FINAL REPORT

COVERAGE SURVEY

IMAM Programme

Zimbabwe

July 2024

ACNOWLEDGEMENTS

The IMAM Programme Coverage Survey in Zimbabwe was funded by Zimbabwe's Health Resilience Fund through UNICEF.

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The core team wishes to express appreciation to all those who contributed to this survey and/or facilitated its development. Special thank you to ZimSTAT, MoHCC from head office (nursing directorate and National Nutrition Unit) and from the provinces and districts that participated in the survey. These include Mashonaland East (Mudzi district), Manicaland (Chimanimani district), Midlands (Shurugwi district), Bulawayo City and Harare City health directorates.

To the administrative and health authorities in sampled districts, in particular to the health facility personnel and village health workers in all visited enumeration areas for their warm welcome and valuable guidance, and to all residents of visited localities and/or encountered at random for their hospitality and frank collaboration.

A special thank you goes to the entire data collection team for their exceptional efforts working in challenging conditions.

This study would not have been possible without the exceptional work and commitment of everyone involved.

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ABBREVIATIONS

AAH	Action Against Hunger
CI	Confidence Interval
Cin	Case in the IMAM programme
CMAM	Community Management of Acute Malnutrition
Cout	Case not enrolled in the IMAM programme
DHIS2	District Health Information System
EPI	Expanded Programme on Immunisation
FANTA	Food and Nutrition Technical Assistance
FNSC	Food and Nutrition Security Committee
HP	Health Promoter
IEC	Information, Education and Communication
IMAM	Integrated Management of Acute Malnutrition
IMNCI	Integrated Management of Nutrition and Childhood Illness
LQAS	Lot Quality Assurance Sampling
MAM	Moderate Acute Malnutrition
MoHCC	Ministry of Health and Child Care
MUAC	Middle Upper-Arm Circumference
NCD	Non-Communicable Disease
NGO	Non-Governmental Organisation
Rin	Recovering case in the programme
Rout	Recovering case not enrolled in the IMAM programme
RUTF	Ready-To-Use Therapeutic Food, PlumpyNut®
SAM	Severe Acute Malnutrition
SLEAC	Simplified LQAS Evaluation of Access and Coverage
SQUEAC	Semi-Quantitative Evaluation of Access and Coverage
UNICEF	United Nations' Children's Fund
VMAHS	Vital Medicines Availability and Health Services Survey
VHW	Village Health Worker
WHO	World Health Organisation
WHZ	Weight-for-Height z-score
ZimVAC	Zimbabwe Vulnerability Assessment Committee

EXECUTIVE SUMMARY

Background

In Zimbabwe, child undernutrition is a critical public health issue. The country faces a triple burden of malnutrition including under nutrition, over nutrition and micronutrient deficiencies. More frequent and severe droughts resulting from the climate crisis, the recent COVID-19 pandemic, the HIV epidemic, the economic situation and compromised food system feature among key determinants of increased malnutrition in country.

Zimbabwe has therefore made great investments to address child nutrition from a public health standpoint and has a well-established cadre of trained nutrition personnel across the country at district, provincial and national levels. Zimbabwe has also established a multi-systems approach to prevention of all forms of malnutrition through the National Care Group approach implemented by the Ministry of Health and Child Care and the network of multi-sectoral Food and Nutrition Security Committees (FNSCs) at district and provincial levels managed by the Food and Nutrition Council which sits in the Office of the President and Cabinet. These investments have resulted in Zimbabwe being on-track to meet the global nutrition targets to maintain child wasting and overweight to less than 3 per cent. However emerging threats, including the climate crisis and unregulated food systems are threatening this progress. Routine health information indicates that there is a rise in the number of new cases of diet-related non-communicable diseases (NCDs). In addition, Zimbabwe remains off-track to meet the remaining 4 global nutrition targets (of a 50% reduction in stunting and anaemia, 30% reduction in low birthweight and to increase exclusive breastfeeding to 70%).

Although the prevalence of wasting in Zimbabwe remains lower compared to other countries in the region, the effects of the climate crisis can be seen with cyclical droughts and floods caused by weather phenomena like El Nino and La Nina becoming more regular and more intense, affecting household food security. And while the focus of UNICEF Zimbabwe's nutrition programming remains the prevention of all forms of malnutrition, good quality treatment services must also be available where prevention fails, in order to prevent excess mortality and save lives.

The treatment of severe and moderate acute malnutrition is supported by national Integrated Management of Acute Malnutrition (IMAM) guidelines. In 2019, a guidance note was issued to enable the use of RUTF for children with severe and moderate acute malnutrition during emergencies. In 2023, approximately 160,000 children were estimated to suffer from wasting, including an estimated 19,775 children who needed life-saving treatment for severe wasting. Due to a lack of investment for essential nutrition supplies and quality improvement, only 10,556 children with severe wasting were treated, which represented the lowest admission rate recorded over the course of the last 7 years. As information about treatment coverage is scarce, a coverage assessment was deemed necessary to assess the IMAM programme access and to identify the barriers and boosters of access to treatment in Zimbabwe.

Methodology

This coverage survey consisted of an analysis of routine programme monitoring data at the level of provinces and/or districts, which was integrated into a bottleneck analysis to identify high and low performing provinces and/or districts. In the second stage, a series of SLEAC surveys was conducted across the selected high and low performing districts to classify coverage, identify key barriers and boosters of access and coverage from the community perspective. In the third stage, an in-depth qualitative inquiry was conducted to further deepen the understanding of identified barriers and boosters in Stage 1 and 2 and to formulate meaningful recommendations adapted to the context.

Results

The survey couldn't compare DHIS2 data with source documents (in-patient and out-patient registers) in health facilities, preventing the identification of discrepancies between original data and centralised databases at district, provincial, or national levels. However, in-facility observations during a qualitative inquiry revealed incomplete or inaccurate anthropometric data entries, especially on discharge. This may explain some of the trends below.

Routine data analysis

National protocols say that Growth Monitoring should be carried out for every child 0-59 months of age every month. Among ten provinces of Zimbabwe, two urban provinces, Harare and Bulawayo, demonstrated very low coverage rates (<50%) of **growth monitoring** in comparison to the estimated population of children 0-59 months in both 2022 and 2023. The provinces of Mashonaland Central, Mashonaland East and Midlands demonstrated moderate rates (50-100%) of one growth monitoring act while the remaining provinces recorded a high rate (>100%) of at least one growth monitoring act per child per year across two years.

The highest volume of **admissions** was recorded for Harare, followed by Mashonaland East and Mashonaland West. The lowest volume of admissions is recorded for Matabeleland South. The admission curves do not seem to follow a particular seasonal pattern, some provinces recording bigger variations on a month-to-month basis while others presenting a rather steady curve. When comparing IMAM admissions to the estimated burden of SAM children per province, two provinces (Mashonaland Central and Midlands) demonstrated an exceptionally low capacity (<50%) to enrol children with wasting into the IMAM programme in both 2022 and 2023. Other provinces enrolled more than 60% of the estimated SAM burden of children while Bulawayo and Matabeleland North enrolled substantially more than 100% of the estimated burden.

Harare, Matabeleland South, Masvingo and Midlands demonstrated the lowest **cured rates** in 2022 and 2023. Harare met the SPHERE minimum standard, of 75% of admissions being discharged as cured, for only 3 months within the 24-month surveyed period with an average cured rate of 61%. On the other hand, Manicaland and Bulawayo demonstrated the highest cured rates in 2022 and 2023 with an average cure rate of 76% and 77%, respectively. These provinces met the SPHERE minimum standard of 75% for at least 15 months within the 24-month period.

The highest average rate for **discharge weaknesses**[1] was recorded in Harare (38.62%), Matabeleland South (35.67%) and Masvingo (31.21%), often exceeding 40-50% on a monthly basis. Over the course of 24 surveyed months, Harare recorded only 3 months not exceeding a 25% threshold while Matabeleland South and Masvingo did not exceed it during 5 and 6 months respectively.

Harare demonstrated the highest **defaulter rates** in 2022 and 2023. The average defaulter rate was 31.29%, well above the SPHERE standard of 15%. The province recorded only one month out of 24 months with a defaulter rate lower than 15%. Masvingo, Matabeleland South and Bulawayo provinces indicated a default rate higher than 15% during 8-9 months in the surveyed 24-month period with an average default rate of 21% in rural provinces and 27% in Bulawayo.

Matabeleland South, Midlands and Masvingo provinces demonstrated exceptionally high **non-recovery rates**. For example, the average non-recovery rate in Matabeleland South for 16 months within the 24-month surveyed period was above the agreed threshold of 15%, at

[1] "Discharge weaknesses" can be described as a composite indicator, combining defaulter, non-recovery and death rates, which provides a complex picture about a proportion of children admitted into the IMAM programme, which were not treated successfully until full recovery.

almost 25%, while the highest non-recovery rate exceeded 50%. Midlands and Masvingo did not reach an agreed threshold about half of the time, with the highest non-recovery rates exceeding 30%. Harare recorded the lowest rates of non-recovery (4.32% on average) while Manicaland with the average non-recovery rate of 6.94% is the only province in Zimbabwe that met an agreed threshold of 15% systematically within 24-month surveyed period. The 15% threshold was agreed by the survey team prior to the survey.

The average **death rate** in the IMAM programme across ten provinces of Zimbabwe was 3%. The lowest death rate of 1% was recorded in Bulawayo while the highest rate of 5% was recorded in Manicaland and Matabeleland South. These two provinces recorded a death rate higher than 10% during two months within the 24-month surveyed period, the highest rate of 17% recorded in Matabeleland South.

	Urban districts *Harare, Bulawayo*	**Rural districts** *Chimanimani, Mazowe, Mudzi, Shurugwi*
Number of children screened during the SLEAC survey	**8,308** (62,62%)	**8,148** (71,37%)
Distribution of population 6-59 months by nutritional status in the sample	115-124 mm: **0.98%** <115 mm: **0.09%** Oedema: **0.0%**	115-124 mm: **0.72%** <115 mm: **0.17%** Oedema: **0.11%**
Proxy-GAM	1.1%	1%
Proxy-SAM	0.1%	0.3%
Coverage classification	**Low (<20%)**	**Low (<20%)**
Coverage estimation	**N/A**	**16.96% (IC 95% 10.01%-23.92%).**
Barriers of access and coverage	– Lack of awareness of illness – Lack of awareness of malnutrition – Lack of awareness of IMAM programme – Caregiver's occupation (caregiver too busy) – Failure of health staff to identify the child as malnourished during monthly check-ups	– Lack of awareness of illness – Lack of awareness of malnutrition – Caregiver's lack of action and/or inappropriate treatment choice – Lack of awareness of IMAM programme – Religious beliefs – Lack of financial resources
Boosters of access and coverage	– Diagnosis of malnutrition by health facility staff – Recognition of malnutrition by caregivers themselves – Encouragement by health promoter – Short distance to health facility	– Diagnosis of malnutrition by health facility staff – Recognition of malnutrition by caregivers themselves – Supplementary feeding programme by NGO partner

TABLE 1: Brief summary of key findings of the SLEAC survey, Zimbabwe, March 2024

Classification and estimation of coverage

Unlike in rural districts, the homogeneity chi-square test x^2 demonstrated a significant difference between the results of the two urban districts and therefore a combined classification and/or estimation of coverage was not possible.

The coverage for combined SAM and MAM treatment in both Harare and Bulawayo was classified as "**low**", i.e. below 20% threshold. The coverage in rural districts was also classified as "**low**". Considering that rural districts were confirmed as homogeneous and a sample size reached the minimum of 96 cases, it was possible to estimate the coverage for these 4 districts combined at **16.96%** (IC 95% 10.01%-23.92%) using the single coverage estimator.

Barriers of access and coverage

Among caregivers of **non-covered SAM and MAM cases**, a lack of awareness of illness (in general) constitutes the first barrier to access to the IMAM programme, especially in urban districts where caregivers seemed to be less attentive to their child's health status. While a good half of caregivers who observed their child's illness noticed symptoms associated with acute malnutrition (wasting/oedema), caregivers tended to be more attentive and/or reactive to symptoms of accompanying conditions, such as fever, cough and diarrhoea. Therefore, a lack of awareness of malnutrition itself could constitute the second barrier to access to the IMAM programme in both urban and rural districts, especially if caregivers choose treatment options based on a fractional reading of symptoms.

In this respect, a considerable difference between treatment preferences was observed among caregivers in urban and rural districts. Children in urban districts have a potentially higher chance of being screened and treated for malnutrition as more caregivers in urban districts appeared to choose a consultation at a health facility as their preferred treatment choice. However, between 30% to 40% of caregivers in urban and rural districts respectively did not initiate any treatment after having observed the said symptoms in their child. This is a concerning trend, especially in rural districts, as an observation of child's illness and potentially an accurate reading of symptoms did not translate into an appropriate treatment choice. Therefore, caregiver's lack of action constitutes a barrier to the IMAM programme in rural contexts. It is to be noted that this passivity does not appear to be influenced by a limited decision-making power with regards to child's treatment as most caregivers in urban and rural districts reported being able to take that decision on their own. In rural districts, Village Health Workers took prominence over other family members with respect to decision-making, highlighting their recognition and community compliance with their advice.

Caregivers in rural districts reported being more aware of the existence of the IMAM programme than their counterparts in urban districts. Therefore, a lack of awareness of IMAM programme constitutes a barrier to access services in urban districts while an awareness of the programme in rural districts could also be improved. Most respondents were very aware of growth monitoring activities and how to access them, however as wasting is relatively rare they lacked information about how to access the IMAM programme in the event that their child would be screened as malnourished. Communities further away from health facilities were less aware of IMAM programme services while in Harare a lower level of community engagement creates an important missed opportunity to raise awareness on the IMAM programme. Among caregivers of non-covered SAM and MAM cases in urban districts who were aware of the existence of the IMAM programme, caregiver's occupation (caregiver being too busy), unawareness of the child's malnutrition and failure of health staff to identify the child as malnourished during monthly check-ups at the health facility were cited as predominant reasons for a child's non-enrolment in the programme. The third element is particularly troubling from the point of view of quality care, highlighting a critical weakness in facility level screening and the knowledge and/or application of the IMAM protocol by health facility staff.

Among caregivers of non-covered SAM and MAM cases in rural districts who were aware of the existence of the IMAM programme, religious beliefs, other barriers (not specified by the survey team) and a lack of financial resources for treatment were cited as key reasons of non-enrolment in the programme.

Boosters of access and coverage

Among **covered SAM and MAM cases** enrolled in the IMAM programme in urban districts, most were enrolled for the first time, only one child relapsed. In rural districts, 80% of covered SAM and MAM cases were enrolled in IMAM programme for the first time, three children

relapsed (20% of covered SAM and MAM cases). During the qualitative inquiry, key informants stated that relapses are indeed very rarely seen while relapsed children might also be inadequately recorded as they might be registered as new admissions, especially if taken to treatment to a different health facility.

In both urban and rural districts, a diagnosis of malnutrition by health facility personnel is a key reason for enrolment in the IMAM programme, having been cited by approximately 60% of caregivers. A recognition of malnutrition by caregivers themselves represented a reason for enrolment for three caregivers in urban districts and four caregivers in rural districts. Other reasons for enrolment include a supplementary feeding programme by NGO partner, encouragement of a health promoter and short distance to a health facility.

Among caregivers of SAM and MAM children enrolled in the IMAM programme, almost all caregivers in urban and rural districts expressed being satisfied or very satisfied with the service. Only one caregiver in a rural district was not satisfied. A similar trend could be observed for a satisfaction with the reception, satisfaction with the quality of treatment and satisfaction with provided information. Only one caregiver in each case expressed being unsatisfied. Respective caregivers clarified that they were unsatisfied because of RUTF stockout and/or lacking information on laboratory tests performed on their child.

In-depth qualitative analysis of barriers and boosters of access and coverage

Community outreach. Village Health Workers (VHW) have been playing a vital role in IMAM programme implementation in terms of active screening, referrals to health facilities and health education in rural districts. However, many VHWs report not having been trained on IMAM and/or having been trained only partially. Common challenges experienced by VHWs with an impact on their motivation include mobility constraints, heavy workload, low and delayed remuneration, insufficient airtime, and shortage of essential equipment, such as height boards, scales, MUAC tapes, referral slips or registers. While care group initiatives have shown positive results in raising awareness and boosted regular community participation to prevent and treat malnutrition cases, the number of functional groups has decreased in recent years due to insufficient technical and financial support as well as food insecurity challenges at household level.

