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ACRONYMS / ABBREVIATIONS

ABBREVIATION	MEANING
ACF	Action Contre la Faim
ARI	Acute Respiratory Infection
вна	Bureau for Humanitarian Assistance
BHF	Basic Health Facility
CAR	Central African Republic
СВНС	Community-based Health Care
COVID-19	Coronavirus Disease 2019
GAM	Global Acute Malnutrition
HN	Head nurse on duty
ICCM	Integrated Community Case Management
ICCM+	Integrated Community Case Management + treatment for severe acute malnutrition
IMAM	Integrated Management of Acute Malnutrition
IMCI	Integrated Management of Childhood Illness
IRC	International Rescue Committee
NGO	Non-Governmental Organization
ROWCA	Regional Office for West and Central Africa
RUTF	Ready-to-use Therapeutic Food
SAM	Severe Acute Malnutrition
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organisation
WFP	World Food Programme

MEMBER LIST

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Special thanks to the representatives of the Ministries of Health from Burkina Faso, Cameroon, Mali, Mauritania, Niger, the Democratic Republic of the Congo, Senegal and Chad for their active participation at this event.

We also thank the technical and financial partners present at the conference.

Finally, our thanks go out to the field teams in our different organizations for their technical support, their deep commitment and the enthusiasm they shared in sharing their expertise and experience.



OINTRODUCTION

1. Context and rationale

In view of the operational limitations of the current protocol for the treatment of children suffering child wasting¹ and the yearly deterioration of the nutritional situation, there is an urgent need to adapt this protocol. ALIMA (The Alliance for International Medical Action), ACF (Action Contre la Faim), IRC (International Rescue Committee) and UNICEF have joined their efforts and organized a joint Regional Conference on Simplified Approaches for the Treatment of Child Wasting on June 15 and 16, 2022, in Dakar, Senegal.

The objective was to communicate and exchange with the representatives from the Health Ministries of the nine countries of the sub-region² on the current barriers to the treatment of child wasting, and the opportunities that simplified approaches can offer to overcome these barriers. **The so-called "simplified" approaches aim to more rapidly detect and treat children suffering from wasting**, more efficiently, by simplifying the standard protocol.

In recent years, ALIMA, ACF, IRC and UNICEF have conducted studies in several countries to build scientific evidence on the relevance of these approaches. These clinical trials and operational pilot projects have yielded scientific evidence of their efficacy. The conference was an opportunity to synthesize and share lessons learned from operations.

The objective of this conference was to develop operational guidelines and clear regional recommendations on simplified approaches. The particular, a regional roadmap was initiated, outlining the next steps needed for the adoption and scaling up of simplified approaches in the areas where they are needed. This roadmap will be the basis of development for national roadmaps by the state leadership of the countries in the region.

Simplified approaches represent a real hope for the countries in the region deeply impacted by the scourge of child wasting. The hope is to provide quality treatment and preventative care to a larger number of children suffering from malnutrition, including the most disadvantaged children and those living in the most inhospitable areas of the region.

- 1. The term wasting within this document generally refers to both severe acute malnutrition (SAM, which includes severe wasting both with and without the presence of edema) and moderate acute malnutrition (MAM).
- 2. Burkina Faso, Cameroon, Mali, Mauritania, Niger, CAR, DRC, Senegal and Chad

2. Expected objectives of the workshop

The objectives of this workshop were to:



Review the state of the treatment of child wasting in the region



Summarize the scientific evidence currently available on simplified approaches



Share experiences from the implementation of theses approaches in different contexts and discuss programmatic implications and operational challenges



Reflect on the next steps to progressively implement simplified approaches in national treatment protocols, in compliance with international guidelines and depending on the national contexts

METHODOLOGY

The workshop was interactive and participatory in nature, with Powerpoint presentations followed by Q&A sessions, as well as working groups, followed by restitutions in plenary sessions.

65 people participated in person during the workshop's two days and more than 120 people attended via videoconference.

1. Conference attendees

- Ministry representatives (Burkina Faso, Cameroon, Mali, Mauritania, Niger, The Democratic Republic of the Congo, Senegal and Chad)
- NGO partner representatives (ALIMA, ACF, IRC, MSF, Save The Children)
- United Nations organizations representatives (UNICEF, WFP)
- Financial partner representatives (FCDO, BHA, ECHO)

2. Agenda

DAY 1: Wednesday June 15 2022

Treatment of child wasting in the region: from IMAM to simplified approaches

Session 1: What is the current state of the treatment of child wasting in the region? Prevalence of acute malnutrition, treatment coverage, lessons learned from IMAM and opportunities for improvement.

Session 2: Simplified approaches for the detection and treatment of child wasting in the region - Mapping and scientific evidence.

DAY 2: Thursday June 16 2022 |

Process of operationalization of simplified approaches: Moving to scale?

Session 3: Operationalization of simplified approaches: programmatic implications and operational challenges.

Session 4: Approval of simplified approaches by the governments of the region: what steps? Development of roadmaps.



PRESENTATION OF THE SESSIONS

TREATMENT OF CHILD WASTING IN THE REGION: FROM IMAM TO SIMPLIFIED APPROACHES

Session 1 - What is the current state of the treatment of child wasting in the region? Prevalence of acute malnutrition, treatment coverage, lessons learned from IMAM and opportunities for improvement

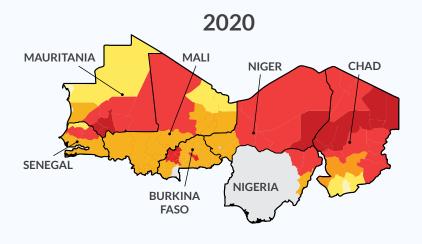
Three presentations were made during this session. The first, a joint presentation from the World Food Program (WFP) and UNICEF, addressed the state of child wasting in the region and the rates of treatment coverage. A second presentation from UNICEF presented lessons learned from the integrated management of acute malnutrition (IMAM) and, finally, a third presentation from the WHO discussed the revision of guidelines related to the prevention and the treatment of wasting in children.

