

Surge Programme Review for Karamoja

Consultancy Report submitted to Concern
Worldwide Uganda



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ACRONYMS

ACF	Action Against Hunger
AFC	Andre Food Consult
ARI	Acute Respiratory Infections
CAFH	Community Action for Health
CBSFP	Community Based Supplementary Feeding Programme
CDFU	Community for Development Foundation for Uganda
CMAM	Community Management of Acute Undernutrition
CSB	Corn Soya Blend
CUAMM	Doctors with Africa
DFID	Department for International Development
DHS	Demographic Health Survey
DHT	District Health Team
DPO	District Planning Office
ECD	Early Childhood Development
FAO	Food and Agriculture Organization
FDP	Food Distribution Point
FHD	Family Health Days
FSNA	Food Security and Nutrition Assessment
GAM	Global Acute Undernutrition
GHG	Northern Karamoja Growth Health and Governance Project
HIV	Human Immunodeficiency Virus
ICCM	Integrated Community Case Management
IEC	Information, Education and Communication
IMAM	Integrated Management of Acute undernutrition
IPC	Integrated Food Security Phase Classification
IPT	Intermittent Preventive Treatment
IRC	International Rescue Committee
ITC	In-patient Therapeutic Care
ITN	Insecticide Treated Mosquito Nets
IYCF	Infant and Young Child Feeding
MAM	Moderate Acute Undernutrition
MCG	Mother Care Group
MCHN	Maternal Child Health and Nutrition
MDD	Minimum Dietary Diversity
MMF	Minimum Meal Frequency
OPD	Outpatient department
OPM	Office of the Prime Minister
OTC	OutPatient Therapeutic Care
PfR	Partners for Resilience
PHAST	Participatory Hygiene and Sanitation Transformation
PLW	Pregnant and Lactating Women
PNC	Post-natal care
PRDP	Peace, Recovery and Development Programme II

EXECUTIVE SUMMARY

The Concern Surge Community Based Management of Acute Undernutrition (CMAM) approach is relatively new initially piloted by Concern in Marsabit County in Northeast Kenya (2012-2014) and in Karamoja region in 2012. The Kenya programme was evaluated in November 2014 and there was agreement to review the Uganda Karamoja approach as well. An opportunity to achieve this was presented by the DFID funded Maximising the Quality of Scaling up Nutrition (MQSUN) consortium in collaboration with Concern Dublin. The Uganda review with its findings and recommendations formed the first component of the MQSUN-funded project to produce a country specific Surge toolkit, guide and training package.

The CMAM Surge approach introduces a process and an evolving set of practical tools to help government health teams better manage services for acute undernutrition over time. Specifically, the approach focuses on improving planning and management of treatment services during periodic spikes or **surges in caseloads of acute undernutrition**. It is a Disaster Risk Reduction approach in that it supports preparedness efforts anticipating any potential peaks related to caseload or workload due to a variety of potential shocks or stresses faced by the health system. In Karamoja the approach has been implemented “on” and “off” since 2012 primarily in two districts Moroto and Nakapiripirit and more recently it is due to expand to Amudat and Napak districts. These periods of use of the surge approach have been in response to high undernutrition rates identified from biannual food security and nutrition assessments and were funded predominantly by Irish Aid. The approach in Karamoja complements an ongoing Integrated Management of Acute Malnutrition (IMAM) programme supported by DFID/UNICEF and implemented through Doctors with Africa’s CUAMM in all districts of the region.

The specific objectives of the review were to document key lessons, provide recommendations on a Surge scale up modality for Karamoja, and to define the policy environment in Uganda which would enable uptake and expansion of the surge approach for IMAM. The methodology applied in this review entailed health facility visits in two Surge supported districts and one “non-Surge” supported district, individual consultations, literature review and two stakeholder consultations held on 3rd February and 3rd March 2016, respectively. A technical committee was formed constituting DFID, UNICEF, WFP, Concern, ACF, MOH, USAID, Irish Aid, CUAMM, IntraHealth and the GHG project that provided guidance on initial design of the review and gave feedback on initial findings. A health systems perspective has guided this review with an analysis of the strengths, weaknesses, opportunities and threats of the Surge IMAM/CMAM approach under the Health Systems Strengthening (HSS) building blocks of; Service Delivery, Workforce, Supplies, Information Systems and Governance (*note that the 'Finance' HSS building block was not included in the assessment*).

An overview of key findings from the SWOT are summarised below:

<p>Strengths</p> <ul style="list-style-type: none"> ✓ High acceptance amongst district and facility staff particularly related to the HR support and redistribution aspects. ✓ Increased awareness and importance of IMAM ✓ Facilitates analysis, planning, coordination and communication with District Health office. ✓ Monitoring of SAM caseload & deaths against thresholds provides a simple and visual approach for prompt decision making and action. ✓ Staff redistribution in the serious phase is in line with Government recommendations where resources are insufficient for recruitment. ✓ Reduced duration of work shifts and facilitated night shift support. ✓ More frequent on the job mentoring and support supervision. ✓ Improves data quality. ✓ Has impact particularly on workload beyond IMAM support thus, is a critical HSS approach. 	<p>Weaknesses</p> <ul style="list-style-type: none"> ✓ Limited visible impact and/or visible attribution on IMAM programme quality performance indicators due to inherent challenges of ongoing IMAM support provided. In addition to household level food security challenges. ✓ Dependence on emergency funding has affected continuity of programme since 2012. ✓ Questions on appropriateness of annual thresholds in a dynamic and complex environment. ✓ Long time lapse (~1 month) from observing high caseload and responding particularly for Outpatient Therapeutic Care sites. ✓ Overlap of support between CUAMM and Concern particularly in the normal and alert phases. ✓ Need for district wide or sub-county thresholds for prompt action at those levels. ✓ Overall lack of coordination of partners (health and nutrition etc.) ✓ Insufficient community involvement in planning and implementation of the Surge approach.
<p>Opportunities</p> <ul style="list-style-type: none"> ✓ Numerous partners working through the health system offer an opportunity to streamline support particularly for HRH strengthening, if they are coordinated. ✓ The USAID/RWANU and GHG programmes have a health systems strengthening component focused on accountability and governance whereby, in South Karamoja, the use of community score cards offer an opportunity for linkages with the Surge approach. ✓ The ongoing multi-sectoral nutrition programmes supported by USAID in addition to larger resilience Government led programmes offer significant opportunities to strengthen linkages at community level and for livelihood support for HH with malnourished children. ✓ New HMIS tool integrates nutrition & SAM treatment indicators which offers a good opportunity for the Surge approach to influence IMAM data quality in HMIS. 	<p>Threats</p> <ul style="list-style-type: none"> ✓ The overlap in activities and potential duplicity of resources for IMAM support between CUAMM and Concern. ✓ Additional workload created by the various programmes operating through the health sector. ✓ Short funding cycles have contributed to lack of continuity in financial support for Surge in the past. ✓ The situation in Karamoja is expected to continue to be very changeable as a result of factors including climate change, continued development deficits, conflict, and diversification of livelihoods. ✓ The singular focus of the Surge approach on IMAM yet there is longer term potential for a broader focus in support of Health Systems Strengthening.

<ul style="list-style-type: none"> ✓ Nutrition specific activities in Karamoja continue their significant shift from an emergency oriented approach through integration into the health system towards nutrition being a significant contributor to the overall HSS agenda. 	
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Key lessons learnt from the SWOT are as follows:

- ✓ The surge approach is highly acceptable to most actors, but particularly the government due to its focus on HSS (particularly HR) and ownership of triggering and its responses.
- ✓ In addition to improving health facilities' ability to plan and communicate needs, the Surge approach increases the use and quality of HF data.
- ✓ The surge approach has impacts beyond IMAM and has a strong potential to be useful for other key diseases where surges are observed.
- ✓ Expansion of the Surge approach to include communities would improve its effectiveness and would likely improve the setting of thresholds.
- ✓ Roles and responsibilities of the various actors involved in the nutrition and health sector of Karamoja needs to be clarified, particularly when it comes to IMAM Surge response.
- ✓ Long-term funding streams for the Surge approach linked to broader IMAM support are required to ensure continuity, especially during the proof of concept and expansion phases.
- ✓ There is a need to define thresholds and actions for other levels of the health system, particularly at the District and Sub-County levels so that there can be a triggering of management support from the Regional or National level, when required.
- ✓ Several opportunities exist in Uganda and Karamoja for expanding the surge approach within the HSS agenda and these should be capitalized on.
- ✓ Indicators need to be developed and periodically reviewed which capture the effectiveness and efficiency of the Surge response.

In relation to the ***implementation modality of the approach*** it is recommended to embed the potential roll out of Surge within the nutrition contribution to HSS. The review provides three options for this:

1. Roll out of an HSS tool that promotes resilience
 - ✓ Phased approach, district by district.
 - ✓ One partner manages nutrition HSS. One partner rolls out the Surge approach, hands over once Surge is established.

2. Resilience element of a Nutrition HSS approach by geographical division.

- ✓ Geographic division of responsibility to support Government Nutrition HSS approach.
 - ✓ Surge is implemented as one element of a broader Nutrition HSS approach.
3. Resilience element of a Nutrition HSS approach implemented at different health service delivery levels.
- ✓ One agency responsible for Nutrition HSS at District Health Management Team (DHMT) Level.
 - ✓ Another agency responsible for Nutrition HSS at Health Facility and Community level.

The suggested modalities do offer a new perspective on how stakeholders engage in Karamoja and aim to address one of the key weaknesses identified in this review as the lack of clarity on roles and responsibilities of the various stakeholders particularly in the nutrition space. A clearer agreement and coordination of external support throughout the health and nutrition specific sector is required. This agreement should be based on comparative advantage, technical capacity and a systems perspective and will greatly benefit the quality and effectiveness of IMAM services as well as the potential of the Surge approach. From a UNICEF perspective it may be important to note that the options would require additional agreements for partners to operate in Karamoja and NGO involvement at least on a short term basis. The review found that a deeper involvement of nutrition partners in addition to CUAMM, notably Concern, has potential to speed up and improve the integration of nutrition into the health system, support linkages between nutrition specific and nutrition sensitive programming and further developing the nutrition sectors contribution to Health System Strengthening. In line with this observation the Surge approach should be integrated into the wider HSS strategy of the nutrition sector by all partners in Karamoja.

The final specific objective of the review was to define the policy environment in Uganda which would be supportive of the Surge approach. The SWOT for the governance and leadership HSS pillar was able to identify the existing opportunities that could be capitalized on. They include:

- ✓ Revision of the IMAM guidelines. The surge approach is included in the draft revision. Finalization of the guidelines as well as the development of a training package offer a specific opportunity to move to the next phase of using the Surge approach in Karamoja and possibly elsewhere in Uganda e.g. in the Refugee camps.
- ✓ National Human Resource policies/strategies and other stakeholders committed to improving HRH. The Surge approach supports the redistribution of staff from low to high burden facilities, this is in line with the Health Sector's HR policies which has helped increase acceptance of the approach. The Surge approach partners should make special efforts to ensure that there is a clear linkage between the Karamoja Surge approach and Government HRH policies and strategies such as those supported by IntraHealth.

- ✓ Several partners are implementing a Health Systems Accountability Approach and its Health Unit Management Committees offer an opportunity to link the Surge approach i.e caseload and threshold monitoring in addition to advocacy on staffing issues.
- ✓ The Interagency Working Group for Nutrition and the Karamoja Resilience Support Unit both represent opportunities for a more coordinated and cross sectoral approach to nutrition in addition to increasing the nutrition sector's contribution to Health Systems Strengthening and developing the resilience of the health system through the use of the Surge approach.

1. Introduction.

Concern Worldwide designed the Integrated Management of Acute Undernutrition (IMAM) Surge Model to enable improved planning and management of services for the management of acute undernutrition during periodic spikes or surges in demand for services for the management of acute undernutrition as a means of improving the resilience of the health system whilst simultaneously developing the capacity of the health system but without undermining the capacity and accountability of government health actors.

The model draws upon Concern's global experience in supporting IMAM/CMAM and health services for more than fifteen years. As a new approach, the Surge Model was introduced in Marsabit County in North East Kenya (2012 – 2014). In addition, various elements of the approach have been introduced in a number of other country programmes including in the Southern districts of Karamoja in Uganda (Moroto, Nakapiripirit, Napak and Amudat) between 2009 on and off up to date.

In Uganda, the approach began in 2009-2010 with only a few aspects of the approach introduced, such as caseload monitoring and management of increased caseloads. This was initiated as part of Concern's CMAM roll-out in Karamoja funded by UNICEF & DFID in 2009. Due to staggered funding and a high staff turnover, the Surge approach was not retained both by Concern or Government staff.

Thus, the approach was re-introduced in 2010 – 2012 with support from Irish Aid as an extension of an ongoing programme supported by UNICEF on IMAM strengthening in the four districts of Karamoja and at a time when high peaks in admissions were observed as a result of worsening food insecurity. This phase of Surge support occurred from June 2012 and ended in October 2012 and coincided with UNICEF phasing out their IMAM related funding to Concern. IMAM Surge support re-commenced in July 2013 in response to peaks in cases of acute undernutrition and high food insecurity with support from Irish Aid up to November 2013. Support in these earlier phases did not include mobilization of government health staffing due to inadequate staff housing and overall lower staffing levels in the region but focused on house to house mass screening exercises in collaboration with CESVI in Abim and Kotido and additional support to OTC and ITC's, which included caseload monitoring and management of increases in caseloads, on the job support supervision and mentoring, providing additional staffing capacity in health centres, providing logistical support for RUTF during the hunger periods of and supporting a mobile OTC clinic in Amudat. The IMAM Surge Approach was again re-introduced in the region in mid-February 2014 up to date. IMAM Surge in the region has been implemented through emergency response funding with short funding cycles, hence the **"start-stop"** nature of implementation.

Despite the stop-start process, the review has shown that CMAM Surge is an approach with high acceptance amongst government and district stakeholders and is very relevant to the Karamoja context due to its intense capacity strengthening support to health facilities in addition to planning, coordination and human resource elements aimed at systems strengthening beyond emergency support. Furthermore, the recent evaluation of the Pilot CMAM Surge Model in Marsabit, Kenya found that the approach is quite effective in supporting local government health systems to manage the high SAM and

MAM caseloads¹ and has particularly high impact when coupled with a Health Systems Strengthening approach.

Consequently, it is envisioned that this assessment will support a stock take of the approach in Karamoja particularly in relation to what other key players are doing and propose a scale up modality which encompasses a broader and a more strategic outlook for more long term and health systems strengthening implementation approach.

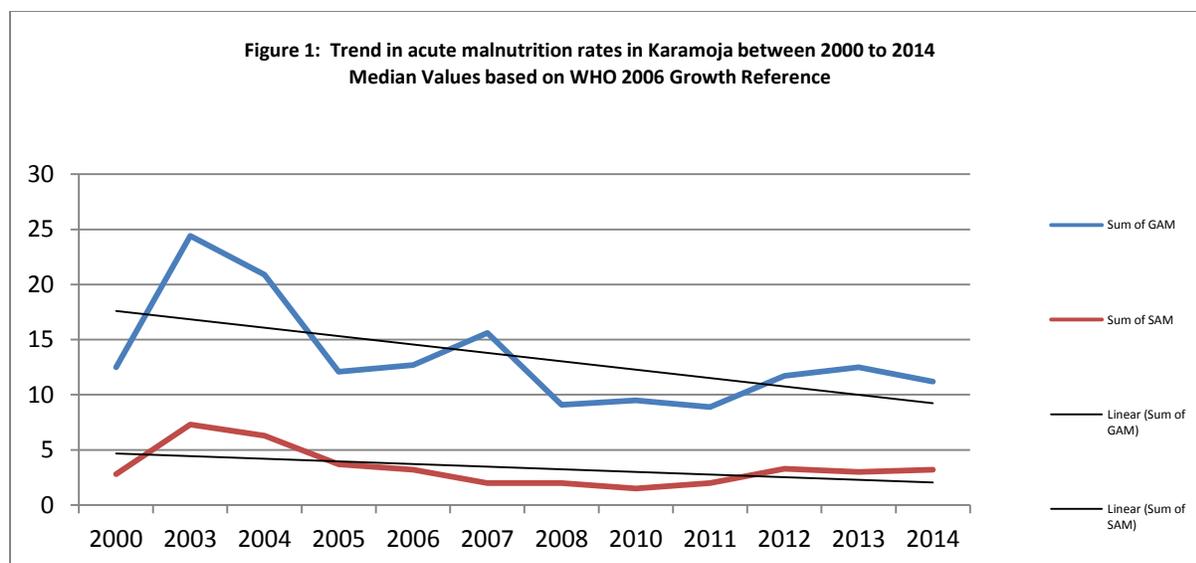
2. Context.

Karamoja region, often referred to as the most neglected or least developed part of the country, is a semi-arid area of northern Uganda bordering Kenya and Sudan. It has a population of 1.37 million people (UBOS projections 2014) who are primarily pastoralists and agro-pastoralists. Undernutrition, hunger, food insecurity are all common themes associated with the region which suffers from cyclical droughts, lack of development investment and insecurity. For more than 30 years, Karamoja sub-region has suffered from recurrent food insecurity and high levels of undernutrition influenced by several factors including unpredictable climatic conditions, insecurity, crop and livestock pest, parasite and disease incidences, poor sanitation and feeding practices and poor economic capital among others.