Growth monitoring. In rural districts, the community screening takes place at a VHW home, through door-to-door visits or at the Expanded Programme on Immunisation (EPI) points, where children receive vaccination and/or vitamin A supplementation. This allows for multiple screening opportunities each month. Growth monitoring includes MUAC measurements, weight and oedema checks but height is usually not checked due to the unavailability of height boards, even at the health facility level. The majority of caregivers, except for religious objectors, bring their children to growth monitoring sessions systematically each month, understanding the importance of this prevention measure and usefulness of shared advice to maintain their child's health. In Harare, Health Promoters (HP) do not organise regular in-community screening for malnutrition due to the unavailability of financial support.

Training and supervision. Most nursing staff are overdue for their IMAM training refresher, with their last training done five years ago or often even longer. Training was provided only to senior staff who took on a responsibility to cascade to the rest of staff. However, considering their high workload, the cascading training has been most probably considerably truncated as the interviewed staff lacks information on many aspects of IMAM programme, including z-score calculations, dosage for SAM and MAM cases, etc. In addition, a high turnover of trained nurses is constantly causing loss of information about the IMAM programme with most new staff not yet trained on IMAM due to the lack of training opportunities. Nurses reported not having prompt and/or regular access to technical support to address their uncertainties, leading to several grey areas in their understanding of the IMAM protocol and/or their ability

to implement it, per instructions. The limited mentorship opportunities were also linked with an overloaded planning of supervision visits to multiple clinics per day, which then limits the time for a mentor and mentee to address all questions, especially if staff do not happen to be trained on IMAM.

Community barriers of access and coverage. Most barriers perceived at a community level are of socio-cultural nature. Religious beliefs among Apostolic Church members and/or similar religious groups opposing modern health services in general represent a significant barrier of access to the IMAM programme. As seeking medical assistance from health facilities or healthcare providers, including VHWs, is prohibited, caregivers belonging to these religious groups who seek such assistance risk being suspended from the church. However, there is a growing trend of individuals seeking discreet help for their children's medical needs. In fact, some caregivers seek healthcare services at night-time with late visits to VHWs houses who are perceived as more approachable and trustworthy than health facility nurses because they are part of the same community. Other barriers perceived at a community level include caregiver's occupation (juggling multiple income-generating activities), fear of judgment and stigmatisation, and RUTF stockouts. This was said to have discouraged some caregivers from continuing the treatment, especially when they learnt about the stockout after a long journey to a health facility. On the other hand, the community appreciates RUTF treatment efficacy, mostly welcoming staff and religious-sensitive programme adaptations.

IMAM programme quality. Shortage of staff and/or trained staff translates into a heavy workload of existing workforce, which then hinders their ability to adequately engage in the IMAM programme and leads to multiple discrepancies with IMAM programme protocol adhesion, which includes **a)** incorrect treatment protocol, such as prescribing the same RUTF dosage for SAM and MAM cases, **b)** underutilisation of z-scores, which complicates the accurate assessment and management of malnourished patients, **c)** omission of an appetite test**.** Observation of delivery of care highlighted positive interactions between health facility and caregivers and the presence of key resources. Areas requiring improvement include utilisation of height boards, prolonged waiting times and the availability of Information, Education, and Communication (IEC) materials.

IMAM data management. At a community level, VHWs are missing referral slips and/or register to properly record data on screened/referred cases. The communication between health facility staff and VHWs can be hindered by a lack of airtime while VHWs monthly visits at health facilities become irregular if VHW feels demotivated by a delayed quarterly payment. At a health facility level, nurses record enrolled cases data in multiple registers, some facilities having only one register for both SAM and MAM cases. This is problematic not only for a systematic follow-up of SAM and MAM cases, respectively, but additional entry into the IMNCI register may result in data omissions. In addition, a heavy workload and staffing changes negatively affect regular data entry, creating backlogs and increasing a risk of data gaps. While these trends themselves can lead to misreporting, this is further exacerbated during occasional system failures in DHIS2, after which staff other than a sister-in-charge (who is responsible for a quality control) may need to submit the report, without adequate information about the IMAM programme caseload. In in-patient settings, challenges in data retrieval of patient notes can lead to a creation of new patient records for relapsed cases. Stabilised children are discharged to local health facilities for continued outpatient care, but issues with the transfer system often results in them being admitted as new patients in the OTP facility in their catchment area.

Recommendations

Based on the findings of this coverage assessment, the following recommendations are proposed to address the identified barriers of access, the sub-optimal quality and the low coverage of the IMAM programme in Zimbabwe.

- Review the national IMAM Guidelines in line with 2023 WHO guidelines on the prevention and management of wasting and nutritional oedema (acute malnutrition) in children under 5 years of age in order to align in-country practice with new evidence-based recommendations, including consideration of a provision of treatment by Village Health Workers;
- Replace the outdated guidance on the enrolment of SAM and MAM cases into IMAM programme by a new interim-guidance with clear instructions on admission and discharge protocols, RUTF dosage and reporting while waiting for the full review and approval of the IMAM Guidelines;
- Include a comprehensive module on the national IMAM programme in the pre-service training curriculum for all healthcare workers (Nurses, Doctors and VHWs) not only nutritionists – as is currently the case;
- Carry out in-person training sessions on the updated national IMAM protocol for all staff involved in the IMAM programme, especially new staff who have not yet been trained;
- Develop and roll-out the use of online training modules, to be used by all staff in need of refresher training on IMAM protocol. Among other things, a focus should be given to a clear definition of different categories of children (e.g. non-recovery) and a calculation of z-scores;
- Consider the implementation of a helpline for remote technical support and coaching on IMAM protocols, which all staff could have access to when in need of clarifications;
- Develop a specific and comprehensive guidance for VHWs and health facility personnel for screening and enrolment of children from households with religious beliefs, who might otherwise miss out on healthcare service;
- As part of the National IMAM Guidelines update, review and streamline IMAM registers and data management processes to limit duplication of effort, data losses and discrepancies. Maintain one register for the IMAM programme that aligns with the guidelines and the updated T5 form, while working towards integration of nutrition data into digital health reporting platforms. ;
- Consider conducting routine monitoring data analyses every six months at district level and every twelve months at provincial level to track progress against SPHERE standards to inform programme improvements and adjustments;
- Expand and enhance community engagement initiatives to raise awareness about the signs of malnutrition and the availability of the IMAM program, utilizing a diverse range of actors and platforms and with particular emphasis on hotspot areas;
- Streamline the functioning of Village Health Workers in rural districts and Health Promoters in urban districts to ensure effective screening and growth monitoring of all children under 5 years of age, including training, supervision and ensuring availability of all required tools. Special attention should be given to vulnerable “hotspots” in urban districts;

I. INTRODUCTION

Background information

In Zimbabwe, child undernutrition is a critical public health issue. The country faces a triple burden of malnutrition including under nutrition, over nutrition and micronutrient deficiencies. Recurrent droughts, the recent Covid19 pandemic, the economic meltdown and compromised food system are among determinants of increased malnutrition in the country. The problem of acute malnutrition has been compounded by the HIV epidemic in the country with an estimated HIV prevalence of 11.58%.

The burden of malnutrition in all its forms remains a critical issue in Zimbabwe, and hundreds of thousands of Zimbabwean children are eating too little of what they need early in life to grow and develop well, while older children, adolescents and adults are increasingly eating too much of what they do not need. Fewer than one in five Zimbabwean children meets the minimum dietary diversity translating to 750,000 children living in food poverty in Zimbabwe, not receiving the diets they need to provide sufficient nutrients for optimal growth and development. Poor diets are a major risk factor for the burden of disease in Zimbabwe. Zimbabwe has made great investments to address child nutrition from a public health standpoint and has a well-established cadre of trained nutrition personnel across the country at district, provincial and national level. Nutrition programming is well established in the health system, with 83 per cent and 88 per cent of health facilities having at least one health worker trained in infant and young child feeding counselling and the integrated management of acute malnutrition, respectively. Zimbabwe has established a multi-systems approach to prevention of all forms of malnutrition through the National Care Group approach implemented by the Ministry of Health and Child Care and the network of multi-sectoral Food and Nutrition Security Committees (FNSCs) at District and Provincial level managed by the Food and Nutrition Council which sits in the Office of the President and Cabinet. Eighty-five per cent of districts now have functioning FNSCs, scaled up from 5 per cent in 2016. These investments have resulted in Zimbabwe being on-track to meet the global nutrition targets to maintain child wasting and overweight to less than 3 per cent, however emerging threats including the climate crisis and un-regulated food systems are threatening this progress. A triple burden of malnutrition exists, with an unfinished agenda of reducing undernutrition (child stunting and wasting), high levels of micronutrient deficiencies and a prevalence of overweight that increases rapidly with age. Routine health information indicates that there is a rise in the number of new cases of diet related non-communicable diseases (NCDs) which reflect the quality of diets and consumer behaviour. Zimbabwe remains off-track to meet the remaining 4 global nutrition targets (of a 50% reduction in stunting and anaemia, 30% reduction in low birthweight and to increase exclusive breastfeeding to 70%). At 42%, rates of exclusive breastfeeding in Zimbabwe are among the lowest in the Eastern and Southern Africa region.

Stunting, or chronic malnutrition, remains a key concern in Zimbabwe, with an unfinished agenda for reduction. While Zimbabwe has made steady progress in reducing both the proportion and number of children who are stunted (Figure 1), still latest estimates show that nearly a quarter of Zimbabwean children – over half a million – are suffering from stunted growth and development, permanently altering the development trajectory for each of those children (Figure 1). Regional variations exist and Manicaland has the highest prevalence as well as numbers of stunted children, and rural areas have a higher burden of stunting compared to urban areas. Adolescent pregnancy and early marriage contribute to the inter-generational cycle of undernutrition. One in 3 girls in Zimbabwe gets married before the age of 18, and almost 1 in 10 babies are born with a low birthweight (8.7% <2.5kg), signifying nutritional deficiencies during pregnancy. Approximately 160,000 children in Zimbabwe were estimated to suffer from wasting in 2023, including an estimated 19,000 children who needed life-saving

treatment for severe wasting. Due to a lack of investment for quality improvement and funding constraints that lead to stock-outs of essential nutrition supplies, just 9,666 children with severe wasting were reached with the treatment services they need. Although the prevalence of wasting in Zimbabwe remains lower compared to other countries in the region, the effects of the climate crisis can be seen, where cyclical droughts and floods caused by weather phenomena like El Nino and La Nina, are becoming more regular and more intense, affecting household food security. Zimbabwe's last major El Nino event in 2016 caused a 25% increase in the number of children admitted for treatment of severe wasting (Ministry of Health and Child Care data). While the focus of UNICEF's programming for nutrition in Zimbabwe remains the prevention of all forms of malnutrition, good quality treatment services must be available where prevention fails, in order to prevent excess mortality and save lives.

The treatment of moderate and severe acute malnutrition is supported by national integrated management of acute malnutrition (IMAM) guidelines. In 2019, a guidance note was issued to guide the dual use of RUTF to treat children with both severe and moderate acute malnutrition during emergencies.

Assessment justification

According to the Zimbabwe Vulnerability Assessments of 2022 and 2023, child malnutrition has been steadily increasing since pre-Covid-19 with a global wasting prevalence above 5% (at 7.2%) in 2022 for the first time since 2005. At 4.1% in 2023, global wasting remained above the pre-Covid levels of 2.5% in 2018. These findings of increasing wasting illustrate a precarious nutrition situation for women, children and adolescents, however despite the increases, admissions to treatment programmes for wasting have reduced every year for the last 7 years, since the last El Nino event in Zimbabwe, which caused a 25% increase in admissions for treatment of wasting.

Using the latest available nationally approved survey data – the MICS data from 2019, and a standard incidence correction factor of 1.6, Zimbabwe estimates a burden of malnutrition of 16,677 children per year. However, as illustrated by the ZimVAC results above, the prevalence of wasting found in 2019, pre-Covid, is likely to underestimate the current prevalence of wasting. In 2023, the Ministry of Health and implementing partners have carried out over 2 million screening episodes (repeated children included), yet admissions in 2023 are the lowest recorded in the last 7 years. The country has experienced large stock-outs of ready to use therapeutic foods in 2023, with 50.1% of facilities reporting stock-outs which has likely had a negative impact on admissions. IMAM services are available through all health facilities in Zimbabwe, and 88 per cent of health facilities reported at least one health worker trained in the integrated management of acute malnutrition (National VMAHS survey, Oct 2023).

With this background, a coverage survey is needed to assess the coverage of the programme for the management of wasting, to identify the barriers and boosters to access to treatment and to assess the quality of programming for treatment of wasting in Zimbabwe.

II. OBJECTIVES

General objective

The general aim of this survey is to assess the coverage of the IMAM programme in Zimbabwe, to identify the barriers and boosters to access to treatment and to assess the quality of programming for treatment of wasting in country.

Specific objectives

- Analyse routine programme monitoring data of the IMAM programme to identify areas with low and high coverage. This will include the analysis the assessment of the quality of data and reporting, identifying issues that need strengthening;

- Carry out a bottleneck analysis of the IMAM programme;
- Classify the coverage of the IMAM programme in selected districts according to the SLEAC methodology, using a three-tier classification system;
- Identify and analyse the factors which are preventing and/or facilitating access to and coverage of IMAM programme, based on feedback from carers of children with wasting screened during the SLEAC survey;
- Carry out a qualitative study in areas with low and high coverage to deepen the understanding of factors which are preventing and/or facilitating access to and coverage of IMAM programme in these areas;
- Generate practical recommendations for improving access to and coverage of the IMAM programme.

III. METHODOLOGY

Introduction

Coverage surveys aim to measure the **treatment coverage** of CMAM/IMAM programs. *Treatment coverage refers to the proportion of children eligible for treatment for severe and/or moderate wasting who actually receive this treatment.*

Coverage is one of the key principles of the operational model for the management of wasting. If coverage is high, this could indicate that a large proportion of children in the program is successfully treated to cure. At the same time, high coverage could be an indicator of the effectiveness of the program's community outreach. The most common methodologies used by nutrition programs to assess treatment coverage are **SQUEAC**[2] and **SLEAC**[3].

The SLEAC methodology was developed by Valid International, FANTA, BrixtonHealth, Concern Worldwide, Action Against Hunger and World Vision to classify and/or estimate the coverage of CMAM programmes and to identify barriers of access to treatment. The SLEAC methodology is the most appropriate method for estimating coverage in large geographical areas. It allows to classify the coverage in the service delivery unit as "low", "moderate" or "high ". The classification method is derived from the simplified LQAS classification technique. The advantage of this approach is that it is sufficient to use a relatively small sample (for example, n = 40) to perform an accurate and reliable classification.[4]

This coverage survey consisted of an analysis of routine programme monitoring data at the level of provinces and/or districts, which was integrated into a bottleneck analysis to identify high and low performing provinces and/or districts. In the second stage, a series of SLEAC surveys was conducted across the selected high and low performing districts to identify key barriers and boosters of access and coverage from the community perspective. In the third stage, an in-depth qualitative inquiry was conducted to further deepen the understanding of identified barriers and boosters in Stage 1 and 2 and to formulate meaningful recommendations adapted to the context.

[2] Semi-Quantitative Evaluation of Access and Coverage.
[3] Simplified LQAS Evaluation of Access and Coverage.
[4] It should be noted that an n=96 sample allows coverage to be estimated at district level without the need to combine results from other adjacent districts for a combined coverage estimate.

A. IMAM PROGRAMME DATA ANALYSIS

ROUTINE PROGRAMME DATA ANALYSIS

Readily available routine programme monitoring data was analysed to identify any patterns over time, which could affect the IMAM programme access and coverage and its capacity to respond to changes in demand for its services[5]. The program performance indicators were compared to SPHERE humanitarian standards related to the context of the survey zone.

Sampling

All ten provinces of Zimbabwe were included in the analysis at provincial level.

Data collection

The consolidated IMAM programme databases covering the period from January 2022 till December 2023 were obtained from the Ministry of Health in Zimbabwe. The databases included the following data:

a. Number of screened children per health district per month;
b. Number of new admissions per health district per month;
c. Number of relapses per health district per month;
d. Number of transfer-in per health district per month;
e. Number of defaulters per health district per month;
f. Number of children not responding to treatment per health district per month;
g. Number of cured children per health district per month;
h. Number of deaths per health district per month;
i. Number of transfer-out per health district per month;

Data analysis

The routine programme monitoring data was compiled and analysed using an Excel spreadsheet.

