-making around issues affecting service quality, context changes or capacity. The collation and review of historical trends for wasting and other illnesses does not commonly take place at health facility level. According to the evaluations, after implementing the CMAM Surge approach, health workers indicated that they were far more interested in their own data and diligent about reviewing it because they now had the skills and tools to understand and use it productively. Several health workers mentioned that prior to CMAM Surge they did not notice fluctuations in their monthly data. The CMAM Surge process has ensured that health facility staff now not only know if their case loads are changing but make decisions based on what the data is telling them.

> “[When asked the difference between a centre that has the Surge approach and one does not] Oh! They are not the same at all. They are not the same in terms of how they work and how to do self-evaluation and organise their own activities… Now I can solve my own problems.”

Nurse-in-Charge at Kalfou facility, Tahoua, Niger

### Table 1 CMAM Surge learning events and documentation

<table>
<thead>
<tr>
<th>Geographic Focus</th>
<th>Event/Publication</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>Publication of an article about Kenya CMAM Surge experiences in Field Exchange issue 47: <a href="http://www.ennonline.net/fex/47/meeting">www.ennonline.net/fex/47/meeting</a></td>
<td>2014</td>
</tr>
<tr>
<td>Uganda</td>
<td>Review of the CMAM Surge Programme in Karamoja, Uganda (unpublished)</td>
<td>2016</td>
</tr>
<tr>
<td>East Africa</td>
<td>CMAM Surge Approach East Africa Consultation Workshop (report unpublished)</td>
<td>2016</td>
</tr>
<tr>
<td>Global</td>
<td>Consolidation of learning to date in a document: The CMAM Surge Approach: An introduction and learning to date (unpublished)</td>
<td>2017</td>
</tr>
<tr>
<td>Francophone Africa</td>
<td>CMAM Surge Review Workshop - Francophone Africa Experience (report unpublished)</td>
<td>2018</td>
</tr>
</tbody>
</table>

1. In Kenya, the approach is called IMAM Surge to align with the naming of the integrated management of acute malnutrition (IMAM) approach used in the country.
2. See article in this special section of Field Exchange entitled “Implementing the IMAM-Surge Approach - experience from Kenya”.
5. https://www.fantaproject.org/focus-areas/nutrition-emergencies-mam/cmam-training
6. See article in this special section of Field Exchange entitled “The Role of Coordination in CMAM Surge Scale-up in West and Central Francophone Africa”

CMAM Surge data and analysis can be a powerful tool to improve early warning systems. Currently, health and nutrition information

---

Field Exchange issue 64, January 2021, www.ennonline.net/fex
incorporated into early warning systems is limited to prevalence data from surveys or absolute and aggregated admission numbers/caseloads. CMAM Surge data and dashboards provide a snapshot of caseloads set against locally appropriate thresholds that are based on historical trends and relative to the actual capacity of each health facility. These contextualised thresholds provide a much more accurate and sensitive measure of stress on the health system than static prevalence estimates or absolute caseloads alone. The article on CMAM Surge scale-up in Kenya included in this series shows how CMAM Surge data aggregated from health facilities to the sub-county level provided a better indicator of a deteriorating nutrition situation than other early warning indicators.\(^7\) The use of CMAM Surge data to improve early warning systems and early response warrants further development (see below). A key priority, however, is to streamline data systems and the existing CMAM Surge dashboards, linking better with the Health Information Management System (HMIS) to support real-time analysis and to inform early action.

**Strengthened relationships with local authorities and communities**

In the evaluations from Niger and Ethiopia, there were noted changes in the social capital of health facility staff. Staff reported that the process of implementing the CMAM Surge approach in conjunction with a wide variety of stakeholders improved the relationship of health facility staff with both district health management teams and with various community structures.

“Now we [district and facility staff] are together and we work better as a team. Before, they were like the big Chiefs, we were scared of them but now we are like friends as we are together more.”

Nurse-in-Charge at Edir Facility, Tahoua, Niger

CMAM Surge includes a specific step to formalise commitments (Step 5) that is meant to ensure the necessary support to Surge action plans will be available if and when requested. However, even in the absence of formalised commitments (such as a memorandum of understanding that can be hard to produce and get approved), relationships with the district have often still been strengthened. If stakeholders are engaged in the Surge planning process, the absence of formalised commitments does not appear to have had negative consequences. In some contexts, however, especially those where the health system is weaker and/or demands on health facilities might be higher, these relationships may benefit from formal agreements to solidify the partnership and secure external support when required.

