

Opportunities and pathways of integrating community management of severe acute malnutrition into existing health system

The Coalition for Food & Nutrition Security



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This document examines the existing policies/ programs pertaining to maternal and child health and nutrition and subsequently identifies opportunities to leverage and suggests pathways of integrating / institutionalizing community management of acute malnutrition into existing health system.

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FOREWORD



Community based Management of Acute Malnutrition (CMAM) is the globally recommended approach for SAM management. In the presence of good community-based management, the vast majority (85-90%) of children with SAM may be managed in the community itself. Only a minority of children, those with SAM and with medical complications (10-15%) will need facility-based care as inpatients in facilities. If properly combined with a facility-based approach for those malnourished children with medical complications and implemented on a large scale, community-based management of severe acute malnutrition could prevent child morbidity and mortality.

Given the scale of the SAM burden in India, CMAM is the best alternative to treat many children. However, CMAM needs to be contextualized into an India-specific approach. In absence of national guidelines several pilot in India across varied settings have been conducted to assess the effectiveness of CMAM and a few states are implementing CMAM some at a smaller scale. Though these pilots and state models have been successful in demonstrating the possibility of integrating CMAM in the existing health system but given the limitations of nationally endorsed protocols and operational structure CMAM in India has yet not mainstreamed into health system.

The integration of community-based management of acute malnutrition (CMAM) into the local health systems is recommended for larger coverage and sustainability. Implementing CMAM through the system would involve leveraging existing platforms and resources and also warrant progressive strengthening of the overall health system in the light of identified barriers. This document attempts to detail the processes that are to be conducted or followed during implementation of CMAM and how the existing system could be leveraged to integrate the community-based management of children with SAM within the health system.

The Coalition for Food and Nutrition Security (CFNS) is a multiple stakeholder alliance that acts as a catalyst, offering evidence-based knowledge and thought leadership to inform, inspire and initiate actions and foster collaboration that will contribute to the reduction in child malnutrition in the country. The purpose of this document is to provide policy makers and program leaders a roadmap illustrating the extent to which CMAM can be integrated/institutionalized within health system. On behalf of CFNS I would like to express my gratitude to all the professionals who directly or indirectly contributed to this document .

I hope this document will be useful in guiding t and integrating CMAM into health system.

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Introduction

Severe acute malnutrition is defined by a very low weight for height (below $-3z$ scores of the median WHO growth standards), by visible severe wasting, or by the presence of nutritional oedema. In children aged 6–59 months, a mid-upper arm circumference (MUAC) less than 115 mm is also indicative of severe acute malnutrition. In the Indian context both GAM and SAM are above the acceptable WHO thresholds standing at 21% and 7.5% respectively in 2015-2016 (NFHS4)¹ and 17.3% and 4.9% respectively in 2018 (CNNS). The NFHS 5 data released for 22 states have also shown an increase in wasting and severe wasting – in 12 and 16 of the 22 states². A Global Acute Malnutrition (GAM) of 21% is far above the 15% the threshold for critical public health concern as suggested by WHO³. Using existing studies of case fatality rates in several countries, WHO has extrapolated mortality rates of children suffering from severe acute malnutrition. The mortality rates reflect a 5–20 times higher risk of death compared to well-nourished children⁴. In India, under nutrition contributes to 68% of under five deaths, 19.5% deaths among children below 5 years has been attributed to wasting alone⁵.

Severe acute malnutrition can be a direct cause of child death, or it can act as an indirect cause by dramatically increasing the case fatality rate in children suffering from such common childhood illnesses as diarrhea and pneumonia. Thus, wasting cannot be side-lined as one of the smaller problems of public health consequence. There are two basic objectives of the management of acute malnutrition: (i) to prevent malnutrition by early identification, public health interventions and nutrition education; (ii) to treat acute malnutrition to reduce associated morbidity and mortality. However, until recently, nationally treatment has been restricted to facility-based based treatment of SAM cases at Nutrition Rehabilitation Centers (NRCs)/Malnutrition Treatment Centers (MTCs) managed by the health system; greatly limiting the coverage and impact. The evidence suggests, however, that large numbers of children with severe acute malnutrition can be treated in their communities without being admitted to a health facility or a therapeutic feeding centre. In the presence of good community based management, the vast majority (85-90%) of children with SAM may be managed in the community itself. Only a minority of children, those with SAM and poor appetite and/or with medical complications (10-15%) will need facility-based care as inpatients in NRC/MTCs⁶. The community-based approach involves timely detection of severe acute malnutrition in the community and provision of treatment for those without medical

¹ IIPS III fPS, Mumbai, India. National Family Health Survey (NFHS-4), 2015–16. 2017

² IIPS III fPS, Mumbai, India. National Family Health Survey (NFHS-5). 2020.

³ De Onis, M., Borghi, E., Arimond, M., Webb, P., Croft, T., Saha, K., ... & Hayashi, C. (2019). Prevalence thresholds for wasting, overweight and stunting in children under 5 years. *Public health nutrition*, 22(1), 175-179.

⁴ Fishman SM, CAULFIELD LE, De Onis M, Blossner M, HyDER AA, Mullany L, et al. Childhood and maternal underweight. 2004;1:39-161

⁵ Swaminathan S, Hemalatha R, Pandey A, Kassebaum NJ, Laxmaiah A, Longvah T, et al. The burden of child and maternal malnutrition and trends in its indicators in the states of India: the Global Burden of Disease Study 1990–2017. 2019;3 (12):855-70.

⁶ Organization WH. Community-based management of severe acute malnutrition: a joint statement by the World Health Organization, the World Food Program, the United Nations System Standing Committee on Nutrition and the United Nations Children's Fund: World Health Organization; 2007.

complications at home. If properly combined with a facility-based approach for those malnourished children with medical complications and implemented on a large scale, community-based management of severe acute malnutrition could prevent child deaths. Evidence across the globe suggest that community based management of children with SAM with no medical complications complemented by facility based treatment for those SAM children with medical complications is feasible and cost effective, and can prevent premature deaths and associated disabilities⁷.

Universal coverage of SAM treatment can only be achieved by ensuring availability and access to treatment at all levels of the health system, including the community level. SAM needs to be considered as a disease to be integrated and mainstreamed as part of the basic package of health services. A much-needed reform in the management of SAM children has seen the light in some of the states where SAM children were treated at community level. This approach in treatment is currently planned in a number of states and is a step closer to treating more children.

Prevention comes first, when prevention fails treatment becomes critical and both prevention and treatment go hand in hand. Preventive interventions must include: improving access to high-quality foods and to health care; improving nutrition and health knowledge and practices; promoting effective and exclusive breastfeeding for the first six months of a child's life where appropriate; promoting improved complementary feeding practices for all children aged 6–24 months — with a focus on ensuring access to age-appropriate complementary foods (using locally available foods); and improving water and sanitation systems and hygiene practices to protect children against communicable diseases. In May 2002, the Fifty-Fifth World Health Assembly endorsed the Global Strategy for Infant and Young Child Feeding, which recommends actively searching for malnourished infants and young children so they can be identified and treated. The development of the community-based approach for the management of severe acute malnutrition should provide a new impetus for putting this recommendation into practice. Preventing morbidity and mortality due to wasting needs to be prioritized on urgent basis, and treatment of SAM along with preventive action, be added to the list of cost-effective interventions to reduce child mortality. Therefore, the community-based management of acute malnutrition CMAM is now more often referred to as IMSAM – integrated management of severe acute malnutrition to give equal focus to prevention along with management/treatment of SAM and extending services to children with MAM.