BOTTLENECK ANALYSIS

Bottleneck analysis is a monitoring approach that facilitates an identification and monitoring of bottlenecks in the service delivery. The approach is integrated into a health system strengthening framework based on the Tanahashi model, which considers the enabling environment, supply, demand and quality as four key pillars of effective service delivery. The approach can be used at every level of service delivery (national, provincial, district, facility) with an objective to increase programme's efficacy in a timely manner.

Sampling

All ten provinces of Zimbabwe were included in the analysis at provincial level. Consequently, 3 best performing and 3 less performing provinces were selected for an analysis at district level.

Data collection

This bottleneck analysis built on the routine programme data analyses mentioned in the previous section, complemented by additional data retrieved from 2023 VHMAS survey database[6]. The additional indicators included:

[5] For more details about routine programme monitoring data analysis, please consult SQUEAC Technical Reference, p.12.
[6] MoHCC Zimbabwe, Vital Medicines Availability and Health Services Survey, Q2 2023

a. RUTF availability;
b. Human resources availability;
c. Care groups functionality;

Data analysis

The bottleneck analysis was conducted using an Excel spreadsheet. The data was organised using the framework of determinants and sub-determinants below with respective thresholds for each category, as described in Table 2.

Determinant	Sub-determinant	Numerator/ Denominator	Time period	Performance standards		
				Low	Moderate	High
Supply	Growth monitoring services availability	Children screened for malnutrition using MUAC/ 0-59 months population	January - December 2023	<50%	50-100%	>100%
	RUTF availability	Health facilities with RUTF available/ All health facilities	Q2 2023	<50%	50-75%	>75%
	HR availability (facility staff)	Health facilities with health workers trained in IMAM available/ All health facilities				
	Community outreach availability	Health facilities with functioning care groups/ All health facilities				
Demand	Initial utilisation	Actual admissions to programme/ Estimated SAM burden	January - December 2023	<30%	30-60%	>60%
	Continuous utilisation	Months with defaulter rate < 15%/ 24 months	January 2022 – December 2023	<50%	50-75%	>75%
Quality	Effectiveness	Months with cured rate >75%/ 24 months		<30%	30-60%	>60%

TABLE 2: Framework of determinants for an IMAM programme bottleneck analysis, Zimbabwe, March 2024

The analyses at provincial level considered the following criteria:

a. **Community outreach**: Percentage of screening acts vs. total population of children <59 months in 2023;
b. **Initial utilisation**: Percentage of admissions vs. estimated SAM burden in 2023;
c. **Effectiveness**: Months with cured rate >75%;
d. **Continuous utilisation**: Months with defaulter rate <15%;
e. **RUTF availability**: Percentage of health facilities with RUTF availability in Q2 2023;

The analyses at district level were conducted for 3 best performing and 3 less performing provinces and considered additional two criteria:

a. **HR Availability**: Percentage of health facilities with health workers trained in IMAM programme;
b. **Community outreach**: Percentage of functioning care groups;

B. SIMPLIFIED LQAS EVALUATION OF ACCESS AND COVERAGE (SLEAC)

Selection of districts

Based on analyses in the previous stage, 6 districts were selected for primary data collection via a series of SLEAC surveys. Three districts were selected to represent “best performing” districts in “best performing” provinces and three districts were selected to represent “less

performing" districts in "less performing" provinces. All sampled districts were selected to represent a variety of IMAM program implementation contexts in Zimbabwe. In addition, two districts, Bulawayo and Harare, were specifically selected to represent the urban context while the remaining four districts were selected to represent the rural context.

Performance	Province	District
High performance	Bulawayo	Bulawayo
	Manicaland	Chimanimani
	Mashonaland East	Mudzi
Low performance	Harare	Harare
	Midlands	Shurugwi
	Mashonaland Centre	Mazowe

For more details about the performance of each province and district with regards to the established criteria, please consult the respective sub-section in the **Findings** section of this report.

Sampling at district level

The SLEAC methodology uses two-stage cluster sampling. The first-stage sampling method must be spatial in order to obtain a sufficiently uniform sample of the intervention area covered by the programme. Thus, in order to ensure spatial representativeness, enumeration areas (EA) were first selected using the stratified random sampling method from an exhaustive list of enumeration areas grouped by wards (see **First-stage sampling**). Sampling at the enumeration area then followed the exhaustive case-finding method (see **Second-stage sampling**), which enables all children aged between 6 and 59 months in the sampled locations to be found and classified according to the admission criteria for IMAM programme.

First-stage sampling

In the first sampling stage, an exhaustive list of enumeration areas, grouped by wards, for each selected health district, maintained by Zimbabwe National Statistics Agency (ZimStat), served as a sampling base for selecting enumeration areas, which are spatially representative of the surveyed district. To determine the number of enumeration areas to be visited in each district, the SLEAC method uses the population and SAM prevalence estimates by Mid-Upper Arm Circumference (MUAC) and/or bilateral oedema to ensure that the target sample size is reached. The expected number of SAM cases was calculated using the following formula:

$$Population_{\,all\ ages} \times \frac{\%\ population_{\,6-59\ months}}{100} \times \frac{SAM\ or\ MAM\ prevalence}{100}$$

A target sample size of 40 SAM cases (n=40) in each area where coverage is to be classified is generally sufficient for most uses of the SLEAC methodology. However, in some contexts it may be difficult, if not impossible, to find 40 (n=40) SAM cases. This may be the case if SAM prevalence is low or the average village population is small. In such cases, it is possible to reduce the target sample size without increasing the error according to the methodological guidelines presented in Table 5, p. 118 of the SLEAC Technical Reference[7].

In the case of this survey, an estimate of SAM cases at the time of data collection was calculated for each selected district based on the prevalence of SAM by MUAC, estimated during the last SMART survey in 2022 and extrapolated to the respective province or the nearest province for the provinces that were not included in the survey. Per these calculations, due to a low prevalence of SAM across all districts as well as generally lower population estimates, the target sample size in three districts, namely Chimanimani, Mudzi and Shurugwi,

[7] The sample size can be reduced if the number of SAM cases expected in the health district does not reach 500.

was lowered to 33 SAM cases. In other districts, a standard target size of 40 SAM cases was maintained.

Then, to estimate the number of enumeration areas needed to reach the target sample size, the following formula was used:

$$n_{villages} = \left\lceil \frac{n}{average\ village\ population_{all\ ages} \times \frac{percentage\ of\ population_{6-59\ months}}{100} \times \frac{SAM\ prevalence}{100}} \right\rceil$$

Per these calculations, an estimated number of enumeration areas varied from 43 enumeration areas in Mazowe to 163 enumeration areas in Harare (Cf. Table 3). As a result, the data collection teams in urban areas (Bulawayo and Harare) were extended to 8 teams in order to complete the data collection with two weeks.

Province	District	Est. % 6-59 m	Est. pop. 6-59 m	Prevalence SAM	Prevalence MAM	Est. pop. SAM	Est. pop. MAM	Target sample (n)	Average EA size	Est. pop. SAM per village	Est. no. EAs to visit
Bulawayo	Bulawayo	12.60%	118,850	0.60%	0.6%	713	713	40	344	0.26	**154**
Manicaland	Chimanimani	12.60%	32,160	1.40%	0.9%	450	289	33	421	0.74	**44**
Mashonaland E	Mudzi	12.60%	30,817	1.00%	3.9%	308	1,202	33	443	0.56	**59**
Harare	Harare	12.60%	296,671	0.60%	0.6%	1780	1,780	40	325	0.25	**163**
Midlands	Shurugwi	12.60%	22,530	1.30%	1.7%	293	383	33	243	0.40	**83**
Mashonaland C	Mazowe	12.60%	63,854	2.00%	0.9%	1277	575	40	372	0.94	**43**

TABLE 3: Calculation of the target sample size for selected districts, Zimbabwe, May 2024.

Enumeration areas to visit were sampled from an exhaustive list of enumeration areas for each selected district using the procedure below:

- Calculation of a sampling interval by dividing the total number of EAs by the number of EAs to be visited.
- Random selection of a starting village from the top of the list using a random number between 1 and the sampling interval generated by the random number generator.

The sampling of enumeration areas was conducted by ZimStat staff. The complete list of sampled EAs as well as reserve EAs is available in the **Annex 5**.

Second-stage sampling

In the second sampling stage, the aim is to identify all the SAM and MAM "cases" in the sampled enumeration area, using an exhaustive case-finding method, which makes it possible to find all the children aged between 6 and 59 months in the sampled locations and classify them according to the criteria for IMAM programme admission. The classification considered the use of an expanded admission criteria in Zimbabwe, allowing the enrolment of MAM cases in the treatment programme for SAM.

The SAM "case" were defined as any child aged between 6 and 59 months presenting one of the following characteristics:

- MUAC < 115 mm and/or ;
- Bilateral oedema.

Moreover, children aged 6 to 59 months with MUAC ≥ 115 mm and without bilateral oedema were considered as SAM recovering case, if they were enrolled in the IMAM programme and their nutritional status was confirmed to be SAM upon enrolment

The MAM “case” was defined as any child aged between 6 and 59 months presenting the following characteristics:

- MUAC ≥ 115 mm and < 125 mm ;
- No bilateral oedema ;

Moreover, children aged 6 to 59 months with MUAC ≥ 125 mm and without bilateral oedema were considered as MAM recovering cases, if they were enrolled in the IMAM programme and their nutritional status was confirmed to be MAM upon enrolment.

For children identified as severely or moderately acutely malnourished, a visual check of the health record and/or PlumpyNut© sachets, was carried out to determine whether or not the children are covered by the IMAM programme.

Data collection

Age (in months), MUAC values (in mm), the presence of bilateral oedema and the case definition was recorded for all screened children via a case-finding summary form, which the team completed for each sampled EA. Data for children identified with severe acute malnutrition (SAM) and moderate acute malnutrition (MAM) were collected using electronic questionnaires, administered via portable devices (tablets) and synchronised on a server on the KoboToolBox[8] platform.

For children with MUAC < 115 mm, children with bilateral oedema (children with SAM) or children with MUAC ≥ 115 mm without the presence of bilateral oedema (recovering children), all three enrolled in the IMAM programme[9], a **questionnaire for carers of covered SAM cases** (Cf. **Annex 3A**) was used. For children with MUAC ≥ 115 mm without the presence of bilateral oedema, enrolled in the IMAM programme under the expanded admission criteria, a **questionnaire for carers of covered MAM cases** (Cf. **Annex 3A**) was used. Both questionnaires were used to assess the access to IMAM programme and the motivation of parents to use the respective services provided by health facilities.

In case of children identified as SAM or MAM who were not enrolled in the IMAM programme, a **questionnaire for carers of non-covered SAM/MAM cases** (Cf. **Annex 3B**) was used. This questionnaire was used to assess barriers of access to IMAM programme.

The introductory questions of an electronic questionnaire guided interviewers towards the use of an appropriate questionnaire. For example, if an interviewer selected a MUAC value for a SAM child and marked the child as not enrolled in the IMAM programme, the questionnaire for non-covered SAM cases would automatically be launched.

Children identified as SAM/MAM but not enrolled in IMAM programme were referred to the nearest service provider for treatment.

In order to ensure the highest quality of collected data, a field manual was prepared and distributed to all SLEAC survey teams. The raw data was first checked by team leaders who were responsible for the data completeness and for verifying that the data from the case-finding summary corresponds with a number of questionnaires for caregivers of covered and non-covered SAM/MAM cases completed on tablets. The data was then cross-checked by supervisors/provincial nutritionists who were responsible for contacting the SLEAC Technical Lead at the slightest doubt and/or at the end of each data collection day. The data imported on the KoboToolBox platform was checked daily by the SLEAC Technical lead.

Data analysis

Data analysis does not require coding or processing by a specific software. All data was processed in an Excel spreadsheet.

[8] https://kobo.humanitarianresponse.info/
[9] After a verification of their nutritional status upon enrolment (based on a health card and availability of PlumpyNut®)

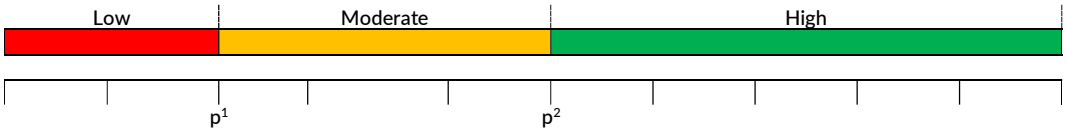
Coverage classification

The method for classifying the coverage of CMAM/IMAM programmes is derived from the simplified LQAS classification technique, which allows the classification by two or three tiers. In the present survey, a three-tier classification method was used in order to distinguish service units with very high coverage from those with very low coverage.

The thresholds for the classification of coverage in both rural and settings were set as follows:

- **Low** coverage: less than 20% (p1),
- **Moderate** coverage: between 20% and 50%;
- **High** coverage: greater than 50% (p2) (in line with SPHERE standards for rural settings[10]).

Please note that normally different thresholds would be used for urban settings but considering that there was no previous coverage survey done in Zimbabwe before, it was deemed appropriate to use lower thresholds for this assessment.

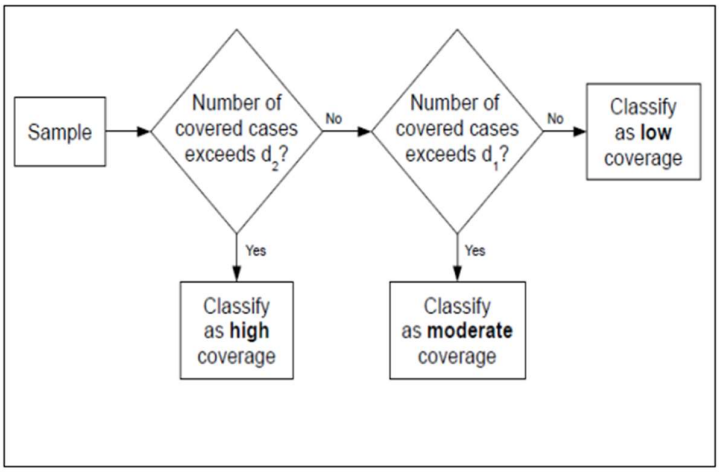


Program coverage

The coverage thresholds (d^1 and d^2) were validated by Ministry of Health and UNICEF representatives. After the data collection, they were calculated using the respective formulas from the SLEAC Technical Reference[11].

$$d_1 = \left\lfloor n \times \frac{p_1}{100} \right\rfloor \qquad d_2 = \left\lfloor n \times \frac{p_2}{100} \right\rfloor$$

The results were then be interpreted using the diagram below:



[10] Sphere Project, Sphere Handbook: Humanitarian Charter and Minimum Standards in Disaster Response, 2011, 2011, disponible sur: http://www.refworld.org/docid/4ed8ae592.html [accédé 20 Novembre 2019].
[11] Myatt. M, Guevarra. E, Fieschi. L, Norris. A, Guerrero. S, Schofield. L, Jones. D, Emru. E and Sadler. K, 2012. Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) / Simplified Lot Quality Assurance Sampling Evaluation of Access and Coverage (SLEAC) Technical Reference.

Coverage estimation

According to the SLEAC methodology, the single coverage estimation of the IMAM programme is possible under two conditions. Firstly, the actual sample size must be at least 96 cases. Secondly, coverage in the surveyed area must be homogeneous, i.e. broadly similar throughout the survey area.

Coverage can be estimated using the following formula in the SLEAC Technical Reference**Error! Bookmark not defined.** and presented below.

$$Singlecoverage = \frac{C + R_{in}}{C_{in} + R_{in} + C_{out} + R_{out}}$$

Cin = SAM and/or MAM cases in the IMAM programme;
Rin = Recovering cases, i.e. cases identified as SAM and/or MAM who have not yet been discharged from the IMAM programme;
Cout = SAM and/or MAM cases not enrolled in the IMAM programme;
Rout = Recovering cases not enrolled in the IMAM programme.

The data for *Cin*, *Rin* and *Cout* are collected during the SLEAC survey while the *Rout* value is calculated using the following formula:

$$Rout \cong \frac{1}{3} \times (Rin \times \frac{Cin + Cout + 1}{Cin + 1} - Rin)$$

Rout represents cases in the process of recovery that are not enrolled in the IMAM programme. The inclusion of this value in the coverage estimate of IMAM programmes balances cases in the programme with cases not in the programme. For more information on *Rout* and the calculation formula, please see a *Field Exchange* article published in 2015.[12]

Organisation of data collection

The SLEAC survey team consisted of a SLEAC Survey Lead[13] and SLEAC Survey Co-Lead (MoHCC), assisted by a team of 5 national supervisors (master team), and SLEAC survey district teams composed of 5 Supervisors, 36 Team Leaders and 72 Surveyors. The surveyors were divided into 5 teams of two people (pairs) in rural districts, and 8 teams of two people in urban districts. Each pair of surveyors were supervised by a Team Leader, thus forming a work unit of 3 people. Each district was supervised by a Supervisor who was responsible for contacting the SLEAC Survey Lead at the slightest doubt and/or at the end of each data collection day. Community health workers were mobilised to assist the assessment team during the data collection in their respective catchment areas.