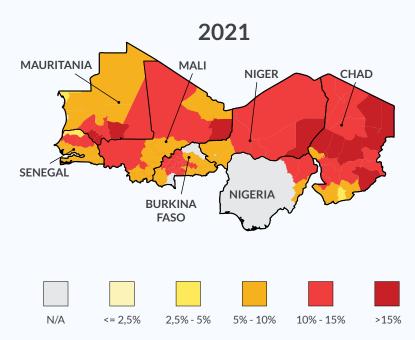
→ Current state of child wasting in the region and coverage of treatment (UNICEF and WFP)

UNICEF and the **WFP** conducted a presentation on the state of child wasting in the region. While the region has seen a slight decrease in the prevalence in growth stunting, the prevalence of wasting, however, has held between 7 and 9% over the last five years, without any real improvement. This middling prevalence hides strong inter- and intra-country disparities with so-called "hotspots" where the prevalence exceeds 15%. Furthermore, in a context of high demographic growth, the total number of children with wasting continues to increase. The situation is even more alarming in the Sahel where, according to the latest estimates, 9.4 million children are expected to have suffered from wasting in 2022, an increase of 32% compared to 2021 and 74% compared to 2018.

In this context, it has become increasingly difficult to provide coverage for the treatment of wasting. Both WFP and UNICEF face many challenges in securing supplies of nutritional products and managing the supply chain. The security situation also hinders the treatment of children with wasting by reducing access to certain areas and slowing down the operation of health facilities, which are often already too few in number.

→ Prevalence of GAM in the region





Lessons learned from IMAM

While all the countries in the region have a protocol for the treatment of SAM, only one third of children suffering from SAM are treated.

What are the main barriers?

1. An insufficient integration of SAM into the health care system

The treatment of malnutrition is still often perceived as an "emergency problem", an "nutrition-only activity", or a "program supported by UNICEF or an NGO". Generally SAM is not considered to be on the same level as other child illnesses because it is not perceived as a priority illness. As a result, it is rarely included in the package of key interventions for child survival delivered in health facilities. Government leadership and coordination is developing in several countries, it is not always accompanied by concrete planning, an operational implementation or the integration of routine activities into the existing health care systems.

2. Precarious funding for the treatment of children with wasting

State contributions to the treatment of wasting in the region remain severely limited. Funding for the treatment of SAM depends almost exclusively on emergency institutional donors, whose funding has become increasingly erratic. Furthermore, these funds are allotted for very short periods and do not allow for an adequate anticipation of the needs for ready-to-use therapeutic foods (RUTF).

3. A limited range of services

Access to health care is hampered due to an insufficient supply of services in quantity and quality.

Often poor healthcare coverage:

- The number of health facilities is badly inadequate in some areas, particularly in the Sahel
- In these areas, chronic insecurity and recurrent conflicts have even led to the closure of some health facilities
- The situation has worsened during the COVID-19 pandemic, which has also contributed to further restricting the supply of services, which were already limited in most health facilities



Sub-optimal service quality:

- Disruptions in the supply chain of therapeutic products do not allow for the continuity of treatment
- Health care personnel are not always available or sufficiently trained in the treatment of SAM
- Some health care centers are overburdened and unable to treat all cases
- Screening for wasting by community health workers and outreach services is suboptimal

4. Under-utilization of existing services

The low coverage of treatment for SAM is due not only to the limited supply of services, it is also due to the weak demand of these services by the population itself:

- The various people (parents, caregivers) responsible for a child suffering from SAM have at times a very limited understanding of malnutrition
- They do not always have decision-making capacities and are therefore sometimes unable to travel to benefit from health services
- The distance needed to reach health facilities is a major obstacle for the population in areas that are difficult to access, isolated or far from health facilities (mountainous regions, areas that are inaccessible due to flooding, etc)
- Indirect costs for treatment are often too great a barrier for the use of services.
- The general insecurity that prevails in some regions of the Sahel does not allow the population to move freely
- The hours of operation of health care centers are at times incompatible with the working hours of people (parents, caregivers) caring for a child suffering from SAM
- Treatment is sometimes abandoned due to a perceived improvement in the child's state. More generally, treatment protocols are not always respected in the home

What solutions are available?

Faced with these multiple challenges, different solutions have begun to emerge, both at the political and operational level.

At the political level, Ithe conditions are now ripe for concerted action to better fight against child wasting. Indeed, at the end of 2019 the Secretary General of the United Nations tasked the UN agencies (UNICEF, PAM, OMS, UNHCR, FAO) to develop a global action plan for child wasting, the Global Action Plan on Child Wasting³ (GAP). As the first global plan to achieve the Sustainable Development Goals (SDG) for wasting, the GAP offers a unique opportunity to recognize child wasting as a priority for global development, but also to coordinate interagency efforts at the global, regional and national levels. It provides a framework for action for the different actors engaged in the fight against wasting and outlines key commitments from governments, United Nations agencies, civil society organizations, universities, and partners in the private sector to accelerate the progress in the fight against child wasting from now until 2025.

At the operational level, some approaches and innovative mechanisms have also emerged. This is notably the case of the Match Fund initiative. Created to encourage governments to allocate more funds for nutrition, this matching fund allows states to double the amount they invest in RUTF. For example, if a state invests \$10,000 in RUTF, the fund may be used to obtain an additional \$10,000 in RUTF (ratio 1:1). In the region, four countries have already taken advantage of the matching fund (Mauritania, Nigeria Senegal and Sierra Leone) by mobilizing more than \$4.5 million dollars in domestic resources.