This document therefore attempts to detail the regular recurring work processes that are to be conducted or followed during implementation of IMSAM and how the existing system could be leveraged to integrate the community based management of children with SAM within the health system. The paper intends to suggest ways to integrate community management of acute malnourished children within the government system. A variety of meanings and values are attached to the word 'integration' in this context. Among these are:

⁷ Guideline WJGWHO. Updates on the management of severe acute malnutrition in infants and children. 2013;2013:6-54.

- The sense that integration is what moves short term programs towards a regular program, to more sustainable development stance.
- The connotation of a comprehensive prevention and treatment (as opposed to vertical) approach, which may be ultimately more effective.
- Working with existing delivery structures, including health care systems, ICDS, tribal department, rural development, 'traditional' systems such as traditional healers, SHGs, community groups etc.

We could therefore say that integration takes place along several planes:

1. Culturally, into 'traditional' institutions
2. Sectorally, across programs (e.g. health services through ICDS platform)
3. Institutionally, into country/state's delivery systems
4. Temporally, between relief and development.

The virtues of integration do not necessarily stand up to scrutiny in every case and there may be good reasons in some settings for government to resist the call to integrate on any one of these planes. Integration within local infrastructure requires an understanding of the constraints under which the institutions operate, the workloads of the staff and the factors affecting motivation of the team. Merely imposing external protocols and systems, no matter how theoretically beneficial they may be, is not a solution. Furthermore, integration is not a one-off event, but is an on-going process. The question is: what type of integration and at what level is appropriate in a given situation? This document seeks to offer some insight into this question by illustrating the extent to which IMSAM can be integrated/institutionalized within health system and the consequent effects of this. It therefore provides clear step by step actions, based on each stage of the project cycle in reference to the WHO recommended IMSAM protocols with reference to the community based protocols for SAM management and best practices followed globally including India and examples of leveraging the existing system. Guided by the WHO building blocks of health system⁸ the document explores integration of IMSAM within the existing service delivery platforms, human resource, nutrition governance, equipment and supply, referral, monitoring and supervision mechanism/ health information systems derived from the existing system are opportunities to integrate IMSAM into the health system.

1.Planning and preparation

1.1 Geographical areas of implementation

The state may decide for universal coverage, however may prioritize specific areas for intense interventions based on the SAM caseload or prevalence of malnutrition in the area. The criteria of selection is purely dependent on areas where the needs are highest, e.g where the wasting rates are high, mortality and morbidity rates are high or above the globally acceptable rates, or in emergency prone area that mainly cause

⁸ WHO framework that describes health systems in terms of six core components or “building blocks”: (i) service delivery, (ii) health workforce, (iii) health information systems, (iv) access to essential medicines, (v) financing, and (vi) leadership/governance.

population displacement. The globally accepted malnutrition prevalence rates are listed below⁹ or aspirational districts

Prevalence Rates	Acceptable
GAM (Global Acute malnutrition)	< 5%
SAM (Severe Acute Malnutrition)	<2%

The process involved in selection entails coordinated meeting between the ministry of health, WCD, health and nutrition implementing partners, in this forum survey data ((latest NFHS,RSOC,DLHS) and ICDS, reports can be reviewed. Data visualization tools (DVTs) are important component of the evidence and quick decision-making. DVTs will help understand the meaning of data by placing the most relevant data in easy-to-interpret visualization formats and will facilitate data-driven decision-making. The DVT will ensure a clear theory of change about key decision making process via identification and prioritization of high burden areas at the district levels. The data can be visualized for quicker and better decision-making process e.g. cluster mapping, radar diagrams, four fold mapping, GIS mapping etc. The DVT proposed here is Know Your Area (KYA) developed by Centre for Technology Alternative in Rural Areas (CTARA), Indian Institute of Technology Bombay.

1.2 Identifying Key Partners for implementation

Thorough institutional and capability analysis at the planning stage is a must, even if this slows initial implementation down a little. Make more time for on-going discussion and consensus building among different stakeholders at all levels. Map stakeholders already working in the area and consult or discuss and take local insights at planning stage.

The Coalition for Food and Nutrition Security (CFNS) has mapped key stakeholders at national level and for 4 states namely – Madhya Pradesh, Jharkhand, Assam and Odisha. The mapping could be used in these states and similar exercise could be done in other states.

1.3. Estimation of beneficiary’s caseloads:

It’s important to estimate the caseload to be targeted to plan and allocate the resources judiciously. The SAM case load can be estimated based on the latest SAM prevalence rate at state and district level based on the latest NFHS data or CNNS data as that would give the number of SAM children present at any given point of time.

For example the number of children wasted and severely wasted in the Sonitpur district of Assam can be calculated by – prevalence x estimated population as follows.

- 1. Estimate the tentative number of children under the age of 0 to 5 years, - the total 0-6 children population of Sonitpur district (given in Census 2011). As from 2011 there would be an increase in the population that is based on the decadal growth. The decadal growth is 20%. Therefore the population of the area as per census 2011 would be multiplied by decadal growth of 20% to get the current estimated population which is:*

⁹ De Onis, M., Borghi, E., Arimond, M., Webb, P., Croft, T., Saha, K., ... & Hayashi, C. (2019). Prevalence thresholds for wasting, overweight and stunting in children under 5 years. *Public health nutrition*, 22(1), 175-179.

Sonitpur district 0-6 years children population (Census 2011) - 277862

*Estimated 0-6 years children population in Sonitpur district in 2021 – 277862 X 1.2
(decadal
growth rate of
20%)
= 333,434*

2. To estimate current 0-5 years population.

The estimated 0-6 yrs population in 2021 is divided by six and then multiplied by five to get the approximate population of children (0-5 years)

*Estimated 0-5 years children population in Sonitpur district in 2021 - (333,434/6) x 5
= 277862*

Also it is crucial to map the children in the age group of 0-6 months as they are crucial for the preventive management of severe acute malnutrition by strengthening the IYCF component in this phase.

3. The population of wasted and severely wasted children are calculated by multiplying it with the percentage wasting and severely wasted, respectively (prevalence data). As per NFHS 5 the wasting and severe wasting prevalence of Sonitpur district was 13.1 and 4.5 respectively,

Wasted population (0-5 years) – 0-5 yrs population x wasting prevalence - 277862 x 0.131 = 36400.

