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## Justification

Mozambique has made slow, steady progress in maternal health and child survival. Maternal mortality rate (MMR) remain high at 452 per 100,000 live births, with slower progress documented the last decades[[1]](#footnote-1). Infant mortality rate (IMR) reduced from 93,6 per 1,000 live births in 2007 to 67,3 per 1,000 live births in 2017[[2]](#footnote-2) with wide disparities, ranging between 49,4 in Maputo City to 83,1 per 1000 live births in Gaza (most affected provinces – Gaza 83,1; Cabo Delgado 81,9; Nampula 75,1; Zambezia 74,9; Niassa 71). Similar declines occurred in the under-five mortality rate (U5MR), from 97 per 1,000[[3]](#footnote-3) live births in 2011 to 73 per 1,000[[4]](#footnote-4) live births in 2019. Despite the progress, indicators related to maternal, neonatal, infant and child health remain dismal in Mozambique, and are further aggravated by indirect impact of COVID-19.

Mozambique has amongst the highest rates of neonatal mortality in the world (30 deaths per 1000 live births[[5]](#footnote-5) or 28 per 1000 using the latest estimated[[6]](#footnote-6)), with unsatisfactory progress towards achieving [[7]](#footnote-7)Sustainable Development Goal (SDG). The nation maternal and neonatal death audit reports confirmed the similarity with other countries causes of neonatal mortality . prematurity, infections and birth complications such as asphyxia – most are preventable if key bottlenecks are addressed at service delivery level. This is the same case for causes of child mortality in Mozambique – all preventable – wich are – 42 percent malaria, 13 percent HIV, 6 percent pneumonia, 6 percent diarrhea, 2 percent malnutrition, <1 percent measles[[8]](#footnote-8).

High rates of adolescent pregnancy increased from 38 percent in 2011 to 46,4 percent of total pregnancies in 2015; it is one of the major risk factors for maternal and neonatal mortality (3,4) , and is linked to persistent high rates of child marriage, at 48 percent[[9]](#footnote-9). Fourteen percent of teenagers had their first pregnancy before the age of 15, and 57 percent before the age of 18; the adolescent friendly health service coverage is low at about 10 percent [[10]](#footnote-10) and adolescents only have the right to access such services for their first pregnancy. Teenage pregnancy is also related to higher levels of fertility (5.2[[11]](#footnote-11)), poor health, premature newborns and infant undernutrition, low birth weight (14 percent) and reduced education and professional opportunities for women (4).

There is limited recent data related to maternal and adolescent undernutrition; the high levels of anemia (51 percent of women of reproductive age we anemic in 2015[[12]](#footnote-12)) suggests that malnutrition is a key contributing factor to high rates of mortality across age groups. Malnutrition has likely been exacerbated by multiple shocks affecting the country since 2019. Frequent natural disasters, including floods, drought and cyclones, as well as conflict and insecurity have disrupted the ability of many poor households, dependant on subsistence agriculture, to access the appropriate quantity and quality of food. The humanitarian response is impaired by frequent outbreaks, climate shocks, and increasing conflict that overwhelm governance and health systems.

Cabo Delgado (CD) Province is entering its fifth year with conflict, insecurity and violence, leaving an estimated 1.5 million people, 58 per cent of which are children, in need of humanitarian assistance and protection. The conflict is complex and multi-faceted, with many drivers including perceptions of historical marginalization and lack of economic opportunities. As of June 2022, 946,508 people were displaced due to the conflict in Cabo Delgado, 55 per cent of whom are children. This figure represents a 21 per cent increase compared to February 2022. Over 80 per cent of displaced people are staying in host communities whose meagre resources and coping capacities are being strained by the influx of internally Displaced Persons (IDPs). This is further aggravated by public health emergency outbreaks, including COVID-19, polio and cholera.