In addition, to reduce the cost of treatment, **new formulas of RUTF** are **being tested** in the region. Cheaper, locally sourced ingredients are being used. For example the Peanut Butter Project tested an oat-based RUTF and observed that it was superior to the standard RUTF in the treatment of SAM in Sierra Leone. Four countries in the region (the Democratic Republic of the Congo, Nigeria, Niger and Sierra Leone) will also test the viability of a soy and chickpea-based RUTF (ingredients widely available in the region and broadly used in Africa).

Finally, simplified approaches are surely the most interesting innovations that have been implemented. They not only solve the problems of treatment coverage, but also to improve cost-effectiveness and availability of health workers. However, some countries are waiting for the WHO guidelines to be revised before moving forward, especially regarding certain simplifications such as the use of a single therapeutic product.

Treatment and prevention of child wasting: What is the current state of the development of new WHO guidelines?

Why revise the guidelines?

The last version of the guidelines for the treatment of children with wasting were released in 2013. They focus on the treatment of SAM and do not address the question of treatment of children suffering from MAM. Furthermore, they include few recommendations on the treatment of SAM in infants (< 6 months) and offer no guidelines for the prevention of wasting in children. All these questions will be addressed in the new guidelines. Simplified approaches will also be examined during the revision process.

What is the status of the revision process?

The revision process for guidelines is still underway. It involves a lengthy literature review and numerous expert consultations. Due to the inability to meet during the COVID-19 pandemic, the revision process was considerably delayed. At this time, new recommendations are not yet available.

The examination consists of 16 PICO process questions⁴. These PICO questions address different themes (admissions, referrals, discharge, comorbidities, etc). Not all of them are related to simplified approaches.



The table below presents the PICO questions related to simplified approaches.

Simplification	PICO question included by the WHO
Family MUAC	No revision of norms necessary
Treatment of wasting managed by CHW	13. In infants and children with wasting without comorbidities, what is the effectiveness of the identification and treatment of wasting by community health agents (in the community setting)
Reduced frequency of follow-up visits	No revision of norms but unresolved questions on efficacity
Measurement of the mid-	2. A) In infants and children over 6 months, what are the criteria that best inform the decision to initiate outpatient/community treatment for wasting and/or edema?
upper arm circumference and/or presence of edema only	2. D) In infants and children over 6 months receiving outpatient/community treatment for wasting and/or edema, what are the criteria that best inform the decision to leave outpatient/community treatment?
Widening the criteria for admission	7. In infants and children over 6 months suffering from moderate wasting in all milieux and contexts, which children need specially formulated foods?
Use of a single treatment product	7. In infants and children over 6 months suffering from moderate wasting; in addition, what is the effectiveness of the specially formulated foods (including RUTF, CSB++,MDCF) compared to the non-specially formulated food interventions of other approaches?
Reduction of doses	8. In infants and children over 6 months suffering from moderate wasting, what is the appropriate dietary treatment in terms of optimal type, quantity and length?
Reduction of doses	9. In infants and children over 6 months suffering from severe wasting or an edema, what are the amounts and optimal length of RUTF?

What is the current position of the WHO on simplified approaches?

At present, there are no WHO recommendations for the use of simplified approaches in routine care. The use of simplified approaches is currently only recommended on a temporary basis when circumstances dictate (severe food insecurity, failing health care systems or interruption of services, extreme population vulnerability, COVID-19). The only guidelines that currently refer to simplified approaches are those that were developed for the treatment of wasting in children in the context of the COVID-19 pandemic.

Session 2 - Simplified approaches to detect and treat child wasting in the region

Duringthissession UNICEF returned to the different types of existing simplifications and their degree of implementation in the region. ACF, IRC and ALIMA presented the results of pilot studies conducted in different countries in the region to test the effectiveness and cost-effectiveness of various simplified approaches. UNICEF closed the session with a summary of the scientific evidence and the unresolved research questions on each of the simplified approaches.

→ The different types of simplification and their implementation in the region

The different types of simplification and their principal objectives are presented in the table on the right.

Type of simplification			Use/Objective
	The families receive training and Family MUAC MUAC bracelets to screen their children for wasting		 Improve early detection of cases and referral for treatment Improve program coverage by detecting and referring more children for treatment
	Treatment by CHW	This approach moves the treatment of SAM (without medical complications) from health facilities to the community. The treatment is performed by the CHWs. It is often integrated into ICCM programs: "ICCM+Nut", "iCCM+"	 Improve coverage and early access to treatment Reduce dropout rates Reduce costs associated with treatment for parents Reduce the workload that overburdens health facilities Allow for continuity of services during COVID-19
	Reduced frequency of visits	This approach allows to extend the time between follow-up visits - from a weekly frequency to a bimonthly or monthly frequency	 Improve access to services and their use while reducing the burden of visitations Give priority to high-risk children who can return for more frequent visits During COVID-19 - reduce gatherings at health facilities
Combined Protocol:	Modified admission criteria	- MUAC Only: Use of mid-upper arm circumference and/or bilateral edema as only criteria for admission and discharge - Expanded admission criteria: Increase of of the MUAC threshold to admit all children < 125mm so that all children with wasting may be eligible for treatment	 Increase in coverage Continuity of care: treatment is harmonized through a continuum of care (SAM - MAM) Quality: treatment better adapted to
	Use of a single treatment product	RUTF is used to treat SAM and MAM	 children's energy needs Cost-effectiveness: reduction of cost per child treated
	Dose reduction	Modification of RUTF dosage during treatment to optimize its use (generally used in association with the use of a single treatment product, but not necessarily) Different dosage models exist: OptiMA, ComPAS	Simplicity: the modification of doses helps health workers determine the dosage - simple dosages do not need calculations nor a high reading level.