Severe wasting population (0-5 years) – 0-5 yrs population x severe wasting prevalence - 277862 x .045 = 12504

This gives the prevalence of wasting and severe wasting in the population which means at any given point these number of children will be wasted or severely wasted

1.4 Planning on Human Resource

IMSAM program requires skilled health and nutrition frontline workers, public health specialists with experience of working in programs addressing acute malnutrition and knowledge and experience of community development. Such technical support and supervision can assist in planning, implementing, monitoring, and evaluating IMSAM program, whilst also helping to develop the health staff's own skills and capacity. Additionally: Quality, experienced supervision ensures effective program implementation. It is important that the

- Managers and supervisors be accountable for decisions, ensuring adequate security and compliance to the codes of conduct.
- Each member of the staff must have a written job description with clear reporting lines and a periodic performance assessment.

- Staff must be provided with necessary training, resources, and logistical support in order to fulfill their responsibilities.
- Staff must clearly understand the program objectives and activities required and receive subsequent feedback on their performance.
- Staff must be oriented on health and safety issues.

Series of coordination meetings primarily between the health and ICDS department and other departments can work towards a harmonized staff structures and roles as described below. The layout of the staffing structure can be headed by the Mission Director POSHAN Abhiyaan / Director General State Nutrition Mission that would supervise PMs (Program Managers) for both health and nutrition sectors with the monitoring and evaluation focal person inclusive. In the community component the person's in charge can be the CDPOs, who supervises the ICDS supervisors who will in the end take charge of the AWWs.

Community mobilization and outreach staff	Outreach Services for providing treatment
<ul style="list-style-type: none"> • ASHA • Anganwadi workers • Poshan Sakhi • A team of community volunteers 	<ul style="list-style-type: none"> • ANM • GNM • RKSK doctors

1.5. Community assessment, diagnosis and barriers

Assess the community's capacity, in terms of identifying the community structures/ representatives and community groups and organizations (community leaders, religious leaders, traditional practitioners and community based organizations) that will help to inform communities about nutrition and malnutrition; identify and screen malnourished individuals; and conduct treatment and case follow-up. Understand what are the community attitudes towards health and malnutrition? Are they using the health facility (demand)? This will help design the sensitization messages. Establish the formal and informal channels of communication in the area. The informal (e.g. market places, women gathering at water points, etc.) and formal (e.g. posters, megaphones, community meetings such as the local chief's meetings) are good venues for health workers to share information and to open up dialogue with the community members. It is important to know who makes key decisions and who is responsible for children as well as community attitudes to health and malnutrition. The following information and actions are required:

- Understanding local terms and phrases for wasting
- Understanding common beliefs and perceived causes and common solutions/ appropriate treatment of wasting
- Identifying key community leaders and other influential people
- Identifying existing structures and community based organizations/groups
- Formal and informal channels of communication that are known to be effective
- Attitudes and health seeking behaviors

- Existing nutrition and health interventions in the community
- Use information on local beliefs and practices to map out critical linkages with other services, where these exist

It is important to directly engage the community from the outset. This can be done initially through meetings with community and religious leaders. Other key community members should also be included. Mothers of young children should be included so that there is full representation of all those concerned with the health of young children. Engage discussion with the community on how they use the health facility, what is their level of trust, demand, what would avoid them to use it and favor this use. Discuss the program and how it works and agree on relevant groups, organizations, structures to be involved in the program. This may include the recruitment of volunteers to help with case finding and follow up and develop clear roles and responsibilities

Participatory Learning and Action (PLA) approach can be utilized for effectively engaging the community. States like Madhya Pradesh and Jharkhand has PLA modules for community engagement. Rajasthan and Uttarakhand has also included PLA in the state PIP and initiated the exercise in limited number of districts. Community representatives like PRI members, gram sabha members, VHSNC members, Self-help groups, and religious leaders and influential people can be involved. Communication channels & platforms like community meetings, special health and nutrition campaigns, deworming day, VHSND, Vitamin A supplementation campaign, home visits, can be instrumental in mobilizing the community.

2. Designing IMSAM program:

Based on the information gathered during the assessment, reviewing the maps and findings of the assessment together and identify the facilities from where the SAM management is to take place, as well as devising a strategy for the implementation and the community mobilization.

2.1 Develop IMSAM Guidelines, Training Manual and Monitoring Tools:

Developing and reviewing state IMSAM guidelines, IMSAM training manual, and monitoring tools to promote the integration of IMSAM services into primary health care and ICDS services and to keep the state IMSAM program abreast with WHO recommended protocols.

2.2. Selection of centers for SAM services at community level – criteria, coverage and size

The site / facility for providing SAM services is to be identified following mapping of the catchment or target area as defined by administrative boundaries such as block or a village with mutual consideration by both health and ICDS department. The service delivery platform /facility for SAM services must be selected to ensure maximum capacity or services and ensure good coverage. One of the criterion of selection is dependent on facilities available for integration of services and most affected populations. The number of sites to be established will depend on minimum case load and distance. The site/ center should ideally be located within

walking distance of the target population. The site must easily be accessible to the vulnerable population. Also ideally be close to a health facility (PHC, CHC) in cases of need for medical review.

Identification of sites jointly with community can help to focus on existing logistical barriers to program uptake. Example some areas maybe cut or would be difficult for care givers to cross the rivers and swamps during the rainy season, in such cases alternatives can be planned in advance. It's important to note that the opportunities and constraints at community level are not constant and such arrangements demand systematic follow-up and a forum for discussion and feedback, to remain effective over time.

The community SAM services centers offering treatment support to SAM children at community can be established at AWC, or in some cases panchayat bhawan, Sub centre. In urban slum areas where such structures are not able to accommodate the requirement, mobile SAM care/services sites under tree, using tents, mobile vans can be organized.

2.3 Prepare a strategy for the community mobilization

The community mobilization provides a link for the community to the existing health facilities, create awareness on the treatment of malnutrition and where the services can be accessed, provide early detection for and treatment of malnourished individuals and promote community participation. Based on the results of the community assessment done in preparatory phase, a strategy on how best to conduct the community mobilization in this particular context can be put together at this stage.

People who can play critical role in community mobilization - Panchayat members, Sarpanch, Religious and local leaders, Traditional healers, Teachers, Mahila Mandal, Local youth groups, Mother's groups, Self Help Groups can be reached out. Apart from the people mentioned above, village health sanitation and nutrition committee (VHNSC) also plays a very important role in mobilizing and sensitizing the community. If this committee actively participates and conducts their responsibilities fully, it will help the frontline workers in early identification of SAM children and will also help in better involvement of the community. Different platforms like Mother's meeting and Community meeting, gram sabhas, community based events proposed under Poshan Abhiyaan like Annaprashan Diwas, Mother's meeting, etc can be used. Techniques for community mobilization like campaign street play, folk media and folk songs, Balmela / exhibition / sports meet and use of PLA techniques can be instrumental in eliciting community participation

2.4 Prepare program implementation plan (PIP) - IMSAM -PIP

A strategy to organize the implementation needs to be put together at this stage by the team that will supervise and implement the plan. Adequate liaison between the components to be carefully planned for, to allow proper coordination and monitoring. The relevant local health service structures, ICDS, PRI, SRLM, and

other local agencies must also be involved. Ideally, all the agencies involved should plan the IMSAM program together, and should meet regularly to review progress. Involvement of senior managers and officials responsible for the national/ regional or state program within which the IMSAM program is situated in the formulation of (and commitment to) the program's aims and objectives. Since the activities of agencies outside the IMSAM program may have an impact on its success or failure, the program plan should also take into account the plans of other agencies. The affected community's knowledge of the situation and how it could be addressed is invaluable, and so involvement of community representatives in the planning process.