All data collection teams received a plan of sampled locations to visit. The SLEAC data collection took place from 24 June to 7 July 2024, i.e. 14 days in total, including the travel to sampled locations.

Training of data collection teams

A two-day training of trainers, composed of 5 national supervisors (master team), 5 supervisors and 36 team leaders, took place from 17 to 18 June 2024 in Kadoma. An additional day and a half of training was added for the master team from 19 to 20 June 2024. The training sessions included a detailed explanation of the SLEAC methodology procedures and quality assurance standards with a series of practical exercises to help supervisors and team leaders to conduct the training of survey teams and to supervise the data collection in their respective districts.

[12] Myatt, M et al, (2015). A single coverage estimator for use in SQUEAC, SLEAC, and other CMAM coverage assessments, Field Exchange 49, p.81.
[13] Senior Nutrition Assessment Advisor, AAH UK.

A two-day training of SLEAC survey district teams was conducted between 20 and 24 in all selected districts. One training day was dedicated to a theoretical background, including the SLEAC methodology, data collection tools and procedures, and one training day was dedicated to a standardisation and pilot tests. All survey teams were required to pass a standardisation test and post-test with satisfactory results to proceed with the data collection.

C. IN-DEPTH QUALITATIVE ANALYSIS OF ACCESS AND COVERAGE

Sampling

The qualitative data collection was conducted in 6 districts selected for the SLEAC survey. The qualitative sampling framework, detailed in Table 4, provided a skeleton for the organisation of focus group discussions (FGD) and semi-structured interviews (SSI) with key informants but additional exchanges were added over the course of the data collection to complete the data collection based on emerging themes of importance for the survey.

In principle, two catchment areas were selected in each district. The selection criteria for the selection of health facilities included the availability of health workers trained in IMAM, RUTF availability, the existence of functional care groups and village heath workers' coverage. The selection of health facilities was reviewed by the SLEAC master team and adjusted accordingly.

Province	District	Health facility catchment area	SSI	FGD	Case studies
Bulawayo	**Bulawayo**	Mpilo Hospital	1 x HF Staff 2 x VHW 1 x CL[14]	1 x SAM/MAM caregiver	1 x SAM/MAM caregiver
		Maqhawe Heath Centre	1 x HF Staff 2 x VHW 1 x CL[14]	1 x SAM/MAM caregiver	1 x SAM/MAM caregiver
Manicaland	**Chimanimani**	Mutambara Hospital	1 x HF Staff 2 x VHW 1 x CL[14]	1 x SAM/MAM caregiver	1 x SAM/MAM caregiver
		Bumba Health Centre	1 x HF Staff 2 x VHW 1 x CL[14]	1 x SAM/MAM caregiver	1 x SAM/MAM caregiver
Mashonaland East	**Mudzi**	Gozi Health Centre	1 x HF Staff 2 x VHW 1 x CL[14]	1 x SAM/MAM caregiver	1 x SAM/MAM caregiver
		Dendera Heath Centre	1 x HF Staff 2 x VHW 1 x CL[14]	1 x SAM/MAM caregiver	1 x SAM/MAM caregiver
Harare	**Harare**	Budiriro Satelite Health Centre	1 x HF Staff 2 x VHW 1 x CL[14]	1 x SAM/MAM caregiver	1 x SAM/MAM caregiver
		Sally Mugabe Hospital	1 x HF Staff 2 x VHW 1 x CL[14]	1 x SAM/MAM caregiver	1 x SAM/MAM caregiver
Midlands	**Shurugwi**	Tana Health Centre	1 x HF Staff 2 x VHW 1 x CL[14]	1 x SAM/MAM caregiver	1 x SAM/MAM caregiver
		Shurugwi District Hospital	1 x HF Staff 2 x VHW 1 x CL[14]	1 x SAM/MAM caregiver	1 x SAM/MAM caregiver
Mashonaland Centre	**Mazowe**	Iron Duke Clinic	1 x HF Staff 2 x VHW 1 x CL[14]	1 x SAM/MAM caregiver	1 x SAM/MAM caregiver
		Christon Bank Clinic	1 x HF Staff 2 x VHW 1 x CL[14]	1 x SAM/MAM caregiver	1 x SAM/MAM caregiver

TABLE 4: Qualitative sampling frame for in-depth qualitative inquiry, Zimbabwe, May 2024.

[14] Community leader.

At health facility catchment area level, the following categories of participants were selected to take part in semi-structured interviews or focus group discussions:

a. Health facility staff (doctors, nurses) and village health workers;
b. Community leaders (village chiefs, religious leaders, traditional healers or birth attendants, other key community figures);
c. Caregivers of children under 5 (parents, grandparents, or other caregivers, including care group members);

The views of other key informants, such as staff from non-governmental organisations that support the IMAM programme directly or indirectly (implementing nutrition-sensitive activities that target households with malnourished children) and caregivers of SAM inpatient children were also be sought. In addition, observations of provided care in the health facility and/or observation of IMAM programme records was included as a data collection method whenever possible to complement and triangulate oral contributions from key informants.

Sample size

During the qualitative data collection, the research teams visited 8 out-patient and 4 in-patient facilities. Observations of provided cared and/or patient registers were conducted in 9 facilities. In total, research teams completed 66 semi-structured interviews and 12 focus groups discussions, i.e. 108% of the planned sample (Cf. Table 5). The sample size was achieved thanks to occasional adjustments during the data collection in order to compensate for the unavailability of key informants and/or unexpected changes in planning.

Province	District	FGD	SSI	Observations	No. of participants (total)	No. of participants (F)
Bulawayo	Bulawayo	2	11	1	26	24 (96%)
Manicaland	Chimanimani	2	11	2	27	24 (89%)
Mashonaland Centre	Mazowe	2	11	1	26	25 (96%)
Harare	Harare	2	11	2	23	19 (83%)
Midlands	Shurugwi	2	11	1	28	26 (93%)
Mashonaland East	Mudzi	2	11	2	28	23 (83%)
TOTAL		**12**	**66**	**9**	**158**	**141 (89%)**

TABLE 5: Qualitative data collection sample characteristics

Data collection

The qualitative data collection team spent approximately 1 day in each sampled health facility catchment area. The duration of semi-structured interviews or group discussions was limited to 1 hour maximum. The semi-structured interviews and group discussions were guided by interview guides covering main themes related to access barriers to IMAM programme. The content of interview guides took into account the available data from sampled districts, including the routine programme data analysis.

Organisation of data collection

The qualitative data collection team consisted of two teams of 4 research assistants, one supervised by a Lead researcher[15] and one supervised by a Co-lead researcher (MoHCC). Community health workers were mobilised to assist the assessment team during the data collection in their respective catchment areas.

[15] Data Analyst and Research Advisor, AAH UK.

All data collection teams received a plan of key informants to interview. The qualitative data collection took place from 26thJune to 5th July 2024, i.e. 10 days in total, including the travel to sampled locations and days of rest.

Training of data collection teams

A two-day training of qualitative data collection was conducted from 24 to 25 June 2024 in Kadoma. One training day was dedicated to a theoretical overview of qualitative approaches and data collection tools and one training was dedicated to a pilot test.

Data analysis

The qualitative data was recorded manually in a notebook and reproduced electronically at the end of each day of data collection using a tablet. The data was compiled in NVivo software and coded by theme for more efficient analysis, guaranteeing the confidentiality of the speakers. All views were then be analysed using qualitative content analysis methods.

IV. ETHICAL CONSIDERATIONS

The following provisions were respected during the course of this coverage survey:

a. All relevant national, provincial and district authorities were duly informed about the survey and expressed their agreement with the survey implementation via support letters sent out by Ministry of Health and Child Care
b. The health facility personnel, community health workers as well as community leaders were informed of the selection of their catchment area/community for the purpose of an assessment qualitative study at least one day in advance.
c. The participants were selected equitably and their oral informed consent was sought to ensure that they participate in the survey voluntarily;
d. The anonymity of participants was ensured during all stages of the assessment (data collection, data analysis and data storage). Their names were collected nor shared;
e. All children aged 6 – 59 months who were identified as suffering from severe wasting and/or other medical conditions and who were enrolled in the IMAM programme, were referred to the nearest health facility for appropriate treatment;
f. Caregivers and/or community members in need of information on wasting were referred to competent professionals in their area.

V. SURVEY LIMITATIONS

- **Limited routine monitoring and complementary data availability**. Certain routine monitoring data, such as data for relapses, were not readily available and therefore, they could not be included in respective analyses. Additionally, complementary data collection faced operational challenges in some districts, preventing its inclusion in the analysis.
- **Limited time allocated to Training of Trainers' (ToT) Training**. Number of days allocated for the ToT training led to a substantial reduction of training content and a possibility to conduct practical exercises, which would enable trainers to digest the learning, ensuring they were fully comfortable with the survey procedures. This increased a risk of incomplete and/or inaccurate information being cascaded to district teams while district supervisors had limited time to familiarise themselves with survey and analysis tools.
- **Limited compliance with quality assurance standards**. The quality assurance standards for both primary qualitative and quantitative data collection set prior to the launch of the data collection were not fully adhered to and/or the performance fell short of achieving them (Cf. Annex 8). For example, a threshold of 90% of screened children vs. estimated population of children 6-59 months in surveyed districts was not reached in any of the

districts. Therefore, a distribution of population based on nutritional status as well as coverage classification might have been influenced.

- **Limited supervision during the onset of the data collection**. Delays in fuel supply limited the availability of district supervisors for supervision, data entry and verification during the first days of data collection, as they were spending significant time trying to find solutions to facilitate team movement, such as arranging fuel loans. In addition, nominated supervisors from the central level were not always present to support district level trainings (3 out 6 not visited during the district level training period).
- **Target sample size for SAM not reached.** Considering an extremely low prevalence of acute malnutrition in both urban and rural settings, the target sample size for SAM was not reached in any of the selected districts, and the target sample size under the extended admission criteria was not reached in 3 rural districts (Chimanimani, Shurugwi, Mazowe). Therefore it was only possible to classify coverage for combined SAM and MAM cases, and grouping districts by context (i.e urban and rural).

VI. FINDINGS

A.PROGRAMME DATA ANALYSIS

General observations. All analyses in this section were conducted using IMAM programme routine monitoring datasets. During the course of this survey, it was not possible to compare the data in these datasets with the data in source documents, i.e. in-patient and out-patient registers in health facilities. Therefore, we were unable to highlight any potential discrepancies between the original data sources and centralised databases at district, provincial and/or national level and identify potential causes of these discrepancies. The datasets themselves demonstrated the following weaknesses: **a)** missing data for relapses in 2023; **b)** discrepancies across provinces in admissions of children 0-5 months, especially between 2022 and 2023; **c)** discrepancies across provinces with regards to transfers in/out.

During an in-depth qualitative inquiry, the research teams conducted in-facility register observations, which highlighted incomplete or inaccurate anthropometric data entries on admission and particularly on discharge, including the lack of z-scores. According to observed registers, quite a large number of children were never officially discharged. The observed limitations were linked with a lack of training, e.g. the calculation of z-scores, and/or a non-functional/missing equipment, such as height boards or scales.

Provincial profiles detailing IMAM programme data analysis for each province are presented in **Annex 9**.

ROUTINE PROGRAMME DATA ANALYSIS

Growth monitoring[16] vs. estimated population 0-59 months 2022-2023

Province level

National protocols say that Growth Monitoring should be carried out for every child 0-59 months of age every month. At provincial level, based on the population of children 0-59 months and the data reported through HMIS, growth monitoring coverage is very low.

[16] Includes both in-facility and community-based growth monitoring initiatives.

The two urban provinces, Harare and Bulawayo, demonstrate very low rates (<50%). The provinces of Mashonaland Central, Mashonaland East and Midlands demonstrate moderate rates (50-100%), while the remaining provinces record a high rate (>100%) of at least one growth monitoring act per year across two years. The evolution of rates between 2022 and 2023 across all provinces is inconsistent, with some provinces, especially provinces with a low and moderate rate of growth monitoring, recording a slight increase in 2023 (Cf. Table 6).

	Manicaland	Mash. Central	Mash. East	Mash. West	Mat. North	Mat. South	Midlands	Masvingo	Harare	Bulawayo
Total 0-59 m pop (est. 2022)	343,378	247,287	320,674	308,466	141,690	127,365	321,418	301,174	373,927	101,821
Total screening acts 2022	542280	198515	275641	329431	177771	185656	167468	359523	0	28690
%	158%	80%	86%	107%	125%	146%	52%	119%	0%	28%
Total 0-59 m pop (est. 2023)	348,528	250,997	325,484	313,093	143,815	129,275	326,239	305,692	379,536	103,348
Total screening acts 2023	510069	192789	275673	404663	214109	199430	221255	352286	6369	47141
%	146%	77%	85%	129%	149%	154%	68%	115%	2%	46%

TABLE 6: Summary of growth monitoring rates in comparison to an estimated number of children 0-59 months across all provinces of Zimbabwe in the course of 2022 and 2023.

District level

The analysis of growth monitoring trends at district level indicated low rates (<50%) of growth monitoring acts in comparison to an estimated population of children 0-59 months in 2023 in 9 out of 36 districts[17] across 6 sampled provinces (Cf. **B. Bottleneck analysis**). The exceptionally low rates (<20%) of growth monitoring acts were recorded in both districts of Harare province (Harare and Chitungwiza) and 3 out of 8 districts in the Midlands province (Gweru, Kwekwe and Shurugwi). Other districts with low rates of growth monitoring acts included Shamva (Mashonaland Centre), Mutare rural (Manicaland), Zvishavane (Midlands) and Bulawayo (Bulawayo).

Admissions 0-59 months 2022-2023

Province level

Among ten provinces of Zimbabwe, the highest volume of admissions is recorded for Harare, followed by Mashonaland East and Mashonaland West. The lowest volume of admissions is recorded for Matabeleland South. The admission curves do not seem to follow a particular seasonal pattern, some provinces recording bigger variations on a month-to-month basis while others presenting a rather steady curve (Cf. Figure 1). This was only corroborated during an in-depth qualitative inquiry as some key informants mentioned a lack of specific seasonality for malnutrition. Observed “peaks” reported by some key informants at community level, i.e. February-March and August-December, match the admission trends only in some provinces.

[17] 25% of the sample.

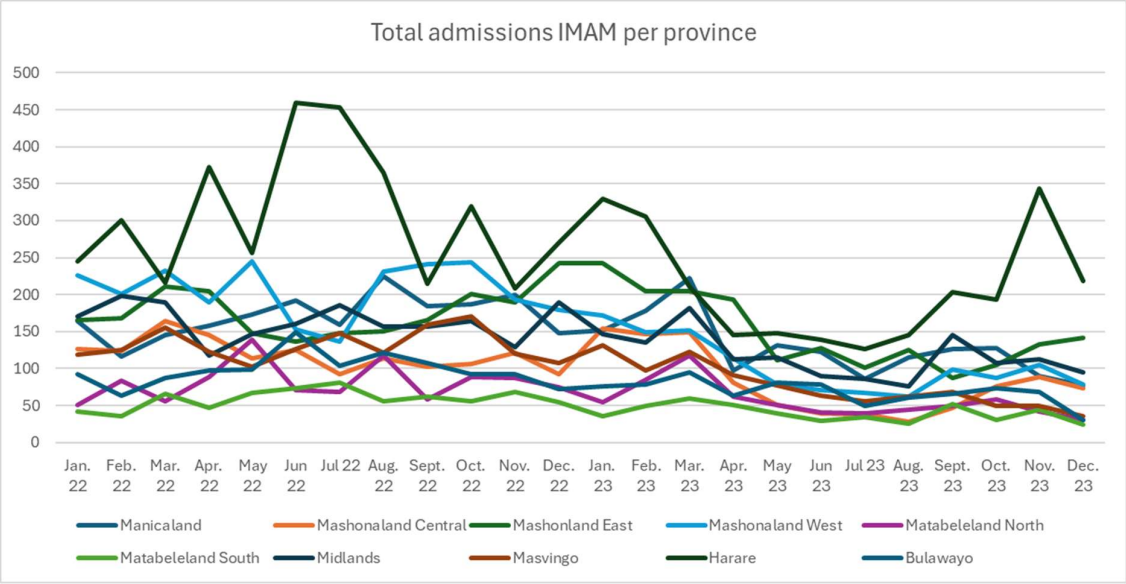


FIGURE 1: Evolution of admission rates across all provinces of Zimbabwe in the course of 2022 and 2023.