In order to improve the ownership, efficiency and sustainability of the CMAM Surge approach, however, Surge actions and budgets should be integrated into the planning and budgeting process of the health facility as well as the local health and administrative authorities. A positive example of this is provided by Kenya whereby CMAM Surge actions have been incorporated into the County Nutrition Action Plans (CNAPs) to some degree.

**Innovations in CMAM Surge to date**

- More data-informed management of community health activities
- Using CMAM admissions to better understand and react to spikes in other morbidities

The CMAM Surge evaluations and learning consultations uncovered several interesting adaptations to the standard approach. In most cases, these innovations were driven by health facility staff and not by the supporting partners. The examples detailed below have pushed the boundaries of the original scope of the approach and should be considered for integration into the standard Surge model.

**Data-informed management of community health services**

In Niger and Kenya, CMAM Surge has led to improved dialogue and expectation setting with community-based volunteers. If caseloads are below or above expectations for a certain time of year, some health workers have initiated discussions with the community volunteers to trigger additional active case finding or an investigation into why there is an unexpected decrease or increase in caseloads. This process has improved the health workers’ relationship with volunteers and their understanding of the local context, and community volunteers have reported feeling more valued and included in the health system. There is potential to take this engagement a step further and empower community-based volunteers in data analysis to better understand the story their data is telling. This would allow community health workers and volunteers to adapt their community-level activities and plans in line with real-time, seasonal data.

**Using CMAM Surge to respond to spikes in other morbidities**

The original CMAM Surge approach hinges on the premise that high quality wasting treatment takes more time than consultations for other childhood illnesses and therefore an influx in cases of wasted children may quickly push health facilities beyond their capacity. However, CMAM Surge practitioners are increasingly recognising that caseloads of wasted children may not always be the primary driver of health facility workload. This has catalysed an emerging ‘Health Surge’ approach that is gaining momentum, such as in Niger where it was applied to co-manage annual malaria spikes with wasting treatment and in Ethiopia to plan for and respond to diarrhoeal outbreaks.\(^8\)

**Priority areas to improve within existing CMAM Surge guidance and programming**

- Strengthen CMAM Surge management at district level
- Involve communities more systematically in the CMAM Surge steps
- Ensure more frequent revision of Surge thresholds

Several priority areas to improve the existing approach have emerged via multiple channels as well as new areas for further development (below). Almost all were clearly articulated during a well-attended CMAM Surge review meeting held in Nairobi, Kenya in May 2019.\(^9\)

The purpose of this meeting was to determine

\(^7\) See article in this special section of Field Exchange entitled “Implementing the IMAM-Surge Approach - experience from Kenya”\(^\)

\(^8\) See field article in this special section of Field Exchange entitled “Expanding CMAM Surge beyond nutrition – towards a broader Child Health Surge approach”\(^\)

\(^9\) The meeting included representatives from UNICEF, GOAL, Save the Children, The Centre for Humanitarian Change, ECHO, Kenya MoH, FFP, Somalia and Kenya, as well as Concern Worldwide teams from Global, Chad, Burundi, Ethiopia, Kenya, Niger and Pakistan
which aspects of the global CMAM Surge guidance and tools required updates based on experience and what aspects still required further learning and documentation – a first step in gathering consensus on future directions for CMAM Surge. Key areas prioritised included a review of the threshold setting process, how to introduce CMAM Surge into a new country and health system, applying the CMAM Surge to different – particularly very fragile – contexts and a more practical set of monitoring and evaluation tools, particularly for district level.

**Strengthen CMAM Surge management at district level**

**Data management**

From the outset, CMAM Surge has primarily focused on health facilities and building their capacity to deliver a localised response to increases in wasting caseloads. Concern’s Operational Guidance for CMAM Surge includes district-focused Surge tools and advice; however, when the guidance was developed these actions were mostly untested. In many contexts, district-level CMAM Surge actions are limited to using the CMAM Surge dashboard and providing some support to health facilities when they cross thresholds. However, a holistic approach and practical tools to empower districts to use that data to better manage their own resources and/or request additional support needs further development.