The Food Security and Nutrition Security Assessment (FSNA August 2015) identified the main drivers of undernutrition and food insecurity as: reduced food availability at household and region level; diminished ability to purchase food from the markets; reduced ability to cope with shocks among households; poor infant and young child feeding (IYCF) practices and poor sanitation and hygiene. Access to healthcare is very limited with 49% of the population living more than 5km from the nearest health facility, aggravated by understaffing in the health facilities. All of these factors have a significantly negative impact on the health and nutrition of the population, especially women and children.

The Global Acute Malnutrition (GAM) prevalence in Karamoja remains above 10% (WHO emergency cut off for an emergency) and thus, the situation has remained consistently unacceptable. An analysis of the percentage of GAM in children aged 6-59 months over a 14 year period between 2000 (25% GAM) and 2014 (13.4% GAM) (Hailey, P. and Kaijuka Muwaga, B., 2015) indicates an overall improvement in acute undernutrition prevalence.

¹Independent Evaluation of CMAM Surge Model Pilot conducted by Centre for Humanitarian Change (2015)



Source of data: Oxfam 2000 Survey, MOH/WFP/UNICEF surveys – 2003-2008, ACF Surveillance reports & WFP and UNICEF supported nutrition surveys (2013 and 2014)

Despite this improvement, the region suffers from frequent spikes and overall unpredictable situation as noticeable in Figure 1 above most notably the peaks in 2003 and 2004 (24.4% and 20.9%, respectively), 2007 (15.6%), and 2013 (12.5%). Additional less noticeable spikes were in 2012 and 2013 (11.7% and 12.5%, respectively) from 8.9% in 2011. Furthermore, the region is also characterised by large-scale poverty with 79.2% of the population living below the poverty line (UDHS 2011) in addition to having the worst performance indicators in the country across most sectors as shown in **Table 1** below.

Table 1: Comparison between national and Karamoja development indicators.

Comparative Humanitarian and Development Indicators	National average	Karamoja
Population living below poverty [UNHS 2012/13]	20%	>70%
Maternal Mortality Rate (per 100,000 live births)-DHS 2011	438	750
Infant Mortality rate (per 1,000 live births)-UNICEF/WHO 2011	54	105
Under 5 Mortality rate (per 1,000 live births)- UNICEF/WHO 2011	134	153
Wasting (acute undernutrition) DHS 2011	6%	13.4% (FSNA June 2014)
Stunting (chronic undernutrition) DHS 2011	33%	32.3% (FSNA June 2014)
Underweight prevalence – DHS 2011	14%	25% (FSNA June 2014)
Access to sanitation facilities (UNICEF 2008)	62%	9%
Access to safe water (UNICEF 2008)	63%	30%
Literacy rate (National HH Survey, 2013)	71%	12%
Life expectancy [UNDP 2013]	59.2 years	47.7 years

In addition, the UNICEF Child Poverty and Deprivation report² placed Karamoja in last place alongside the West Nile region with the highest proportion of children 0-4 years (68%) experiencing multiple deprivations in relation to health, nutrition, water & sanitation, shelter, information and child protection. It is also perturbing and important to note that the HIV prevalence rate in Karamoja has risen in the last decade from 3.5% to 5.3% (compared to the national rate of 7.3%).

This situation prevails despite significant investments in improving security and infrastructure in the region particularly in the last 10-15 years. Thus, Karamoja remains highly volatile in terms of human development, food security and maternal and child health and nutrition.

2.1. Response to the acute undernutrition situation in Karamoja.

Since this assessment has a specific focus on the Surge approach in relation to Integrated Management of Acute Malnutrition programmes, below provides an overview of the response ongoing in the region to address the persistently high rates of acute malnutrition. For a more in depth review of ongoing nutrition response in the region refer to the Karamoja Nutrition Programme Review report (P. Hailey and B. Kaijuka Muwaga, 2015).

The overall decline in acute malnutrition rates shown in **Figure 1** highlights the significant effort by all stakeholders involved in preventing critical emergency nutrition levels in the region and to some extent, these have “stabilised” the situation. This refers to the ongoing supported treatment and preventive nutrition programmes that have been running for more than a decade in addition to overall increased attention and support to the region across the various sectors since early 2000s. However, the fact that the rates remain high (above 10% GAM in 2015) indicates the need for sustained efforts in the management of acute malnutrition complemented by the scale up of broader nutrition sensitive programmes in the region addressing food insecurity, poor care practices and poor access to other services such as WASH services to help prevent acute undernutrition and promote good nutritional status.

Specific to addressing acute malnutrition, management of severe acute malnutrition (SAM) began with support from UNICEF around 2004-05 at a time when only **one** facility, Matany Mission Hospital supported by CUAMM, was providing a locally prepared recipe (skimmed dry milk, sugar and oil) for treating severely malnourished children. The region has since made tremendous progress with the current 10 Inpatient Treatment Centres (ITC's) in **all** the large hospitals and HCIV's managing severely malnourished children with complications and 104 Outpatient Treatment Centres (OTC's) implemented

²Situation Analysis of Child Poverty and Deprivation in Uganda, 2014. Ministry of Gender, Labour and Social Development and UNICEF Uganda, 2014.

at all health facility levels for the management of severely malnourished children without complications covering the majority of lower level health centres.

This scale up and integration of programmes for the management of SAM in the health system are currently supported by DFID through UNICEF as part of Component One: Access to high impact nutrition services of the Joint UN Project to Enhance Resilience in Karamoja (2013/14-2015/16). UNICEF support has evolved from a more intense International NGO (MSF Spain, ACF and Concern) presence as early as 2006 to the current health systems strengthening approach through an ongoing partnership with CUAMM (2012 to present day) who provide technical assistance to the districts and health facilities directly with one Nutrition Technical Assistant (TA) sitting within all 7 district health offices. CUAMM are the current principal support to the Ministry of Health, District Health Management Teams (DHMT), for the further integration and strengthening of the management of severe acute malnutrition (ITC and OTC) services in the region. CUAMM provide support to the DHMT in all core components of the programme; supplies management, reporting, on the job mentoring and supportive supervision in all 7 districts. Concern supports the Surge IMAM approach in two districts (Moroto and Nakapiripirit) and will soon expand to Napak and Amudat districts. World Food Programme have in parallel supported treatment of moderate acute malnutrition through supplementary feeding programmes in the region since for more than a decade in addition to preventive blanket nutrition support to pregnant and lactating mothers and children 6 months to 2 years through its Maternal Child health and nutrition (MCHN) services.

The main emphasis of the Surge approach is to jointly plan and prepare for increases in demand for IMAM services, with pre-agreed support and actions to address capacity gaps identified by respective facilities. This approach complements the MoH IMAM services supported by CUAMM by developing the capacity of the ongoing IMAM services to cope with the very changeable environment in Karamoja.

Overall, significant focus and resources have gone into supporting the Government to develop services for the management of acute malnutrition in the region through various partners supported by DFID, Irish Aid, Italian Government, UNICEF, WFP and others over the past decade and beyond. This is not withstanding the preventive interventions which have been implemented alongside the scaling up and integration of the acute malnutrition services programmes and other sectoral initiatives however, not at the scale required for the region.

3. The Surge Approach.

Due to the prevailing conditions in the region particularly the poorly resourced (both financial and human) health sector and the changeable nature of the food security and nutrition situation, the Surge approach for strengthening IMAM (first initiated in Karamoja in 2012) offers an exciting, practical approach to supporting the health system to manage “surges” in demand for IMAM services. At the same time the Surge approach aims to contribute to health system strengthening.

The Surge model aims to *strengthen the capacity of government health systems to effectively manage increased demand for services for the management of acute of malnutrition without undermining the health system, the provision of other services and on-going systems strengthening efforts.*

The IMAM Surge model allows improved resilience of the health systems to deliver services for the treatment of acute undernutrition during periods of high demand and allows the flexibility to accommodate a wide range of interventions according to the need. It prepares the health system to plan for, detect and respond efficiently to spikes in MAM and SAM prevalence and caseload; while it does not prevent acute undernutrition it does trigger early action and community mobilisation. The model is premised on one of the fundamental principles of IMAM, that early detection of undernutrition leads to improved treatment outcomes and fewer cases of severe acute undernutrition (SAM), as children are treated before their acute undernutrition becomes severe.

The model has five major components including:

- 1. Risk Analysis:** each health facility analyses the drivers of spikes in new admissions of acute undernutrition in their contexts. An event and seasonal calendar is created to assist the analysis. The aim is to understand what is 'normal' and why and when and to what degree spikes occur. Health centre visits for morbidities such as diarrhea, pneumonia, and malaria are also considered and their relationship to spikes in acute undernutrition are analysed. This analysis is done with the staff and key community informants at each facility. The health facility staff and key community informants also review their experience of the impacts these surges in demand have on the management of the IMAM service. Through this process the staff identify their capacity gaps relative to demand.
- 2. Threshold setting:** Thresholds are developed to indicate a critical number of new admissions at a health facility, above which the health facility feels it will start to experience capacity challenges based on the analysis in step 1 above. These thresholds are defined by the staff at each health facility and should be based on their capacity to respond to increasing health and nutrition needs.
- 3. Monitoring against thresholds/ triggering Surge support:** At the health facility, new admissions are monitored and compared with the thresholds. Once a threshold is exceeded the health facility works with the DHMT to adapt management processes at the HF level and where necessary to request additional support enabling them to cope with the increasing number of patients without compromising the quality of the health service.
- 4. Deliver tailored external Surge support as needed.** The support package is agreed between health centres and district authorities and builds on existing capacities within the government health package before external support is brought in. This preserves and builds ownership by the government health actors while improving cost-effectiveness.
- 5. Scale down Surge support according to pre-agreed criteria.** As the caseloads reduce according to the pre-defined normal, the Surge support is scaled down.



Figure 2. The IMAM Surge Model Components

The model is best situated within a HSS approach as a contribution to allowing the system to cope with surges in demand for services and minimising the negative impacts such surges could have on quality, effectiveness and ongoing HSS processes. However, even in those areas where the investment in nutrition services within the health system are predominantly external the surge model provides a framework for this external support to use a systems and capacity strengthening approach to reduce the potential negative impacts of surges in demand on the service being provided.

3.1. The Karamoja IMAM Surge Project

Karamoja region has implemented the national guidelines for integrated management of acute undernutrition (IMAM) services both at community and health facility since 2006 with support from UNICEF, WFP and NGO partners. The IMAM service has four components; community, supplementary feeding programs (SFP), Outpatient Therapeutic Care (OTC) and Inpatient Therapeutic Care (ITC) programs. Inpatient and Outpatient Therapeutic Care have been institutionalized in the health system across the country including Karamoja. The national guidelines recommend OTC services and SFP (targeted and blanket supplementary feeding) in emergency situations in addition to the static ITC services for the severely malnourished with complications (IMAM Guidelines Feb 2015). However, with

the very frequent spikes in the GAM levels in the region, to protect the service scale up and integration gains made, the health system can utilize the Surge approach to better plan and deploy support to bolster and build health facility capacity.

Concern Worldwide is working closely with the District Health Management Teams (DHMTs) to deliver a full Surge approach in Moroto and Nakapiripirit districts that include; risk analyses, setting thresholds, monitoring against thresholds, provision of surge support and scaling down surge support. These activities are further supported by quarterly joint support supervision to all OTC/ITC sites to provide job mentorship and coaching of health workers based on national IMAM protocols, monitoring of IMAM supplies, and supporting community-based case finding and referral with the help of Village Health Teams and the so-called Lead Mothers. They are volunteers as part of the Mother Care Groups of the USAID-funded RWANU project and they head a group of household carers and they are the community-level change agents for the different social and behaviour change ‘messages’ that the RWANU project promotes.

The Surge approach as a concept was first talked about and introduced in Karamoja in 2009 when Concern was implementing IMAM in four districts in southern Karamoja with funding from UNICEF. This was before any guidance or tools were developed. However, it was in March 2012 that the approach was introduced though still in the early stages of its design with initial “**emergency scale up of nutrition services**” training. This covered aspects of identifying triggers for scale up and setting of emergency caseload thresholds, monitoring and evaluation during scale up and triggers for scaling down. Between June 2012 and October 2012, Concern received support from Irish Aid to implement the approach in the four districts in response to the high rates of malnutrition identified in the May 2012 Round 8 Karamoja Nutrition Surveillance. The response at the time included; mass screening, additional job support to OTC’s & ITC’s, and a mobile OTC clinic in Amudat. In addition, facilities that reached their critical thresholds had 2 additional clinic staff hired by the DHO and paid for by Concern. Furthermore, Concern’s global Nutrition Trainee was based in Karamoja and supported the initial programme or organisational design of the Surge IMAM approach that led to the design of the Marsabit and Karamoja approaches.

This approach was used again in 2013 whereby, the May 2013 Nutrition Surveillance findings again identified high rates of acute malnutrition especially in Moroto and thus, Concern implemented the approach from July 2013 in Napak, Moroto and Lorengedwat sub-county in Nakapiripirit until November 2013 with support from Irish Aid. The response was the same as that in 2012 without the mobile OTC services and deployment of staff (which was restricted by the unavailability of staff housing). In 2014, Concern took a slightly different approach through earlier support to the DHMT and HFs to prepare for predicted surges as opposed to waiting for the periods of high peaks as had been done previously. Response took place from February 2014 to February 2015 with support from the ELMA Relief Foundation, which enabled mass screening, on the job support and linkages with the Resiliency through Wealth, Agriculture, and Nutrition (RWANU) mother care groups.

Since this assessment focuses on Surge IMAM Implementation in 2015 below is an overview of the 2015 IMAM surge approach goal and objectives funded by Irish AID;

Overall project goal: Prevent morbidity and mortality amongst children 6-59 months suffering from Severe Acute Malnutrition (SAM) in South Karamoja.

Objectives:

1. Strengthen district and health centre capacity in Moroto and Nakapiripirit to plan for and respond to seasonal spikes in IMAM caseloads.
2. Identify children 6-59 months with SAM and MAM and refer them to TFP and SFP.
3. Strengthen and support TFP services in 32 OTC sites and 3 ITC sites in Moroto and Nakapiripirit to meet service performance in line with National IMAM Protocol, 2009 and International SPHERE Standards, 2011.
4. Monitor nutrition caseloads in Napak and Amudat and respond if crisis level is reached.

Due to the start-stop implementation of the approach each year in the region, this assessment has focused on Surge activities in Nakapiripirit district where implementation has been more consistent since 2014.

4. Assessment objectives.

This assessment is the first part of a larger piece of work supported by DFID UK through the Maximising the Quality of Scaling Up Nutrition (MQSUN³) Programmes Framework (MQSUN) and Concern Worldwide headquarters which aims to produce a Surge toolkit, guide and training package. This assessment aims to use a Strengths, Weaknesses, Opportunities and Threats (SWOT) approach to gain a better understanding of the approach in Karamoja region to identify the Surge approach's added value, and opportunities and gaps, which are intended to feed into the development of Surge Guidance tools and training package in addition to guiding the scale up of the approach in Karamoja.

4.1. Overall objective of this assessment.

To support Concern Worldwide to plan for and scale up the Surge approach in Karamoja region.

4.2. Specific Objectives.

1. Document key lessons learnt from ongoing implementation of the Concern Worldwide supported surge implementation in Moroto and Nakapiripirit.
2. Based on lessons learnt from ongoing activities, provide recommendations on surge scale up modality for Karamoja over a 3 year period.
3. Define the Policy Environment requirements to enable integration and absorption of the approach within the context of IMAM nationally and specifically for Karamoja⁴.

³MQSUN is a new consortium of organisations (Programme Appropriate Technology in Health - PATH, Agribusiness Systems International, Aga Khan University, Health Partnership Intl, ICF International, Institute of Development Studies, Save the Children) established to provide DFID with technical services to improve the quality of nutrition-specific and nutrition-sensitive programmes.

⁴ Note that the consultancy team was supported by Concern staff working on pilot approach in Karamoja; Joseph Odyek and Annet Rita Imamut.

5. Review methodology.

To ensure the strategic scale up of the IMAM Surge approach in Karamoja or other parts of the country, this assessment applied a critical review of its implementation in Karamoja based on the World Health Organization's (WHO) (2007) Health System Approach. This approach identifies six 'building blocks' along which health system functions are organized as shown in Box 1 below.

The desirable attributes, or core functions, of each health system building block as defined in the WHO Framework for Action are detailed in Box 1.

BOX (1): Health System Building blocks

Leadership and governance should ensure that strategic policy frameworks exist and are combined with effective oversight, regulations, system design, and accountability.

Workforce should be responsive, fair, and efficient given available resources and circumstances. There should be sufficient numbers of staff that are fairly distributed, competent, responsive, and productive.

Financing** should raise adequate funds for health in ways that ensure people can use needed services and are protected from financial catastrophe or impoverishment from needing to use/pay for them.

Information systems should ensure the production, analysis, dissemination, and use of reliable and timely information on health system performance, health determinants, and health status.

Supplies and equipment should ensure equitable access to essential products of assured quality, safety, efficacy, and cost-effectiveness and ensure sound and cost-effective use.