Admissions 0-59 months vs. estimated SAM burden 2022-2023

Province level

Among ten provinces of Zimbabwe, two provinces (Mashonaland Central and Midlands) demonstrated an exceptionally low capacity (<50%) to enrol children into the IMAM programme in both 2022 and 2023. Other provinces enrolled more than 60% of children while Bulawayo and Matabeleland North enrolled substantially more than 100% of the estimated burden. The evolution of admission rates between 2022 and 2023 demonstrated a consistent decrease in 2023 across all provinces due to a RUTF stockout (Cf. Figure 2).

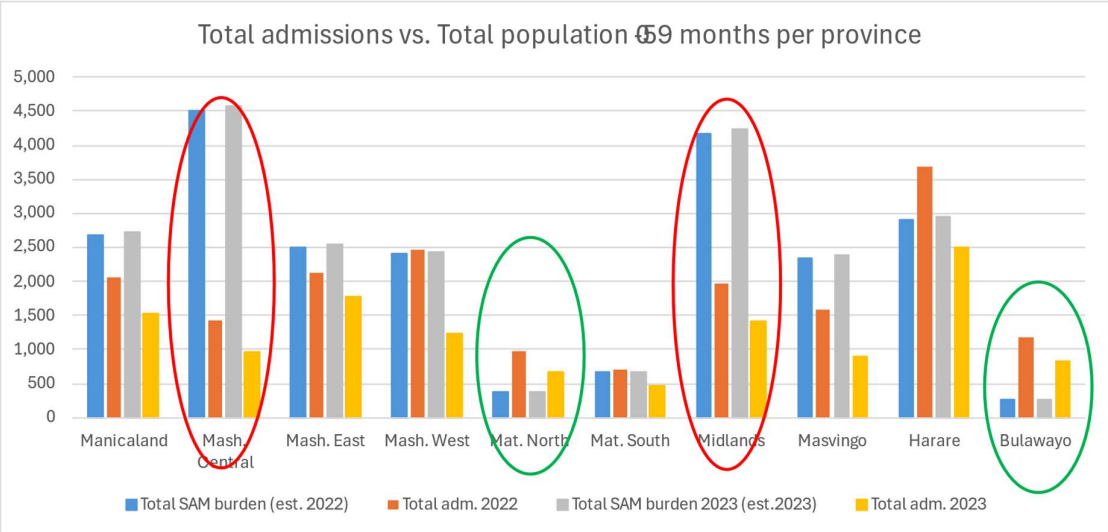


FIGURE 2: Summary of admission rates in comparison to an estimated SAM burden across all provinces of Zimbabwe in the course of 2022 and 2023.

District level

The analysis of admission trends at district level indicated exceptionally low rates (<30%) of admissions in comparison to an estimated SAM burden in 2023 in 10 out of 36 districts[18] across 6 sampled provinces (Cf. **B. Bottleneck analysis**). Most under-performing districts (6 out of 8) were observed in Mashonaland Centre, followed by 4 out of 8 districts in Midlands. No district in "best performing" provinces recorded low rates of admissions. More than 55% of districts in this group enrolled more than 60% of estimated SAM burden.

Performance indicators 2022-2023

Analysis of performance indicators can indicate the programme effectiveness in admitting and treating children with severe or moderate acute malnutrition as well as the effectiveness of its monitoring and evaluation systems. A large percentage of children dropping out of the program could indicate an interface problem between the health personnel and caregivers as well as the problem of geographic accessibility. On the other hand, a large percentage of children leaving the program cured could indicate a good quality of care.

Cured rates 2022-2023

Province level

Among ten provinces of Zimbabwe, Harare, Matabeleland South, Masvingo and Midlands demonstrated the lowest cured rates in 2022 and 2023. Harare met the SPHERE standards of 75% only 3 months within 24-month surveyed period with an average cured rate of 61%. On the other hand, Manicaland and Bulawayo demonstrated the highest cured rates in 2022 and 2023 with an average cure rate of 76% and 77%, respectively. These provinces met the SPHERE standards of 75% at least 15 months within 24-month period (Cf. Figure 3).

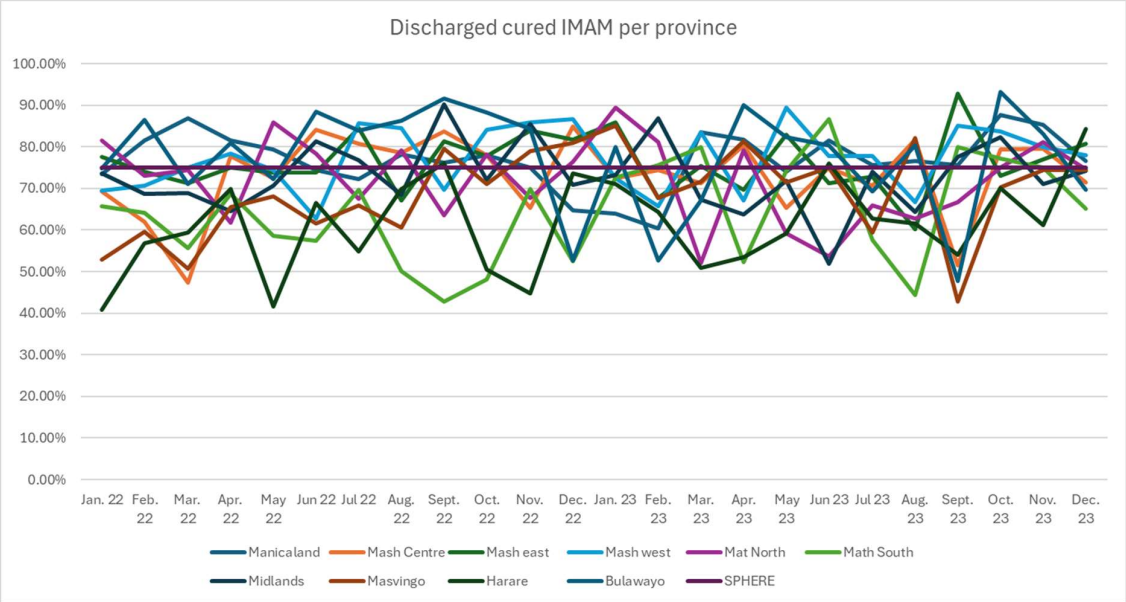


FIGURE 3: Evolution of cured rates across all provinces of Zimbabwe in the course of 2022 and 2023.

District level

The analysis of recovery trends at district level indicated that two districts in the "best performing" provinces recorded exceptionally low cured rates. The district of Uzumba in Mashonaland East recorded cured rates meeting the SPHERE standards of 75% only 4 months within 24-month surveyed period while the district of Mutare rural in Manicaland recorded cured rates meeting the SPHERE standards during 7 months within 24-month surveyed period.

[18] 27.7% of the sample.

Other districts within the same group demonstrated cured rates meeting the SPHERE standards of 75% during 9 months on average.

In "low performing" provinces, 6 out of 18 districts recorded exceptionally low cured rates, not meeting SPHERE standards of 75% during at least 20 months within 24-month surveyed period. The other districts within the group demonstrated similar cured rates over 24-month surveyed period, i.e. not meeting SPHERE standards during 9 months on average.

Defaulter rates 2022-2023

Province level

Among the ten provinces of Zimbabwe, Harare demonstrated the highest defaulter rates in 2022 and 2023. The average defaulter rate was 31.29%, well above the SPHERE standard of 15%. The province recorded only one month out of 24 months a defaulter rate lower than 15%. Masvingo, Matabeleland South and Bulawayo provinces indicated a default rate higher than 15% during 8-9 months in the surveyed 24-month period with an average default rate of 21% in rural provinces and 27% in Bulawayo (Cf. Figure 4).

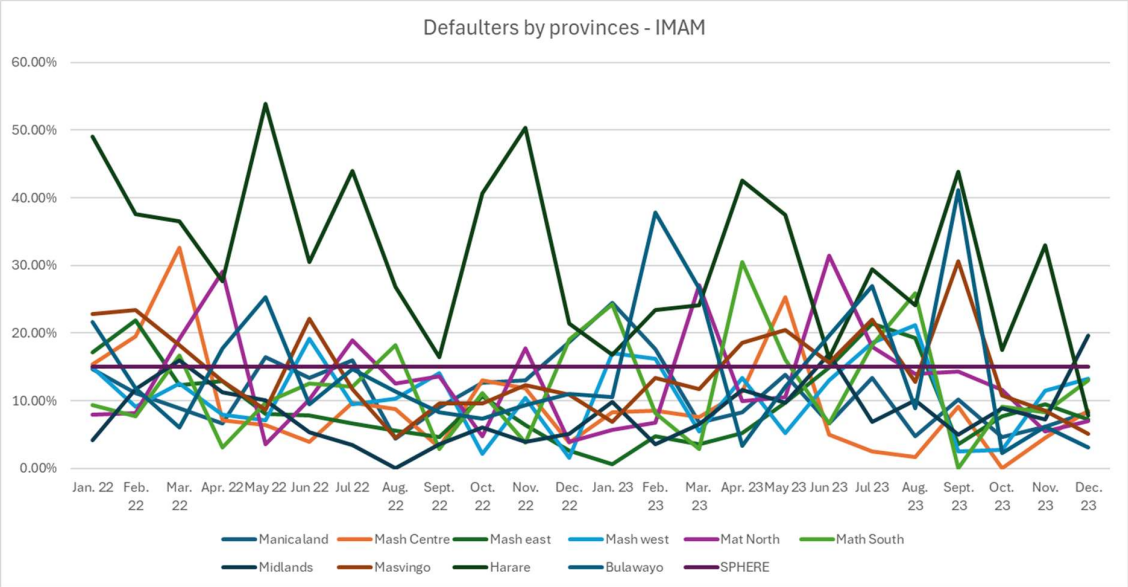


FIGURE 4: Evolution of defaulter rates across all provinces of Zimbabwe in the course of 2022 and 2023.

District level

The analysis of defaulter trends at district level indicated that no district in the "best performing" provinces recorded exceptionally high defaulter rates systematically. On average, respective districts recorded defaulter rates higher than 15% during 6 months within 24-month surveyed period. In "low performing" provinces, Harare and Mazowe recorded exceptionally high defaulter rates, not meeting SPHERE standards of 15% during at least 18 months within 24-month surveyed period. However, other districts within the group demonstrated similar defaulter rates over 24-month surveyed period, i.e. not meeting SPHERE standards during 6 months on average.

Non-recovery rates 2022-2023

Province level

Among ten provinces of Zimbabwe, Matabeleland South, Midlands and Masvingo provinces demonstrated exceptionally high non-recovery rates. For example, the average non-recovery

rate in Matabeleland South during 16 months within 24-month surveyed period when the province failed to meet an agreed threshold of 15% reached almost 25% while the highest non-recovery rate exceeded 50%. Midlands and Masvingo did not reach agreed threshold about half of the time, with the highest non-recovery rates exceeding 30%. Harare recorded the lowest rates of non-recovery (4.32% on average) while Manicaland with the average non-recovery rate of 6.94% is the only province in Zimbabwe that met agreed threshold of 15% systematically within 24-month surveyed period.

However, during an in-depth qualitative inquiry, non-recovery cases were perceived as very rare, often linked with underlying conditions, such as cerebral palsy, that can complicate recovery efforts. Such cases would then be transferred to Harare and Bulawayo for a more specialised and multidisciplinary care. A lack of understanding of exit outcomes among nurses, specifically non-recovery, was also highlighted.

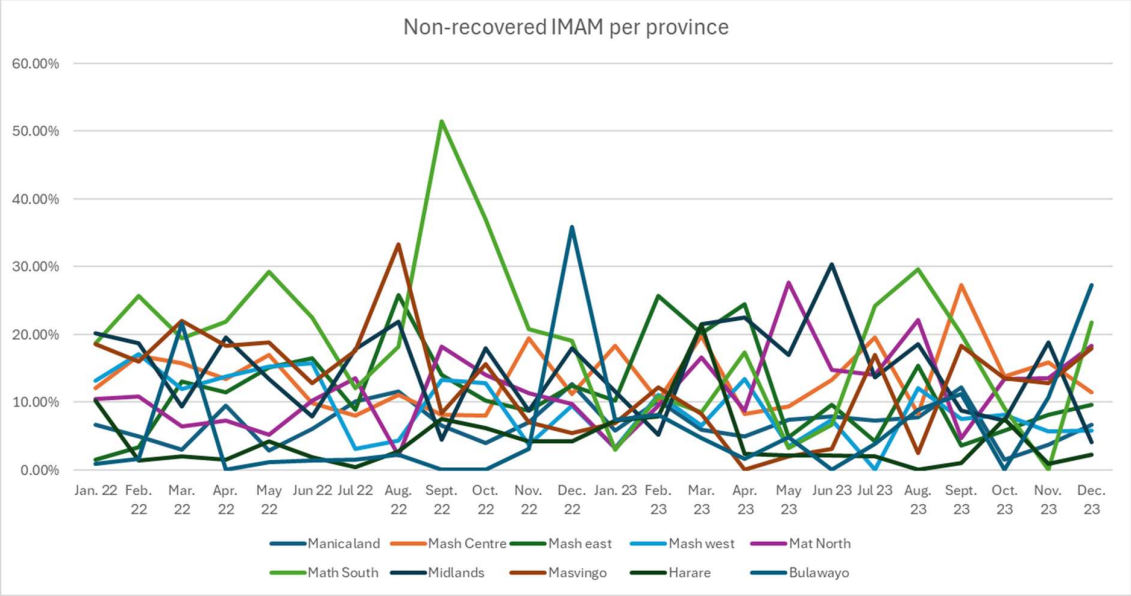


FIGURE 5: Evolution of non-recovery rates across all provinces of Zimbabwe in the course of 2022 and 2023.

Death rates 2022-2023

Province level

The average death rate in IMAM programme across ten provinces of Zimbabwe is 3%. The lowest death rate of 1% was recorded in Bulawayo while the highest rate of 5% was recorded in Manicaland and Matabeleland South. These two provinces recorded the death rate higher than 10% during two months within 24-month surveyed period, the highest rate of 17% recorded in Matabeleland South.

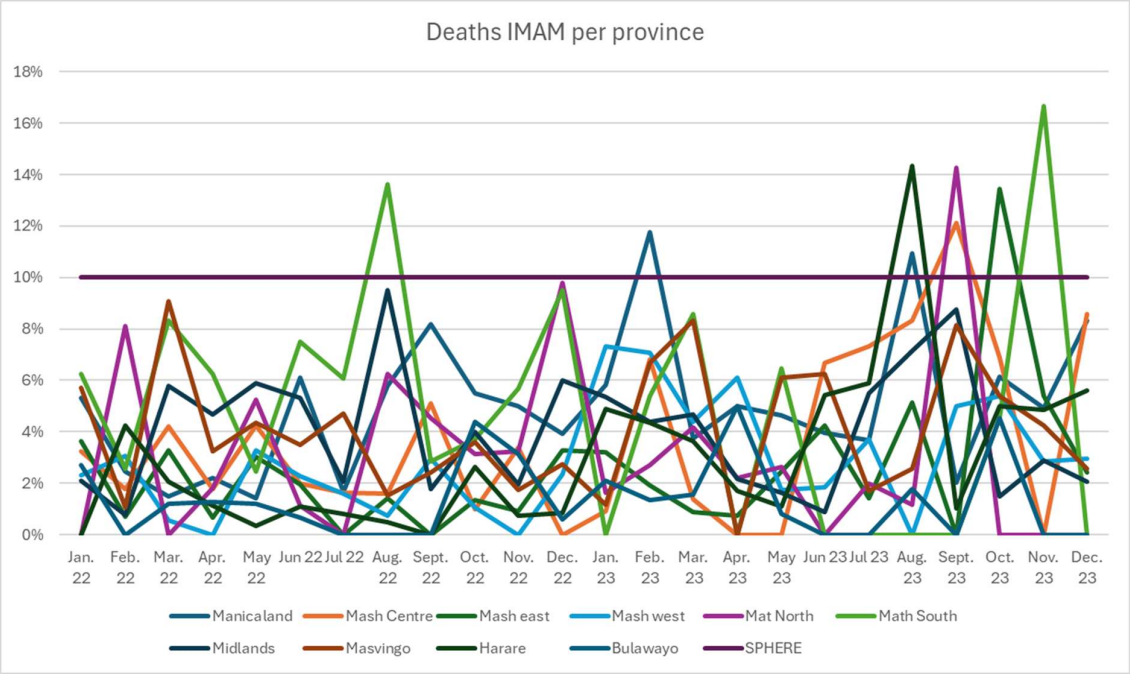


FIGURE 6: Evolution of death rates across all provinces of Zimbabwe in the course of 2022 and 2023.