ACF presented the preliminary results of studies on "The Improvement of coverage and the treatment of children with wasting by supporting community health workers in emergency areas through a modified protocol in Mali and Niger". The objective of the study was to evaluate the effectiveness, costeffectiveness and treatment coverage by extending community-based treatment of SAM to include CHWs through the application of a modified protocol (ComPAS) in the emergency situation in Gao (Mali) and N'guigmi (Niger). This was a non-inferiority cluster controlled randomized trial (CRT) designed to compare three different protocols in Mali, and a proposed nonrandomized prospective community intervention trial with a control group and an intervention group where two different protocols will be applied in Niger. The treatment protocol used for SAM by the CHWs was 1) the use of mid-upper arm circumference and/or bilateral edemas as sole criteria for admission and discharge and 2) fixed doses of RUTF to treat SAM and MAM children according to their MUAC measurement (2 sachets/day for children with a MUAC < 115mm and 1 sachet/day for children with a MUAC ≥ 115m and <125mm).

The preliminary results showed that the quality of treatment was maintained with respect to Sphere standards with the use of the ComPAS protocol. There is no difference in the average length of stay for SAM treatment between the 2 protocols (ComPAS and IMAM). With the ComPAS protocol there is a reduction of quantity in RUTF used in the treatment of SAM without complications and an increase of treatment coverage with the decentralization of MAS treatment to the community level (CHWs). Subject to final results, we can nevertheless conclude that with SAM treatment at CHW sites/health outposts, CHWs with a modified protocol (ComPAS), use less RUTF and increased treatment coverage compared with the IMAM protocol.

IRC presented its results on the effectiveness of the simplified and combined treatment protocol obtained in different settings. The treatment protocol that IRC uses consists of 1) simplifying the admission criteria by only using the MUAC and edemas; 2) combining the treatment of severe and moderate malnutrition in the same program using the same input (RUTF); 3) Simplifying the dose of RUTF given to children to 2 sachets/day to children with a MUAC <115mm or edema and 1 sachet/day to children with a MUAC of 115-124mm. The results show that this protocol (often referred to as ComPAS) leads to similar recovery rates and lengths of stay as the standard protocol and it is less costly per child treated due to reduced RUTF consumption. These results were confirmed in several operational pilot studies, notably in Mali where the Nara district has been implementing this protocol for more than 3 years with very satisfactory programmatic indicators.



ALIMA presented the basic principles of the OptiMA simplified strategy and its effectiveness with the results from the OptiMA clinical trial in the DRC, as well as the real-world pilots implemented in several settings and countries. The OptiMA strategy is based on three basic principles: 1) improve communitybased nutritional surveillance by strengthening parents' capacity to detect edemas, and usie the MUAC bracelet for early self-referral to health facilities; 2) simplify treatment by basing admission, follow-up and discharge of children only on the mid-upper arm circumference and edemas; 3) use of a single nutritional treatment (RUTF) with a degressive dosage. This strategy aims to increase the efficiency and coverage of malnutrition treatment programs. The OptiMA study in the DRC was a community-based non-inferiority, individually randomized controlled trial comparing the OptiMA strategy to the standard national protocol in effect in the Kamuesha (Kasaï) health zone from July 2019 to August 2020. In the OptiMA arm, all children were treated with RUTF, according to the OptiMA dosing table based on the MUAC measurement and weight gained during recovery (the RUTF dose is progressively reduced as the child's weight and the MUAC measurement increase). The OptiMA dosing table provides for daily caloric intake of 170-200, 125-190 and 50-166 kcal/ kg/day in children with a MUAC <115 mm, between 115 and 119 mm and >19 mm, respectively. Children with edema receive the same ration of RUTF as children with a MUAC <115 mm until the edema disappears, then their ration is determined by their MUAC and their weight. In the standard arm, children suffering from SAM and MAM received two different treatment protocols, in accordance with the DRC's national guidelines⁵.

The results show that the gradual reduction in RUTF dosage as the child recovers does not have harmful effects on recovery, weight gain or relapse when compared to the standard dosage. An improved nutritional status was observed at 6 months post inclusion in the OptiMA section, while using only half the amount of RUTF for treatment. This is explained by the fact that a single program treated all children with a MUAC <125 mm, and treated children earlier if they relapsed. These results demonstrate the safety and benefits of a potentially cost-effective approach that could allow more children to receive treatment in a deteriorating global food situation.

^{5.} Children who present a SAM defined by a MUAC < $115 \, \text{mm}$ and/or W/H < -3 and/or nutritional edemas, were treated with RUTF following the RDC national dosage protocol which is based on the child's weight at each visit (i.e. the RUTF dose increases progressively as the child's weight and MUAC increase). The DRC protocol indicates a daily caloric intake in RUTF of $150-200 \, \text{kcal/kg}$. Children suffering from MAM, with a MUAC between $115 \, \text{and} \, 124 \, \text{mm}$ and a WHZ >=-3 receive one RUTF sachet per day ($500 \, \text{kcal/day}$) every two weeks.

Summary of scientific evidence and outstanding research questions



FAMILY MUAC

Main scientific evidence

- Quality of screening: Mothers are able to take correct measurements of the mid-upper arm circumference, as accurately as those taken by CHWs. But their abilities tend to diminish over time. Therefore, training sessions must be repeated frequently.
- Early detection: There is less evidence on this point. Nevertheless, a study in Niger showed that children detected through the Family MUAC were detected earlier and hospitalized less frequently.

Outstanding research questions

- Is Family MUAC effective in identifying children suffering from MAM?
- What is the impact of Family MUAC on clinical outcomes (e.g., recovery time, complications/hospitalizations, recovery rate)?
- How cost-effective is the Family MUAC compared to traditional screening?
- How can this approach be monitored? What are the most useful indicators for monitoring, evaluation and learning?



CHW Treatment

Main scientific evidence

- Treatment coverage: Several studies have shown improved coverage for treatment of SAM when it is provided by CHWs. Some studies report a reduction of dropout rates as a result of the improved accessibility of treatment. (reduction in travel, proximity to CHWs).
- *Quality and outcome of treatment*: Overall, there is evidence of improvement in recovery rates. Nine studies cited in a systematic review of the literature found that treatment outcomes with CHWs exceeded Sphere standards.