The CMAM Surge dashboard is currently an Excel-based tool that captures, at a minimum, data on child wasting admissions against thresholds for each facility within a district health team’s management area. While there have been successes in using the dashboard – in Kenya, the CMAM Surge dashboard was credited as being key in the initiation of an early response to growing drought conditions in 2019 (Maintains, 2020) – the dashboard is not always used to its maximum potential. This is due, in part, to the limitations of capturing district-wide CMAM Surge data in an offline spreadsheet. Currently, CMAM Surge data is not integrated into the HMIS as the usability of a district dashboard needed testing before attempting to link it to the formal national health information system. At present, the dashboard requires manual updating, increasing the opportunity for data-entry errors and delays, and limits the number of users who have access to the data. Various online district-level dashboards are already in use within the health sector (e.g., DHIS-2) and in other sectors (e.g., early warning systems for agriculture and food security).

There is a need to develop and test a dashboard that links directly into the HMIS and other relevant data sources, where they are functioning. For this, Kenya is a perfect example. Dashboards should, ideally, use a cloud-based platform so that data can be updated without manual entry. Better access to real-time data can and should be used to inform activity planning, the organisation of the health workforce and supplies and communication and advocacy upwards to the regional or national level if a large number of health facilities or the district health management team itself is showing signs of stress and requires additional support.

**Costing and financing**

The limited role of districts in providing support to CMAM Surge actions at facility level is linked, in part, to constraints in formalising commitments (discussed earlier) as well as the costing and financing of the CMAM Surge action plans. At present, the CMAM Surge action plans should be developed and costed within a single step of the approach (Step 4) which occurs at health facility level (see Figure 2). However, because some Surge actions will require support from actors external to the health facility – such as districts or NGOs working through district health teams – it is important that all the relevant stakeholders play a more active role in this costing process, perhaps better placed within Step 5 of the process (formalising commitments). In this way, the role and accountability of the district and other relevant partners supporting bigger Surge support actions could be strengthened.

Additionally, the initial development and revision of CMAM Surge action plans should be better aligned to government planning and budgeting cycles and other financing mechanisms, such as disaster risk financing systems, to help ensure that promised resources are formally planned for and earmarked within these systems. More practical costing tools for this step are needed to support this process within the Operational Guide.10

**Involve communities more systematically in the CMAM Surge steps**

As noted above, some community-level engagement in the CMAM Surge process is taking place. However, this is often ad hoc and although community representatives are listed among CMAM Surge stakeholders, this aspect is not yet integrated as a core element of the approach. Community members should be consistently involved in the CMAM Surge set-up process, not only to provide important contextual and seasonal insights but also to identify how community members and structures might be able to contribute to Surge action plans.

The evaluations showed that health facilities that had reached out to and formed relationships with community and mayoral structures had stronger Surge responses and felt more confident that they had access to a variety of resources to handle atypical situations than did other facilities. However, guidance around the process of clarifying and structuring relationships with community stakeholders seems to be overlooked. In the initial stages of the CMAM Surge start-up, all stakeholders that can support the Surge process should be identified and invited to participate in the establishment of Surge thresholds and the development of formalised, costed action plans. However, non-financial contributions, such as in-kind support or other community-based resources, should be more systematically identified and included in these plans so that the support can be detailed and predictable.

---

10 See field article in this issue of Field Exchange entitled “CMAM-Surge: understanding costs and potential contribution to CMAM's cost-effectiveness”
The CMAM Surge approach at community level can be innovated even further to include a community-level Surge process whereby community workers monitor screening numbers against thresholds and develop Surge action plans for when thresholds are passed. Bringing the CMAM Surge process down to the community level will provide an even more timely alert and early action system, especially in areas with poor coverage of health facilities. Using CMAM Surge data to inform and initiate seasonally appropriate actions to better manage acute malnutrition at the community level will be piloted in Kenya in 2021.

**Ensure more frequent revision of Surge thresholds**

A nearly universal issue that emerged from the evaluations and ongoing consultations was the lack of regular threshold review and revision. It was felt that this could and should happen as part of an annual CMAM Surge review, in response to changes in health facility capacity or operating context or after a surge response but this was generally not being done. Across the evaluations, the setting of thresholds was noted as a complex and theoretical exercise that takes place in the initial set-up stage and is rarely ever revisited or revised. As per the CMAM Surge Operational Guidance, thresholds should be viewed as dynamic and reviewed at least annually and ideally each time a Surge response has been triggered. To address this gap, teams in Niger and Kenya have developed processes to ensure reviews are happening in both these instances.