Discharge weaknesses 2022-2023

Province level

"Discharge weaknesses" can be described as a composite indicator, combining defaulter, non-recovery and death rates, which provides a complex picture about a proportion of children admitted into the IMAM programme, which were not treated successfully until full recovery. This indicator mirrors the cured rate trends and therefore the provinces with the lowest cured rates and/or highest frequency of not meeting the SPHERE standards of 75% for cured rate are likely to top the rankings in this category. In order to distinguish between problematic provinces (not meeting an agreed threshold of 15% for discharge weaknesses) and greatly problematic provinces, we exceptionally also introduced a 25% threshold.

Among ten provinces of Zimbabwe, all provinces failed to systematically meet the agreed threshold of 25% in 2022 and 2023. On average, the provinces met the threshold during 2.4 months within 24-month surveyed period. Harare and Mashonaland Centre did not meet the threshold at all while Matabeleland South and Masvingo met the threshold only one month within 24-month surveyed period. Bulawayo performed the best meeting the threshold during 7 months within 24-month surveyed period.

The highest average rate for discharge weaknesses was recorded in Harare (38.62%), Matabeleland South (35.67%) and Masvingo (31.21%), often exceeding 40-50% on a monthly basis. Over the course of 24 surveyed months, Harare recorded only 3 months not exceeding a 25% threshold while Matabeleland South and Masvingo did not exceed it during 5 and 6 months respectively.

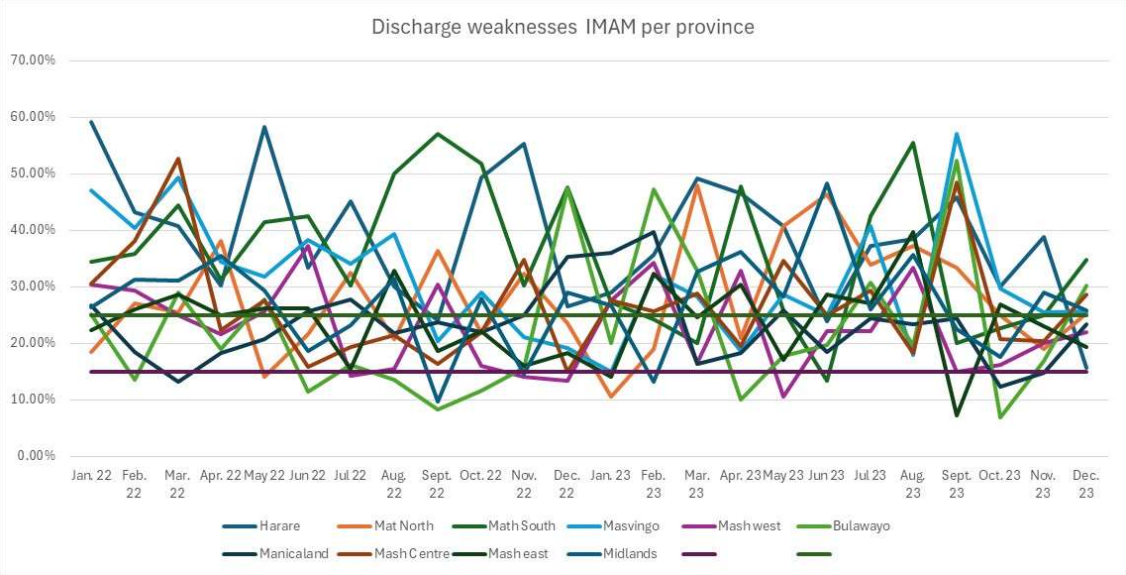


FIGURE 7: Evolution of discharge weaknesses across all provinces of Zimbabwe in the course of 2022 and 2023.

RUTF availability in Q2 2023[19]

Province level

Among ten provinces of Zimbabwe, only Bulawayo demonstrated the availability of RUTF in more than 75% of facilities. More than 50% of facilities in 6 provinces lacked RUTF supply. Two provinces, Mashonaland Central and Harare, demonstrated RUTF availability in only one third of facilities. Mashonaland West, Midlands, Matabeleland North and Manicaland confirmed the RUTF availability in 40-50% of facilities.

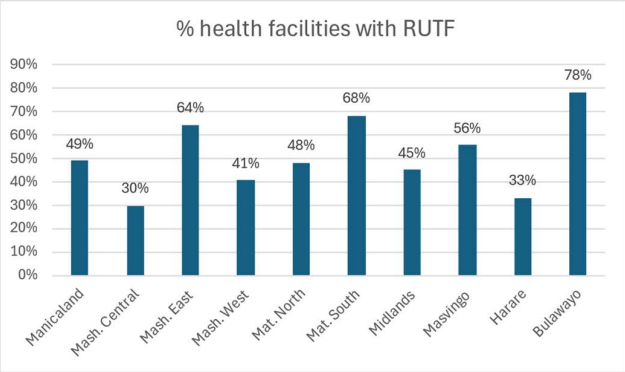


FIGURE 8: Proportion of health facilities with RUTF in comparison to all health facilities providing IMAM service across all provinces of Zimbabwe in Q2 2023.

District level

The analysis of RUTF availability trends at district level indicated that RUTF stockouts were more likely observed in "low performing" provinces. In this group, RUTF availability in less than 50% of facilities across the district was recorded in 14 out of 18 districts[20]. In "best performing" provinces, RUTF availability in less than 50% of facilities across the districts was recorded in 6 out of 18 districts[21]. While low performing provinces did not manage to demonstrate the RUTF availability in more than 75% of facilities across any district, best performing provinces indicated such availability across 5 districts, namely Bulawayo (province of the same name), Mutare urban and Mutasa in Manicaland province, and Goromonzi and Hwedza in Mashonaland East province. In fact, Hwedza was the only district that indicated the RUTF availability in all facilities across the district.

[19] MoHCC Zimbabwe, Vital Medicines Availability and Health Services Survey, Q2 2023
[20] 77.7% of the sample.
[21] 30% of the sample.

BOTTLENECK ANALYSIS

Province level

Based on established criteria matching the availability of secondary data at provincial level, Harare, Midlands and Mashonaland Central demonstrated most IMAM program deficiencies across multiple indicators. These provinces were therefore selected for district level analysis as "low performing" provinces. On the other hand, Manicaland, Mashonaland East and Bulawayo demonstrated a rather satisfactory performance, despite a few less favourable indicators, and were thus selected for district level analysis as "best performing" provinces. Insights for each indicator are provided in "Routine programme data analysis" sub-section above.

	Manicaland	Mash. Central	Mash. East	Mash. West	Mat. North	Mat. South	Midlands	Masvingo	Harare	Bulawayo
% Growth monitoring / U5 pop (2023)	146%	77%	85%	129%	149%	154%	68%	115%	2%	46%
% Admissions / SAM burden (2023)	56%	21%	70%	51%	181%	71%	33%	38%	85%	306%
Months with cured rate >75%	67%	46%	50%	58%	42%	21%	29%	25%	13%	63%
Months with defaulter rate<15%	79%	83%	83%	79%	71%	67%	88%	63%	4%	67%
% Health facilities with RUTF availability Q2 2023	49%	30%	64%	41%	48%	68%	45%	56%	33%	78%

TABLE 7: Summary of bottleneck analysis based on established criteria for all provinces of Zimbabwe, 2023.

District level

In less performing provinces, based on established criteria matching the availability of secondary data at district level, Harare, Shurugwi and Mazowe scored the lowest and were therefore selected for the SLEAC survey as "low performing" districts. As their performance across different indicators varied, it is not possible to generalise top barriers of access and coverage apart from low RUTF availability in Q2 2023.

	Harare		Midlands								Mashonaland Centre							
Criteria	Harare*	Chitungwiza	Chirumhanzu	Gokwe N	Gokwe S	Gweru*	Kwekwe	Mberengwa	Shurugwi	Zvishavane	Bindura*	Centenary	Guruve	Mazowe	Mbire	Mt Darwin	Rushinga	Shamva
% screening acts/ U5 pop (2023)	0%	9%	89%	137%	90%	14%	11%	113%	19%	43%	71%	118%	112%	63%	117%	71%	76%	26%
% Admissions / SAM burden (2023)	108%	58%	35%	29%	30%	50%	49%	23%	40%	17%	20%	26%	14%	17%	31%	15%	37%	18%
Performance - months with cured rate >75%	17%	8%	54%	50%	50%	88%	17%	54%	38%	21%	71%	29%	8%	25%	67%	75%	63%	63%
Performance - months with defaulter rate <15%	8%	38%	92%	83%	75%	96%	67%	88%	75%	83%	92%	71%	75%	25%	88%	88%	88%	88%
Supply - % Health facilities with RUTF availability Q2 2023	33%	33%	58%	23%	40%	70%	58%	34%	33%	41%	39%	11%	40%	10%	36%	52%	19%	39%
Supply- % Health facilities with health workers trained in IMAM	52%	67%	74%	86%	97%	87%	89%	66%	20%	76%	78%	72%	80%	63%	79%	100%	81%	89%
Supply - % Functioning care groups	45%	67%	100%	82%	86%	90%	81%	20%	17%	24%	44%	22%	55%	80%	64%	43%	0%	56%
Total Score	10	11	16	16	14	17	14	13	10	11	14	13	13	11	17	15	15	14

TABLE 8: Summary of bottleneck analysis based on established criteria for all districts of less performing provinces of Zimbabwe, 2023.

In best performing provinces, Bulawayo, Chimanimani and Mudzi scored the highest and were therefore selected for the SLEAC survey as "best performing" districts. Similarly to low performing districts, it is difficult to pinpoint top boosters of access and coverage but all named districts seemed to benefit from a higher proportion of facilities with health workers trained in IMAM.

	Bulawayo	Manicaland								Mashonaland East								
Criteria	Bulawayo*	Buhera	Chimanimani	Chipinge	Makoni	Mutare urban	Mutare rural	Mutasa	Nyanga	Chikomba	Goromonzi	Hwedza	Marondera*	Mudzi	Murewa	Mutoko	Seke	Uzumba
% screening acts/ U5 pop (2023)	46%	130%	181%	182%	132%	132%	30%	129%	128%	170%	56%	110%	64%	156%	60%	127%	54%	109%
% Admissions / SAM burden (2023)	306%	56%	41%	47%	42%	33%	72%	49%	78%	62%	41%	92%	82%	65%	56%	69%	78%	123%
Performance - months with cured rate >75%	63%	67%	75%	42%	42%	29%	54%	75%	38%	63%	46%	58%	54%	63%	83%	50%	83%	17%
Performance - months with defaulter rate <15%	67%	67%	96%	50%	67%	75%	71%	75%	71%	83%	63%	71%	75%	88%	83%	79%	88%	71%
Supply - % Health facilities with RUTF available Q2 2023	78%	54%	39%	63%	33%	78%	40%	83%	14%	50%	81%	100%	43%	43%	72%	76%	67%	67%
Supply- % Health facilities with health workers trained in IMAM	87%	94%	100%	93%	96%	67%	93%	88%	68%	75%	77%	93%	67%	90%	90%	92%	87%	81%
Supply - % Functioning care groups	9%	74%	86%	83%	46%	11%	73%	45%	71%	22%	2%	67%	14%	57%	7%	32%	53%	5%
Total Score	16	17	18	17	14	14	14	17	15	19	15	18	13	18	16	17	18	15

TABLE 9: Summary of bottleneck analysis based on established criteria for all districts of best performing provinces of Zimbabwe, 2023.

B. SIMPLIFIED LQAS EVALUATION OF ACCESS AND COVERAGE (SLEAC)

GENERAL RESULTS

Out of 546 sampled enumeration areas across selected districts, the SLEAC completed the data collection in all of them. For 4 enumeration areas in Harare case finding could not be done exhaustively due to population's refusal to have their children screened. These enumeration areas were not replaced by reserve EAs due to a plausible likelihood of a refusal in reserve EAs too as well as a plausible likelihood that an additional EAs would not substantially change the outcome of the survey in the district.

The SLEAC survey teams screened 8,308 children across sampled EAs in urban districts, which represents 62.62% of an estimated population of children 6-59 months in these locations. In rural districts, the SLEAC survey teams screened 8,148 children across sampled EAs, which represents 71.73% of an estimated population of children 6-59 months in these locations. The screening rate in both rural and urban districts is below an established 90% threshold, which was validated prior the data collection to confirm the exhaustivity of screening by the survey teams. Therefore, the distribution of the said population by nutritional status, presented in Table 10, which could be used as a proxy prevalence for future use, needs to be considered with caution.

District	# sampled EAs	# completed EAs	Est. pop. 6-59 m (per sample)	# screened children	%
Bulawayo	154	154	6,500	4,552	70,03%
Harare	163	163	6,803	3,756	55.21%
SUBTOTAL URBAN	**317**	**317**	**13,303**	**8,308**	**62,62%**
Chimanimani	44	44	2,031	1,479	72.82%
Mazowe	43	43	2,645	1,327	50.17%
Mudzi	59	59	2,562	2,231	87.08%
Shurugwi	83	83	4,125	3,111	75.42%
SUBTOTAL RURAL	**229**	**229**	**11,363**	**8,148**	**71,37%**

TABLE 10: Summary of screening acts during the SLEAC survey across selected districts, Zimbabwe, July 2024.

In urban districts, 98.53% (n=8,222) of screened children in the sample had a MUAC measurement ≥125mm and were therefore categorised as well-nourished. Of the screened children in the sample, 79 (0.98%) children presented a MUAC measurement between 115 and 124 mm and were therefore categorised as moderately malnourished. One child in Bulawayo and six children in Harare had a MUAC measurement <115mm and were therefore categorised as acutely malnourished. No case of oedema was found in urban districts.

District	# children ≥125 mm	# children 115-124 mm	# children <115 mm	# children oedema	# children <115 mm or oedema
Bulawayo	4,521 99.32%	30 0.66%	1 0.02%	0 0%	1 0.02%
Harare	3,701 98.53%	49 1.3%	6 0,16%	0 0%	6 0,16%
SUBTOTAL URBAN	**8,222** 98.92%	**79** 0.98%	**7** 0.09%	**0** 0%	**7** 0.09%
Chimanimani	1,471 99.46%	6 0.41%	2 0.14%	0 0%	2 0.14%
Mazowe	1,322 99.62%	4 0.30%	0 0%	1 0.08%	1 0.08%
Mudzi	2,183 97.85%	36 1.61%	10 0.45%	2 0.09%	12 0.54%
Shurugwi	3,083 99.10%	17 0.55%	3 0.1%	8 0.26%	11 0.35%
SUBTOTAL RURAL	**8,062** 99.00%	**63** 0.72%	**15** 0.17%	**11** 0.11%	**26** 0.28%

TABLE 11: Distribution of population 6-59 months by nutritional status during the SLEAC survey across selected districts, Zimbabwe, July 2024.

In rural districts, 99.00% (n=8,062) of screened children in the sample had a MUAC measurement ≥125mm and were therefore categorised as well-nourished. 63 children, i.e. 0.72% of the screened children in the sample, presented a MUAC measurement between 115 and 124 mm and were therefore categorised as moderately malnourished. 15 children, out of which 10 were identified in Mudzi, had a MUAC measurement <115mm and were therefore categorised as acutely malnourished. 8 children, out of which 5 were identified in Shurugwi, were confirmed to have bilateral oedema and were also categorised as acutely malnourished.

All children screened as moderately or acutely malnourished who were not enrolled in IMAM programme were referred to the nearest service delivery unit for the verification of admission criteria and admission into the programme. The referral was properly followed by health facility personnel and most children were admitted into the programme, except for children whose parents chose not to engage with the programme for religious reasons.

It is important to note that a proportion of children with SAM was substantially lower than prevalence estimates from previous nutrition surveys, which were used for the target sample calculations. In fact, in urban districts, the estimated prevalence of SAM was almost 7 times higher than the proportion of children with SAM in the SLEAC survey sample. In rural districts, the estimated prevalence of SAM was 2 to 8 times higher than the proportion of children with SAM in the SLEAC survey sample. This trend had a major impact on the capacity of the survey to reach the target sample described below. In addition, it is important to note that, unlike the estimated prevalence of MAM from previous nutrition surveys which was in some areas lower than the SAM prevalence, the proportion of children with MAM in the SLEAC survey sample is aligning with global observations of the proportion of children with MAM being 4+ times higher than the proportion of children with SAM.