Despite deployment of international security forces in mid-2021, and after relative clam for six months in the north, the security situation deteriorated significantly in June 2022 with Non-State Armed Groups (NSAGs) carryin out attacks in Ancuabe and Chiure districts of southern CD resulting in a large influx of IDPs. Similarly, in June, Nampula suffered its first attack since the start of the conflict when insurgents attacked the village of Lúrio in Memba district[[13]](#footnote-13)[[14]](#footnote-14). These last incidents led to the displacement of over 69,000 people mainly in Ancuabe district, of whom 55 percent where children, moving to Pemba, Chiure, Metuge, Montepuez among other areas of the province. In addition, there was a temporary displacement of nearly 23,600 people from Ancuabe, Chiure, and Mecufi to Erati district in Nampula province, of whom approximately 5,000 remain displaced (14), while others continue to return to CD. This was the largest displacement recorded in a single month in 2022 and between 05 and 23 June 2022 there was an average daily movement of 2,150 people in CD. From February to June 2022, nearly 115,550 IDPs of whom 51 percent were children, moved within CD seeking safer areas and livelihood opportunities[[15]](#footnote-15).

The Nutrition Cluster in CD estimates that in 2023, at least 98,440 children under 5 years old, and 7,884 pregnant and lactating women are in need of lifesaving treatment for wasting in Cabo Delgado. Displacements have resulted in a more vulnerable situation with over 15% of children reported as having a case of diarrhea and/or malaria in the last six months in CD.

Findings from and essential needs assessment (ENA[[16]](#footnote-16)) conducted between September 2020 to February 2021 in Cabo Delgado revealed that 52 percent of internally displaced persons (IDPs) and 43 percent of households in host communities have insufficient food intake, 80 percent of women do not have access to minimum diet diversity. In another hand, Mozambique indicates a low percentage of young children being exclusively breastfed (43% of children from 0 to 5 months and 52% from 0 to 3 months) according to the recent most recent Demographic and Health Survey (IDS) from 2011. The same data indicate according to the WHO, that 13% of 1,3 million of child mortality under 5 years were caused by lack of Exclusive Breastfeeding (EBF).

A sharp increase in severe acute malnutrition (SAM) admissions was observed in 2022 countrywide, with 46 per cent increase compared to similar months in 2021. This is probably due to improved access to hard-to-reach areas in northern CD coupled with a more stable pipeline of nutrition supplies, resulting in a better capacity to screen and treat children with malnutrition.

Although wasting management is recognized as a cost-effective intervention, its coverage in Mozambique remains very low. Less than 16 per cent of target caseload were treated in 2021 and only 35 percent SAM cases were treated in 2022 despite more than 80 percent of health facilities implementing the program and nearly all districts having at least one health facility providing treatment. Wasting management is also being provided as part of the integrated mobile brigades and by community health workers (CHW) as part of community management of acute malnutrition (TDC – Tratamento da Desnutricao Aguda na Comunidade) programs.

The Nutrition Department at Ministry of Health (MISAU) oversees the provision of quality care to children with wasting through the Nutrition Rehabilitation Program (PRN). In 2019, MOH updated the PRN protocol, to align with recent recommendations from WHO/UNICEF, with a five-delivery platform approach, namely: (1) community participation, (2) inpatient management of severe wasting with complications (TDI), (3) outpatient management of severe wasting without complications (TDA), (4) outpatient management of moderate wasting (TDA) and, (5) counseling and education sessions coupled with cooking demonstrations for wasting prevention.

According to the MoH Health Information Management System (SISMA), in 2021, there were about 1,500 health facilities providing PRN out of which, about 400 health facilities delivering Inpatient care for wasting, targeting mainly children under five and children from 5 to 14 years old (PRN-1), adolescents from 15 to 18 years, pregnant and lactating women (PLW) and adults (PRN-2). The two protocols of the PRN prescribe RUTF for all SAM cases, not only for under five children but also for older children and adults.

Despite the efforts for a wide coverage of treatment of children 6-59 months, treatment for infants under 6 months is less available. According to the national PRN protocol, children under 6 months with wasting should be treated in inpatient facilities, although due to the volatile insecurity context most of the SAM cases among hard-to-reach infants under 6 months (u6m) remain untreated or are taken to the nearest CHW for management. The recently released Management of Small and Nutritionally At-risk Infants Less than 6 Months and their Mothers (MAMI) Care Pathway Package offers an opportunity to strengthen the capacities of CHWs and health staff to systematically identify nutritionally at-risk infants u6m and to ensure proper quality care for infants u6m and their mothers.

## Methodology

The consultant started with a desk review of the PRN, Programa de Reabilitação Nutricional, answering questions previously designed to find key information related to the attention that infants under 6 months receive in case of malnutrition in Mozambique. Questions can be found in the Annex 1 of this document. The consultant also designed questions for the partners of the local nutrition cluster.