Outstanding research questions

- What is the optimal level of supervision to ensure an appropriate quality of care?
- What is the optimal level of incentive needed to motivate and retain CHWs?
- How do parents and caregivers, CHWs and healthcare personnel perceive and accept the transfer of responsibilities from healthcare personnel to CHWs?
- What is the impact on treatment by the CHWs on non-responses and relapses?
- Is this approach cost effective?



Main scientific evidence

This approach was implemented extensively during COVID-19 in order to limit visits to health facilities, and thus contacts. However, there is relatively little evidence of its effectiveness.

- Treatment coverage: It is hypothesized that reducing the number of visits could improve access to services and their use, by reducing the demand that weighs on the population in terms of time and resources. Some operational results have shown that fewer visits may allow more children to be treated (fewer resources needed to treat each child).
- Treatment quality and outcome: There remains little scientific evidence on treatment outcomes. Those that are available are not conclusive. A randomized trial conducted in Nigeria showed that although the dropout rates were lower with a monthly follow-up than a weekly follow-up, the risk of mortality between admission and 3 months after discharge was significantly higher in the group with monthly follow-ups. When possible, and pending further evidence, it is therefore currently recommended that weekly visits be maintained when possible.

Outstanding research questions

- What is the impact on the treatment outcomes (rate and times of recovery, mortality, etc)?
- What challenges did the population encounter in managing and storing inputs at home (pressure by other family members to share rations, insufficient storage space, sale of products, etc) and how were they mitigated?



PROCESS OF OPERATIONALIZATION OF SIMPLIFIED APPROACHES: MOVING TO SCALE?

Session 3: Operationalization of simplified approaches *Program implications and operational challenges*

IRC shared the experience of implementing simplified approaches in Mali and the perceptions of caregivers and healthcare personnel on their implementation. UNICEF then presented a new decision support tool for the adoption of different simplified approaches.

IRC presented the results of a satisfaction survey conducted among health workers and parents and caregivers of children with wasting in the Nara District, in Mali, where the complete package of simplifications (simplified protocol, CHW treatment and Family MUAC approaches) has been implemented since 2018. The results show that the parents and caregivers are very satisfied with the new approach and commended in particular the following facts: 1) SAM and MAM children are now all treated (even those with a yellow MUAC reading) and there are no more input breaks for MAM; 2) treatment is available from community health workers who appreciated the simplicity of the new protocol, particularly the fact that there is no more measuring weight or height and reading of z-scores at each visit.

However, health agents as well as parents and caregivers consider it an inconvenience that children with a MUAC between 115 and 124 mm had to be treated weekly. They have asked if visits of these children could be spaced two weeks apart instead of one. IRC is in the process of launching a new study in the district on the impact on the length of stay and the cost of spacing visits every two weeks for children with MUAC between 115 and 124 mm.

UNICEF presented a decision support tool on the use of simplified approaches in exceptional circumstances. Developed with the global working group on simplified approaches, this tool aims to guide governments or organizations wishing to implement simplified approaches to address certain barriers to the treatment of children with wasting. In particular, it helps to identify the most appropriate simplified approach, depending on the type of obstacle encountered (obstacles to the offering and the demand of IMAM services).

One of the purposes of this tool (see diagram below) is also to help to define what is understood by "exceptional circumstances". While the WHO is currently reviewing existing treatment protocols and evaluating different simplified approaches for possible inclusion into the new guidelines on the treatment of child wasting, the use of the simplifications is currently acceptable in exceptional circumstances, when justified, to ensure continuity and availability of services. However, there is no clear definition or specific criteria for determining if a situation falls under exceptional circumstances.

SIMPLIFIED APPROACHES

SUPPLY BARRIERS



SIMPLIFICATIONS



DEMAND BARRIERS

Stock and pipeline issues

- Shortages of RUTF and/or RUSF
- Pipeline breaks for treatment products
- Limited or inconsistent management of wasting across the continuum

Health staff availability and capacity

- Complexity of multiple admissions criteria and interpretation of WHZ scores
- Health facilities overburdened and health workers not able to cope with the caseload
- Seasonal spikes in malnutrition mean health facilities are unable to cope with demand / caseload
- Community health worker / outreach screening for malnutrition is suboptimal

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- Increased insecurity means population cannot access services
- Closure of health facilities due to contextual factors

Access to health facilities

- Significant proportions of the population live far away from health facilities
- Health facility hours of care are not compatible with caregivers' working hours
- Certain areas are hard to reach and inaccessible to health facilities (e.g. mountainous regions, floods, etc.)

Combined protocol

Reduced and simplified dosage

MUAC admissions

Expanded MUAC

One treatment product

Reduced visits

Community Healther Worker-led treatment

Family MUAC

Use of the services

- Limited awareness of malnutrition at the caregiver and community level
- Limited coverage of health facilities
- Caregiver does not have decision making capacity and therefore cannot travel to use the service
- Indirect costs pose too great a barrier to access
- Defaulting from treatment due to perceived improvement of child or distance to health facility
- Non-adherence to treatment protocols at the household



The tool proposes the following definition: the expression "exceptional circumstances" refers to "complex and/or challenging circumstances that negatively affect the delivery of treatment services or the target population." This definition is accompanied by a list of 8 questions that should help judge the appropriateness of implementing of simplified approaches:

- 1. Have health facilities recently closed (for example, due to insecurity) or have they become inaccessible (for example, due to a shock, such as flooding)?
- 2. Has the nutritional situation deteriorated considerably, leading to a sudden increase in the prevalence of wasting in children?
- 3. Have there been disruptions in the supply of essential treatment products or are they expected?
- 4. Are there gaps in the continuum of care in the treatment of wasting?
- 5. Have health workers become unavailable (for example because of other health emergencies such as the COVID-19 pandemic)?
- 6. Has coverage recently diminished in the area of intervention and/or is it considered excessively low?
- 7. Has a sudden increase in dropout rates or mortality been observed?
- 8. Have community activities, in particular screening activities, lessened because of a change in context?