Collectively reviewing thresholds also gives health facility staff a chance to reflect on whether the thresholds triggered actions that were appropriate to needs and if the thresholds were a true reflection of workload stress experienced by the staff. This is especially important in the context of staff turnover or operating context changes that impact on the ability of the health facility to cope with normal caseloads (e.g., during an acute outbreak or due to increased COVID-19 infection prevention and control measures). Conversely, the inappropriate triggering of Surge actions when the health staff are not in fact overwhelmed can also damage confidence in the system.

In both Niger and Uganda, evaluations found that thresholds were not altered despite changing human resources situations brought about by strikes or frequent staff turnover. A CMAM Surge review workshop for Francophone Africa found that advice based on local experience is needed when first establishing and then reviewing thresholds and that threshold setting should rely on data and on-the-ground experience rather than a formula, as is currently provided in the global Operational Guide. During the Ethiopia pilot, the same standardised thresholds were set for all health facilities, rather than allowing health facilities to adapt to their own capacity. Changes to thresholds at some facilities were noticed during follow-up visits. Essentially, the appropriate setting of thresholds requires experienced support and revision based on learning.

**New areas for developing the CMAM Surge approach**

- Test, document and develop guidance for a Health Surge approach
- Capture CMAM Surge’s contribution to a wider health system strengthening agenda
- Explore the applicability of CMAM Surge across different contexts
- Use CMAM Surge data to inform early warning/early action and strengthen prevention

A number of significantly new areas of development for CMAM Surge are included in the global learning agenda being finalised by the Global Technical Working Group (TWG). These new areas will require more substantial piloting and documentation but, to the degree possible, will inform the update of the Global CMAM Surge Guide in 2021 and the generation of additional learning papers.

**Test, document and develop guidance for a Health Surge approach**

There is a great deal of interest by health workers to expand CMAM Surge beyond the management of child wasting into a more holistic Health Surge approach. Some adaptations have already happened spontaneously, as noted in the earlier section on CMAM Surge innovations and in the Health Surge article. Other more formal Health Surge pilots are also planned or already taking place in West and Central Africa and Kenya. To ensure generation of good evidence and learning, a common vision for the approach is needed and key questions must be asked in the different pilots, allowing broader conclusions to be drawn about its effectiveness.

**Better articulate and capture how CMAM Surge complements broader health system strengthening initiatives**

CMAM Surge – and potentially a broader Health Surge – can and should complement different health system functions and be integrated into health system strengthening activities. This will require more in-depth analysis of the health systems in each context as well as the broader landscape of health system strengthening initiatives. As a starting point, however, there are two areas where CMAM Surge can add value to traditional health system strengthening efforts. Firstly, CMAM Surge leverages the compilation and review of historical data in light of those case load fluctuations – something that is possible from existing HMIS data but often is not done. Secondly, the approach focuses on engaging and empowering the health facility staff. Evaluations have shown that the approach has been particularly valuable in strengthening governance at the lowest level of the health system, the health facility, through improved data use, decision-making and relationship strengthening.

CMAM Surge likely adds the most value to health systems with regular fluctuations in case loads – this is often in contexts with more seasonal trends in food security and morbidities and in challenging contexts where health system strengthening efforts are under-resourced and short-term. One of the main advantages of the approach is the seasonal lens to health system strengthening in those contexts: Action Against Hunger added modules on CMAM Surge within its organisational guide to health system strengthening to address this (AAH, 2017).

The CMAM Surge approach alone cannot address all health system challenges; it is one tool in the larger health system strengthening toolbox. The approach focuses on managing increased caseloads and is not designed to directly address more system-wide health shocks and stresses such as health staff strikes or widespread stock-outs of ready-to-use therapeutic food (RUTF). There are some signs, however, that CMAM Surge may be helping health facilities, and increasingly health districts, to be more resilient to these shocks. In addition, CMAM Surge could be more purposefully leveraged to support advocacy around these wider health system issues at higher levels through its documentation of on-the-ground capacity and workload.