The questions were answered by 8 organizations that are part of the local nutrition cluster and one organization that is a key stakeholder in health service delivery in emergency situations but not part of the nutrition cluster.

The information found in the desk review and the collection through the partners was confirmed during 2 visits to the field, including two health centers in Metuge District, two visits to Health Mobile Brigades, and one visit to the District Hospital of Chiure.

After the confirmation of the information, the consultant compiled the information and organized a workshop of validation with the partners of the cluster.

## Nutritional Risk in Infants under 6 months – literature review

The PRN (Programa de Reabilitação Nutricional / Nutritional Rehabilitation Program) has a special section for infants under 6 months and the section is divided into two subsections, one for considerations for breastfed infants and the other for considerations of non-breastfed infants.

For both groups, malnutrition rehabilitation must be done in inpatient care, the document describes the specifications of the formula that should be given during the stabilization, transition, and rehabilitation processes.

Breastfed infants

For breastfed infants, the main key point is to support and protect the breastfeeding practice while the re-establishment of breastmilk production is stimulated through the Supplemental Suction Technique.

The admission criteria for inpatient care are:

-Weight/Length < -3 SD or

- Weight/Length ≥ -3 SD and < -2 SD or

- Bilateral edema (kwashiorkor) or

- Severe weight loss (marasmus) or

- Medical complications or

- Recent weight loss or failure to gain weight or

- Problems with breastfeeding (poor latching, positioning, and sucking) directly observed for 15-20 minutes or

- Other medical or social conditions that need more detailed attention, e.g., depression of the mother or caregiver, severe social problems, or disabilities

The PRN for breastfed infants contains a subsection pointing feeding process, such as ensuring good breastfeeding through "good latch on" and effective sucking of breast milk, avoiding distractions and letting the baby suck the breast at its own speed, strengthening the mother's confidence to stimulate milk flow and encourage more frequent and longer breastfeeding sessions to increase milk production and avoid interferences that can disrupt breastfeeding.

The discharge criteria are:

-W/H > -1 SD at 2 successive weighings

- No edema for 2 weeks (for cases admitted with bilateral edema)

- No medical complications, alert and clinically well

- Vaccination up to date

- Clarity that he/she is gaining weight on breast milk alone, after the supplementary sucking technique has been used: minimum 20 g of weight gained per day on breast milk alone for 3 days

However, a note in the discharge criteria section allows discharge without reaching ) W/H> -1 SD at 2 successive weighings if the child is gaining weight and growing appropriately according to the growth curve on the child's health card. In this section other considerations for the discharge such as, at discharge, the child may be transferred to infant artificial feeding, mother or caregiver was adequately counseled on infant care and feeding practices, danger signs, and when to return to the health center for follow-up, and follow-up and in the community by the APE/ACS (CHWs) are mentioned.

Regarding the follow-up after the discharge, the PRN contains a subsection where the process is explained and consists of the referral to the Child at Risk Consultation (CCR), it gives details on the frequency that this consultation has to have in the first two months after the discharge (every 15 days), and from the third month, the consultations can be done monthly until the 6th month after discharge.

It also gives special considerations to children with HIV – positive mothers that should attend the CCR and the Chronic Disease Consultation, it also remarks that liaison with the community must be ensured through the Chronic Disease Consultation APEs (CHW), it gives an alternative of liaising with the community in case the APEs are not available, through the support maintained by the “model mothers” who will support in conducting nutrition education activities and practical demonstrations with the involvement of the mothers.

The PRN also mentions the support that mothers should receive such as phsycological support , nutrition assessment, action points in case of poor diet, physical and mental health, breastfeeding difficulties such as fissures and mastitis, and misinformation or comprehension lack.

Not breastfed infants

The admission criteria for inpatient care are the same as the breastfed infants, plus other specifications, such as danger signs identified by IMCI protocols, poor weight gain, and who do not respond satisfactorily to nutritional advice and support.

For not breastfed infants cup feeding is promoted and supported, pandas for breastfed infants, psychological support, and nutrition assessment.