Service delivery should deliver effective, safe, quality health interventions to those who need them, when and where needed,

***Financing was excluded from this assessment due to time constraints and in cognizance of the need for a more in depth review of resources being spent on the region across the various sectors as one of the recommendations of this assessment.*

The status of the above in relation to the IMAM Surge approach in Karamoja was reviewed in line with the Surge IMAM Karamoja Programme Objectives⁵ shown above. In addition, the following approaches, guidance documents and assessments were referred to in order to guide the findings and recommendations outlined in this report.

- Concern CMAM Surge Approach Overview including the Evaluation Framework for the CMAM Surge Approach which broadly guided parts of the questions asked in this assessment.
- Concern Worldwide IMAM surge reports from 2012.
- CUAMM IMAM programme reports
- Draft Guidelines for the Integrated Management of Acute Malnutrition in Uganda. February 2015; specifically the Performance Indicators for IMAM programmes in line with Sphere International Standards (2004).
- Health System Performance Assessment for IMAM/NACS in Uganda: Considerations for Delivery of Nutrition Services. September 2014.
- Specifically under “Workforce” building block; the National Human Resources for Health strategies and frameworks were all reviewed and taken into consideration in identifying linkages and opportunities for national IMAM Surge scale up.
- Karamoja Multi-Sectoral Nutrition Programme Review and Strategy (Hailey P. and Kaijuka Muwaga, B., 2015)
- Karamoja Multi-Sectoral Nutrition Strategy (2015)

Furthermore, due to the number of health and nutrition partners in the region and the various **nutrition related** activities underway, this assessment sought to identify areas of synergy, gaps and opportunities across all building blocks (except financing). A comprehensive assessment of health actors and health services in the region under each building block was beyond the scope of this assessment. However, the exception was for the **Service Delivery** and **Health Workforce** building blocks whereby a mapping of the various health and nutrition partners operating at facility level both in relation to services provided and human resources used to implement respective services was carried out.

The field mission was conducted between 3rd February and 12th February 2016 whereby, three districts were visited; Kaabong (for comparison or the “control” as a district **not being supported** with the Surge IMAM approach), Moroto and Nakapiripirit. **Annex A** provides the full list of facilities visited in each district and **Annex B** is a list of the various individuals met and interviewed.

Annex C is an outline of some of the broad questions asked at the various levels to determine the strengths, weaknesses, opportunities and threats for the surge approach. These questions have been

⁵ Reference was made to the objectives outlined in the Concern Worldwide Irish Aid Surge Nutrition Proposal (1st April – 30th November 2015)

based loosely on the questions in the Concern Surge Approach Evaluation Framework in **Annex D**. However, since this assessment did not apply a comprehensive evaluation approach, most of the questions addressed in this assessment focused on “**Impact**” in addition to aspects of “**Effectiveness**”, “**Acceptance**” and “**Sustainability**”.

6. Findings.

6.1. Overview of findings 2015 Karamoja Surge approach and recommendations.

Twelve health facilities (1 Regional Referral Hospital, 1 District Hospital, 1 HCIV, 5 HC III’s and 4 HC II’s) were visited in the **three districts** and interviews held with facility staff. All three District Health Officers and the Regional Nutrition Officer were consulted in addition to partners; UNICEF, WFP, Andre Food Consult (Moroto district), Mercy Corps, CAFH (Kaabong district), World Vision (Kaabong district), Concern Worldwide, CUAMM, Drylands Integrated Programme, IntraHealth, SUSTAIN, Marie Stopes International and Ministry of Health. Findings have been synthesized to capture broad themes & issues under each WHO HSS building block.

6.2. Service Delivery (IMAM with and without the Surge approach).

The service delivery component assesses effectiveness of the IMAM "base" programme (without the Surge approach) that is, the IMAM programme as it is irrespective of Concern's Surge support hence the ongoing IMAM programme supported by DFID/UNICEF and implemented by CUAMM and compares this to the IMAM Surge approach implemented by Concern. This reviews the caseloads (children with SAM in relation to other health issues such as diarrhoea, pneumonia and malaria), overall IMAM programme coverage i.e. % of children with SAM being reached (broadly based on the 2015 SLEAC⁶/SQEAC⁷ findings), % of facilities offering the services and IMAM programme performance data (% cured, % deaths, % defaulters, % non-response).

Under the Surge IMAM approach in addition to the routine activities supported through CUAMM, the Surge approach complements these activities with the following; facility capacity assessment or risk analysis, threshold setting, monitoring the thresholds, provision of Surge support depending on levels as defined by the respective facilities (normal, alert, serious, emergency) and scaling down of the surge

⁶ Simplified Lot Quality Assurance Evaluation of Access and Coverage (SLEAC)

⁷ Semi Quantitative Evaluation of Access and Coverage (SQEAC)

support. In addition, the Concern Surge support looks at community based actions as a key component of IMAM service provision i.e. screening, identification and follow up of malnourished children in addition to social mobilisation and behaviour change communication.

Prior to a more in depth analysis of the specific strengths and weaknesses of the IMAM Surge approach, it is important to highlight the status (**strengths, weaknesses, opportunities and threats**) of the ongoing IMAM programme because the IMAM Surge performance also relies on the performance and functionality of the overall IMAM programme being supported by CUAMM/UNICEF.

6.2.1. Strengths of IMAM programme (without Surge).

- i. All district hospitals and HCIV's in the region provide Inpatient Therapeutic Care and Outpatient Therapeutic Care (OTC). All HCIII's and HCII's now provide OTC services with support from CUAMM and UNICEF.
- ii. Health workers from all health facilities have been trained and equipped to manage children with severe acute undernutrition.
- iii. More than 1174 VHT members have been trained and engaged in nutrition screening, referral and follow up (DFID Annual Review of Resilience Programme, 2014).
- iv. Supplementary feeding programme supported by WFP is being implemented to complement treatment of SAM through NGO's and uses a combination of both community based and facility based posts.
- v. Several partners and stakeholders currently work through and support the health and nutrition sector as follows;
 - i. **Nutrition programmes and partners; WFP** Maternal Child Health and Nutrition programme, WFP Community Based Supplementary Feeding programme, **CUAMM** (IMAM), **Concern** (IMAM Surge), USAID Concern **RWANU** (Southern Karamoja) & **GHG**⁸ (Northern Karamoja) on health systems accountability, governance and outreaches.
 - ii. **Health programmes and partners include; IRC** support to Integrated Community Case Management of Malaria (iCCM) - though this was phased out at the beginning of 2015, **CUAMM**; PMTCT, RCH and overall health systems strengthening, **Marie Stopes** supporting family planning services, **INTRAHEALTH** supporting human resources for health, **SUSTAIN**⁹ providing PEPFAR support to HIV prevention and care. (Refer to **Table 1** in **Annex E** for Table of health sector partners in Karamoja (**Source:** Karamoja Nutrition Programme Review, 2015)).

⁸Growth, Health and Governance (Development AID Programme – DFAP)

⁹Strengthening Uganda's Systems for treating AIDS nationally (SUSTAIN)

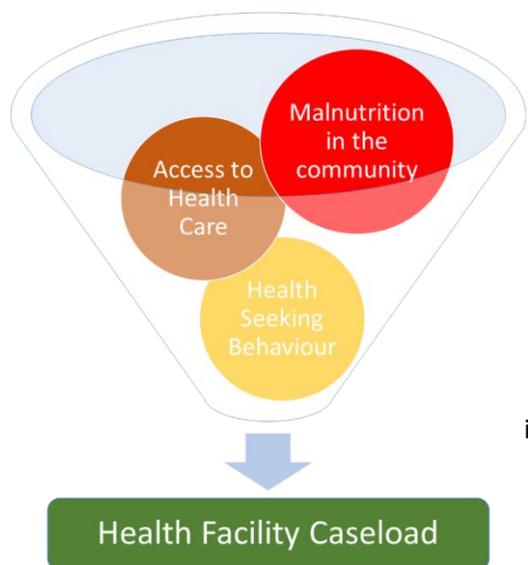
- vi. In relation to programme performance, the Karamoja nutrition programme review (2015) stated that cured rates remain steady at an average of 74% (*almost at the Sphere Standard >75%*).

General observations in relation to SAM caseload versus caseload for other health services include;

- i. Malaria caseload (OPD) exceeds all other caseloads in the five facilities visited in Nakapiripirit five-fold in 2015 (~4749 children in total malaria cases versus 975 SAM cases) whilst, the diarrhoeal cases are almost parallel to the SAM cases. **Refer to Annex E; Figure 3** as an example of facility data (SAM caseload vs other health data). This indicates a need for the Surge approach to integrate the review of other health conditions in addition to SAM caseload with focus on malaria and diarrhoeal cases.
- ii. Maternal Child Health and Nutrition services supported by WFP also have a much higher caseload than SAM or the other health conditions; For example, with an annual average of ~920 beneficiaries (pregnant, lactating women and children under 5 years) per facility in Moroto since food support has significantly increased access to services. The beneficiaries can go up to as high as or more than 2000 in the more populous facilities such as Rupa HCIII.

6.2.2. Weaknesses of IMAM programme (without the Surge IMAM approach).

- i. The coverage of the SAM programme based on SLEAC and SQUEAC Coverage Study (ACF/UNICEF/MOH 2015) noted a lower coverage than that indicated by the 2015 Karamoja Nutrition programme Review Report at **moderate** coverage of 49% (95% CI: 47% - 52%) compared to mean annual coverage since 2009 at 62% (CUAMM/UNICEF programme reports). The SQUEAC findings are supposedly more accurate and thus indicate that the SAM programme in the region falls short of the recommended Sphere Standard of 70% coverage for combined ITC-OTC programmes. This indicates a number of challenges associated with ongoing interventions such as;



- ii. An inelasticity in the ability of the system to get more children into the centres related to inadequate community case finding and or poor access to facilities and poor health seeking behaviour. This is further demonstrated by the limited availability of evidence of systematic compilation of MUAC data i.e. at facility and district levels.
- iii. Inaccuracies in estimating needs or SAM caseload in addition to possible inaccurate population estimates for the region. The Karamoja Programme Review (2015) identified discrepancies in calculating SAM/MAM caseload

between the partners (i.e. CUAMM, UNICEF and WFP).

- iv. Lack of more regular training on IMAM specifically for Doctors and CO's.
- Poor quality of data at facility, district and regional level identified in both Karamoja Nutrition Programme Review study findings (May 2015) and the SQUEAC/SLEAC Coverage Assessment Report (March 2015). This includes all key performance indicators, admissions, relapses and supplies.
 - High transfer or absenteeism rate (linked to low retention) of trained health workers reduces the knowledge base within the facilities managing children with SAM. Furthermore, this has resulted in a heavy reliance on support staff (unskilled) who are less able to manage children with SAM.
 - Nutritionists recruited in each district related to the general IMAM programme who provide direct Technical Assistance (TA) to government have limited experience and not a very clear definition of their TA role particularly in support of strengthening government's capacity to both implement and oversee the management of acute undernutrition or nutrition programmes as a whole.
 - Despite efforts by Government with support from UNICEF to train health workers every 2-3 years and as was already stated above due to high transfer rate or poor retention of HW's, there are likely few staff in each facility that are familiar with the protocols. Almost all facilities visited noted at least one or two staff who had been trained (last training was in 2014) and who had left the facility subsequently. Thus, this means that new staff who join are most of the time not familiar with and tend to be less confident in managing severely malnourished children particularly in ITC facilities. Management of SAM is considered more "complicated" and labour intensive.
 - IMAM programme performance remains severely constrained due to various factors however, the Karamoja Nutrition Programme review identified that defaulter rates and non-response rates had **gradually worsened and doubled** since 2011 from 12% to 23% (above Sphere Standard 15%) and 8% to 20%, respectively.
 - The prevention arm of ongoing IMAM programme and hence the community component remains inadequate due to the vast challenges faced by the region.

6.2.3. Opportunities of existing IMAM programme (irrespective of Surge approach)

- The continuing poor food insecurity due to climatic conditions, environment and other development factors in the region, affirm that management of acute undernutrition programmes remain a critical priority.
- There is significant opportunity for the ongoing IMAM programme to continue the process of integrating into the health system.
- There continues to be both donor and government interest in investing in the health sector in the region in recognition of the region's unique challenges. This is translated in the number of health and nutrition sector partners. This offers an opportunity for the IMAM programme and wider nutrition support to be strengthened to support the health system strengthening efforts. Specific opportunity lies in developing a strategy and agreement between Government, donors and partners for the further integration of nutrition specific activities into the health system and to define the

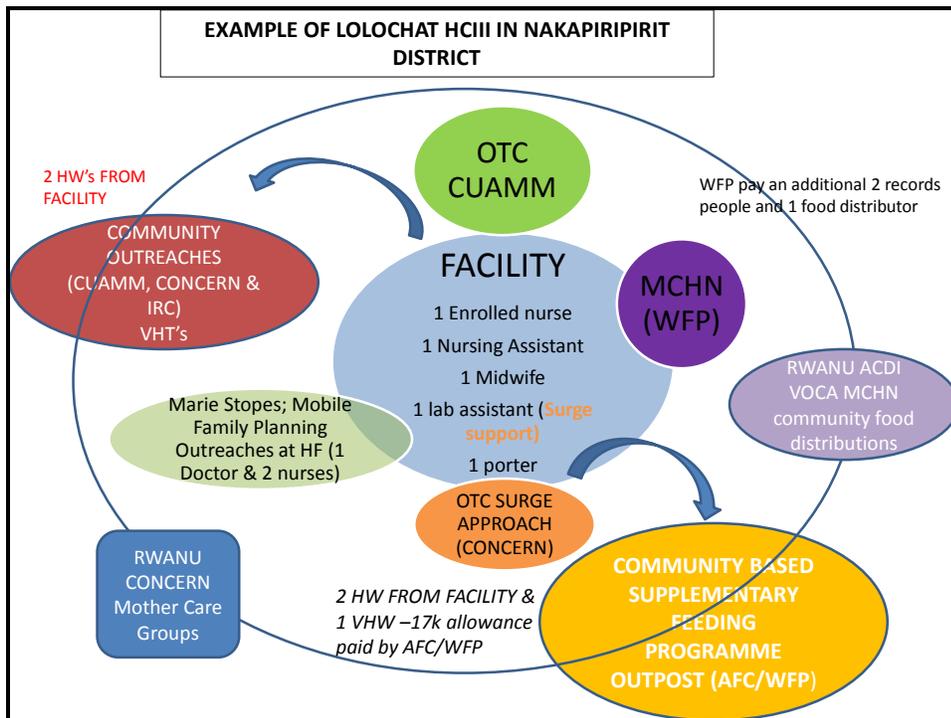
role and contribution of the nutrition partners in the plans for health system strengthening at all levels.

- Opportunities also exist to better link the IMAM programme to broader and larger scale preventive livelihood programmes currently starting their next phase of operations such as Karamoja Livelihood Programme III (KALIP) and Northern Uganda Social Action Fund (NUSAF III) in line with the Karamoja Integrated Development Plan (2) recently finalised.
- DFID and USAID (RWANU and GHG) are implementing community nutrition activities, livelihood support including agriculture and livestock initiatives and health systems and governance support offer opportunities to strengthen nutrition specific and sensitive linkages.

6.2.4. Threats for existing IMAM programme (irrespective of the Surge approach)

- Funding related threats include the vulnerability of continued donor funding for therapeutic milks. There are also related threats of reductions in government funding. Government funding is important to ensure the necessary human resources for health are in place and are incentivized to stay.
- Poor health seeking behaviours and incentivizing the utilization of the health services is demonstrated by a decline in clients for all health services for example, when there are breaks in the pipeline for food support through the WFP MCHN programme. The sustainability of incentives such as health service related food distributions is uncertain and a phased transition plan is urgently needed.
- Several funding streams and partners are involved in health and nutrition System Strengthening. An example of how these activities interact at the health facility and community level is shown in table 3 below. Whilst there has been an improved technical division of work there remain threats to the capacity of the health facility and community to service these multiple inputs and overlaps and gaps remain apparent.

Figure 3: Demonstration of typical external inputs in Karamoja at health facility level using Lolochat HCIII in Nakapiripirit (has only OTC, not ITC) as an example:



Note: RWANU/ ACDI/VOCA food distributions are to eligible persons living outside a 5km radius of a health facility to avoid overlap with the WFP rations.

6.2.5. Strengths and Weaknesses specific to service delivery of the IMAM Surge approach.

The Surge approach allows the health system to cope with surges in demand for SAM services in Karamoja. The surges are also likely to negatively impact on the health systems strengthening efforts. The Surge approach emphasises that health facility and DHMT should take ownership of the preparedness, planning, and response to surges in demand for SAM services and as such the approach contributes to health system strengthening efforts in general, and in particular to the leadership and governance building block. Therefore, the approach is NOT an emergency approach and is rather a development approach which supports the development of resilience to surges in demand within the health system.

The following are the 5 implementation components of the IMAM surge capacity model; (**Annex F** provides more detailed step by step procedure against each component).