Session 4: Adoption of simplified approaches by governments in the region - what are the next steps? Development of roadmaps

→ Identification of the barriers to the supply and demand of services for the treatment of children with wasting

The first session was organized around the use of the decision support tool presented on the previous page. The countries were divided into 4 working groups to work on identifying the main barriers to the treatment of children with wasting in the different contexts they face in their respective countries. The main barriers identified by the different working groups are presented in the table below.

WASTING TREATMENT SERVICES

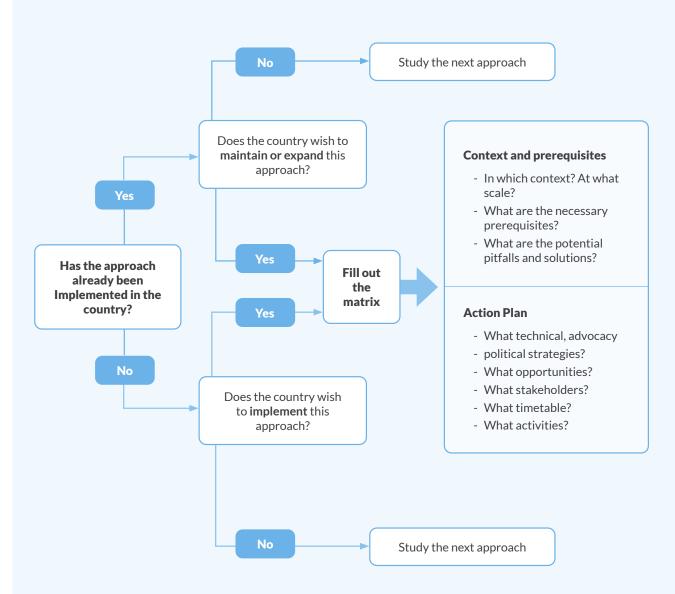
Main barriers to SUPPLY	Main barriers to DEMAND
Unavailability of inputs - Disruption in stock - Difficult transit	Distance/Remoteness from treatment center - Few means of transport - Cost of transport
Discontinuity of care Lack of systematic screenings at health facilities Unsatisfactory monitoring and reporting of health data	Lack of time To go to health facilities for weekly follow-up visits (especially during field work season) To wait one's turn once at health facilities (the waiting time is often very long, it can last an entire day)
Health facilities closed	General insecurity in some areas and on the road to health facilities (which also affect the availability and quality of care)
Health facilities overburdened (especially in hunger season)	Poor understanding of malnutrition among the population
Lack of HR, qualified personnel	Lack of awareness in some countries of free health care
Insufficiently integrated services	Population mobility: high amount of transhumance
Poor capacity to receive patients and lack of material - Lack of beds for children with complications - Poor technical capacity	Poor reception in some health facilities

Once these barriers were identified, the exercise consisted of determining the most appropriate simplified approaches to address them, taking into account the context of the different countries, their status with respect to simplified approaches and the prerequisites necessary to implement each of the simplified approaches.

This allowed each country to then work on a draft roadmap highlighting the simplified approaches they wished to implement or expand.

→ Development of country roadmaps for scaling up simplified approaches

The objective of this working session was to assist countries in developing their respective roadmaps for the initiation or expansion of simplified approaches. During this session, each country was able to review each of the simplified approaches and question its relevance to its context(s). They were guided by a matrix whose main elements are summarized in the diagram below.





Although the countries did not have time to begin the "Action Plan" section (see above diagram), fruitful discussions emerged from the exchanges and made it possible to begin draft roadmaps that were then taken up and completed during national workshops.

In **Burkina Faso**, The Family MUAC was considered necessary to promote self-referral and its adoption at the national level is desired. CHW Treatment is also believed to be an opportunity to increase the accessibility of care, and is particularly appropriate for areas that are difficult to access. The simplified protocol has already been adopted in some particular situations, especially in conflict zones where the proportion of health facilities that have closed is high. The revitalisation and the strengthening of this approach in these areas was discussed. Potential bottlenecks and their solutions were discussed and will need to be finalized during the national workshops.

In **Mali**, CHW Treatment has already been included in the national protocol since 2017, as an approach adopted at the national level. In Mali, the simplified protocol was discussed as a protocol mainly adapted for CHW Treatment. As in Burkina Faso, it is considered that the Family MUAC is necessary to promote self-referral.

In **Chad**, a country in the Sahel, adaptations to the simplified approaches were implemented at the onset of the COVID-19 pandemic. The MUAC Mother approach has been implemented by NGOs in some areas in the country, but the approach has not yet been adopted by the Ministry of Health. In view of the benefits of this approach, it was thought that it would be appropriate to strengthen the number and capacity of the community relays, and advocate for its adoption. The supply and management of inputs was admitted to be an issue in the country. The use of a single product remains a possibility, but the possible workload that this could generate should be taken into account in the decisions. It was proposed to continue with pilot projects to better evaluate the scope of the strategy. The WHO recommendations will also be taken into account.

For the **Democratic Republic of the Congo**, it was emphasized that it is important to quickly appropriate these simplified approaches. The MUAC Mothers approach was recognized as being ready to implement in all of the country's contexts and that its adoption will require training and advocacy activities at all levels. Regarding CHW Treatment, geographic barriers as well as the availability of community relays would constitute a barrier to its adoption in terms of accessibility and supply. Its implementation at the health post level, treatment sites or even within community-based advisory committees is being considered. The approach of reduced visits is seen as a possibility in settings with poor access due to insecurity, but the question of households managing large quantities of inputs would be problematic. This could be minimized, however, by frequent visits from CHWs. The approach of reducing inputs can be implemented in all contexts and would allow for the rationalization of inputs, which are not widely available in the country. The approach as a whole could increase the coverage of care.