The discharge criteria are the same as for the breastfed infants with the particularities regarding that reaching W/h > -1 SD could be not reached if the child is gaining weight and growing appropriately according to the growth curve on the child's health card

The follow-up process is the same as for the breastfed infants, including the CCR, the Chronic Disease Consultation if the mother is HIV-positive, and the APEs or “model mothers” follow-up at the community level.

PRN Volume II

The volume II of the PRN offers the guidelines to screen and treat malnutrition in pregnant and lactating women.

## Nutritional Risk in Infants under 6 months – Field visits

The response to the IDPs emergency consists in supporting the health system through mobile health brigades. The mobile health brigades bring the health and nutrition package that is offered at health facility level to the communites that have not easy access because of the long distances where they have been localized by the authorities. The mobile health brigades are supported by partners of the health cluster and the nutrition cluster. When there is no emergency response, the mobile health brigades don´t function because a lack of financial resource.

The nutrition cluster partners focus their activities on the support of the Health Child Consultation (Consulta de la Crianca Sadia - CCS) and the Nutritional Recovery Programme (PRN). The CCS offers preventive services for children under 5 years, such as vaccination, supplementation with micronutrients, growth, and development follow-up, and nutritional counseling. During the visits, no development monitoring was observed despite it being mentioned in the guidelines. In the health facility and mobile health brigade, this consultation was full, the staff refers that families come mainly for the vaccines, and when, children complete the vaccination scheme, they stop attending the consultation, then the growth and development monitoring. They will come back if children are sick and then will be referred to the AIDI (Atenção Integrada das Doenças da Infância - Integrated Management of Childhood Illness) consultation. The AIDI consultation functions at the facility level, mobile level and also in the community level through the CHW.

When a malnutrition case without clinical complications is founded in the CCS or other contact point, the children are referred to the CCR where outpatient treatment is provided (TDA - Tratamento da Desnutrição em Ambulatório / Outpatient treatment of malnutrition). If the case presents clinical complications like edema, it is referred to inpatient treatment for malnutrition (TDI - Tratamento da Desnutrição em Internamento). For infants under 6 months, the health staff mentioned that the treatment is in inpatient care and they do the referral, when they are discharged from the inpatient care they have to return to the At-risk Consultation (Consulta de la Crianca en Riesgo - CCR) however,

this referral is not assured without any health facility.

During the visit to the district hospital which provides inpatient care (TDI) the staff mentioned that they perform the suction supplementation technique when they manage acute malnutrition in children under 6 months, it was not possible to observe it as there were no cases of children under 6 months admitted. The staff couldn´t give the number of children under 6 months who are admitted because of malnutrition and discharged after the recovery. The suspected cause is that they don´t have a record. At the moment of the visit, there were no admitted infants under 6 months with malnutrition.

In the visit to a health center, a registration form for the consultation of children at risk (CCR) was requested, as well as the registration book in order to review the information collected, it was found that in the book, unlike the consultation of the healthy child, there is space to review controls, on the other hand, the follow-up form is filled out with risk factors that are also assessed by the MAMI package.

Among the risk factors found in the CCR card that coincide with those evaluated by the MAMI package are the reasons for consultation, such as Prematurity, Birth weight less than 2.5 kg, Failure to thrive (Diagnosed according to the PRN when a child has no weight gain between two consecutive weighings with an interval of not less than 1 month and not more than 3 months, meaning horizontal or decreasing growth curve on the Child Health Card), Exposure to HIV, Deceased or absent mother, Contact with tuberculosis, twins, formula milk or abrupt weaning.

Birth weight and gestational age are recorded, as well as the type of feeding, maternal, artificial, or mixed, as well as space to record age at weaning and reason for weaning.

The consultant asked questions to the CCR nurse related to the follow-up of children under 6 months discharged from inpatient care. The consultant did not find a clear process, only weight and height control is performed, and there is no counseling or practical help for the mother.

According to the PRN there are community actors that support al the CCR process, they are the CHW known as APEs, and the Activistas – ACs. Both groups receive a monetary incentive from the cooperation organizations that also support the mobile health brigades.

The prenatal, postnatal, family planning, and at-risk consultation are managed by only one nurse in the mobile health brigades, at the facility level there is a nurse for each consultation. The load of work of the mobile health unit nurse is at least from what was observed, higher than the one at the facility level.