- Participatory **risk analysis and capacity assessment**,
- **Threshold setting**; this is the *critical number of new SAM admissions* at a health facility over which the type and scale of support, internally from within the MoH and externally from health partners, changes based on various factors such as other facility caseloads, staff availability including presence or not of skilled staff. Each facility determines its own respective thresholds using a self-assessment of health facility capacity and needs. Thresholds are set using four categories; normal, alert, serious and emergency levels.
- **Monitoring** against thresholds
- **Triggering surge response package** activities and support
- **Scaling down** surge support

Overall, the Surge approach was operational in 14 of 17 facilities in Nakapiripirit and all 16 facilities in Moroto in 2015. Of the nine health facilities visited for this assessment in Moroto and Nakapiripirit, the Surge approach was being implemented and staff aware of the approach in seven out of the nine facilities. **Annex G** provides more information on the type of phases and responses for each of the facilities visited during this assessment. Rupa HC III and Loputuk HCIII in Moroto district did not have any staff familiar with the approach (at time of the visit) yet the approach had been introduced there. This is attributed to high staff turn-over in addition to challenges experienced by Concern in retaining staff to support and supervise the programme in Moroto due to the start-stop implementation mode until recently.

Tables 2a and 2b below show that of the nine facilities, five facilities entered the “serious” phase at some point in 2015 and **four**¹⁰ of these in Nakapiripirit and Moroto RRH had responses in the form of staff deployment.

¹⁰¹⁰ Lolochat HCIII, Nayonai Angikalio HCII, Tokora HCIV and Namalu HCIII

Table 2a and 2b: Thresholds, case load and phases observed in 2015 and January 2016 for facilities visited in Moroto and Nakapiripirit districts respectively.

2a MOROTO DISTRICT					2015									2016
Health facility	Normal	Alert	Serious	Emergency	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan
Loputuk HCIII	0-30	31-69	70- 139	> 140	55	48	63	44	30	23	15	24	15	33
St Pius Kidepo HCIII	0-40	41-178	179- 357	> 358	55	57	69	65	75	59	62	82	44	60
Rupa HCII	0-20	21-39	40-79	> 80	16	30	40	33	28	24	18	27	20	21
MRRH OTC	0-20	21-49	50-99	>100	65	43	26	21	40	17	26	12	20	55
MRRH ITC	0- 10	11 20	21-40	>41	9	21	16	12	9	10	10	11	15	7

2b NAKAPIRIPIRIT DISTRICT					2015									2016
Health facility	Normal	Alert	Serious	Emergency	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan
Tokora HCIV OTC	0-30	31-42	43-85	> 86	47	30	30	28	35	23	45	35	41	32
Tokora HCIV ITC	0-5	6 9	10 19	> 20	1	0	0	0	0	1	1	54	3	6
Nayonai-Angikalio HCII	0-15	16-25	26-51	> 52	10	19	30	28	27	16	30	32	34	34
Lolachat HCIII	0-35	36-67	68-135	> 136	45	43	56	60	56	66	50	56	62	38
Namalu HCIII	0-50	51-84	84-167	> 168	13	19	91	67	83	66	67	54	62	49
Nabulanger HCII	0-50	50-95	96-191	> 192	56	70	91	66	48	36	32	39	41	44

Nabulanger HCII entered the “alert” phase from the period April to July 2015. The Surge response included; more regular monitoring and mentoring by Concern Emergency Nutrition Officers and district officials, planning with staff to address potential increment in caseloads, continued analysis (caseloads, workload, staffing gaps, supply gaps among other factors) of facility gaps, refresher training and closer collaboration which includes screening and follow up of malnourished children in addition to community sensitisation between facility staff and VHT's, lead mother groups (RWANU) and other community based agents. Namalu HCIII did not enter the ‘serious’ phase. Due to staffing challenges, however, 2 Village Health Workers were deployed and the Surge programme facilitated a daily allowance of 10,000shs to provide extra support for screening and registering children with SAM. Refer to **Annex G** for more detail on the surge responses (serious and alert phases) implemented in 2015.

In contrast, facilities visited in Kaabong (as the “comparison” district), were unable to demonstrate an understanding of their average monthly caseloads or admissions and trends other than having to refer to their registers. Furthermore, the coping strategies for high caseloads stated by staff at Kaabong hospital (ITC/OTC) seemed ad hoc and responsive rather than being based on prepared plans. Coping strategies mentioned include reduced frequency of administration of therapeutic foods or working longer shifts (**12 hours shifts are the norm**). Each of these strategies clearly has significant potential to affect quality, efficiency of the IMAM programme and undermine any attempts to make systems strengthening sustainable.

“We rarely sit down and plan our workload with the hospital Medical Superintendent or District Health Officer, we just get on with it.” J. Bosco Achilla, Enrolled nurse Paediatric Ward at Kaabong Hospital.

Other types of response initiated without the ‘surge’ approach include:

- Taking on the extra workload and thus longer shifts.
- Allocate specific days for the various services (ANC/OTC/EPI) but maintaining daily OPD services.
- Use of support staff, WFP SFP food distributors or VHT’s particularly at HCII’s to fill the HR gap (Note: this is a strategy applied commonly across the region irrespective of presence of surge) however, it was more pronounced in Kaabong due to higher staffing gaps in the district.
- CUAMM in Kaabong support to advocate for or negotiate for a no-transfer policy of trained staff, particularly at the Hospital (ITC/Nutrition Unit).
- CUAMM provided support for VHT/volunteers to support nutrition unit team to mix feeds due to the lack of HR.

With the above in mind, below are the broad strengths and weaknesses of the surge approach in relation to IMAM service delivery.

6.2.6. Strengths (Service delivery of the Surge IMAM approach)

“The surge approach has made staff familiar with and appreciate the importance of IMAM” Dr Anguzu, DHO Nakapiripirit.

High acceptance of the surge approach (DHO’s and facility staff); in all facilities visited principally in Nakapiripirit and the Moroto Regional Referral Hospital particularly in the

“serious” phase. The approach has increased awareness and importance of IMAM among health workers; Surge HR support has leveraged the positive perception of IMAM. Risk analysis facilitates

and improves facility planning, identifies specific needs of individual facilities and improves communication between facilities and DHO's office.

“Surge risk/gap analysis facilitates a deeper understanding of crisis management, planning and preparedness - which is not part of HW's routine work”.

Dr Peter Akwang (In Charge, Tokora HCIV)

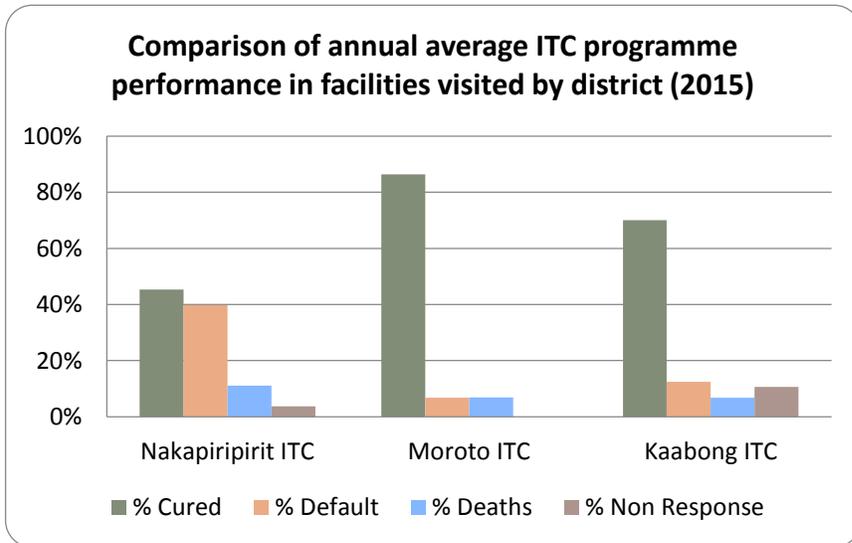
Surge improves overall planning, coordination and integration of IMAM within facilities and with the DHMT; particularly in Nakapiripirit where it was observed that following joint consultations between IMAM

partners and the DHO, facilities were able to better integrate the IMAM programme into regular health services. Surge has taken a broader approach to monitoring caseloads of other health programme caseloads in Outpatient or inpatient Departments e.g. diarrhoea, or malaria and enabled response to high caseloads or workload irrespective of IMAM caseload. This was the case in Namalu HC III in Nakapiripirit which has a particularly high volume of clients and due to absenteeism of some key staff (i.e. Clinical Officer), VHT's were deployed to support staff.

Caseload threshold setting and monitoring provides a good visual, simple and practical approach to supporting facilities manage their SAM caseload throughout the year as indicated below. Surge applies an “adaptive management” and “quality improvement” approach beyond focus on IMAM. It can be applied to various health sector programmes and thus a significantly versatile approach with potentially numerous outcomes at various entry points. The Surge approach is most visible in and has created a significant impact in the ***serious phase*** according to feedback from DHO and facility staff responses;

- Planning and coordination meetings were held within hospital management for ITC's.
- Deployment of additional health staff (or VHT's) staff was activated in 6 health facilities (4 in Nakapiripirit and 2 in Moroto).
- Surge approach facilitates linkages between DHO and facilities.
- Intensification of health and nutrition education at OPD & OTC.

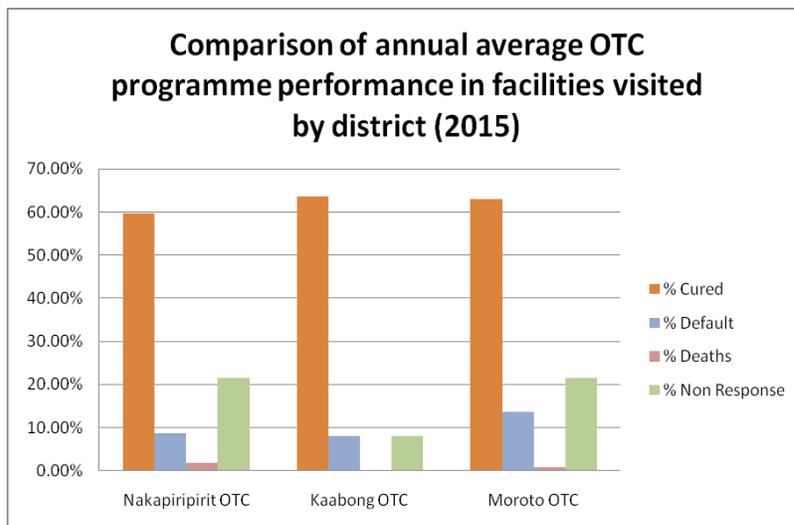
6.2.7. Weaknesses (Surge approach in IMAM service delivery)



In reviewing the programme performance data above, the approach at surface level, appears to have limited influence on programme effectiveness as demonstrated in the graphs comparing performance data between Kaabong facilities visited and Surge facilities for both OTC and ITC; However, it should be

noted that performance is affected by numerous other factors and thus attribution cannot be determined by this assessment or data. A more in depth evaluation would be required to determine the impact of the Surge approach on programme effectiveness.

Overall poor programme performance (all indicators) in 2015 for facilities visited in Nakapiripirit; AVG% cured: <60% and as low as 45% for Tokora HCIV, AVG % defaulter rate; >15% (as high as 40% for Tokora HCIV).



Furthermore, defaulter rates have been increasing in ITCs probably due to the termination of WFP food support to caretakers as observed in Tokora HC1V, Kaabong Hospital (as high as 25% in Sep 2015) and Moroto RRH (as high as 22% in Sept 2015). % Non-response rate is alarming (>10%) for all the OTCs visited indicating lack of programme effectiveness.

The data compiled at facility level indicates that there is significant variation in programme performance between various facilities, irrespective of the Surge approach implementation indicating that it is not currently possible to attribute improvement in programme quality on the presence of the Surge approach. To reiterate earlier statement, an in depth evaluation would be required to enable this.

High dependence on rather short term *emergency funding* has affected continuity of the approach by Concern which has affected the retention of Concern staff from one funding cycle to the next, which oftentimes had an unfunded period in between when well-trained/ qualified staff would then secure other jobs. There is a similar issue concerning the retention of Health staff in general in Karamoja, particularly at the Health Facility level and the success of HSS by nutrition and the surge model depends on making progress in finding solution to these issues. Long time lapse between reviewing of SAM caseloads and responding particularly for OTC's i.e. caseload for a particular facility above the serious threshold will be observed when the monthly report is submitted i.e. two weeks into the new month and a response may be made within a week of this hence a 3-4 week period before a response is made. Despite the availability of a step by step guide to performing risk analysis and threshold setting based on triangulation of data from both the risk and capacity assessment, this assessment was not able to obtain the actual outcome of data triangulation by facility to determine SAM caseload threshold. A simplified matrix or tool may be required to enable this triangulation (*note that this matrix/tool should factor in the recommendation suggested in bullet above*).

This assessment suggests that whilst setting annual thresholds is a good initial start, the thresholds should be more fluid due to the very changeable circumstances affecting individual health facilities (mainly related to HR gaps) and hence, the need for a predetermined set of criteria to support

Boniface - In Charge (Enrolled Nurse) at Nabulenger HC II in Nakapiripirit stated; "*In the alert phase, it feels like CUAMM and Concern are doing the same thing*" though he seemed clear that Concern's visibility and support was stronger.

threshold revision. There is currently overlap of IMAM interventions between the partners (CUAMM and Concern) since most facilities fall within the "normal and alert" levels and response in these two phases is very similar to the routine IMAM approach furthermore, the presence of the two partners is confusing for health facility staff. There are opportunities to develop stronger linkages with other community actors across both health and non health actors; WFP CBSFP, Marie Stopes International who conduct family planning outreaches etc. The approach is implemented against a background of IMAM programme functionality that still has many weaknesses.

6.2.8. Opportunities and threats (Service Delivery/IMAM Surge approach)

The Surge response package has the potential to be applied across other health programme areas. The next phase of the surge approach might consider including thresholds for other morbidities in particular malaria and diarrhoea to address caseload comprehensively within respective facilities. In Inpatient Treatment Centres (ITC) the Surge approach might consider using mortality as the threshold rather than caseload.

A major **threat** to the Concern Surge approach in Karamoja is related to the apparent duplicity of efforts with CUAMM, particularly in the “alert” phase whereby the support even if more intense on Concern’s (Surge) side is quite similar except for the preparedness planning and caseload monitoring. To address this, both partners are making efforts to coordinate, including joint Supportive Supervision and joint support to quarterly District Health Management Teams.

6.3. Impact of IMAM Surge approach on the work force.



The impact of the surge response on the work force and issues affecting health worker workload or “pressure” was identified as one of the **most visible and clear strengths** that this approach offers. This is particularly relevant in a resource-constrained environment such as Karamoja region.

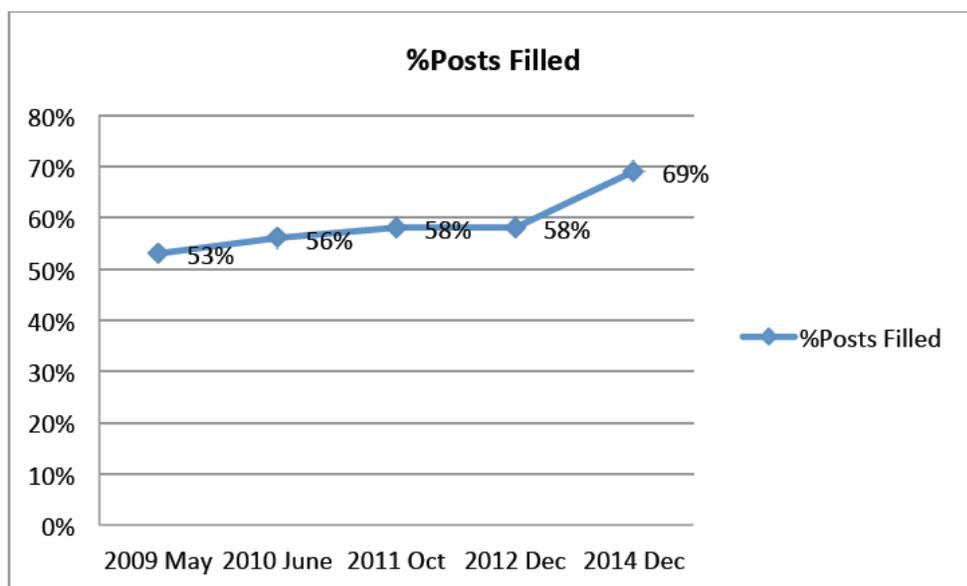
Analysis of the impact of the IMAM Surge approach on the work force in the region requires an understanding of the national Human Resources for Health context. Uganda is one of 57 countries globally and 36 in Sub-Saharan Africa identified by the World Health Organisation (WHO) as having a severe human resources for health crisis which is reflected in health staff availability, distribution and performance¹¹. However, in Uganda this situation seems to have improved with the Human Resources for Health 2015 Biannual Report (April 2015) showing a significant improvement in health sector staffing during the period of 2009 – 2014 from 48% to 67% in local governments and **53% to 69%** nationally as observed in Figure below;

These improvements have been facilitated by a Government of Uganda mass recruitment drive focussing mostly on HCIV’s and HCIII’s and driven by the fight against HIV/AIDS, malaria and other communicable diseases. Furthermore, various partners have supported additional recruitment of staff

¹¹ Namaganda et al. Human Resources for Health (2015) 13:89

at the lower levels through Global Fund and USG/PEPFAR support. Currently, the two most notable national programmes which also operate or support HRH in Karamoja are: USAID/PEPFAR Strengthening Uganda’s Systems for treating HIV/AIDS nationally (SUSTAIN), 2010 – 2015 and the Uganda Capacity Programme (USAID) implemented through Intrahealth Uganda. SUSTAIN provides laboratory and clinical support through all 7 hospitals and HCIV’s in the region. This has so far supported more than 50 health workers (medical/clinical officers, nurses, midwives, lab technicians, data officers and lab hubs) in the region.