Establish a state level, technical advisory group and steering committee to promote ownership and accountability for IMSAM integration and full implementation. Steering Committee: Representation from the MoH, MoWCD, Department of ICDS, NHM, AYUSH, Rural Development and development partners. The IMSAM Technical Advisory Group (TAG) to be set up to foster strong partnerships and serve as a coordinating mechanism as well as a platform for building IMSAM capacity. This committee would be the guiding force for IMSAM roll-out and should meet once in a quarter to review progress and identify action points.

*Once the planning is done, a program management unit needs to be put together via a meeting that should be held with the district health authorities and the steering committee in order to define and identify the members of this team. Indeed **it is essential that logistic and purchase experts, technical CMAM experts, monitoring and evaluation experts, finance experts sitting** in the government body of choice in the state level to oversee the implementation and the integration of the project as a whole. **The role of the program management unit is to oversee the implementation of the project.** A first meeting should rapidly be organised between the **program management unit** operational team and the steering committee on the process and in order to officially launch the implementation.*

Organize the operational committee that would be directly linked to the focal points of each group of health facilities. They would transmit information to the focal points to be in turn transmitted to the health facilities, and they would collect data from the focal points to monitor the project as a whole. The operational committee's role is to ensure that the project runs smoothly as per the plan and to brainstorm and provide solutions to address the inevitable challenges that will be faced along the way. The operational committee would gain from meeting once a week to ensure that the project is running according to the timeframe set in the planning stage.

Decentralize for better organization of field level implementation, a focal point for each chosen facility, for each of 10 centers (AWC or other centers chosen to provide services for SAM children without medical complications at community level) chosen, another focal point is to be nominated within the health system structure (supervisor), and this focal point would directly supervise and monitor the work in the 10 centers. This type of division will help each facility know who to call in case of

an emergency, challenges or difficulties encountered. The focal points for the facilities will not only be responsible to relay information to the health facilities and to collect data every week from the health facilities, but also to act as a link between the chosen AWC centers and the higher focal points in the organization of the CMAM at district and subsequently at state level. This structure can be replicated at different levels in order to finally have a few focal points supervising a greater number of focal points who in turn supervise focal points of health facilities. A supervisor can be made responsible for monitoring, supervision and handholding support to the centers for providing SAM services supported by CDPO.

2.5. Planning on capacity building and training

Ongoing training and mentoring support extended to all implementing staff irrespective of the department they belong to, so that they continue to build their capacity to implement and supervise the program. Support the recruitment and training of a cadre of state IMSAM master trainers and provide mentoring and technical backstopping support to district and state trainers to conduct IMSAM trainings. Orient district IMSAM focal persons and zonal supervisors on the management of acute malnutrition and integrated IMSAM in the health & ICDS training program. On-the-job support to all districts and other NGO partners for the implementation of districts plans and institutionalization of CMAM within these plans.

The induction training will be classroom, whereby practical on anthropometry will be demonstrated to enable staff perfect the skills. Later on during supportive supervision visits and reporting periods (weekly and monthly) the on the job training will be in play as reminders and further instill the knowledge and skills to the nutrition staff. Target trainings to the actual staff involved in the implementation process, e.g the ASHA, ANM, the medical staff (doctors, clinical officers, nurses).

*In case of need for a consultant/ resource persons, the contractual needs should be met well in good time, this includes but not limited to signing the contract, agreed and signed terms of reference and any forthcoming expenditure covered for the consultant. The National Centre of Excellence (NCoE). State Centre of Excellence (SCoE), INGOs can be approached as resource person for imparting trainings. Opportunities to incorporate IMSAM component into standard staff training should be explored. The pre service trainings for ASHA, AWW, and ANM and in service trainings for supervisors, medical officers should include components of IMSAM – identification, management and referral as per their role envisaged in the program. The program management trainings for DPMs, BPMs **The Integrated Management of Neonatal and Childhood Illness (IMNCI) trains** medical officers, nurse and LHVs on comprehensive newborn and child health package that involves the identification, management and referral of malnourished/sick children that need immediate care.. The definition of the sick child in the IMNCI strategy should specifically include severe acute malnutrition*

*and identifying medical complications in SAM children. The community providers can be trained on IMNCI package that would facilitate early identification of malnourished & sick children as well as children with danger signs or those who are at risk. **Navjaat Shishu Suraksha Karyakram (NSSK)** has provisions for training of health personnel in basic newborn care and resuscitation. As the birth issues especially low birth weight have strong correlation with severe acute malnutrition children, NSSK trainings to incorporate fundamentals of community based management of severe acute malnutrition. **Rashtriya Baal Swasthya Karyakram (RBSK)** has provision for early identification and early intervention of children to cover 4 'D's viz. Defects at birth, Deficiencies (Severe Acute Malnutrition), Diseases, Development delays including disability. The RBSK trainings can be utilized for training on management of SAM along with identification. Under **POSHAN Abhiyaan** there are provisions of Incremental Learning Approach Training for appropriate training of AWW towards identification and management of severe acute malnourished children.*

ASHA, AWW, Poshan Sakhi and other community groups like SHGs, Shaurya dals etc can be trained and engaged for community mobilization. The training on growth monitoring should also include measuring height, MUAC, plotting of weight of height SD along with measuring weight and plotting weight for age as per WHO standards.

2.6 Planning on Logistical needs

The logistic support is mandatory for the program to kick off, run and during closure/handover. Continued support on especially timely delivery of supplies is another key role of the logistics team; this will be accompanied with all the relevant documentations from the order stage to procurement.

Equipment, supplies and ware house management

Note that:

- All supplies must be clearly labelled and an inventory updates at all times.
- Daily stocks carried should be reviewed after the first month as requirements will vary depending on number of enrollments.
- Amounts carried should be kept as low as possible to facilitate storage but enough to meet the beneficiary needs.

Traditionally ICDS has been monitoring the weight of the child as part of the growth monitoring and weighing machines are available at AWC. With identification of aspirational districts anthropometry instruments for both weight and height have been supplied and are being used. With the launch of Poshan Abhiyaan the provision of anthropometry instruments for both weight and height has been made universally and budget made available to purchase the same. Each AWC should have weighing machine and stadiometer for measuring weight and height and therefore identification of SAM as WFH SD can be done on

regular basis as part of growth monitoring. The medicines required are available in the general supply of health department.

The storage space for all commodities should be sufficient, optimally isolated, protected from rodents with the right temperatures especially for the **nutrient** dense foods. All equipment and supplies, including the nutrient dense food, can be either kept or managed at panchayat bhawan/ block office stores if there is capacity, or transported on weekly or fortnightly basis. If numbers are small and storage sufficient, supplies related to SAM services may also be kept at AWC. A well-established network of main and sub-stores will be needed a transport provider must be identified for logistic support. This is an important component of programming and should be well managed to avoid stock outs which will later impact on the program indicators negatively.