It was noticed that the mobile health brigades attend to a lot of people, but not perceived the same level of attendance at the health facility. Nurses from the health facility and mobile health brigade, refer low attendance to the postnatal consultation and other preventive health services.

During a short interview with the health staff of a health facility with newborn delivery rooms, nurses might need refreshers on guidelines such as the skin-to-skin practice to promote breastfeeding in the first hour of life or the late cord clamping, as they were not sure about the answers they gave and they were not accurate.

During the visits to the health facilities or mobile health brigades, individual breastfeeding counseling was not observed. Group sessions named support groups were found, however, they had an information delivery approach and not group counseling.

In a health facility, the manager showed a screening tool for mental health, he mentioned that is applied to women, the tool is designed by levels and the instructions consist in asking a first series of questions, if the answers are affirmative, then he needs to call to the central health facility to ask the mental health focal point support, as the case may need specialized support. This form was only found in the health facility, not in the mobile health brigades.

It was found that mobile health brigades do not always have treatment for malnutrition for pregnant women, infants, or children. In case there are cases of malnutrition with complications, the cooperation organization ensures referral to hospitalization, when the organizations are not there, each family must seek resources to assist.

No tools or spaces were available to provide services for people with disabilities in the places visited this time.

## Nutritional Risk in Infants under 6 months – Community

During a mobile health brigade field visit in the Chiure district, a focus group was conducted with women who had children diagnosed with malnutrition. Save the Children staff provided translation support since the consultant did not speak the local language. Among the main findings, it was found that when women had difficulties with breastfeeding, they go to the nearest parish where they receive infant formula. A relationship was found between these donations and the diagnosis of malnutrition.

It also asked about how to care for and feed orphaned children, it was found that after a meeting between the mother's and father's families, the child will pass into the care of the family with a woman who has children of similar age. The orphaned child is not breastfed, due to fears of transmitting diseases, and instead, the provision of infant formula will be sought from social protection services.

Another relevant information offered by the community has to do with infant mortality, since within the group it was stated that there have been cases of death, the women related it as a death that happened from one day to the next, it happened in the community and therefore, these cases are not recorded in official records.

## Nutritional Risk in Infants under 6 months – Nutrition Cluster Partners

The nutrition cluster coordinator supported the consultant through the request to the nutrition cluster partners to answer a questionnaire that seeks to find the capacity on the management of nutritionally at-risk infants.

Eight organizations responded to the questions including Johanniter International Assistance, CUAMM, ADA, Helpo, WFP, Caritas, Save the Children, and the ICRC. The last one is not a member of the cluster but as they maintain good relations with it, they answered.

It was found that the partners work closely with the local authorities to support them with the Mobile Health Brigades, malnutrition detection, treatment, referral, education sessions, and awareness on adequate infant feeding practices. There are other partners who run projects related to food security but sensitive to nutrition, and an organization that has a focus on the delivery of the products for the treatment of moderate malnutrition or supplementation to follow the PRN to the health authorities.

The organizations mentioned that the treatment for infants under 6 months with malnutrition is challenging because the support needed is not always available as it should be inpatient care, then when the cases are discharged there is a lack of follow-up. They refer that the mental health services are not in place as they should be, and they work closely with the CHW (APEs and ACs).

They mentioned that there is a problem related to the management of infant formula as there are challenges regarding hygiene and that a government organization is providing these products.

They consider that are gaps regarding the support of infants under 6 months, they mentioned the family context as families may not take children to the consultation for the healthy child (CCS), the introduction of other foods before the 6 months of age, lack adequate hygiene conditions and not offering breastmilk on demand. They also mention gaps within the health system, as such the lack of the nutritional status classification in the children’s consultations, the constant rotation of the health and nutrition staff, the lack of active search for cases with malnutrition that have not returned for follow up and lack of training on the management of malnutrition of infants under 6 months.

## Nutritional Risk in Infants under 6 months – Local Health Authorities

The consultant was able to interview the local health authorities in Pemba, Cabo Delgado, the Provincial Health Directorate (DPS) represented by one person and the Provincial Health Services (SPS), represented by another person. Both representatives agreed that malnutrition in children under 6 months of age can be prevented through a closer accompaniment, however, they recognize that there are no financial resources to train all health staff, trainings must be done in cascade, and it does not help that there is a high staff turnover. They also mentioned that the data they have from the inpatient malnutrition care of children under 6 months relate the lack of breastfeeding with mothers reporting low milk production.