Figure 4: Percent of approved posts filled by health workers (2009 – 2014)



Source: MOH Annual HRH Staff Audit, selected years

In addition, the Uganda Capacity Programme (USAID supported) implemented through IntraHealth supports national level capacity for HRH policy and planning, HRH systems for improved health care and quality and improving health workforce management practices. IntraHealth has been instrumental in developing a web-based live information HRH Information System which allows review of MOH staff audits at various levels (including facility level) of the health system throughout the country¹². At national level, the three year HRH plan is used to negotiate with the Public Service Commission and Ministry of Finance for inclusion in the Budget Framework Paper. Specifically for Karamoja region, the Uganda Capacity Programme has supported the development of a regional recruitment plan and district specific plans. In addition, they have an officer based in Abim district who coordinates HRH issues in the region. The **IntraHealth Uganda Capacity Programme** is spearheading support to Ministry of Health in

¹² http://hris.health.go.ug/districts_manage/index.php/audit_summary_districts

applying a **Workload Indicators of Staffing Need (WISN¹³)** methodology to support identification of staffing requirements based on *workload* or *pressure*. Whilst stakeholders in 2011 recommended the transition from use of fixed Local Government norms (*current approach being applied nationally*) to the WISN method, this has not yet been applied or rolled out nationally. The Local Government norms (established in 2000) determined by facility type and scope of services fail to account for *variations in workload* or *output* and thus are considered inefficient (Namaganda et al, 2015).

Since the Karamoja region is known to suffer from chronic health worker shortage the Government and Health partners supporting Northern Uganda together with local governments agreed to develop mechanisms for motivating and retaining health workers once attracted to their local governments to minimize labour movement. Thus, **hard to reach allowances** are now provided for all health workers in facilities outside of municipalities in addition to increased Government allocations towards the wage bill and significant development partner support to address staff housing issues. **Table 1** below provides the most recent MOH staff audit for the region and indicates an overall 55% approved posts filled for Karamoja close to the national at 54.8% which is a significant improvement since Karamoja has always been much lower than the national average.

No.	District	Total No. of Units	Total Norms	Filled	Vacant	Excess	% Filled	% Vacant	% Excess	Net Vacancy Rate
1	Abim	18	371	251	185	65	67.7%	49.9%	17.5%	32.4%
6	Amudat	10	147	43	107	3	29.3%	72.8%	2.0%	70.8%
36	Kaabong	27	511	229	316	34	44.8%	61.8%	6.7%	55.2%
60	Kotido	16	251	164	108	21	65.3%	43.0%	8.4%	34.7%
81	Moroto	21	290	110	206	26	37.9%	71.0%	9.0%	62.1%
86	Nakapiripirit	16	270	177	118	25	65.6%	43.7%	9.3%	34.4%
91	Napak	16	202	146	104	48	72.3%	51.5%	23.8%	27.7%
	Average for the region	18	292	160	163.43	31.71	55.0%	56.0%	11.0%	45.0%
	Grand Total (National level)	124	2042	1120	1144	222	54.9%	56.0%	10.9%	45.2%

It is important to note the fluidity of staffing situation which often renders information collected through the central HRH Information System slightly redundant. This is reflected in **Table 2** below which summarises the actual situation at the time of the facility visits in February 2016.

Table 2: Facility staffing situation at time of field visit in Feb 2016

¹³ Methodology developed by WHO in 1998.

District	Facility visited	% Staff posts filled ¹⁴ at time of visit	Comments (includes comparison with MOH HRH Information System staff audit – Dec 2015)
Moroto	Moroto Regional Referral Hospital	65%	Shortage of Medical Doctors/CO's and additional nurses. The situation at time of facility visit was better than the MOH staff audit report; 39%
	Rupa HC II	46%	Lacks Clinical Officers and Nurses (MOH staff audit = 37% staff posts are filled)
	St. Pius Kidepo HC III	83%	This is quite different from the 16% MOH Audit information. Note that the higher number is due to 2 midwives who are volunteers (one of which is overseeing the MCHN and OTC programmes) They lack full time govt. salaried nurses and midwives
	Loputuk HC III	32%	Versus 16% MOH Staff audit information They have a serious lack of Clinical Officers and additional nurses
Nakapiripirit	Namalu HCIII	76%	Versus 89.5% in MOH staff audit. This facility lacks additional CO's and nurses. One of their CO's is absent for prolonged periods.
	Nabulenger HCII	>100%	They have overstaffing of nursing assistants and do not have a midwife so % posts filled is misleading. Versus 89% from MOH staff audit
	Tokora HCIV	62%	82% from MOH Staff Audit. CUAMM is funding 2 Doctors and MO's
	Nayonai Angikalio HCII	100%	Surge approach supported a Lab Assistant. MOH Staff audit = 44% staff posts filled
	Lolachat HCIII	50%	110% posts filled from MOH staff audit. They need additional CO's and nurses.
Kaabong	Kaabong Hospital	63%	Based on MOH Staff Audit Currently being supported by SUSTAIN; Medical Doctors and laboratory staff
	Narengepak HCII	50%	Versus 44% from MOH staff audit. They need a midwife and an extra nurse. Support staff were performing some of the routine functions
	Kalapata HC HCIII	50%	Versus 42% MOH staff audit. They lack midwives, clinical officers and additional nurses.

Other stakeholders that support Human Resources for Health in the region include; **Drylands Integrated Programme (2015 – 2020) Initiative** uses the Millennium Villages Project approach of integrated

¹⁴ This is calculated on the basis of staff availability versus Government staffing norms by type of facility

development to the benefit of pastoral and agropastoral communities in Djibouti, Ethiopia, Kenya, Somalia, Sudan and Uganda. The approach aims to deliver integrated interventions to achieve the Millennium Development Goals in the four sub counties of Lotome (Napak), Lorengedwat (Nakapiripirit), Nadunget (Moroto) and Loro (Amudat) in Karamoja. It is being implemented by the Ministry of Karamoja Affairs in the Office of the Prime Minister through the Millennium Promise Alliance. Under its health portfolio, the programme has a health systems strengthening/HRH component. So far, this has facilitated the districts of Moroto and Napak to recruit an additional 20 health workers in April 2015. This support entailed ensuring the District Service Commissions are functional and sought approval of the district wage bill by Ministry of Finance through Chief Administrative Officers (CAO). The initiative supported the first year's salary with the aim that the Government absorbs all staff initially paid for.

CUAMM have been a critical player in addressing Human Resources for Health in the region over the last decade. Currently, it is providing this support with funds from DFID through UNICEF and previous support was provided from the Italian Government. The CUAMM HRH portfolio has evolved over the years however, in general it has entailed recruitment of midwives and enrolled nurses whose salaries have now been absorbed by Government. CUAMM have sponsored 90 Karamajong school leavers to pursue midwifery, nursing and laboratory skills of which (>80%) have already been absorbed into the Government Health System. CUAMM have also ensured functionality of HCIV's, constructed nine staff houses, renovated maternity wards and theatres and provided salary top ups or allowances for medical or clinical staff to cover the unpaid periods until Government salaries are received. In addition, the CUAMM TA's, supported through DFID/UNICEF nutrition programme, monitor facility workload and advise on re-distribution of staff.

WFP also supports the health sector and specifically human resources through its Maternal Child Health and Nutrition programme currently in all hospitals, HCIV's and HC III's which aims to increase access to essential maternal and child health services through the provision of a food supplement. To support the over worked health workers, WFP pays salaries of two food handlers and distributors at each of the facilities operating the MCHN programme. These often support health workers in performing other duties as well where staff are inadequate. In addition to MCHN which is facility based, WFP Community Supplementary Feeding programme facilitates 2 health workers by paying safari day allowances to support SFP activities at the various out posts. Furthermore, due to the high numbers of MCHN clients, WFP are considering recruitment of additional staff (*cadre or type of staff to be recruited has not yet been determined since this was still being conceived at time of visit*) to address workload.

The **Concern IMAM Surge approach** is providing a simple solution to address workload or skills gap in facilities with surges in SAM caseloads by having specific Surge response activities, including but not restricted to redistributing staff. Below outlines the specific strengths, weaknesses, opportunities and threats of the approach in addressing "work force" issues in Karamoja.

6.3.1. Strengths (Workforce)

Whilst the surge approach has benefits across all HSS building blocks, it is the surge support to the most challenging and central issue affecting health service delivery in the region i.e. workload and human resource factors, that makes it particularly appealing to Karamoja district health team and facility staff. The positive impact of the surge approach on health facility workload is well recognised and appreciated by DHO's and health facility workers and is the most visible aspect of the approach. This was clearly evident by the various statements made by the DHO's of Moroto and Nakapiripirit and Moroto as shown below.

Dr Anguzu (DHO Nakapiripirit) stated that *“The surge approach is principally addressing workload and thus, taking the resources where they are needed most”.*

Dr Muron (Acting DHO Moroto) stated that; *“The Surge approach has helped shift staff from low burdened facilities to high burdened or poor performing facilities”.*

6.3.2. Other strengths of the surge approach linked to the workforce include:

The Surge approach supports the scale up of the recommendation outlined in the HRH April 2015 Binannual report and in research paper (Namaganda et al, 2015) in reference to **“redistribution of staff from health facilities with low client volume or workload to health facilities with high client volume in the absence of funds for recruitment”**. Staff redistributions were supported in 6 facilities during periods of high peaks of SAM caseload.

- This was done on a temporary basis in 6 facilities; 4 in Nakapiripirit and 2 in Moroto including the Regional Referral Hospital.
- Duration of surge HR support ranges from 2 to 5 months and is in the form of health worker redistribution, facilitation of VHT's e.g. Tokora HCIV, and payment of wages for volunteer staff e.g. an enrolled nurse previously working with TASO in Moroto RRH.
- Redistributed staff are paid a safari day allowance for the period support the respective facilities in addition to their regular salary (if on government pay role).

In the paediatric wards, staff redistribution has enabled shorter work shifts and additional staff to cover night time shifts (Moroto RRH and Tokora HCIV); Pre-surge; worked 12 hour shifts and sometimes had no night shift ("surge has enabled both day and night shifts") Now work 8 hour shifts. Surge staff support has enabled attention on other health issues i.e. enables an integrated

approach to health service delivery. The surge approach differs from Kaabong (without surge approach) in that there are fewer options available for managing workload other than to take on the extra work and work longer shifts in places without surge as was noted in Kaabong Hospital whereby one or two staff work per shift (12 hour shifts versus the 8 hours in Moroto RRH). In addition, these facilities have a higher tendency to use "unqualified" support staff to bridge the gap e.g. VHT in Kaabong Hospital who is helping to mix feeds in the nutrition unit.

The surge approach enabled better planning and management of workload by allocating specific clinic days for OTC, MCHN whilst OPD remained daily in some facilities. The Surge approach has facilitated direct & frequent on the job IMAM support across all phases and strengthened IMAM capacity of health workers in paediatric wards or health facilities. This was particularly evident in Nakapiripirit district whereby health workers reported seeing Concern staff almost weekly and noted appreciation of their frequent support. Surge has facilitated improved planning between facility staff or hospital management teams, DHO's and partners.

6.3.3. Weaknesses (Workforce)

Lack of district nutritionists for coordinating and overseeing nutrition interventions is a challenge in all districts. Despite significant improvements, HRH issues remain challenging including lack of district nutritionists which ultimately impacts on developing capacity and resilience of HF. Non-reporting following recruitment is a big challenge e.g. in Nakapiripirit, MW's, 2 lab tech and 2 Doctors were recruited by the district in June 2015 but did not show up or report after accepting offer. Absenteeism is a major challenge nationally and in Karamoja. Data are not routinely available on this indicator however an estimate provided by the Tokora HCIV In Charge implies that ~ **45-50% of staff** allocated to posts actually come to work and work on a daily or regular basis.

6.3.4. Opportunities and threats (Workforce)

The most apparent opportunity identified is for Concern and the Surge approach to be streamlined with ongoing national and regional HRH efforts led by IntraHealth International. There are HR workload tools being promoted by GOU and specifically in the HRH national policy and strategy and thus, these present opportunities for the Surge approach both in relation to synchronising the approach with these policies but also as a means of ensuring nutrition is integrated into these. The Workload Indicator for Staffing Needs (WISN) indicator is one such tool and which applies the Local Government staffing norms in addressing staff requirements but considers workloads by cadre of staff. This offers an opportunity to define in more concrete terms the "**activity standards**" (by MOH staff cadre) for managing children with SAM and for integrating treatment of SAM into health services sustainably.

This assessment has identified a potential opportunity for the Concern Surge approach to integrate information and advocacy on non-reporting and absenteeism of facility staff since this was a general challenge faced in all health facilities in the region and is currently not being reported or compiled. Facilities are supposed to maintain registers of staff presence or not and thus, Concern and other partners could support them to compile this information. The fact that there are numerous stakeholders working through the health sector and often with the same health workers is a significant opportunity if coordinated appropriately. There is an opportunity to jointly propose and support actions to address some HRH challenges. There is need for the various donors/partners to come together and provide coordinated support in addressing capacity, workload or other HRH issues in the region.

6.4. Information Systems

As already stated earlier, the Surge IMAM approach is being implemented to backstop and complement existing IMAM programmes. The Surge approach focuses more on strengthening data quality at facility level and thus, both CUAMM and Concern compile the same reports to derive district reports. Furthermore, Concern reports more closely on additional indicators not compiled by routine IMAM support such as; caseloads in relation to thresholds. The table below provides an overview of the strengths, weaknesses, opportunities and threats of the approach in relation to IMAM related information systems.

Strengths	Weaknesses	Opportunities	Threats
Concern Surge support is resulting in improved quality of IMAM data compiled and reported due to more HF ownership and facility data cleaning.	Differences in the IMAM indicators being reported by CUAMM and Concern e.g. % non response is not captured in district IMAM report by CUAMM.	New HMIS tools have integrated IMAM indicators and thus offer an opportunity to further streamline IMAM into health systems reporting.	Two organisations supporting the follow up of similar reports may cause some confusion to facility staff.
Monitoring of caseloads and admissions (including deaths) against thresholds and use of visual aids has facilitated prompt decision making at facility level.	Time lag between review of caseloads and response since these are collected monthly.		
Ownership of data at health facility level has improved.	Parallel system to HMIS still in use however, new HMIS tools now incorporate IMAM data		
Surge approach has demonstrated an efficient use of data to support planning and response on IMAM.	Need for district wide or sub/county thresholds for decision making and district wide response.		

6.5. Supplies

Routine supplies required by the IMAM programme are provided by UNICEF through CUAMM i.e. therapeutic supplies; F75, F100 and plumpy nut in addition to other equipment for preparing supplies. Supplies monitoring and management is a critical objective of CUAMM's ongoing support and has done a good job in streamlining this support with much fewer stock outs compared to previous years. However, supplies for treatment of SAM other than the therapeutic food supplies are not being regularly replenished through CUAMM support and hence the Surge approach has demonstrated its ability to both identify and meet the additional supply needs particularly for the ITC's.

Strengths	Weaknesses	Opportunities	Threats
<p>Surge programme has provided more responsive support in the distribution of therapeutic supplies.</p> <p>CONCERN and CUAMM have been able to share supply response work load.</p> <p>The Surge approach has enabled provision of other materials not being replenished regularly by UNICEF/CUAMM support such as mosquito nets, utensils, drugs mainly for inpatient facilities.</p>	<p>Lack of IMAM job aides (wall charts, posters etc.) in all facilities was evident; these are needed as quick guides to support IMAM services.</p> <p>Therapeutic nutrition supplies are still managed as a push system versus integrated into Health System</p>	<p>Collaboration and advocacy with CUAMM, UNICEF and other partners to ensure unmet IMAM and general health supply needs are availed.</p>	<p>Persistent supply challenges of health system which need to be addressed by all partners working together.</p>

6.6. Governance and Leadership

Aspects of governance and leadership in relation to the Surge IMAM approach relate to the available policy environment and how the approach feeds into this and gaps not currently addressed. This is principally in regards to IMAM in addition to the wider nutrition or health policy environment and extent of its integration into the health systems.