3. Operational steps in setting up of community based program for SAM at state

3.1 Screening and referrals

CHWs and community volunteers screen and identify malnourished individuals in two phases.

Screening/ Identification: To be conducted in the health centre / AWC by taking the weight and height measurement of children. The weight-for-height indicator is a more accurate estimate of body wasting, and is usually the preferred index for nutritional status. The WFH Z score needs to be assessed using WFH Z score look up tables.

It has been observed that most of the time the health workers struggle with assessing WFH Z score through look up table. Therefore, other alternative tools like MOYO chart or apps can be used to calculate WFH SD.

In order to reach as many malnourished children as possible, community providers must actively identify children who need care and refer them for treatment. Consultation with community groups will help identify the vulnerable households and narrow and expedite the search. ASHA, AWW, Poshan Sakhi and CNVs screen at the households and the AWC, ANMs, doctors at sub centre, health facilities, and pediatric wards actively seeking out sick and malnourished individuals. Active screening drive at regular intervals through door to door screening or at centrally located place at fix time is the best case scenario to ensure early identification of SAM children. Platforms like VHSND, Growth monitoring sessions, Vitamin A supplementation or deworming day is also an opportune time for planning screening drive. Home visits are also an opportunity to screen SAM children. Home visits as part of HBNC program offer an opportunity for early identification of children showing symptoms of wasting especially children under 6 months of age. Village Health Sanitation and Nutrition Day can be an important platform for identification and referral of children with severe acute malnutrition through weight

for height measurement along with medical complications. In VHSND it is the job responsibility of the AWW to refer the severely malnourished/SAM children to ANM.

3.2 On-going sensitization

Community members, by attending meetings, can regularly voice their views and suggest alternative courses for action. The Community leaders and other community workers can maintain regular contact with the community to identify problems and work together to provide timely solutions. A regular means of maintaining contact with the community is established as soon as the program becomes operational. During design stage, information collected on appropriate channels, individuals and forums in which to conduct this dialogue can be useful to the process.

The following community based events – (i) Inviting women during the first, second and third trimester of pregnancy (ii) Annaprasan Diwas (iii) Suposhan Diwas (focus on orienting husband) (iv) Messages related to public health for improvement of nutrition and to reduce illness has been designed under for organizing community-based traditional events at AWC to promote and support behaviour change to improve maternal and child nutrition. These events can be utilized to increase awareness about the IMSAM program and set in change. Home visits, VHSNDs, Gram Sabhas, community meetings, community fairs (mela) can also be utilized for community sensitization and mobilization. Mata Samities, SHGs, PRI members, religious leaders can be involved

3.3 Services provided at the AWC/center for SAM services at community level

3.3.1 Screening /identification of children 6-59 months

Screening is the practice of distinguishing between the targeted children who should be enrolled in a program/intervention and those who should not be enrolled; there are various parameters used for identifying individuals at risk and malnourished as listed below.

Screening measurements	Action
WFH/L <-3SD	AWC/ center for services for SAM children without complication
With both <11.5 and <-3SD	AWC/ center for services for SAM children without complication
With both <11.5 and <-3SD and medical complication	To MTC/NRC
Oedema +	MTC/NRC
Oedema ++	MTC/NRC
Oedema +++	MTC/NRC

Both active and passive screening needs to be promoted. In addition to the regular screening process using growth monitoring platform, screening SAM at different platforms and opportunities for screening like door to door, in pediatric wards, at sub centres, PHCs must be mandated. The medical officers/RBSK

doctors, ANM, ASHA and AWW to be trained on anthropometric measurement – weight, height measurement, calculating WFH Z scores and assessing oedema to enable them to identify SAM children. Other tools maybe used when WFH is not feasible.

3.3.2 Assessment of medical complication:

Identifying medical complications or danger signs is a critical step towards deciding the line of treatment. Taking a decision as to the child should be enrolled in SAM services at community level at AWC / or other chosen centre or admitted to inpatient facility – MTC/NRC depends on the presence of medical complication in SAM children. All SAM children with any medical complication needs to be referred to inpatient facility. However this a very challenging step, as detecting complications in SAM children is very tricky and many a times the ANMs do not have the required capacities to assess medical complication.

The capacities of ANMs needs to be upgraded, digitalized tools, audio visual job aids can be used. RBSK involves Anganwadi Center based screening of 4 ‘D’s [Defects at birth, Deficiencies (Severe Acute Malnutrition), Diseases, Development delays including disability] by the dedicated Mobile Health Teams for children aged 6 months to 6 years. It is also suggested that the team of doctors engaged in RBSK program can be involved for assessing medical complication. Scheme of grant-in-aid for Promotion of AYUSH intervention in Public Health Initiatives; it promotes AYUSH intervention for community health care to encourage institutionally qualified AYUSH practitioners and utilize these AYUSH practitioners in different public health programs. These AYUSH practitioners can be utilized for the medical assessment of SAM Children. The IMNCI package is comprehensive and caters to the identification, management and referral of malnourished/sick children that need immediate care. The community service providers ASHA and AWW to be essentially trained on IMNCI package that would facilitate early identification of malnourished & sick children as well as children with danger signs or those who are at risk.

3.3.3. Routine medication/immunization

This is treatment using simple medical protocols (antibiotics, deworming, Vit A) for children with severe acute Malnutrition without medical complications at community level. This can be linked with existing health systems to enable further medical checks and administration of vaccination and other drugs.

The quantities of routine drugs are caseload dependent, thus the total number of children enrolled in the program in a specific time line should be known. **Refer Estimation of SAM caseloads**

Drug required for SAM children for management at community level	Beneficiary caseload	Total number required
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Amoxicillin tablets	All new admissions	7 tablets of 250mg per beneficiary
Amoxicillin syrup 60 ml bottle	All new admissions	1 bottle per beneficiary
Albendazole syrup 10ml bottle	All new admissions on the second visit	1 bottle and half bottles for children above 2 years and those 1-2 years respectively
Albendazole tablets (400mg)	All new admissions on the second visit	1 tablet and half tablet for children above 2 years and those 1-2 years respectively

*The medicines required as part of the medical protocol under IMSAM are part of the general drugs available with ANM at sub centre and used at VHSND is available within health department. The quantities required must be estimated and informed/ requested from the health department. The medical protocol is delivered through the health department by ANM and hence is managed easily. **Mission Indradhanush** should prioritize vaccination of children with severe acute malnutrition with more focus with children having medical complications. **Anemia Mukh Bharat** should prioritize distribution of IFA to children with SAM and prioritize their monitoring for reducing their chances of being severe acute malnourished. The only prerequisite is the ANM and other health staff involved in the IMSAM needs to be trained on the medical protocols for IMSAM.*

3.3.4 Nutritional care through nutrient rich foods

While the success of community-based management of malnutrition lies on many factors - including proper organization and coordination with the community, accurate diagnosis of children, strong follow-up activities and associated medical protocol to tackle underlying infections,- the administration of a nutritional therapeutic food product constitutes as well an important component of the care package.