Real sample size

The real sample size includes all cases of severe and moderate acute malnutrition, identified during the data collection. This also includes recovering cases enrolled in IMAM programme, even if their upper arm circumference is equal to or greater than 115 or 125 mm, respectively.

Considering an extremely low prevalence of SAM in both urban and rural settings, the target sample size for SAM was not reached in any of selected districts and therefore a classification of coverage for this target group only would not be possible in any of surveyed districts.

However, taking into account IMAM programme's extended admission criteria, which allows for an admission of both SAM and MAM children into outpatient treatment programme, although it may not be applied systematically, the target sample size was reached in both urban districts, Harare and Bulawayo, and one rural district, Mudzi. However, as the remaining districts did not reach the target sample size even with these extended criteria and would therefore not benefit from a coverage classification due to a low sample size, the districts were grouped by context, i.e. urban and rural, to provide a clear and homogeneous presentation of findings for the entire surveyed area.

Consequently, in urban districts, the real sample size consisted of a total of 96 children with SAM and MAM, which represents 120% of the target sample size. In rural districts, the real sample size also consisted of a total of 96 children with SAM and MAM, which represents 69.1% of the target sample size. A classification, and potentially an estimation of the coverage, should be possible in both cases.

District	Target sample size (SAM)	# SAM cases[22]	# SAM Rin cases[23]	Real sample size (SAM)	# MAM cases[24]	# MAM Rin cases[25]	Real sample size (SAM+MAM)
Bulawayo	40	1	2	**3** 7.5%	28	8	**39** 97.5%
Harare	40	6	2	**8** 20.0%	49	0	**57** 142.5%
SUBTOTAL URBAN	**80**	**7**	**4**	**11** 13.8%	**79**	**8**	**96** 120%
Chimanimani	33	2	1	**3** 9.1%	5	0	**8** 24.2%
Mazowe	40	1	0	**1** 2.5%	4	0	**5** 12.5%
Mudzi	33	12	1	**13** 39.4%	35	4	**52** 157.6%
Shurugwi	33	11	1	**12** 36.4%	17	2	**31** 93.9%
SUBTOTAL RURAL	**139**	**26**	**3**	**29** 20.9%	**61**	**6**	**96** 69.1%

TABLE 12: Comparison of target and real sample sizes during the SLEAC survey across selected districts, Zimbabwe, July 2024.

Gender

Among SAM and MAM cases screened during the SLEAC survey across selected districts, almost 65% (n=116) were girls and 35% (n=63) were boys. This proportion is also applicable for SAM or MAM cases not enrolled in IMAM programme in both rural and urban districts. In other words, almost 67% (n=48) of children in rural districts and 65% (n=48) of children in urban districts, who were identified as SAM or MAM cases not enrolled in IMAM programme were girls. The proportion of girls and boys is more balanced among SAM and MAM cases, enrolled in IMAM programme in rural districts (53% of girls vs. 47% of boys) while girls represent 75% (n=9) of all enrolled SAM and MAM cases in urban districts. These findings likely indicate an underlying phenomenon linked with higher vulnerability to malnutrition among female population in surveyed districts. This topic would naturally require further research.

[22] This includes children with MUAC < 115 mm and/or oedema, both enrolled (C^{in}) and not enrolled in IMAM programme (C^{out}).
[23] SAM Recovering cases (R^{in}), i.e. children enrolled in IMAM programme with MUAC < 115 mm and/or oedema, who have recovered partially since their admission into the programme but not yet met discharge criteria.
[24] This includes children with MUAC 115-124 mm, both enrolled (C^{in}) and not enrolled in IMAM programme (C^{out}).
[25] MAM Recovering cases (R^{in}), i.e. children enrolled in IMAM programme with MUAC 115- 124 mm, who have recovered partially since their admission into the programme but not yet met discharge criteria.

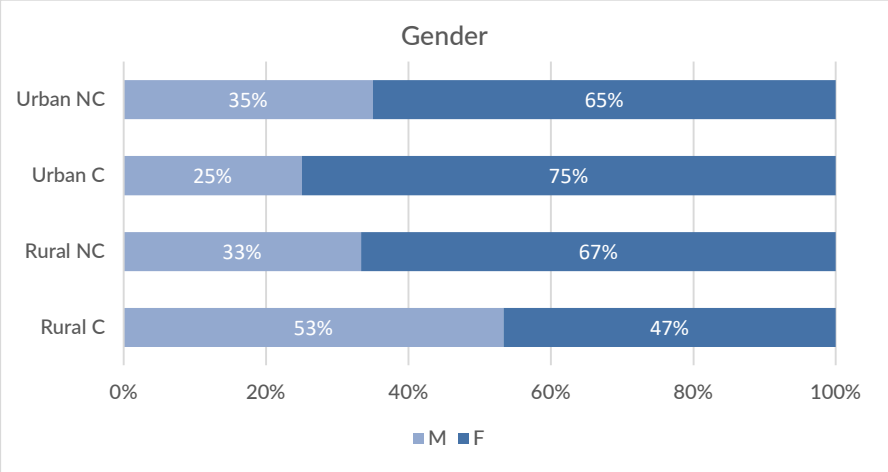


FIGURE 9: Sex distribution of children with SAM and MAM by covered and non-covered cases screened during the SLEAC survey across selected districts, Zimbabwe, July 2024.

Age

Among SAM and MAM cases screened during the SLEAC survey across selected districts, 87% (n=156) were children 0-23 months and 13% (n=23) were children 24-59 months. The proportion of SAM and MAM cases aged 0-23 months who were not enrolled in IMAM programme is comparable across both urban and rural districts and varies between 87% and 90%. The proportion of SAM and MAM cases aged 0-23 months who were enrolled in IMAM programme is slightly higher in rural districts (80%) than in urban districts (75%). However, these findings are unlikely to be statistically significant. Median age for SAM and MAM cases not enrolled in IMAM programme was 12 months for rural districts and 14 months for urban districts. Median age for SAM and MAM cases enrolled in IMAM programme in both rural and urban districts was 16 months. Based on these findings, it is hypothesised that if cases are missed during monthly growth monitoring sessions, they might be picked up during immunisation campaigns.

These findings likely indicate a higher vulnerability to malnutrition among population 0-23 months in surveyed districts and/or the existence of care practices for children around first year of life, which could increase the risk of wasting and/or oedema among children in this age bracket. Based on a few indications from the qualitative inquiry, it is hypothesised that this could be linked with early weaning due to a new pregnancy. However, this topic would naturally require further research.

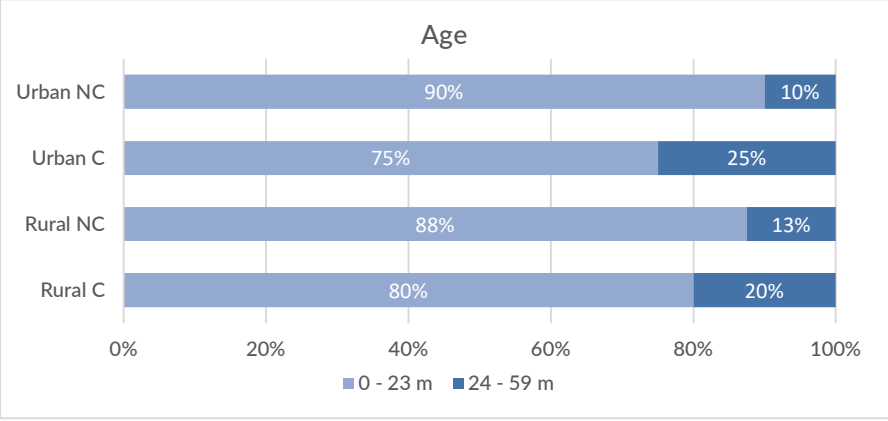


FIGURE 10: Age distribution of children with SAM and MAM by covered and non-covered cases screened during the SLEAC survey across selected districts, Zimbabwe, July 2024.

Vaccination status

Caregivers of all children identified with SAM or MAM were asked if their child had ever received vaccination. Those indicated as not vaccinated reported their child had never received any vaccination. This information was based solely on the caregivers' responses and was not cross-verified with vaccination cards. Among SAM and MAM cases screened during the SLEAC survey across selected districts, 96% in urban districts and 68% in rural districts had never received vaccination. Children enrolled in IMAM programme were more likely to be vaccinated. In urban districts all children (n=12) who were enrolled in the programme were vaccinated. In rural districts, 93% of children (n=14) who were enrolled in the programme were vaccinated. In fact, only one child enrolled in the programme in a rural district (Mudzi) was not vaccinated. Among children who were not enrolled in IMAM programme, children in urban districts demonstrated a higher likelihood of being vaccinated than children in rural districts. In urban districts, 95% of children not enrolled in IMAM programme (n=76) were vaccinated, i.e. the vaccination status could not be confirmed for only 4 children. In rural districts, almost 63% (n=45) of SAM and MAM cases not enrolled in IMAM programme were vaccinated. Out of 26 children, who were not vaccinated, more than 40% were from the so-called “religious objectors” households, i.e. households adhering to Apostolic faith and/or other church, which opposes modern health services.

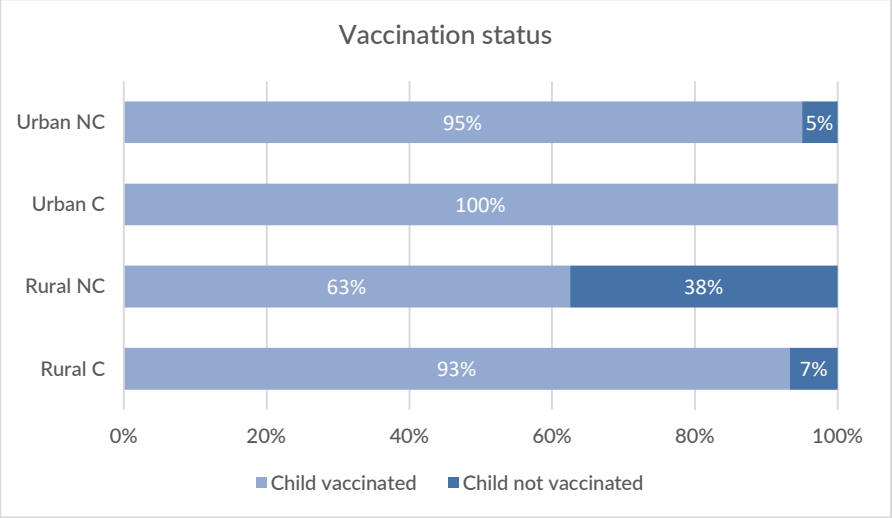


FIGURE 11: Comparison of vaccination status for all SAM and MAM cases screened during the SLEAC survey across selected districts, Zimbabwe, July 2024.

Distance to health facility

Among SAM and MAM cases screened during the SLEAC survey across selected districts, distance trends to nearest health facility varied across urban and rural contexts. In urban districts, 75% (n=9) of children enrolled in IMAM programme resided within 3km radius from the nearest facility. While this could suggest that the community outreach is fulfilling its purpose in the proximity of respective health facilities, 55% (n=44) of children not enrolled in IMAM programme resided within the same radius and were missed. Almost 23% (n=18) of children not enrolled in the programme resided between 3 to 7 km from the nearest health facility and the same proportion of children resided beyond 7km radius. The proportion of cases further away from the health facility is higher among uncovered cases than cases enrolled in the programme.

In rural districts, only 30% (n=5) of children enrolled in IMAM programme resided within 3km radius from the nearest facility. Approximately 27% (n=4) resided between 3 to 7 km from the facility while the remaining 40% (n=6) of children resided beyond 7km radius. While the

distribution of distance trends seems to be quite balanced among children enrolled in the programme, the proportion of children residing further away from health facilities was substantially higher for children not enrolled in the programme. In fact, 50% (n=36) of children not enrolled in the programme were found in villages beyond 7km radius while another 36% (n=26) of uncovered cases were found within 3-7km radius. In rural settings particularly, these findings not only indicate weaknesses in community outreach in areas, which are far (3-7 km from nearest health facility) or very far (>7km from nearest health facility) but also a greater need for IMAM services in these locations. The distance factor is not negligeable in urban districts either.

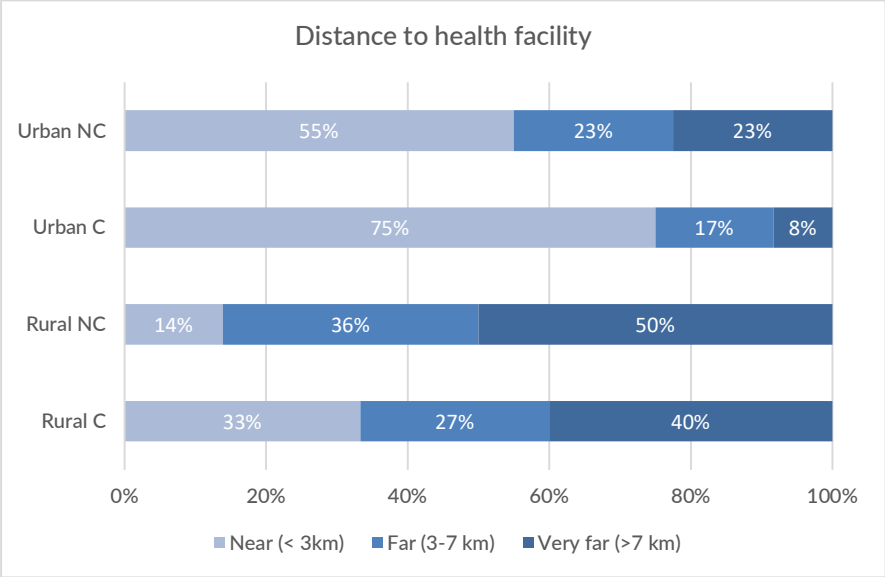


FIGURE 12: Comparison of distance to nearest health facility, as perceived by caregivers of all SAM and MAM cases screened during the SLEAC survey across selected districts, Zimbabwe, July 2024.

MUAC

In urban districts, children enrolled in IMAM programme had MUAC values between 119mm and 145mm, with a median value of 129mm. In rural districts, children enrolled in IMAM programme had MUAC values between 115mm and 139mm, with a median value of 124mm.

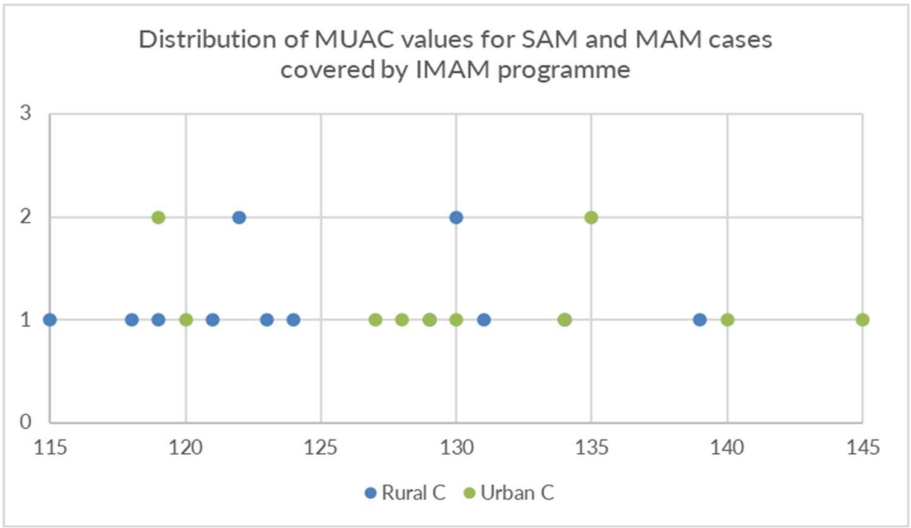


FIGURE 13: Distribution of MUAC values for SAM and MAM cases covered by IMAM programme, screened during the SLEAC survey across selected districts, Zimbabwe, July 2024.

In urban districts, children not enrolled in IMAM programme had MUAC values between 93mm and 124mm, with a median value of 122mm. In rural districts, children not enrolled in IMAM programme had MUAC values between 90mm and 143mm, with a median value of 121mm. Seven children in urban districts and eight children in rural districts had MUAC values <115mm, indicating a higher risk of mortality. The proportion of such children represented approximately 10% in respective samples.