Senegal identified 4 priority simplified approaches: the Family MUAC approach, the Treatment of SAM without complications by CHWs (already implemented in 8 districts of the Community SAM Treatment pilot project with an ambition to extend it to 20 districts); the reduction of visits (implemented during COVID-19), the widening of MUAC measurement thresholds. The main bottlenecks in terms of operationalization are:

- for the Family MUAC approach: related to the insufficient numbers of MUAC bracelets and a lack of monitoring for the implementation of the approach
- for the SAM treatment by CHW: linked to the insufficiency or lack of financial motivation of the CHWs, to the non-integration of community data in the area's global report and the insufficient supervision of community workers
- for the expansion of thresholds of MUAC measurements: related to the unavailability of materials.

Mauritania has prioritized three simplified approaches for implementation: the Family MUAC, CHW Treatment and the use of a single product for treating SAM and MAM. The bottlenecks identified in Mauritania for the implementation of the Family MUAC and the CHW SAM Treatment are similar to those identified in Senegal. Mauritania plans to test the ComPAS and OptiMA approaches in at least 4 health districts in order to generate more evidence.

Niger plans to implement the Family MUAC approach nationwide, but the availability of MUAC bracelets, the training of stakeholders, post-training follow-up and data feedback could hinder the implementation of this approach. Treatment by CHWs and reduction of visits could be implemented in special situations (declared nutritional emergency, during peak admission periods according to the CMAM Surge threshold). For dose reduction, Niger cannot commit until after the OMS issues its recommendations on simplified approaches.

Cameroon has already piloted the Family MUAC and CHW Treatment of SAM cases, which will be implemented in all settings to address access challenges and to increase coverage and early detection. Other simplified approaches (reduced visits, reduced of doses, admission based on MUAC and edema, use of a single product and expansion of MUAC thresholds) will be implemented according to the context, i.e., depending on the availability of inputs, security constraints, disruption in the continuum of SAM/MAM treatment, etc.

CONCLUSION AND RECOMMENDATIONS

Overall, the conference was a succes, filled with rich exchanges of evidence, experiences and implementation issues of simplified approaches and countries all demonstrated their interest in integrating simplifications into their nation protocols for the treatment of child wasting.

In general, the discussions and debates during the different sessions were focused more on operational and implementation issues than on scientific evidence. This reflects a positive paradigm shift towards simplified approaches. It is no longer simply a question of demonstrating their effectiveness, their merit, or their relevance, but rather of questioning their feasibility and operationalization. The "how" was at the heart of the discussions:

- How to target areas of implementation?
- How to implement without the close support of NGOs?
- How to ensure a good management of inputs at the community level?
- How to remunerate the CHA so that they remain motivated?
- How to monitor simplified approaches?

The countries present do not all share the same operational realities for the treatment of achild wasting. It was nevertheless raised that the conference played an important role in their common understanding on simplified approaches. The conference helped to clarify latent issues and provided new data that will be topics of discussion in forums or in clusters at the national level.

At the closing of the workshop, the following recommendation were made:

- 1. **Finish the work** in collaboration with the nutrition actors at the national level to finalize the roadmaps and arrive at an action plan for the adoption of simplified approaches.
- 2. **Prepare a work plan / guide** on the deployment of simplified approaches at the country level.
- 3. Follow up on the roadmaps and action plans for scaling up simplified approaches on a quarterly basis in the country.
- 4. Continue, through steering committees, the coordination of simplified approaches with all actors (Ministry of Health, NGOs, United Nations) under the leadership in the Ministry of Health.
- 5. **Document the lessons learned** from the scaling up of simplified approaches to guide other countries in their reflections on simplified approaches.

UNICEF, ALIMA, ACF and **IRC** are available to provide technical support to the Ministries of Health in West and Central Africa for the testing, piloting and scaling up of the different simplifications.

To find all the presentations shared during the Regional Conference on Simplified Approaches, use the following link:

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In the context of low coverage due to great distances from treatment centers, which simplification could help?

In the context of poor treatment quality (anthropometry incorrectly taken, children discharge before recovery, etc), which simplified approach could help?

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OPERATIONAL CONSIDERATIONS FOR THE IMPLEMENTATION OF SIMPLIFIED APPROACHES

What proportion of children suffering from SAM would be excluded from treatment if we adopt the MUAC of <125 mm and the presence of edema as sole criterias for admission?

What is the impact of changing the standard protocol to the simplified protocol on the RUTF consumption?

What are the aspects to be taken into account to ensure the management of inputs by CHWs in the management of malnutrition by CHWs?

INTRODUCTION

This document aims to bring together the main issues that were raised during the Regional Conference on Simplified Approaches for the Treatment of Child Wasting, held on June 15 & 16 2022 in Dakar. ALIMA (The Alliance for International Medical Action), ACF (Action Contre la Faim - Action Against Hunger), IRC (International Rescue Committee) and UNICEF once again would like to warmly thank all of participants for sharing their experiences and lessons learned.

The answers provided here were jointly written by our different organizations and are based on our respective experiences. We hope that they satisfy the questions as much as possible.

→ SIMPLIFIED APPROACHES: DEFINITION AND RELEVANCE

What are simplified approaches?

"Simplified approaches" are a means, by simplifying the standard protocol, for a more efficient early diagnosis and treatment of children with wasting.