However, in India, while national/state guidelines on community management of children with SAM are yet to be launched, locally appropriate strategies could be devised to meet local demands of population for states to treat children with SAM. There is a need for dedicated nutrient rich food for the additional nutritional requirements for both SAM and MAM. Many different food products have been piloted to provide therapeutic care to SAM children. The requirement of nutrient rich food could possibly be achieved through fortification and augmentation of the THR to match the nutritional requirements of SAM and MAM as recommended by WHO. Existing THR can be augmented to meet nutritional needs of children with SAM and MAM. Some states (Telangana) are using augmented THR, fortified THR for management of SAM. Many states like Madhya Pradesh, Odisha, and Telangana have gone ahead including millets as part of the supplementary nutrition program (SNP). Use of millets as part of nutrient rich food for SAM and MAM could be a good alternative. The local public sector, cooperatives or SHGs production units should be mapped to assess their capacities and engaged for

strengthening the food component of the SAM response. It is important to ensure the quality of the product – packaging, shelf life, lab test and certification. The State rural livelihood mission is an important stakeholder that can facilitate the production of nutrient rich food through SHGs. States like Odisha, Bihar – Jeevika, Madhya Pradesh – Tejaswini group are few of the excellent examples of this.

3.3.5. Referral and follow up service

In order for follow up to be effective, there must be good linkage between the health facility and community providers. Community providers play an important role in tracing children who are absent or have defaulted and encouraging the caretakers to return. Home visits are instrumental and the frequency and tool for home visit must be included in the standard IMSAM protocols. Home visits to be done with a standard checklist which will ensure that key areas of follow-up are covered. Home visits should focus more on households where children:

- Are not recovering
- Have static weight or have lost weight also require follow up at home.
- Have deteriorating medical conditions
- Are not responding to the treatment, should be admitted for inpatient care
- Are not presenting for follow-up visits at the AWC/ center for SAM services
- Need constant monitoring of new practices taught during nutrition counselling sessions

It's sometimes easier during a home visit to gently inquire the reasons why a SAM child has defaulted or is showing poor response. It's also an opportunity to encourage the child to return to treatment or to provide counselling and support to the caregivers to ensure recovery.

Community providers (ASHA, AWW, Poshan Sakhi or other nutrition volunteer) should be trained on effective follow ups. The home visits under IMNCI to be utilized for monitoring the progress of SAM children. For difficult cases PRIs, religious leaders, faith healers, influential people from the community can be involved for convincing the families to avail treatment or continue the treatment and adhere to the treatment regime. The home visit tools can be built on IT platforms including the guided checklist along with instructions and subsequent counselling and advice in audio visual format to be given to the family. This will ensure quality as standard messages are provided and the audio visuals messages/counselling would gauge more interest and have better impact on the receiver.

Post discharge follow up is equally important to ensure the learnt skills are institutionalized by the family to ensure the child do not relapse. Ensure linking the child supplementary nutrition program (SNP) at AWC, also the family should be linked to social safety net schemes. The assumption is that households with a malnourished child attending SAM services at community level, are likely to be among the most food insecure. However, in India, nonfood factors, particularly disease and the social care environment, are extremely important determinants of malnutrition. Therefore achieving sustainable improvements in household nutrition, from a food security angle, demands interventions to improve skills, knowledge and

community organization in the areas of food production, post-harvest food management and food utilization. Demonstration gardens, supported by posters, can be staged at each OTP distribution point, displaying technologies mothers could adopt at home to diversify diets. Seeds distributions for house hold level nutrition gardens can contribute to improved food security. Attempts to integrate nutrition and food security to prevent relapse and also prevention of acute malnutrition can be planned into two broad categories: short term interventions providing food security inputs to individual families and longer term activities aimed at integrating the day to day activities of longer-term nutrition, food security and health interventions implemented by government services example linking with PDS, distribution of fortified grains through PDS, providing augmented THR, HCM under SNP. Improving the diet diversity of SAM children and their households, nutri-garden can be built in these households. Focusing on the development of positive deviance techniques as a community extension tool, organizing farmer groups through agriculture department for the local production of ingredients for nutrient dense foods, organizing SHGs through SRLM for local production of ready to eat nutrient dense foods and developing Poshan Vatikas/ nutri garden as part of the community based program for ensuring

*Absence of attention and care from mothers can also push child to malnutrition especially severe acute malnutrition. So, working mothers with SAM children should be prioritize and covered under **National Crèche Scheme**. As per its provision the scheme should also educate parents about severe acute malnutrition and its management at community level. As sanitation and drinking water facility has a strong correlation with malnutrition, so there is need to prioritize and monitor these services to households with severe acute malnourished child under **Mission Jal Shakti, Swachh Bharat Mission and Jal Jeevan Mission**. As poor economic condition is linked with high malnutrition especially severe acute malnutrition, so the households with SAM children should be provided with preference in **MGNREGA** schemes for improving their economic conditions.*

3.3.6. Health and nutrition counselling

This is carried out as individual and/or group depending on need

- SAM services at community presents a good opportunity for health education. When a child is first admitted to the AWC/center for SAM services, the key messages about how to feed nutrient rich food routine medicines and basic hygiene messages should be clearly understood. No other messages are given at this time to avoid overloading the caretaker with too much information.
- Simple messages can be developed to be used for SAM services at community and in the community that complement the key messages and attempt to address some of the underlying reasons for the child becoming malnourished in the first place.
- It is essential that messages be reinforced by practice. These messages should focus on: exclusive breastfeeding (for 6 months) and introduction and use of appropriate complementary foods using local foods, basic hygiene such as hand washing, the importance of frequent and active feeding even during illness and

what local foods to give young children; identifying malnutrition (when to bring children to AWC/center for SAM services); management of diarrhea and fever and recognizing danger signs.

Standard messages already exist for infant and young child feeding breastfeeding and complementary feeding messages under MAA program. Messages pertaining to identification of danger signs, care of child, identification of development milestone are provided in mother child tracking card. Every attempt should be made to use the same or similar messages that are given out in other existing programs. Some of the job aids and IEC material related to community management of acute malnutrition is available on the website of National Centre of Excellence hosted by Kalawati Saran Hospital, Delhi at <http://www.coesamnetwork.org/#> under resources – communication tools. It also has counselling tools for maternal nutrition and essential nutrition practices. A wide range of resources on nutrition topic contributed by MoWCD, MoHFW, Niti Aayog, UN agencies UNICEF, USAID and development partners like Alive & Thrive, BBC Media Action, Save the Children etc are all available at a common platform and can be accessed from Poshan Gyan website - <https://poshangyan.niti.gov.in/>

4. Reporting, Monitoring, evaluation and supportive supervision

Monitoring and supportive supervision must be a continuous process. It will help us to identify the areas of improvement and enable us to make the required improvements, thereby improve performance and achieve results. It will mainly be used to assess the performance of IMSAM projects as it establishes links between the past, present and future actions and improve current and future management of outputs, outcomes and impact.