Strengths	Weaknesses	Opportunities	Threats
<p>The surge approach has been integrated into the revised IMAM guidelines.</p> <p>The surge approach is directly implementing national HR recommendations to distribute staff from lower burdened facilities to high volume facilities as a more sustainable and cost effective approach in the absence of resources for new posts etc.</p> <p>Surge approach has improved coordination between facilities and district health teams</p> <p>The surge approach has raised the profile of IMAM due to the approach meeting the significant HR needs.</p>	<p>The approach does not yet reflect the</p> <p>Singular focus of the approach on IMAM yet its potential is beyond this.</p> <p>As a general weakness related to IMAM, IMAM needs to be integrated into essential Health Package and training on IMAM integrated into pre and in-service training.</p>	<p>Completion of revised IMAM guidelines and training packages is an opportunity to roll out training of health facility workers for quality improvement and for roll out of surge the approach.</p> <p>Health Unit Management Committees as part of the Health Systems Accountability Approach being implemented by GHG and RWANU offer an opportunity to link Surge approach, i.e., caseload and threshold monitoring in addition to advocacy on staffing issues.</p> <p>Advocacy to ensure integration of nutrition/IMAM and the surge approach into essential health services package (including HRH) and pre & in service training and other health strategies and policies.</p> <p>Available national tools and guidance on monitoring workload using the WISN indicators offers an opportunity to integrate IMAM.</p> <p>Build on the availability of other experienced HRH partners such as Intrahealth and SUSTAIN (URC/FANTA) and their respective programmes.</p>	<p>Approaching the policy space on nutrition singularly i.e. on IMAM versus as a package of nutrition services.</p> <p>This threatens or undermines the integration of nutrition into Health Systems approaches.</p>

7. Recommendations for surge scale up in Karamoja by HSS building blocks.

Health systems Building Blocks	Recommendations
Service Delivery	<p>Adapt/modify surge guidance tools with the following considerations in mind;</p> <ul style="list-style-type: none"> • Facility risk analysis checklist – this should address all HSS building blocks; • Streamline the guidance and tools from risk analysis to threshold setting. A simplified matrix or tool may be required to enable this triangulation. • Health facilities should review caseload against thresholds more regularly than once a month based on dynamic nature of challenges affecting workload. This may be in the form of an additional tool to support identification and monitoring of daily or weekly caseload/workload thresholds and or weekly monitoring of deaths particularly for ITC facilities. • Consider including thresholds for other programmes in particular malaria and diarrhoea to address overall negative impacts of increases in demand for services. • Step by step guidance on threshold setting, including visuals (pictures, graphics) as appropriate in addition to guidance or criteria for the revision of the thresholds. • Strengthen linkages between the facility and community levels building on all existing entry points (across sectors) for screening and referral of malnourished children. With this in mind, build on and strengthen existing linkages with RWANU and GHG mother care groups for community screening, referral and emphasis on follow up of severely malnourished children. • Increased advocacy for integrated nutrition and livelihood programmes to address preventive approaches.
Workforce	<ul style="list-style-type: none"> • Include the Surge approach as a tool to be used at DHMT level to plan, manage and request support from national level and external partners. • Concern and CUAAM should work with other HRH partners such as Intrahealth (Uganda Capacity Programme) to determine appropriate definition of workload or “activity standards” for IMAM and integrate these national HRH strategies, health policies and training packages (pre & in service) into their IMAM/surge and HSS work. • Review criteria for temporary staff deployment including incorporating other HSS factors such as malaria and diarrhoea caseloads in addition to staff retention, absenteeism etc. • Concern/Surge should consult with district health team and partners, review regional and district HRH plans developed with support from Intrahealth and identify actions it can support for more streamlined and coordinated support. • Joint advocacy for recruitment of district nutritionists which may require creation of posts thus national and district level advocacy is required. • Advocate for inclusion of nutrition in job posting instructions for key health personnel. • Work with district officials and partners to motivate and retain existing health workers (Joint Awards system etc.) • Integrate nutrition (including IMAM Surge approach) into national HRH strategy including

Health systems Building Blocks	Recommendations
	<p>nutrition capacity development of health workers (pre and in service training)</p> <ul style="list-style-type: none"> • Establish a pool of national, regional and district level trainers on nutrition (including IMAM/surge) for more sustainable and health systems strengthening support of IMAM/nutrition in the region. • Strengthen capacity of regional nutritionists, RHMT and DHMT's to oversee nutrition programmes in the region including IMAM/Surge.
Supplies	<ul style="list-style-type: none"> • Joint nutrition & health partners review of unmet supply gaps for IMAM in addition to broader HSS needs and advocate for joint action to address the supply needs. UNICEF/WFP and partners should continue to support streamlining of IMAM supplies management into ongoing health supply management chain; focus on the requisitioning of supplies from facilities i.e. from push system to pull. • As part of this review a risk sensitive approach should be taken. How has the IMAM supply system coped with surges in need in the past? What have been the successes and challenges? What are the likely risks in the future and capacities to manage the supply chain to respond to surges in demand?
Information Systems	<ul style="list-style-type: none"> • Support training and on the job mentoring in the use of the new HMIS tools which have integrated IMAM indicators • In consultation with UNICEF and CUAMM, jointly review IMAM programme performance data in the region and identify a common reporting mechanism (including non-responders) and develop an agreement and mechanisms for the Government and partners to regularly use nutrition data for improving the quality and effectiveness of the nutrition programming. • Include the surge monitoring of demand for IMAM nutrition services and thresholds of the health facilities in the DHMT regular monitoring of the IMAM nutrition contribution to the health service.
Governance	<ul style="list-style-type: none"> • Integrate relevant aspects of national HRH policy or strategies including Workload Indicators for Staffing Need (WISN) methodology into Surge/IMAM tools and guidance. • The above should be done alongside a more comprehensive review of other tools e.g. cholera response and other sector tools that apply a similar approach to address workload factors. These should be considered in the ongoing development of the surge guidelines, tools and training packages. • Surge roll out should be integrated into continued advocacy for nutrition integration into health policies (including HRH policies & strategies), staffing standards, and training strategies etc. • Review surge elements already included in IMAM guidelines in particular clarity on HSS development approach as opposed to emergency tool. • Wider stakeholder's e.g beneficiaries and health facility and DHMT staff should be consulted on satisfaction and impact of the approach in future evaluation methodologies.

8. Recommendations for surge implementation modalities in Karamoja.

The following three options are proposed for surge roll out in Karamoja;

1. Roll out of a risk sensitive HSS tool.
2. Add resilience and risk sensitive element to the Nutrition HSS approach.
3. Resilience and risk sensitive element of a Nutrition HSS partnership by level of HS.

Under **Option 1**, a phased approach is suggested whereby the approach is initiated district by district. Currently, the approach has made tremendous progress in Nakapiripirit district whilst more effort will be needed to streamline the approach in Moroto, Napak and Amudat districts. This option proposes that **one partner manages the nutrition-specific contribution to HSS (considers nutrition holistically, not just IMAM) and one partner rolls out the surge approach and hands over once surge is established.** This option represents the status quo in Karamoja. Concern have been developing the surge approach in districts and health facilities at the same time as CUAAM/UNICEF have been supporting HSS activities (see further comments on the division of labour under option 3 below). If the present arrangement was extended a much clearer agreement, between Government, UNICEF/CUAAM, Concern and principal donors, on roles, responsibilities and hand over modalities would be required.

Pros of Option 1:

- Specific focus for surge funding and results.
- Clear agreement on roles and responsibilities as well as hand over strategy could result in less confusion on who is doing what.
- Single approach to Nutrition HSS (at present CUAAM).
- Adaptation of status quo. Less disruption.

Cons of Option 1:

- Requires close collaboration between Surge and Nutrition HSS agencies and donors.
- Inefficient and higher opportunity costs for Government and donors.
- Only one agency for IMAM nutrition HSS less innovation and danger that organisation doesn't have all the needed capacity for IMAM nutrition HSS.

Under **Option 2**, it is suggested that under the leadership of the Government the key stakeholders, UNICEF, CUAMM, Concern and the donors, agree on a new **geographic division of responsibility to support nutrition-specific HSS work, including Surge.** In this option, the roll out of the Surge approach becomes just one element of a broader nutrition support to HSS.

Pros of Option 2:

- Reduced opportunity costs for government staff at district and HF level.
- More clear approach to embedding surge in nutrition HSS and HSS generally.
- More than one approach to Nutrition HSS might promote innovation and reduces risk of 'all eggs in one basket'.

Cons of Option 2:

- Increased opportunity costs for donors.

Under **Option 3**, it is suggested that under the leadership of the Government the key stakeholders, UNICEF, CUAAM, Concern and the donors, agree on one agency (probably CUAAM) being allocated responsibility for Nutrition contribution to HSS at DHMT Level and another agency (possibly Concern) made responsible for Nutrition HSS at Health Facility and Community level. This option would require a clear agreement and constructive partnership and coordination on linkages between Health Facility and District. This option is an adaptation of the current situation where

- a. The USAID RWANU and GHG programmes are investing in many elements of the community managed nutrition programme, however there is limited input from the HSS agencies such as CUAMM
- b. There are several examples of potential overlap between HSS inputs such as those of CUAAM (UNICEF/DFID) and those of Concern (other donors) at the community health extension and health facility level.
- c. There is significant input from CUAAM (UNICEF/DFID) at DHMT level, with some inputs from organisations such as Concern.

Pros of Option 3:

- Adaptation of present approach. Less disruption.
- Specific focus for funding and results.
- Reduced opportunity costs for Health Facility and Communities.
- Combined approach to Nutrition HSS.
- Possibly more innovation.
- Partners might be selected by comparative advantages.

Cons of Option 3:

- Increased opportunity costs for donors and DHMT.
- Requires close collaboration between Nutrition agencies contributing to HSS.

9. Conclusions and Recommendations.

The scoping study has found that **the CMAM surge approach has a role to play in Karamoja**. The situation in Karamoja is expected to continue to be very changeable as a result of factors including climate change, continued development deficits, conflict, and diversification of livelihoods. This environment will likely result in continued need for services to manage severe acute undernutrition, whilst at the same time investing in a full holistic approach to addressing nutrition specific and sensitive issues in Karamoja. Nutrition specific activities in Karamoja continue their significant shift from an emergency oriented approach through integration into the health system towards nutrition being a significant contributor to the overall HSS agenda. At the same time the constant changes in the environment has been shown to result in changes in incidence of disease and undernutrition and consequent demand for services. This volatility in demand for nutrition services is likely to not only worsen quality and efficiency of the services in the short term but also has the potential to set back the underlying improvements in health and nutrition services. Therefore, the CMAM surge approach offers a methodology to develop the resilience of the health system and specifically the IMAM services to absorb, adapt and transform in the face of shocks and stresses.

The study has highlighted that despite significant progress in offering IMAM services in Karamoja there are still considerable challenges to address before an efficient and quality system is place, accessed and utilized by a large number of those needing the services. The surge approach is not a replacement for the investment that is required to strengthen the health system and the IMAM services within the health system. Thus, for the surge approach to achieve its full potential there is still much work to do on the IMAM services and the health system as a whole. Therefore, the study finds that the best operational implementation modality would be to **embed the potential roll out of the surge approach within the nutrition-specific contribution to HSS**.

The study has given three options for modalities to embed the surge approach within the health system. The authors consider option two to be the optimum option for the reasons described above. However, other options have been suggested to allow the stakeholders to consider alternative approaches that may result in less disruption to the present status quo for IMAM services in Karamoja. The authors do feel however, that some aspects of the IMAM service weaknesses highlighted in the report are a result of the lack of clarity on roles and responsibilities of the stakeholders involved in supporting the Government on IMAM services, nutrition specific services and HSS in general. **A clearer agreement and coordination of external support throughout the health and the nutrition sub-sector is required**. This agreement should be based on comparative advantage, technical capacity and a systems perspective will greatly benefit the IMAM service quality and effectiveness as well as the potential.

The most significant challenge to the health system resilience in the face of surges in demand is the human resource issue. A very unstable and in many cases inadequate health facility staffing situation has multiple impacts of the systems resilience. It is likely that the surge approach - once rolled out - will

have a large part of its response activities dedicated to solving staffing issues at times of surges. The study has found **several opportunities to engage with other stakeholders in HSS such as IntraHealth, where these Human Resource issues can be addressed at a system level and adapted to facilitate the surge approach.**

To date, the surge approach has been used in a stop-start emergency oriented way, partially because of funding issues but also because of the residual perspective of IMAM being an emergency response. Should the IMAM surge approach be rolled out more stable funding will be required as well as health system agreement that it is not an emergency approach and is an element of HSS that has the potential to build the Health System resilience. If a systems based approach is taken then the stakeholders should also **consider expanding the surge approach to include communities** both as stakeholders in developing the health facility surge approach but also to use an adaptation of the surge approach for their own activities in response to surges in need for nutrition services.

In Kenya, the surge approach has concentrated on providing the tools for a health facility to cope with surges in demand. The DHMT has been involved in facilitating the capacity development of the Health Facility staff and in supporting the response to surges. The stakeholders in the roll out of a surge approach should also **consider developing a surge mechanism at the district level** that would allow the district to request and receive support to respond to surges in demand from the national level and from non-government partner's support to the Health System.

There is also the dilemma of embedding the Surge approach within nutrition's contribution to HSS and only applying it to one aspect of that system (IMAM) instead of to all surges in demand for services that a health facility might experience. Depending on the suggested agreement on roles and responsibilities for nutrition specific activities within the health system, the study finds that the stakeholders should **consider including other diseases that experiences surges in demand within the roll out of the surge approach in Karamoja.**

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Annexes

Annex A: List of facilities visited.

District	List of facilities visited
Moroto	Moroto Regional Referral Hospital
	Rupa HC II
	St. Pius Kidepo HC III
	Loputuk HC III
Nakapiripirit	Tokora HCIV
	Lolachat
	Nabulenger HCII
	Namalu HC III
	Nayonai Angikalio HC II
Kaabong	Kalapata HCIII
	Narengapak HCII
	Kaabong Hospital

Annex B: List of individuals met and interviewed

District	Name & Organisation	Date of visit
Kaabong	Dr Nalibe Sharif – Acting DHO	3 rd February 2016
	Christine Namukasa (Nutrition Officer) - CUAMM	4 th February 2016
	Eunice (Registered Nurse) – Nutrition Unit Kaabong Hospital	
	J. Bosco Achilla – Paediatric Ward – Kaabong Hospital	
	Samuel Omara (Enrolled Nurse) – Kalapata HCIII	
	Nolem Pirimina (Nursing Assistant) – Kalapata HCIII	
	Isaac Lochiam (Enrolled Nurse) – Narengapak HCII	5 th February 2016
	Patrick Baraza– CAFH	
Patricia Akongo (Community Development Assistant) - World Vision	4 th February 2016	
Kotido	Maggie Mcloughlin (MCHN Manager)– Mercy Corps (GHG programme in Northern Karamoja)	5 th February 2016
	Joseph Odyek, Concern Surge Coordinator	5 th February 2016
Moroto	Martin (Nutrition TA) – CUAMM	5 th February 2016
	Dr Charles Nuwagaba – Drylands Integrated Project (Millenium Promise)	
	Simon Ondoa (Regional Nutritionist - Moroto Regional Referral Hospital)	
	Harriet Achen (Enrolled Nurse – Moroto Regional Referral Hospital)	6 th February 2016
	Sam Akocil (Volunteer Nursing Officer at MRRH) was previously supported through TASO	
	Agnes Akol /Nurse (Paediatric Ward)	9 th February 2016
	Sister Rose Oyet – Principal Nursing Officer (Moroto Regional Referral Hospital)	8 th February 2016
	Dr Vincent Muron (DHO Moroto)	
	Martin Ngolobe (Propgramme Officer – UNICEF)	
	Tom Ahimbisibwe (WFP)	
	Irene – AFC	9 th February 2016
	Joseph Menya Nursing Assistant (Rupa HC III)	11 th Feb
	Francis Lotee – Nurse (Rupa HC III)	
Innocent Putan (Nursing Officer) – Rupa HCIII		
Moroto	Alex (St. Pius Kidepo HC III)	

District	Name & Organisation	Date of visit
	FRANCESCA – Volunteer (St. Pius Kidepo III) Rachel Nagudi (Enrolled Nurse) In Charge Loputuk HCIII	
Nakapiripirit	Annet Rita Imamut (Concern Emergency Nutrition Officer, Nakapiripirit district)– oversees the Surge Approach in Nakapiriprit) Teddy Akello (In Charge - Nursing Officer) – Namalu HC III Boniface (Nabulenger HCII) John Boscoe Moru – Enrolled Nurse (Nayonai Angikalio HCII) Bernard Anyakaim - Lab assistant (Nayonai Angikalio HCII) Dr Peter Akwang (In Charge) – Tokora HCIV Jonathan (Support Staff) - Tokora HCIV Samson (Support Staff) - Lolachat HCIII	9 th February 2016 10 th February 2016
Kampala level (individual discussions, phone calls or via email correspondence)	Mary O’Neill (Country Director - Concern) Gudrun Stallkamp (Senior Nutrition Advisor - Concern) Moses Doka (MOH – HMIS) Dr Peter Lochoro – Country Director (CUAMM), Claire Katusiime – Nutrition Coordinator (CUAMM) based in Napak district Dr Andrew Okot (Marie Stopes International) Siti Halati and Martin Ahimbisebwe (WFP) Nelly Birungi and Abiud Omwega (UNICEF) Dr Vincent Oketcho (Chief of Party INTRAHEALTH)& Bezy Omoya (INTRAHEALTH Manager based in Abim) &Ismail Wadembere (INTRAHEALTH – M&E focal person) Irene Sseguya (Human Resources for Health/SUSTAIN)	Various dates