The term "simplified approaches" is a reference to a certain number of simplifications of the existing national and international protocols for treating wasting in children. These simplifications are designed to improve the effectiveness, the quality, the treatment coverage and to reduce the costs of treatment for children with wasting. The most commonly used simplified approaches are:

- 1. Family MUAC: involving family members to screen for malnutrition and refer their children
- 2. Community health workers (CHW)-managed treatment: treatment of severe wasting with complications
- 3. Reduced frequency of follow up visits
- 4. Admission, treatment and discharge of children based on the mid-upper arm circumference measurement and/or the presence of edema
- **5. Expanded admission criteria:** systematic increase of the mid upper arm circumference threshold to include more children (for example 120 mm or 125 mm)
- **6. Use of a single treatment product:** ready-to-use therapeutic foods (RUTF) for the treatment of all children with wasting requiring treatment
- **7. Dose reduction:** modification of doses of ready-to-use therapeutic foods during recovery

Why adopt simplified approaches?

In areas where treatment coverage is very poor due to a lack of qualified health workers, long distances or other reasons, simplified approaches can help expand coverage. This is because a simplified protocol can be easily adopted by less qualified or overburdened health workers. Simplified approaches can reduce and simplify tasks to ensure quality treatment for all. They reinforce the standard protocol in a specific context, not replace or redesign it altogether.

Where have they been implemented so far?

The website www.simplifiedapproaches.org gathers information on simplified approaches and includes a mapping of implementation of different approaches in different countries. It shows that 52 countries have tested, piloted or implemented simplified approaches at scale. The most commonly implemented approach is the Family MUAC approach, tested and adopted by 39 countries. The combined protocol has been tested or piloted in 31 countries. Implementation has been carried out in a wide range of contexts: rural (for example in Mali, Niger and Burkina Faso), urban (Mali, Kenya, Somalia), emergency (South Sudan, Somalia), stable (Mali, Burkina Faso), camps for refugees/internally displaced persons (Kenya), deployed directly by an NGO (South Sudan and Kenva) and in support of the Ministry of Health (Mali). The treatment of SAM without complications by community health workers (CHW) in health outposts or CHW/BHU sites has been tested or piloted in 22 countries around the world, most notably in Cameroon, Mali, Niger, Senegal and Mauritania. in West and Central Africa.

What is WHO's position on simplified protocols?

Currently, the WHO has no formal recommendation on simplified approaches but the UN agency sees them as a potential solution for emergency situations or other exceptional situations (e.g. COVID-19).

→ DIFFICULT CONTEXTS AND THEIR APPROPRIATE SIMPLIFIED APPROACHES

In a context of recurrent shortages of ready-to-use therapeutic foods (RUTF), what simplification could help?

Beyond its medical relevance, the reduction of RUTF doses according to the evolving nutritional needs of children in treatment can also help to rationalize the use of these products in situations where product is scarce, as it allows to maximize the number of children treated with a limited supply of inputs. The reduction can be made progressively during treatment of children suffering from SAM or even from the outset of treatment, such as, for example, in the MANGo, CompAS and OptiMA protocols.

In a context of lack of health workers (due to insecurity for example), what simplification could help?

The use of a simplified protocol (including simplifying admission criteria and simplifying the dose of RUTF given) can be an option in conjunction with training health workers who are not formally qualified or using CHW to treat children in areas abandoned by formally-trained health professionals.

In a context of low coverage of treatment due to long distances to treatment sites, what simplification could help?

Training of health professionals and volunteer community health workers in treatment can not only make it easier for patients to access treatment, but can also expand coverage. Multiple studies have shown that by decentralizing treatment of children with wasting to the community level by CHWs, coverage can be increased, overcoming geographical and economical barriers related to transportation.

Another simplified approach reduces the number of follow-upvisits of children suffering from malnutrition and therefore limits the frequency of travel for families to treatment sites. However, scientific evidence for this simplification is still scarce, and its impact on recovery rates remains to be evaluated.

In a context of poor quality of care (anthropometry incorrectly taken, children discharged before recovery etc.), what simplification could help?

The use of a simplified treatment protocol (simplified admission criteria and RUTF dosage) can make treatment easier for health workers. They no longer need to take time-consuming height and weight measurements, or read Z-score tables, allowing them to concentrate on what is most important.

→ OPERATIONAL CONSIDERATIONS FOR THE IMPLEMENTATION OF SIMPLIFIED APPROACHES

What proportion of children suffering from SAM would be excluded from treatment if we adopt the MUAC of <125 mm and the presence of edema as sole criterias for admission?

According to nutritional studies, we know that in many contexts, many more patients are identified via the height/weight measurement than by MUAC. In the West and Central Africa region, approximately 10-35% of children suffering from SAM (by MUAC or WHZ) are excluded from treatment if we adopt the admission criteria of MUAC < 125 mm and edemas only. A review of the country's SMART data is recommended to guide a decision to simplify the admission criteria by calculating the number of children excluded. However, the decision must also take into account the barriers to treatment and whether, in reality, the WHZ measurement is actually feasible for all children when considering health workers' available working time, equipment and competencies.



What is the impact of changing the standard protocol to a simplified protocol on the consumption of RUTF?

Several comparative and operational studies have shown that the quantity of RUTF consumed by a child to recover is reduced when the dosage is reduced following the progress of recovery from malnutrition and calculated to the daily energy needs of each child. However, we do not currently know if the total quantity of RUTF needed to supply an entire district which implements the simplified protocol will be different, given that it is also used to treat children suffering from MAM. The quantity of RUTF per child is reduced but we do not know if the total amount of RUTF is reduced, similar or increased.

What aspects should be considered to ensure the management of inputs by CHWs in the context of the management of malnutrition by CHWs?

The transport of inputs to CHWs remains a problem. The supply chain must be improved to limit disruptions, especially when there is no partner support and poor use of RUTF, and a decentralized treatment is required.

To do this, the supply of RUTF should be integrated into the logistics system for generic essential medicines and a system of transport for nutritional inputs at the local level should be identified. Purchases should be made as much as possible at the local level, and at a monthly (not yearly) rate and the distribution should be done at the community level. Demands should be made based on real needs in order to limit large orders.

Finally, despite the cost that this represents, it is important to include community health workers in the management of inputs. This will require the development of health reforms that include the CHWs and their management and remuneration.



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