Monitoring in IMSAM to be done at two levels:

1. Monitoring of the individual child
2. Monitoring of the program

Regular monitoring of progress of individual SAM child should be done during treatment in IMSAM program. For this weekly sessions to be organized as SAM service Days. The SAM child's compliance and response to the treatment needs to be monitored. In addition the feeding and caring practices of caregivers need to be monitored and supported by ASHAs/AWWs/Poshan Sakhi/ SHG members/village level Volunteer. Regular follow up visits at the AWC/center for SAM services and home visits should be ensured for monitoring the child. Vital areas of reporting and supervision include maintaining records, analyzing the data on regular basis and monitoring the quality of service delivery. Ration cards, beneficiary cards can be used at the health facility level to record information related to nutritional status, nutrition and medical treatment and type of nutrition education provided to all SAM children admitted to the program. Health workers need to keep a monthly attendance report as well to record new admissions, attendance, discharge, deaths, default and transfers. Records are also kept for supplies of food and

drugs, storage and staffing position. The monthly reports and stock balances are to be shared at coordination forums such as district health sector group meetings, District Steering Groups (DSGs), and with the relevant block, district and state departments. Routine program data is collected together in tally sheets. The tally sheets are compiled into weekly and monthly reports for program monitoring and record keeping. This allows continuous monitoring of activities, assessment of changes and trends, updating of data and timely action. Monthly reporting is recommended for deeper analysis of program outcomes and for the presentation of data to higher level and to external agencies. More in-depth evaluations of recorded data using extended databases, retrospective analysis of admission cards or specific coverage surveys or studies may be conducted as necessary. All routine monitoring data should be compared to key indicators of quality and appropriateness for SAM program.

A computerized database can automatically compile information from the tally sheets. Qualitative and quantitative data implemented by use of a database/or software that has the IMSAM indicators being monitored. Under the monitoring umbrella, data is collected and analyzed weekly and monthly within the state that will help evaluation on the go. This analysis needs to be presented and discussed to keep track of the project progress and performance. This is useful, but requires specific skills and equipment. The analysis should also be accompanied by a narrative report with attention to data comparisons from the previous month. This will be the role of the monitoring and evaluation focal person, with monthly and quarterly time frames. On monthly basis, the data feeding the program indicators will be analyzed, these are the coverage, death, defaulter and cure rates, average weight gain, mean length of stay.

Regular meetings and workshops can be planned to present the data, discuss it and propose adjustments to the intervention. The regular meetings would ideally involve different teams involved in the implementation such as the operational management team, the steering committee, the monitoring and evaluation team, the health staff, the beneficiary and staff feedback mechanism team, etc. In addition to the ongoing efforts of the teams to evaluate and adjust according to the findings and the challenges raised, the project would greatly benefit from a mid and end-line external evaluation.

The details of IMSAM component at individual level can be integrated into the Mother and Child Tracking Card. The SAM individual data to be linked with MCTS/PCTS. Monitoring data and other information on IMSAM can be integrated into the existing HMIS. This is carried out at both the field and facility level.

Several states and civil society organization working towards management of severe acute malnutrition has different application for monitoring and evaluation of program. For example in the Baksa district the Piramal Swasthya in coordination with district administration, health and social welfare department devised a Swasthya Suraksha Card for monitoring and evaluation of the pilot CMAM program in the district. The state of Madhya Pradesh has launched the SAMPARK application which has the CSAM module integrated in it that captures data on SAM and MAM and is hosted on ICDS MIS website. Another example is from Gujrat where integrated facility based and community based

SAM MIS has been linked with the Techo + Software (Mother Child Tracking system) of the Gujarat Government. Here all the data related to screening of children and CMAM implementation is recorded in this software for online monitoring and analysis. The data entered can be driven down from District level to Anganwadi Center level.

Also the government of India has released the POSHAN Tracker, which also monitors the severe acute malnourished (SAM) children and the services provided to it. However the Poshan tracker does not include individual tracking of SAM child and reporting on performance indicators of IMAM program. It is crucial to have a holistic and comprehensive application for monitoring and evaluation of the SAM management and calls for integration for several existing applications. The opportunities and challenges learned from several SAM management applications can be integrated in the POSHAN trackers for more efficiency.

ASHAs/AWWs/Poshan Sakhi/ SHG members/village level volunteer can be engaged for follow up visits and counselling to support feeding practices and compliance to the treatment. In case of difficult cases, PRI members can be requested to intervene and convince the families.

CONCLUSION

The integrated community based program for acute malnutrition can offer not only immediate action on malnutrition, but also give an opportunity for continuum of care between facility and community and also for prevention and management of acute malnutrition... IMSAM's potential to achieve this lay in its focus on working with communities. Integrating IMSAM within national policies, guidelines, and the existing health infrastructure for training, supply chain management, and supervision reduces the costs associated with IMSAM programs and enhance their sustainability. The non-negotiable prerequisite for complete integration of IMSAM into existing health system is the ownership by state health and WCD for management, implementation, and supervision of IMSAM services. To integrate IMSAM into health system linkages need to be established with other health programs and health service delivery platforms whereby IMSAM is not a stand-alone intervention but services are harmonized with routine primary care activities such as immunizations, growth monitoring, and other health and nutrition services. IMSAM activities should be incorporated in District implementation Plans and accounted for in the district health and ICDS budget and the data collection and reporting should be harmonized with the reporting structure and schedule of state HMIS and key IMSAM indicators reported through the state health management information system. Procurement for nutrient rich food and other supplies for IMSAM should be centralized; requisition, storage, and distribution of supplies managed through the state level essential supplies distribution system. Last but not the least the identification and referral of SAM children to become a part of routine service delivery at both health facility and community levels.

However, a health system is never similar from one state to another or one block to another and so is the context. There is no one method or one way to implement a program within an ever changing health systems and structures. There is no one recipe

and no one size fits all. This paper is meant to provide a road map to integrate IMSAM into health system leveraging the existing resources and encourage an approach of coming together, partnering, sharing, and being open to learn. It is meant to provide some main recommendations that can be adapted as per the context and status of the health system.

The actors in each state and in each block are the best placed to fine tune the implementation. In order for the implementing partners to be empowered into creating and finding their own solutions. However, the question we should all be asking is how do we ensure that this integration is not weakening an overburdening the system? Integrating the CMAM within the health system cannot be done without looking at ways to strengthen the health system concomitantly. If there is one last standing recommendation to give, it would be to seek ways to strengthen the health system continuously. A Health System Strengthening exercise must be undertaken from diagnosis to planning to build health system blocks in all components. Applying a systems approach deepens the understanding of how to work within a complex health system. To effectively integrate services, it is necessary to understand the different health actors, delivery points, referral pathways, etc. within the health system. This understanding is critical in enabling a process of continuous adaptation and in ensuring sustainable scale up of services on an ongoing basis. Common tools that can be used to understand systems dynamics which include: '5 Whys', SWOT analysis, mind mapping, fishbone diagrams, theory of change models and stakeholder mapping. Systems thinking enables the creation of sustainable, flexible solutions and insights into potential unintended consequences of interventions.