Finally, as the CMAM Surge (and Health Surge) approach grows, it is becoming important to not only articulate but find ways to capture and measure how the approach contributes to health system strengthening – in particular, how it may help to address bottlenecks in service delivery of the six health system building blocks (WHO, 2010). Observations regarding the contribution of CMAM Surge to broader health system strengthening remain largely qualitative but quantitative data is also needed to track the longer term impact and to make a case for continued investment in the approach. This requires agreement on quantitative indicators and tools that can capture Surge-specific contributions to health system strengthening including the level at which they should be applied and the cost of related activities.

**Explore if and how CMAM Surge can work in contexts with very weak health systems**

Current guidance suggests that CMAM Surge is appropriate when the health system has a minimum level of functionality, although how to define this minimum level is not elaborated in the current guidance. This reflects the element of caution taken during the early days of CMAM Surge.

1. See field article in this special issue of Field Exchange entitled “Expanding CMAM Surge beyond nutrition – towards a broader Health Surge approach”.
2. The formal Health Surge pilots include the health authorities supported by Concern Worldwide in Kenya and Niger and the health authority of Mali supported by Save the Children.
Surge when most experience was being drawn from Kenya where the MoH had taken a strong lead. Based on subsequent experience, the potential to apply the principles and steps to more fragile contexts, where government health systems may be weak or fractured, is clearer. In such contexts, the primary objective of improving capacity to respond to shocks and emergencies would not change but the context will likely be more complex than when the MOH is leading. Broader health system strengthening efforts will also look much different in these contexts and integrating with these requires careful planning.

In fact, health systems and health workers in fragile countries operating within the humanitarian-development nexus may stand to benefit most from the CMAM Surge approach. One of the successes of CMAM Surge is its ability to improve the confidence and self-sufficiency of health workers to assess and manage caseload fluctuations which is arguably even more important in contexts where more central support from government health resources is lacking. In fragile or weak health systems, the same analysis and planning can take place at health facility level and to some degree at health district level. However, Surge support when certain thresholds are crossed would be provided by an NGO, and likely at a much lower threshold than in a more capacitated health system.

The health systems in many of the countries where CMAM Surge has been implemented to date face numerous challenges and undoubtedly suffer from a low level of functionality at certain times. Adaptation and application of the approach in highly fragile contexts such as Somalia or South Sudan has not yet been tried but should be explored in the future. Many elements of the CMAM Surge may even be useful in NGO-led protracted emergency response as these more ‘stand-alone’ interventions are also prone to shocks, stresses and resourcing delays and constraints. An important caveat, however, is CMAM Surge will likely not work in contexts where treatment services for wasting are regularly not available due to the lack of health staff capacity or required resources.

**Use CMAM Surge data to inform early warning/early action**

Supporting early warning/early action systems is critical to ensure that a deteriorating situation is identified and responded to in a timely manner. While systems exist for food security, agriculture and acute disease outbreaks, early warning/early action for nutrition-specific action remains weak and the contribution of nutrition data to these systems has not been optimised. Nutrition surveillance and detection of nutrition emergencies still relies quite heavily on cross-sectional anthropometric surveys (e.g., SMART surveys) that only show a snapshot of the situation at a given point in time or, where wasting treatment admissions are used in early warning data collection, they are usually aggregated and provided as absolute numbers without useful context.

CMAM Surge data offers more dynamic and contextualised nutrition information for early warning/early action systems and can better represent the relative and changing need for nutrition and health system support. It improves on the aggregated and absolute wasting admission figures by presenting the number of wasted children admitted for treatment relative to historical trends in each facility and set against thresholds that take into account the capacity of health facilities to manage those caseloads. An early success was seen during the 2019 drought in the ASAL of Kenya where county health teams were able to detect a deteriorating nutrition situation via CMAM Surge dashboards even before more traditional early warning measures were signaling alerts. This allowed county and sub-county authorities to react sooner. However, this valuable real-time information is not yet integrated into the early warning bulletin produced by the National Drought Management Authority. Similarly, in Ethiopia there is room to integrate CMAM Surge dashboard data into decision-making processes.

**References**


13 See field article in this special section of Field Exchange entitled, “Implementing the IMAM Surge approach - experiences from Kenya.”