## Validation workshop

On May 5, a validation workshop was held with the nutrition cluster partners. During the first part of the workshop, an orientation on the MAMI care pathway was carried out, the presentation of the findings found by the consultant regarding the feasibility of implementing the MAMI care pathway in Cabo Delgado, Mozambique to subsequently request the validation of this information through the completion by teams of matrices of strengths, opportunities, weaknesses and threats. We also worked on the adaptation of the MAMI care pathway with the participants at the end of the validation of the mapping of services and capacity. Agenda is available in Annex 3.

The following organizations participated in this workshop:

|  |
| --- |
| UNICEF |
| HELPO/ Nutricão |
| Save the Children |
| The Johanniter International Assistance |
| AVSI |
| Caritas Diocesana de Pemba |
| ACF |
| Medicos com África CUAMM |
| ASAC |
| SPS- Nutrição |
| WFP |
| DPS C. Delgado |
| DPS-DSP SESP ENVOL. COMUNITARIO |
| ADEL CD |

With a participation of 13 women and 5 men, both from national and international organizations.

In the results validation activity, participants highlighted the importance of coordinating with different actors on the issue of artificial feeding, improving the registration and follow-up of beneficiaries, strengthening referral systems, technical capacity in the field teams and communication between the different health programs. One of the most mentioned strengths was the presence of cooperation, however, it was related to the threat to the sustainability of activities. In general, it was concluded that actions are needed to connect and strengthen what already exists and that cooperation is supporting.

## Discussion

The consultant found that Mozambique's health system has a range of health care and disease prevention services that provide the ideal platform for the MAMI care pathway, considering that MAMI is an approach that seeks to connect existing services for mothers and infants less than 6 months. The existence of a child risk management consultation is an achievement of the system as it recognizes a gap between illness and health and that after an illness there is a risk of relapse and a continuum of care is important to maintain the state of recovery.

Another strength of the Mozambique health system is the existence of a specific section for the treatment of malnutrition in children under 6 months of age in the national protocol, which is also subdivided into guidelines for breastfed and non-breastfed children. The country has a consultation for healthy children which is also an advantage, since it offers different services (vaccination, supplementation, IYCF counseling, supplementation, growth and development follow-up) in a single visit, facilitating access to them. The health system also has a community component represented by the Elementary Multipurpose Agents (APEs) and Activists (ACs), which becomes an essential and positive component within the offer of services for the care of dispersed communities.

Factors were also found that do not facilitate the active search for children under 6 months of age at nutritional risk and the follow-up of infants after hospital discharge. In relation to the detection of cases at-risk at the community level, there is a missed opportunity since despite having CHWs that perform case tracking, children under 6 months of age are excluded since only the MUAC of children between 6 and 59 months of age is measured currently.

In relation to the use of anthropometric indicators, according to the PRN the diagnosis of malnutrition in children under 6 months of age is made with the weight-for-length indicator, with deviations < -3 SD or ≥ -3 SD and < -2 SD indicating inpatient treatment. The discharge criterion mentioned > -1 SD in weight for length in two successive weighings, which can generate confusion against the normality parameter offered in the CCS consultation where the weight for length is indicated to be in normal parameters when found with ≥ -2 and ≤ 2 SD.

On the other hand, the PRN mentions that it is not necessary to reach a standard deviation > -1 for discharge in case weight gain is evidenced, which opens the door for children to be discharged with standard deviations of < -3 SD or ≥ -3 SD and < -2 SD for weight for length.

It was detected as a missed opportunity that in the health card that is filled out at the CCS, weight-for-age follow-up is done, however, the PRN does not offer guidelines regarding the use of this indicator. Although the PRN states that discharged children should go to the CCR, it does not offer clear criteria for follow-up during this consultation or parameters for monitoring progress under anthropometric indicators. Nor does it provide guidelines for support for the practice of breastfeeding, assessment, and monitoring of feeding practices. Although it refers that maternal mental health is important, there are no clear guidelines for referral to this service.