District	Name & Organisation	Date of visit
Participants of Stakeholder Consultation Meeting to present findings held on Thurs 3 rd March	UNICEF – Abiud Omwega (Nutrition Manager) and Alex Mokori (based at Moroto) ACF –Duncan Bell INTRAHEALTH – Dr Vincent Oketcho CUAMM – Dr Gideon Ndawula Concern Worldwide – Mary O’Neill, Laura Lalor, Gudrun Stallkamp, Joseph Odyek MOH – Albert Lule GHG/ Mercy Corps Chief of Party – Tracy Mitchell DFID - Howard Standen, Ben Cattermoul Consultants (Brenda K. Muwaga and Peter Hailey)	3 rd March 2016

Annex C: Evaluation Framework for the CMAM Surge Approach

	Question	Indicator
Impact	1. Has the introduction of the Surge approach improved the lives of children with SAM in the programme area and their families?	<ul style="list-style-type: none"> - % of children discharged from SAM treatment services as cured, died and defaulted during the surge period at facilities implementing surge model as compared to a) the same facilities during non-surge time b) Sphere standards c) non-surge facilities during the same period. <p>Note this indicator presumes a suitable control group at facilities not implementing the surge support is available for comparison – this may only be possible in some settings</p>
	2. Is coverage affected by the approach?	<ul style="list-style-type: none"> - % of children with SAM covered by treatment service during the surge period 2014, compared to the same period in 2013 and during non-surge period - % of carers with SAM children not covered by the service (or who have defaulted from the service) who cited quality/ reliability of health service as reason for not attending - Note, attribution of improved coverage to the Surge approach, may be difficult to establish
	3. Did the model affect other health services positively or negatively?	<ul style="list-style-type: none"> - % health service users (disaggregated by under-fives, maternal and other) satisfied with the key services,

		<p>including CMAM (health service user survey)</p> <ul style="list-style-type: none"> - Average waiting time for SAM services vs. that for other child and maternal health services before and during surge period (health facility assessment) - % health facilities with no stock-outs of key supplies e.g. RUTF during surge period (health facility assessment) - Perceptions of health workers regarding the efficient delivery of SAM vs. other health services during surge periods (KIIs, FGDs, survey)
Effectiveness	4. Are health facilities able to analyse drivers of malnutrition in their catchment areas and forecast when spikes in caseload are likely to occur?	<ul style="list-style-type: none"> - % of health facilities with seasonal event calendars with relevant risk factors plotted (process documentation) - % calendars that are reviewed / updated quarterly (process documentation) - % of health facilities that correctly forecasted peak months for caseload in facility plan (process documentation)
	5. Are health facilities able to set realistic threshold levels based on a good analysis and understanding of their historical data and context	<ul style="list-style-type: none"> - % of clinics with established thresholds and related support packages and surge protocols agreed and outlined in facility district preparedness plan/ MoU at least 2 months prior to expected start of surge
	6. Are key CMAM indicators meeting sphere standards at all stages of the approach – i.e. at all threshold levels.	<ul style="list-style-type: none"> - % of children discharged from therapeutic care (and supplementary feeding) feeding programmes cured, defaulted and died (compared to Sphere standards)
	7. When thresholds are crossed are facilities requesting support in a timely manner?	<ul style="list-style-type: none"> - % of occasions where agreed threshold was exceeded at end of the month that were reported to DHMT within 2 weeks (process documentation)
	8. When the District Health Office receives support requests is the response efficient and timely?	<ul style="list-style-type: none"> - % of facilities reporting they exceeded thresholds that received the full agreed package on time per preparedness plan/MoU.
	9. Is the surge package at each stage comprehensive enough?	<ul style="list-style-type: none"> - Qualitative assessment of package versus need using key informants among District and health facility staff
	10. Is the capacity of health facility staff in CMAM maintained or improved during and after the surge, as compared to baseline	<ul style="list-style-type: none"> - % of health facility staff and District managers (disaggregated by type) demonstrating acceptable knowledge of CMAM protocols before, during and after surge period (health staff survey)
Relevance/ acceptance	11. Is the approach acceptable to clinic staff, district staff, community members, donors and NGOs?	<ul style="list-style-type: none"> - % of health facility and District staff who are satisfied with the support they received during the surge.
Efficiency	12. What is the cost per life saved and how does it compare with other interventions?	<ul style="list-style-type: none"> - What is the cost per life saved annually where surge approach implemented vs. a 'typical emergency response scenario' built from historical data
	13. Are there additional costs associated with implementing the CMAM surge capacity approach at the clinic level beyond normal services? Are there any observed savings?	<ul style="list-style-type: none"> - To degree possible, what is the cost of life saved in surge vs. non-surge facilities? - What is the actual (vs. projected) cost of delivering different versions of the surge package? (cost analysis) - Which aspects of the surge package are most expensive for both Concern and the District Health Team and where could savings be made?
Sustainability	14. Was the additional surge support scaled down in line with decreasing caseloads and agreed thresholds?	<ul style="list-style-type: none"> - % of health facilities returning to below thresholds that have scaled down all external support within 2 months
	15. Has a sustainable approach been taken?	<ul style="list-style-type: none"> - What aspects of the surge approach are taken up by the DHMT in early 2015 with minimal support from Concern? - What wider funding mechanisms exist within government authorities, the UN & donors to support surge scale up/down the future, particularly linked to emergency preparedness & early response efforts across sectors?

Annex D: Broad questions applied during this assessment

Level	Type of questions or issues to follow up during individual and stakeholder consultations
National	<ul style="list-style-type: none"> i. Who are the key players in Health System Strengthening specifically Human Resources for Health? What are the HRH strategies in place specifically for hard to reach areas like Karamoja? ii. Who are the actors supporting HRH issues in Karamoja and what are they doing? iii. What is the national data or systems available to strengthen HRH? iv. What are the Governments plans to roll out new IMAM guidelines? Feasibility of integrating Surge approach into these guidelines? v. Government plans to roll out new HMIS tools and support training on IMAM reporting within HMIS framework? vi. To what extent is IMAM integrated into the Health System? What needs to be done?
District	<ul style="list-style-type: none"> i. Knowledge and acceptance of the Surge approach ii. Other players and potential overlap iii. What has the approach achieved/impact of the approach? iv. Issues/challenges to be addressed? v. Who are the HSS actors and what do they do? vi. How does surge link and/or compare with other HSS activities? vii. Partners at district level (mainly nutrition partners): viii. What support is being provided and how is this affected by the human resource issue? ix. How do the respective programmes address HRH issue or workload issue? x. If IMAM support is provided, how are synergies being created or how are linkages being improved?
Facility	<ul style="list-style-type: none"> i. Knowledge, implementation and impact of surge activities. ii. Assess caseloads and admission data for IMAM and other health related issues; What are the conditions or programmes that create the greatest pressure on health workers? iii. What are challenges and gaps? iv. Who are the various partners/actors supporting facilities (IMAM/nutrition support & HSS?)
Community	<ul style="list-style-type: none"> i. What are the actions at community level? Who is implementing what? What are the synergies between facility and community? How has surge supported this? What are the gaps?

Annex E: Photos, facility data analysed from field mission

Figure (1): Risk analysis admissions and caseloads Moroto Regional Referral Hospital 2015 (ITC)

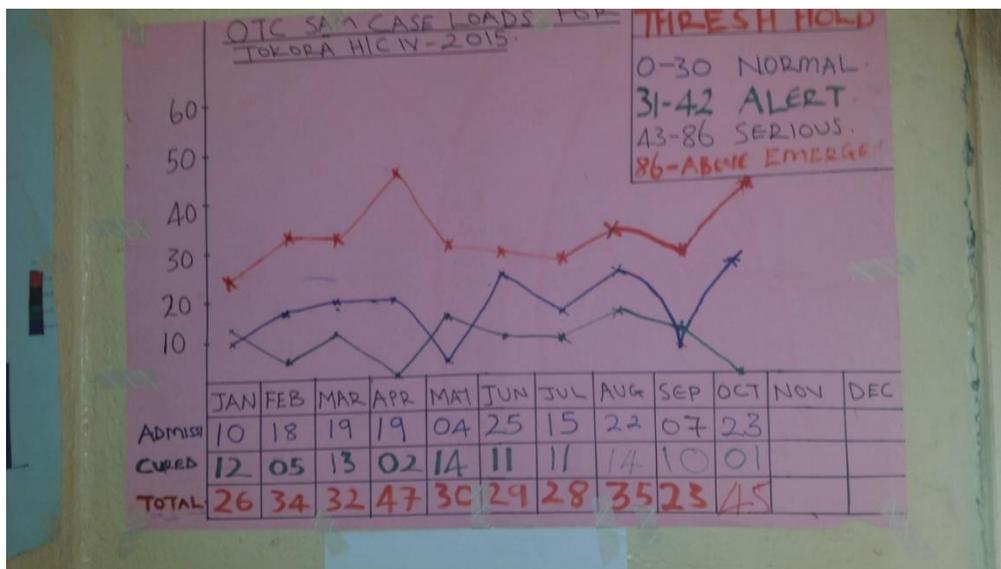
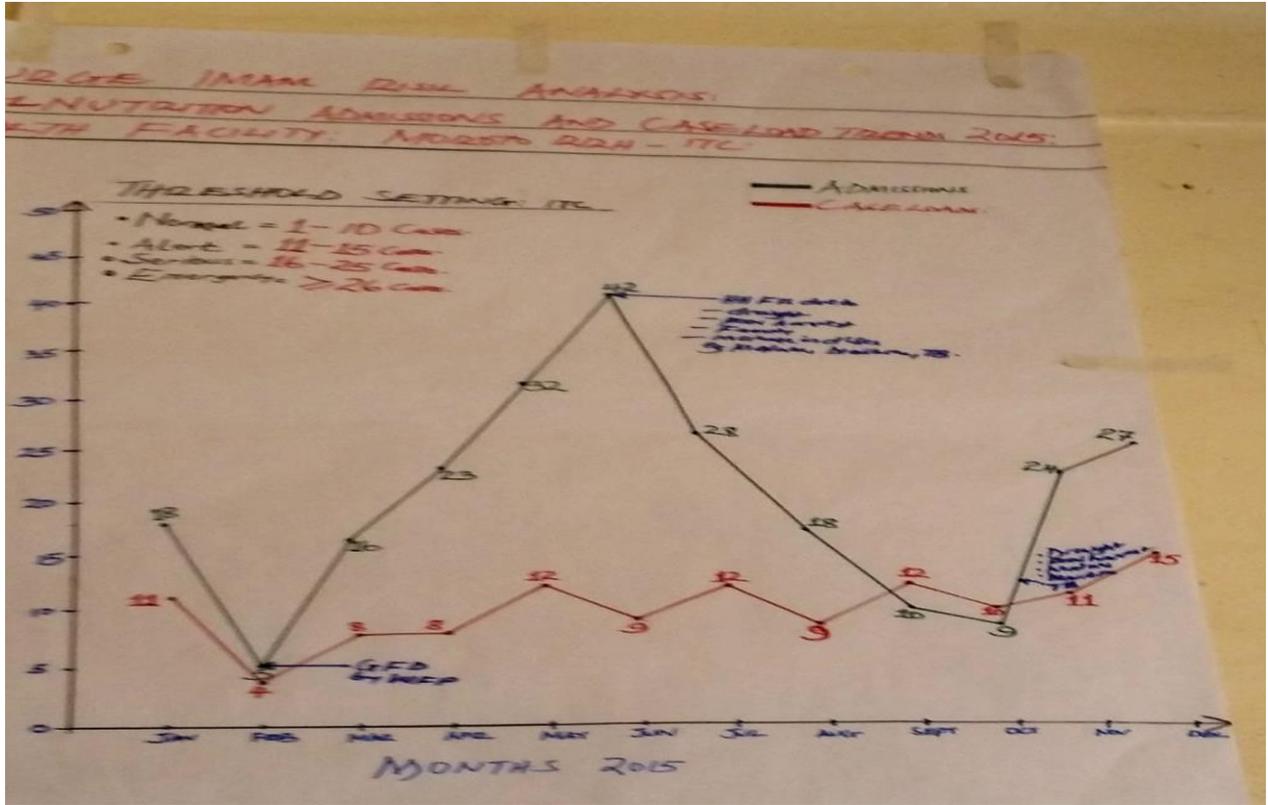


Figure (2): Risk analysis OTC admissions and cured in 2015 for Tokora HC IV in Nakapiripirit

Figure 3: Caseload data for Tokora HCIV (SAM, Malaria and acute diarrhoea)

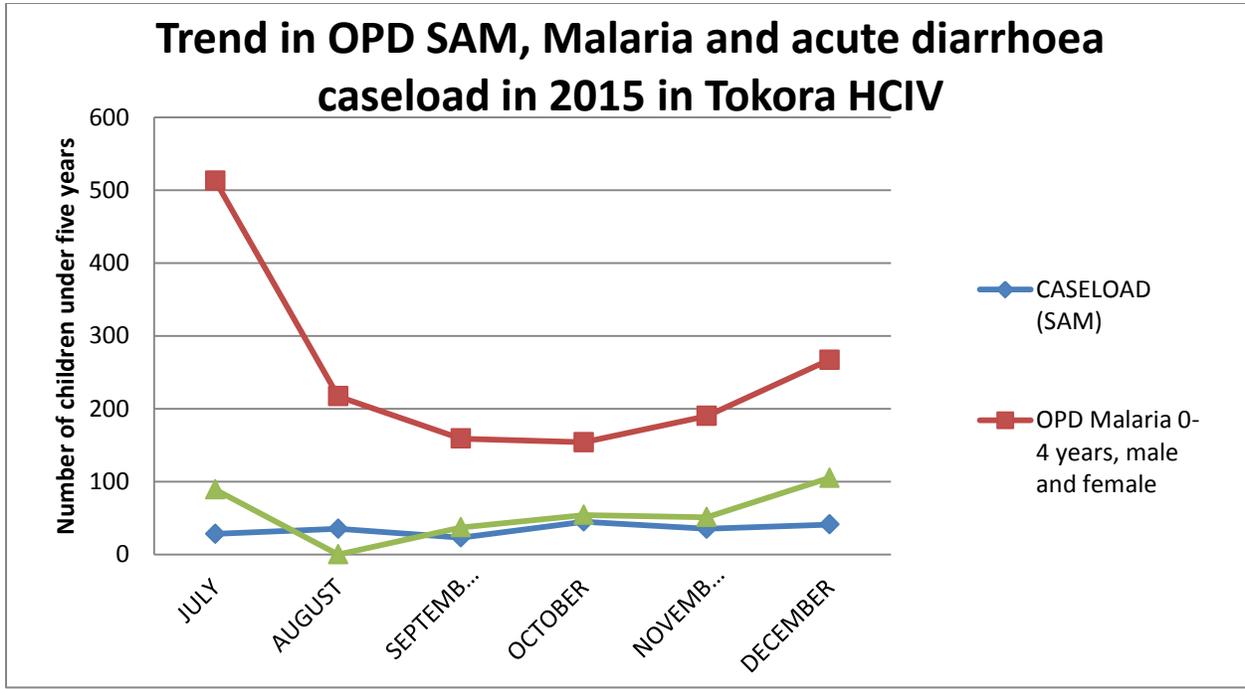
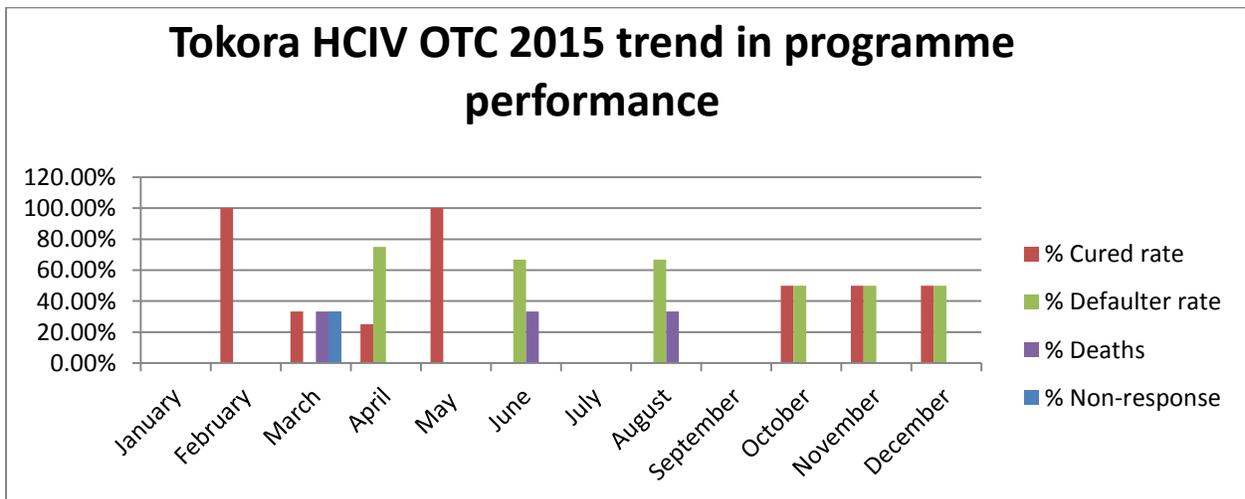
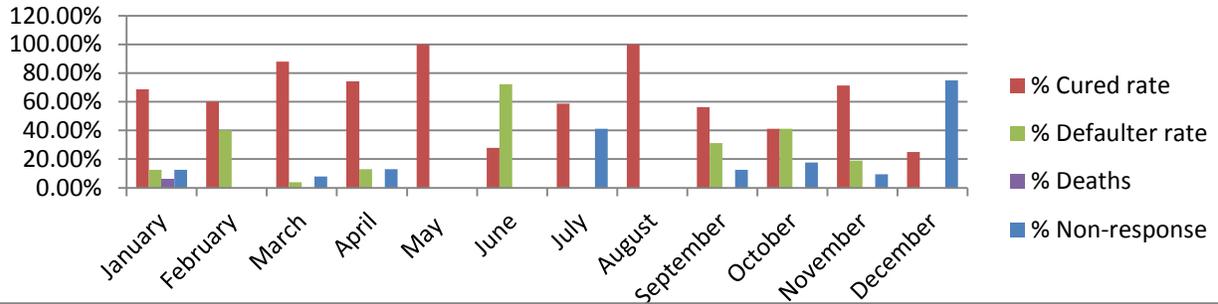


Figure 4: Nakapiripirit (OTC) programme performance data from some of the sites visited indicating below acceptable cured, defaulter and non-response rates.