A suggestive pathway for integrating and institutionalizing SAM management into existing system followed by examples from states on ways of implementing CMAM components is presented below for reference.

Pathways to integrating IMSAM into health & nutrition system

IMSAM Components	MOH structure	ICDS Structure	Other sector structures	Community Structure
Community Mobilization	Worker/Person ASHA Platforms meetings	Worker/Person AWW, Platforms-AWC	Worker/Person – PRI, Sarpanch Platforms – MNREGA sites, gram sabhas,	Worker/Person Religious leaders, faith healers, influential people, adolescent groups, SHGs Platforms – Melas,

Identification and referral of SAM- , WFH screening & assessing oedema	Worker/Person ASHA Platforms – Health Sub centre, VHSND, Vitamin A supplementation, campaign Indradhanush, deworming day, home visits- IMNCI, HBYC	Worker/Person AWW Platforms – growth monitoring, Home visits	Worker/Person Platforms	Worker/Person Mothers, mother support groups, SHGs Platforms
Identification and referral of SAM – WFH measurement, medical assessment	ANM, ASHA, RBSK doctors Platforms – Health Sub centre, VHSND, Vitamin A supplementation, campaign Indradhanush, deworming day	AWW Platform – Growth monitoring,	Worker/Person – Ayush doctors	
Stabilization centre for SAM children with medical complication	District Hospital, CHC, Government funded hospital, charitable hospital tie up with government. Paediatric ward	Worker/Person – AWW (Follow up of SAM children discharged from MTC/NRC)	Worker/Person – Ayush doctors	Worker/Person – Mata Samity, SHG members (Follow up of SAM children discharged from MTC/NRC)
SAM care/services at community level	Sub centre, PHC, CHC ASHA & ANM, GNM, MOIC, RKSK doctors IMNCI package,	AWC	Panchayat bhawan, mobile center for SAM services	Follow up by Mata Samity, SHGs
Reporting & Monitoring	HMIS	Poshan Tracker		
IMSAM Trainings	Pre – service trainings. In service trainings	Pre service trainings		

	- IMNCI package, HBNC, HBYC, RBSK	In service - ILA		
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STATES		Bihar	Gujarat	Maharashtra	Uttar Pradesh	Madhya Pradesh	West Bengal	Rajasthan	Telangana	Chhattisgarh	Odisha	JKH	Assam
CMAM Components	Sub themes												
Community meetings for awareness	Where (Platform)	CMAM Clinic on VHSND (AWC)	AWC on Mamat a day	AWC	AWC	AWC	AWC	AWC	AWC	AWC	AWC	AWC	AWC
	Lead by	AWW/ASHA Clinic is lead by ANM	ANM/ASHA	AWW	AWW	AWW	AWW	AWW	AWW/ASHA Sahyogini	AWT and ASHA	AWW	AWW	AWW
Screening of SAM in community	GMDs are already in fields/ WFH	WFH	/WFH	WFH	WFH	WFH	WFH/	WFH for enrolment / for screening	WFH	WFH	WFH	WFH	WFH
	Where (Platform)	CMAM Session In Clinic its is cross verified (AWC)	AWC and Subcenter	AWC	AWC/Subcenter	AWC	AWC	AWC	AWC	AWC	AWC	AWC	AWC
	By whom	AWW & ASHA with support from Health and Nutrition Manager	ANM	AWW	AWW And validate by ANM and CHO	AWW	AWW	AWW	AWW/ASHA Sahyogini	AWT	AWW	AWW	AWW

		(JEEVIKA) in mobilisation											
Identification (Confirmation – medical assessment) and referral of SAM	Where (Platform)	CMAM Clinic (AWC)	AWC/subcentre on VHND	AWC during VCDC and PHC	AWC on VHSND	VHSND, CMAM Clinic	AWC and Subcentre during VHND	AWC on VHSND	AWC	AWC during CMAM Clinic	AWC	AWC during VHSND	ANM during VHND
	By whom	ANM	ANM	ANM and PHC medical officer	ANM	ANM	ANM	ANM/ASHA Sahyogini	ANM	-ANM	ANM	ANM	-ANM
Stabilization of SAM children with medical complication	Where (Platform)	NRC	NRC/C MCT	NRC	NRC	NRC	NRC	MTC	NRC	NRC	NRC	NRC	NRC
Medical care of SAM in the community	Where (Platform)	CMAM Clinic (AWC)	AWC/Subcentre	AWC	AWC	VHSND	AWC	AWC	AWC	AWC during CMAM Clinic	AWC	AWC	-AWC
	By whom	ANM	ANM	ANM	ANM calculated from	ANM	ANM	ANM	ANM	-ANM	ANM	ANM	-ANM

					E kavach								
Nutritional Care of SAM in the Community	Where (Platform)	CMAM Clinic (AWC)	AWC	AWC	AWC	AWC	AWC	AWC	AWC	AWC	AWC	AWC during VHSND	AWC
	By whom	AWW	ASHA/ANM/AWW	AWW	AWW	AWW	AWW	AWW/ASHA Sahyogini	AWW	AWW	AWW	AWW	-AWW
Follow up/monitoring of SAM child during treatment	Where (Platform)	CMAM Session (AWC)	Home Visits	AWC	AWC	AWC	Home Visit	Home Visit	AWC	AWC	AWC	AWC	
	Frequency	Fortnightly	Weekly	Weekly when enrolled in VCDC and monthly height	Weekly by AWW at home and monthly by ANM at AWC	weekly	Weekly	Weekly and Monthly to AWC	For first four weeks Weekly followed by Fortnightly	Weekly	Fortnight	Weekly	WEEKLY
	By whom	AWW	ASHA	AWW	AWW/ANM	AWW	AWW/ASHA	AWW/ASHA Sahyogini	AWT	AWW	AWW	AWW/ASHA	-AWW
Follow up post Discharge (platform and by)	Where (Platform)	At home	VHSND Monthly for 2 yrs	- Fortnightly for 2 months	Monthly	AWC for 3 months	Home for 2 months	AWC Monthly for 2 months during VHSND	AWC for 6 months	AWC for 6 months	AWC For 6 months	AWC for 3 months	AWC-FORTNIGHTLY
	By whom	AWW 1 st , 3 rd and 6 th	ANM	AWW	AWW	AWW	AWW/ASHA	AWW/ANMASHA	AW	AWW	AWW	AWW	-AWW

		month						Sahyogini					
CMAM Recording and Reporting	SAM Wise child tracking (Yes/ No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-Yes
	Outcome Indicator s reported (Yes/ No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Techo+)	Yes	--
	SAM data reported (Yes/ No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Screening and identified is reported)	Yes	-
	CMAM Data shared with other departm ent (Yes/ No)	Yes	No		ICDS and Health	No	Yes		-	Joint reviews		WCD, Health	-
	CMAM Data shared at what level	State, district and block level	-	-State level through ICDS	State level, District and block level	-	GP Block Distric t	-	-	-		District , State level	-

State Experiences of integrating IMSAM into health & nutrition system