## Conclusion

The consultant considers that implementing the MAMI care pathway in Cabo Delgado, Mozambique in an organized manner is possible and beneficial under the current service scheme and proposes some additional measures for the successful follow-up of young children under 6 months of age who are at nutritional risk alongside their mothers, including community screening of children under 6 months of age with the support of CHWs, reinforcement of referral to the CCR, strengthening the technical capacity of CCR staff, strengthening the relationships between health and protection authorities and strengthening referral to other services such as maternal mental health and AIDI (IMCI).

## ANNEXES

### ***Annex 1*** *Questions to guide the desk review to find the attention process for infants under 6 months in the national protocol for malnutrition treatment.*

|  |  |
| --- | --- |
| 1.1 | Includes the criteria for the diagnosis of acute malnutrition ? |
| 1.2 | Includes the use of W/L for the diagnosis of acute malnutrition ? |
| 1.3 | Includes any other anthropometric (MUAC, weight, W/A) criteria for the diagnosis of acute malnutrition ? |
| 1.4 | Includes the management of acute malnutrition of infants under 6 months ? |
| 1.5 | The guidelines demand inpatient care for acute malnutrition in infants under 6 months ? |
| 1.6 | The guidelines give criteria for discharging infants under 6 months with acute malnutrition ? |
| 1.7 | The criteria involve breastfeeding efficiency indicators, such as transfer of milk or right attachment ? |
| 1.8 | The discharge of the infant carries a referral to follow-up ? |
| 1.9 | The follow-up visit happens at the facility level ? |
| 1.10 | The follow-up visit happens at the community level ? |
| 1.11 | The guidelines indicate the frequency of the follow-up visits ? |
| 1.12 | The guidelines provide the criteria to stop follow-up visits ? |
|  | At-risk of malnutrition |
| 1.13 | Includes the criteria for the diagnosis of at-risk of malnutrition ? |
| 1.14 | Includes an assessment of the mother and the infant ? |

### ***Annex 2*** *Stakeholders questionnaire*

Job position:

Organization:

Places where your organization works:

|  |
| --- |
| Question |
| What are the services that you provide? |
| Within your services, what are your contact points for infants u6m? |
| What do you assess? |
| Experiences of treating infants u6m in the Outpatient Severe Acute Malnutrition (PD-SAM)? In recovery? |
| Do you think there are any *gaps in support* for infants u6m?  If yes, what are those gaps? |
| Outside of your services, where are *other contact points* for infants u6m that you are aware of? |
| Maternal mental health services? |
| Do you work with APEs or ACS? How? |
| What is the current treatment available for LBW/ preterm/ sick/ small infants? |
| Who else should I ask this questions? |
| Another information or topic that you want to share |

Annex 3 Agenda Workshop 5 de maio

|  |  |  |
| --- | --- | --- |
| Hora | Asunto | Responsable |
| 7:45 – 8:00 am | Llegada a oficina de UNICEF | Participantes y facilitadores |
| 8:00 – 8 :30 am | 1.Presentaciones | Participantes y facilitadores |
| 8 :30 – 9 :00 am | 2.Introducción MAMI | Sherifa Janja |
| 9:00 – 9 :30 am | 3.Presentación de mapeo de servicios y capacidad | Andrea García |
| 9:30 – 10 :00 am | 3.1 Validación de mapeo de servicios y capacidad | Andrea/Sherifa/Kelda |
| 10 :00 – 10 :15 am | Descanso | Participantes y facilitadores |
| 10 :15 am – 01 :00 pm | 4.Adaptación de la ruta de cuidado MAMI | Participantes y facilitadores |
| 01 :00 – 02 :00 pm | Lunch | Participantes y facilitadores |
| 02 :00 – 02 :40 pm | 5.Presentación Términos de Referencia (genéricos) Grupo Técnico de Trabajo en Alimentación Infantil | Andrea |
| 02 :40 – 02 :50 pm | Comentarios, sugerencias, pasos a seguir | Participantes y facilitadores |
| 02 :50 – 03 :00 pm | Despedida |  |

1. Census 2007 and 2017 [↑](#footnote-ref-1)
2. Census 2007 and 2017 (although Demographic and Health Study (DHS) in 2011 reported 64/1000) [↑](#footnote-ref-2)
3. DHS 2011 [↑](#footnote-ref-3)
4. UN- IGME (2019) – UN modeled data [↑](#footnote-ref-4)
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