Lolachat HCIII 2015 trend in OTC programme performance



Nabulenger HCII 2015 trend in OTC programme performance

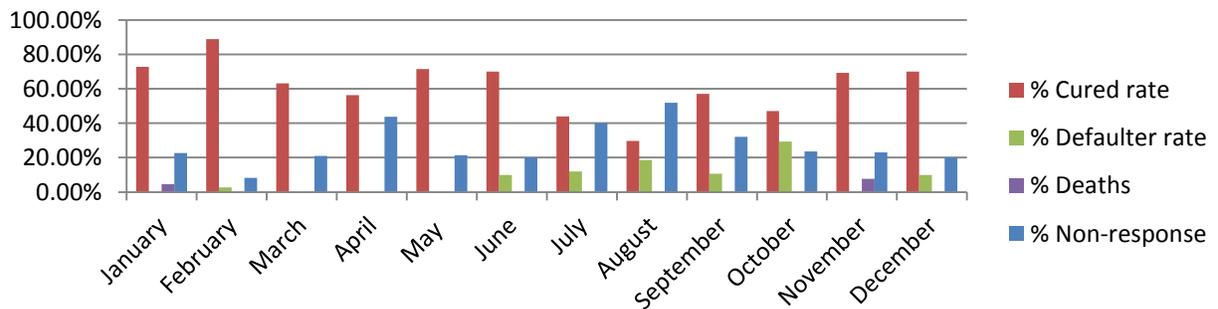


Table 1: Overview of health sector partners in Karamoja (*Source:* Karamoja Nutrition Programme Review Hailey, P., and Kaijuka Muwaga, B., 2015)

Programme description	Geographical location	Implementing Partners	Donors	Funding available and programme duration
HIV/EMTCT	All 7 districts	CUAMM	UNICEF/DFID	Ush1,974,311,052 (Jan – Dec 2014)
Scale up and consolidate iCCM	4 new districts (Abim, Kiruhura, Lynatonde, Rakai) and consolidate implementation in 14 districts (the 8 central region and 6 Karamoja districts)	IRC and direct Government support	UNICEF/DFID (UNICEF has additional support from from the Bill and Melinda Gates Foundation – contribution not known)	£7,583,595 grant (about 12m USD) 2014 - 2017
GHG Under SO2: Improved Health Facility Management, VHT's, internship & mainly infrastructure	Abim, Kotido and Kaabong - 375,000 target beneficiaries	Mercy Corps (lead partner of a consortium with World Vision, FIC and Kaabong Peace for Devt Agency)	USAID Food For Peace	Annual estimate for health; \$1 million (Bulk of funds to health is for infrastructure >90%) 2012 – 2017
Under SO2; IR 2.2 – Improved Service Delivery for prevention and treatment of maternal and child illnesses	4 districts (Amudat, Moroto, Napak and Nakapiripirit & 16 sub-counties) Target population: 287,461	RWANU-Concern WW	USAID Food for Peace	50 million USD total project budget over 5 years (Contribution to health annually estimated at ~\$1 million) 2012 – 2017
Baylor – Paediatric and adolescent HIV, new born and maternal child health services	All 7 districts (PCA also includes additional 24 districts in Eastern, West Nile and Rwenzori regions)	BAYLOR Uganda	UNICEF	UGX 5,459,768,817 1 st September 2014 – September 2015
Strengthen capacity of district health systems in Karamoja	All districts	CUAMM	UNICEF	Total unicef contribution 2,294,873,715 Partner contribution 157,350,000 01 January 2013 – 31 December 2014
MCH Project (Mother care groups – nutrition & health education/Village ambulances)	Napak Targeting mothers and children	Samaritan's Purse	DFID/UKAID (part of a Global Poverty Action Fund)	3 year project (ended by May 2015 whereby care groups have been taken over by Concern) 749,386pounds
CARITAS – (supply of essential drugs to health facilities)	Kaabong, Kotido, Abim	CAFOD (Catholic Agency for Overseas Development)	DFID, CORDAID Netherlands, FAO	

Marie Stopes international Family planning programmes	Kotido, Kaabong, Moroto (Mothers Clubs – MSI) 111 districts		UNFPA USAID – Long Term FP methods Project	\$20 million
Reproductive health and Family planning project	Kaabong	Action for Women and Awakening Rural Environment (AWARE – local NGO)	Safer World for Women	2011
Strengthening Health Outcomes through Private Sector (SHOPS)	3 districts in Karamoja; Amudat, Nakapiripirit and Abim	Marie Stopes	USAID	Not available
Promoting Behaviour Change Communication through Health Choices (Radio)	8 districts including 3 in Karamoja (Moroto, Kotido and Kaabong)	CDFU	UNFPA	Not available
Strengthening Uganda's Systems for treating AIDS nationally (SUSTAIN) project	2 districts in Karamoja (Moroto & Kaabong) plus 17 others	University Research Council	USAID	2014 – 2019 \$20 million over 5 years

Annex F: Step by step outline of surge implementation

a) Risk analysis

It is important to analyse the drivers of increased caseloads in the health facility context. This is done to

- To understand what is 'normal' case load
- Why, when and to what degree spikes occur
- The drivers to estimate thresholds may include:
- Seasonal impediments, health seeking behaviour – maternal work load, festivals, health workers absence, lack of commodity
- Who is involved: staff and key community informants at each facility

b) Capacity assessment

This is done after the risk analysis to assess the capacity of the health facility and its ability to manage high caseloads not only based on SAM and MAM but other conditions like malaria, pneumonia that are identified in the risk analysis.

The assessment is also done to identify the factors that would hinder SRGE implementation at the facility like Human Resource, therapeutic food, anthropometric equipment, data collection tools, Knowledge and skills of health workers, drugs and supplies for the management of acute undernutrition.

c) Setting thresholds

Thresholds Indicate a critical number of monthly cases at a health facility, above which the type and scale of support changes.

Based on the capacity assessment and previous experience, a set of caseload thresholds are agreed for each health centre. Thresholds are equal to the number of cases of SAM undernutrition seen in the facility per month, above which the health facility would need to modify their normal clinic procedures (usually the 'alert' threshold) and/or receive external support from the District Health Office (usually the 'serious' or 'emergency' threshold).

This forward planning allows health facility teams to plan a number of modifications to normal procedure (e.g. staff do not book leave during the hunger gap) that will reduce the need for external support.

d) How thresholds are calculated

1. Data is triangulated from the risk analysis and conducted in targeted health facilities, to estimate the expected caseload (over different times of the year. Health facility's year trends are reflected before setting of thresholds. The thresholds do not go below 10 and this is the number that does not undermine the health workers capacity to deliver nutrition services and other services of the health facility.
2. Alert: the thresholds in the alert phase are based on what trends are reached quite frequently during the year. Services are then made more efficient with the available resources e.g. patient flow.
3. Serious: This is set based on the highest number of caseloads in the previous year . this usually triggers the need of external support guided by the District Health Management Team to guide shifting of government staff and mobilisation of resources., (possibility of an additional staff)
4. Emergency: Should be reached once in a year (if at all). And it is based on 100% increment from the serious phase.

If the highest number in the serious phase 30 in the previous year then the emergency thresholds will be 100% increment ($30 \times 2 = 100$) so the emergency will be ≥ 60

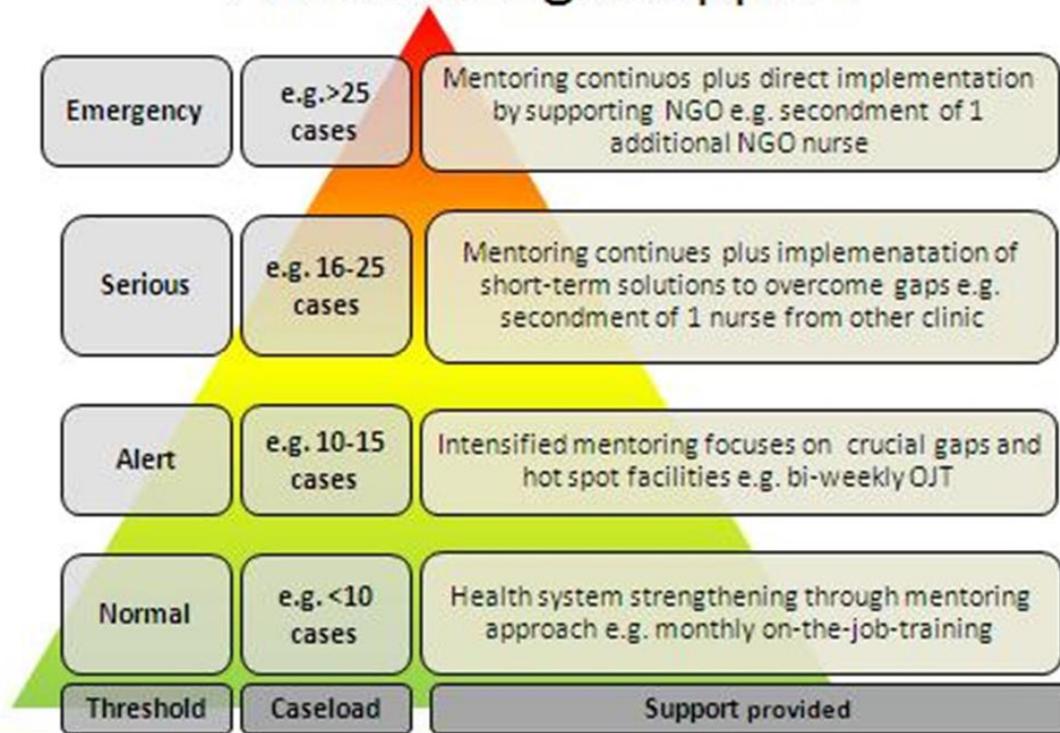
the thresholds for that period will be

- ***the normal will be 0-10***
- ***alert then would be 11-29***
- ***serious 30-59***
- ***emergency ≥ 60***

e) Who defines and on what basis

- Health facility staff
- Based on their capacity to deal with nutrition needs
- Use of caseload records (SAM, MAM, malaria, pneumonia, diarrhoea etc.)
- Draw from staff experiences e.g. when needs exceeded resources or staff capacity

Phased surge support



Monitoring against thresholds

- Monitor and compare caseloads against thresholds monthly
- Use a hand drawn chart to help visualize your trends
- Once a threshold is exceeded, facility staff should alert the district health team
- Request support based on a pre-defined & jointly agreed package

Annex G: SURGE RESPONSE IN 2015 IN FACILITIES VISITED (Facilities in bold are those visited during this assessment)

District	Health facility	Phase	SURGE response 2015 to Facilities in Serious phase	Not carried out
Moroto	Moroto Regional Referral Hospital (ITC and OTC)	Serious phase between April & May 2015 Alert phase from May - Aug 2015 (4 months)	SURGE Support package at ITC –Moroto Regional Referral Hospital from August to November 2016 Planning meeting with hospital management and nutrition unit team PAYMENT OF SAFARI DAY ALLOWANCE FOR E/NURSE (FORMER TASO Staff that was laid off from a previous project) FOR 8 MONTHS DURING HIGH SURGE PERIODS (Aug – Nov 2015) Orientation/training of health workers (2 days) on the nutrition ward and paediatric ward on ward procedures, management of medical complications, preparation of therapeutic feeds.	Not applicable
Moroto district	Rupa HCIII	Serious: June 2015 Alert: May, July-Sep and Nov-Dec 2015 (5 months)	No response was made in the serious phase. Main response was in the alert phase whose typical response is indicated below.	Not applicable
Moroto district	St. Pius Kidepo HCIII	Alert phase; April – Dec 2015 (9 months)	Refer to box below for typical alert phase response	Not applicable
Moroto	Loputuk HCIII	Alert phase: April – July (4 months)	Refer to box below for typical alert phase response	Not applicable
Nakapiripirit	Tokora HCIV	Serious phase; April, Oct- Nov 2015 Alert phase; Aug & Dec	Planning meeting with facility management and nutrition unit team Orientation of staff on ITC ward procedures and management	Mass screening for the neighbouring community to identify children suffering from moderate or severe acute undernutrition (MAM and SAM).

District	Health facility	Phase	SURGE response 2015 to Facilities in Serious phase	Not carried out
		2015	<p>Deployment of health facility staff</p> <p>6 mosquito nets</p> <p>1 fuel efficient stove</p> <p>2 large thermoses to facilitate night feeding</p> <p>Bags of charcoal per month also for cooking</p> <p>Buckets and measuring jugs</p> <p>Support to DHO and DHMT to support the facility</p> <p>Support to DHO and DHMT to support the facility</p> <p>Caseloads were closely monitored against the set thresholds through IMAM data compilation.</p> <p>Procurement of equipment to support preparation of therapeutic food on the ward</p> <p>Health and Nutrition education was intensified at the OPD and the OTC.</p> <p>On-job mentoring and coaching of health workers was intensified to ensure quality nutrition services according to the IMAM protocol.</p> <p>Continued support to health facilities to strengthen the linkage between facility and the community through the existing referral system with the VHTs and the mother care groups to monitor uptake of nutrition services and RUTF.</p> <p>Monitoring therapeutic supplies to prevent stock outs through regularly updating the stock cards and delivery of supplies to facilities with limited number of RUTF.</p>	<p>Analysis of the situation by health centre staff, VHT and district personnel.</p>

District	Health facility	Phase	SURGE response 2015 to Facilities in Serious phase	Not carried out
NAKAPIRIPIRIT DISTRICT	Nayonai-Angikalio HCII	<p>Serious: June – Aug and Oct – Dec 2015 (6 months)</p> <p>Alert: May and Sep 2016</p>	<p>Deployment of health facility staff</p> <p>Caseloads were closely monitored against the set thresholds through IMAM data compilation.</p> <p>Health and Nutrition education was intensified at the OPD and the OTC.</p> <p>On-job mentoring and coaching of health workers was intensified to ensure quality nutrition services according to the IMAM protocol.</p> <p>Continued support to health facilities to strengthen the linkage between facility and the community through the existing referral system with the VHTs and the mother care groups to monitor uptake of nutrition services and RUTF.</p> <p>Monitoring therapeutic supplies to prevent stock outs through regularly updating the stock cards and delivery of supplies to facilities with limited number of RUTF.</p> <p>Support to DHO and DHMT to support the facility</p>	<p>Mass screening for the neighbouring community to identify children suffering from moderate or severe acute undernutrition (MAM and SAM).</p> <p>Analysis of the situation by health centre staff, VHT and district personnel.</p>
	Namalu HCIII	<p>Alert phase: June – Dec 2016</p> <p>(7 months)</p>	<p>Deployment of health facility staff</p> <p>Caseloads were closely monitored against the set thresholds through IMAM data compilation.</p> <p>Health and Nutrition education was intensified at the OPD and the OTC.</p> <p>On-job mentoring and coaching of health workers was intensified to ensure quality nutrition services according to the IMAM protocol.</p> <p>Continued support to health facilities to strengthen the linkage between facility and the community through the existing referral system with the VHTs and the mother care</p>	Not applicable

District	Health facility	Phase	SURGE response 2015 to Facilities in Serious phase	Not carried out
Nakapiripirit			<p>groups to monitor uptake of nutrition services and RUTF.</p> <p>Monitoring therapeutic supplies to prevent stock outs through regularly updating the stock cards and delivery of supplies to facilities with limited number of RUTF.</p> <p>Support to DHO and DHMT to support the facility</p>	
Nakapiripirit	Nabulenger HCII	Alert phase: April – July 2015 (4 months)	<p>See below for response in the alert phase</p> <p>According to staff visited; the surge response has enabled; regular monitoring (monthly) and mentoring, closer collaboration with VHT's.</p>	Not applicable
Nakapiripirit	Lolachat HCIII	Alert phase: April – Dec 2015 (9 months)	See below for response in the alert phase	As above

Alert response in facilities in 2015

- Planning with staff to address increasing number of children with malnutrition at the health facility.
- Support to district to supervise facilities.
- Frequent Mentorship and coaching.
- Monitoring and documenting supplies and logistics at the facilities to ensure no stock outs.
- Continued support to health facilities to strengthen the linkage between facility and the community.
- Monitoring therapeutic food and other nutrition supplies to prevent stock outs through regularly updating the stock cards and delivery of supplies to facilities with limited number of RUTF.
- Follow up of issues identified.
- Refreshers training and updates of MUAC screening to the lead mothers.