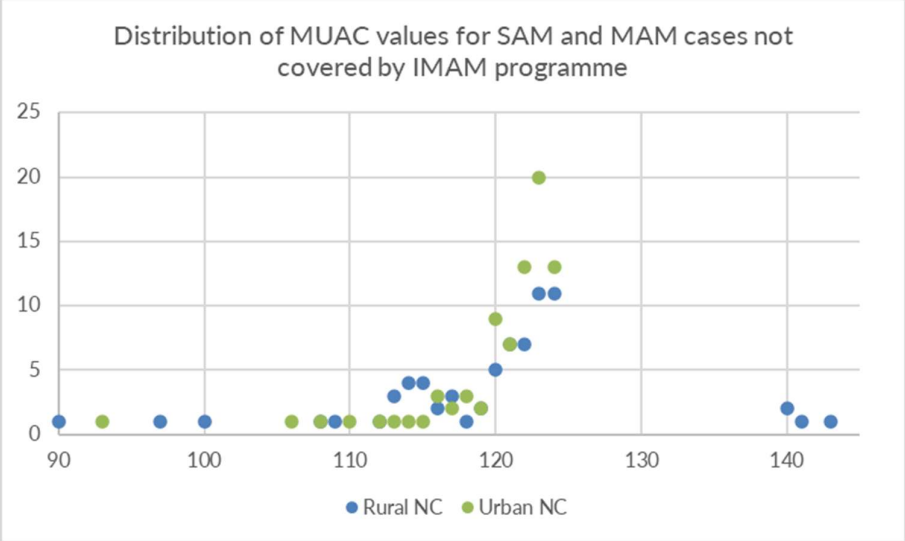


FIGURE 14: Distribution of MUAC values for SAM and MAM cases not covered by IMAM programme, screened during the SLEAC survey across selected districts, Zimbabwe, July 2024.

CLASSIFICATION AND ESTIMATION OF COVERAGE

In this section, for the purposes of classification and estimation of coverage of IMAM programme, the term "case" refers to a child with SAM or MAM. A detailed breakdown of covered and non-covered cases by nutritional status is provided in the upper part of the table below (light red and yellow sections) while the bottom part of the same table refers to SAM and MAM cases combined. The latter figures will be used for the classification of coverage of IMAM programme, considering **a)** extended admission criteria, and **b)** insufficient sample size for SAM only.

In urban districts, the SLEAC survey teams identified two cases enrolled in IMAM programme (Cin), 12 recovering cases (Rin) and 82 cases not enrolled in IMAM programme (Cout), which represents a real sample size of 96 cases. In rural districts, the SLEAC survey teams identified 10 cases enrolled in IMAM programme (Cin), 9 recovering cases (Rin) and 77 cases not enrolled in IMAM programme (Cout), which also represents a real sample size of 96 cases.

District	SAM Cin	SAM Cout	SAM Rin	MAM Cin	MAM Cout	MAM Rin
Bulawayo	0	1	2	1	27	8
Harare	0	6	2	1	48	0
SUBTOTAL URBAN	**0**	**7**	**4**	**2**	**75**	**8**
Chimanimani	0	2	1	0	5	0
Mazowe	0	1	0	0	4	0
Mudzi	1	11	1	4	31	4
Shurugwi	3	8	1	2	15	2
SUBTOTAL RURAL	**4**	**22**	**3**	**6**	**55**	**6**

District	ALL Cin	ALL Cout	ALL Rin	ALL Rout	TOTAL
Bulawayo	1	28	10	46	85
Harare	1	54	2	18	75
SUBTOTAL URBAN	**2**	**82**	**12**	**64**	**160**
Chimanimani	0	7	1	2	10
Mazowe	0	5	0	0	5
Mudzi	5	42	5	11	63
Shurugwi	5	23	3	3	34
SUBTOTAL RURAL	**10**	**77**	**9**	**16**	**112**

TABLE 13: Distribution of covered and non-covered cases by IMAM programme, differentiated by nutritional status and combined (SAM+MAM), across selected districts, Zimbabwe, July 2024.

A number of recovering cases not covered by IMAM programme (Rout), which is necessary for coverage classification, has been calculated using a formula below. The calculated values for Rout for each selected district are provided in Table 13.

$$R_{\text{out}} \approx \left\lfloor \frac{1}{k} \times \left(R_{\text{in}} \times \frac{C_{\text{in}} + C_{\text{out}} + 1}{C_{\text{in}} + 1} - R_{\text{in}} \right) \right\rfloor$$

In order to confirm whether a classification of coverage is possible for rural and urban districts respectively, a homogeneity chi-square test x^2 was conducted. In line with the methodological requirements for the SLEAC survey, in the SLEAC Technical Reference[26], a difference between service delivery units of less than 3.48 confirms the homogeneity of results and allows to proceed with the classification of coverage for the respective area.

Districts	n	O	E	(O-E)	(O-E)2	(O-E)2/E
Harare	75	3	6.56	-3.56	12.69	1.93
Bulawayo	85	11	7.44	3.56	12.69	1.71
Total	**160**	**14**				**3.64**

TABLE 14: Calculation elements for the x2 chi-square test to determine a homogeneity of urban districts, Zimbabwe, July 2024.

According to the calculations in Table 14, there is a significant difference between the results of two urban districts (resulting value is higher than 3.48) and therefore a combined classification of coverage is not possible. However, considering a sufficient sample size in each

[26] Myatt. M, Guevarra. E, Fieschi. L, Norris. A, Guerrero. S, Schofield. L, Jones. D, Emru. E and Sadler. K, 2012. Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) / Simplified Lot Quality Assurance Sampling Evaluation of Access and Coverage (SLEAC) Technical Reference.

district, the classification of coverage is possible at district level. On the other hand, per calculations in Table 15, the homogeneity is confirmed for rural districts as the resulting value does not exceed 3.48. The combined classification of coverage for rural districts is therefore possible.

Districts	n	O	E	(O-E)	(O-E)2	(O-E)2/E
Chimanimani	10	1	1.70	-0.6964	0.4850	0.29
Shurugwi	34	8	5.77	2.2321	4.9825	0.86
Mazowe	5	0	0.85	-0.8482	0.7195	0.85
Mudzi	63	10	10.69	-0.6875	0.4727	0.04
TOTAL	**112**	**19**				**2.04**

TABLE 15: Calculation elements for the x2 chi-square test to determine a homogeneity of rural districts, Zimbabwe, July 2024.

In the tables below, the value "n" represents all covered and uncovered cases identified during the SLEAC survey, including recovering cases not covered by the IMAM program (Rout).

In urban districts, n value equals 160 cases and in rural districts, it equals 112 cases. Thresholds d1 and d2 refer to coverage thresholds, which are explained in the Methodology section of this report. D1 represents 20% and d2 represents 50% in both rural and urban settings.

n	d1	d2	Cin+Rin	Coverage classification
75	15	37	3	LOW <20%

TABLE 16: Classification of coverage for IMAM programme in Harare, Zimbabwe, July 2024.

n	d1	d2	Cin+Rin	Coverage classification
85	17	42	11	LOW <20%

TABLE 17: Classification of coverage for IMAM programme in Bulawayo, Zimbabwe, July 2024.

n	d1	d2	Cin+Rin	Coverage classification
112	22	56	19	LOW <20%

TABLE 18: Classification of coverage for IMAM programme in rural districts, Zimbabwe, July 2024.

Following the calculations of d1 and d2, it is possible to classify the coverage in Harare as "**low**", i.e. below 20% threshold, as the number of covered cases (Cin+Rin) is lower than 22 cases. In Bulawayo, the coverage is also classified as "**low**" as the number of covered cases is lower than 25 cases. In rural districts, the coverage is classified as "**low**" as the number of covered cases is lower than 22 cases.

Considering that rural districts were confirmed as homogeneous and a sample size reaches the minimum of 96 cases, it is possible to estimate the coverage for these 4 districts combined. Based on respective calculations, the coverage across 4 rural districts is estimated at **16.96%** (IC 95% 10.01%-23.92%).

Cin	Cout	Rin	Rout	ALL	Estimation of coverage
10	77	9	16	112	16.96%

Interval	Upper bound	Lower bound
6.95%	10.01%	23.92%

TABLE 19: Estimation of coverage for IMAM programme in rural districts, Zimbabwe, July 2024.

BARRIERS OF ACCESS AND COVERAGE

The caregivers of all SAM and MAM children not covered by the IMAM programme were invited to answer a few questions in order to explore the barriers of access to the service. The questionnaire for caregivers of non-covered cases is composed of a series of cascading questions, which progressively reduce the total sample size, depending on previous answers provided by the caregiver (Cf. **Annex 3A**).

It is to be noted that the total initial sample size falls short of 7 questionnaires, which were missing[27] or had to be discarded when a wrong questionnaire was deployed. After a thorough data cleaning, a total of 152 questionnaires from six selected districts were retained for the analysis. In order to differentiate between a potentially diverse barriers of access in urban and rural settings, the questionnaires were divided into two groups. A total of 80 questionnaires from Harare and Bulawayo were analysed together to represent the urban context while 72 questionnaires from the remaining districts were analysed to represent the rural context.

Awareness of illness

The questionnaire for non-covered SAM/MAM cases begins with a question that tests caregiver's awareness that their child is unwell. Caregivers in rural districts seemed to be more attentive to their child's health status as more than 50% (n=36) stated that they noticed child's illness. On the other hand, only 38% (n=31) of caregivers in urban districts confirmed to have noticed a degradation of their child's health. Based on these results, it is possible to infer that an awareness of illness constitutes the first barrier to access to IMAM programme, especially in urban districts.

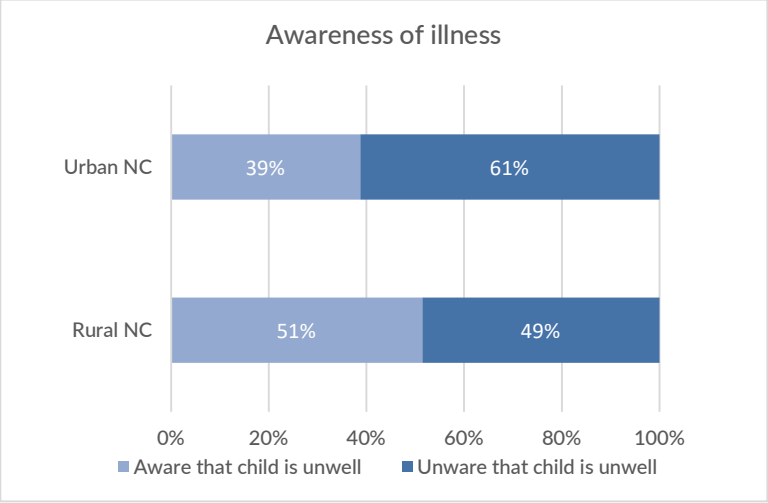


FIGURE 15: Awareness of illness by caregivers of SAM and MAM cases not covered by the IMAM programme across urban and rural districts, Zimbabwe, July 2024.

[27] Not provided by survey teams.

Awareness of malnutrition

The questionnaire for non-covered SAM/MAM cases continues with a question about symptoms that a caregiver might have perceived in their child. *Please note that this question is only asked to caregivers who answered the preceding question positively.*

Overall, perceptions of illness by caregivers in urban and rural settings are fairly similar. More than one third of caregivers in both urban (n=16) and rural (n=22) settings observed their child's weight loss. The other prominent symptoms observed by caregivers include loss of appetite (n=8 and n=12, respectively), followed by vomiting (n=6 and n=8, respectively) and diarrhoea (n=6 and n=8, respectively). Considering that the latter two are accompanying phenomena and not necessarily symptoms of acute malnutrition, the preferred treatment choices – which may or may not include a consultation at a health facility - might be influenced by this fractional reading of symptoms. Nonetheless, almost 57% (n=38) of caregivers in rural districts observed symptoms, which are associated with acute malnutrition (wasting/oedema) while in urban districts, 50% (n=26) of caregivers noticed respective symptoms Therefore, based on these results, it is possible to infer that an awareness of malnutrition could constitute the second barrier to access to IMAM programme in both contexts, especially if caregivers observe and/or act on accompanying conditions, such as fever, cough and diarrhoea.

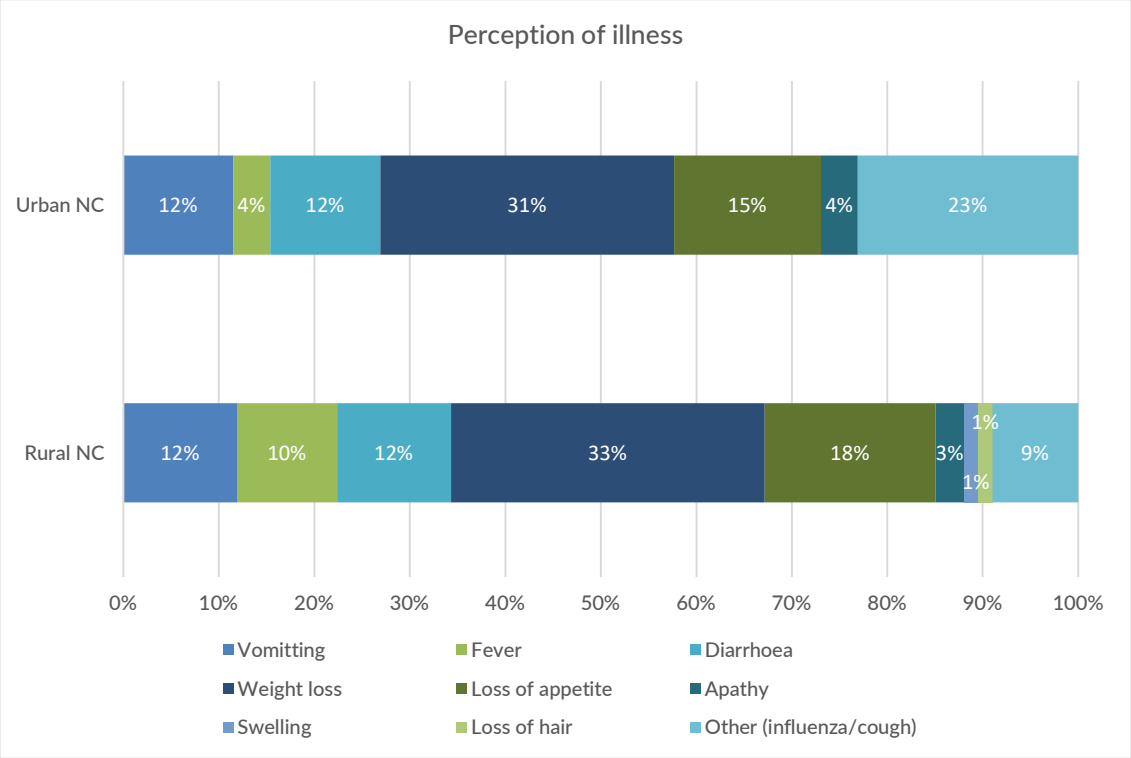


FIGURE 16: Perception of illness among caregivers of SAM and MAM cases not covered by the IMAM programme across urban and rural districts, Zimbabwe, July 2024.

This was corroborated during the in-depth qualitative inquiry, which revealed a limited familiarity with malnutrition due to a very low numbers of these cases in the community. In general, kwashiorkor and marasmus were often collectively referred to as kwashiorkor, with minimal distinction between the two conditions or their specific causes. Commonly observed characteristics of acutely malnourished children include a distended abdomen, a large head, thin limbs, and oedema. Oedema is sometimes mistaken for chubbiness, and unless it is accompanied by other symptoms, it does not immediately alarm caregivers. Marasmus is also associated with polio, disability, and sunken fontanelle, conditions believed to further increase

a child's vulnerability to malnutrition. Trigger symptoms for caregivers to seek treatment included apathy, skin rush, pot belly, cough or cold, vomiting, diarrhoea or swelling.

Specific terms used to describe acute malnutrition are listed in the table below.

Acute malnutrition - wasting	
kuonda	skinny child
kudzikira	child that lost weight
dumbezenene	child with an unhealthy belly
chimutumbu	child with a pot belly
mwana akayamwira	child was breastfed whilst their mother was pregnant
kuyamwira	child that drank infected milk
Acute malnutrition - kwashiorkor	
chizvimbo/ zwimba	child with a swollen body
Acute malnutrition – both forms	
kuremara	child with disability
nyengerezi	disease caused by being touched by someone involved in witchcraft

TABLE 20: Non-exhaustive list of local terms used by key informants to describe a child suffering from severe acute malnutrition across selected districts, Zimbabwe, July 2024.

In some cases, stigmatisation of caregivers with malnourished children was reported across surveyed districts, linking the nutritional status of a child with perceived mother's inability to properly care for her child. However, several caregivers reported that they would offer advice and support to a mother with a malnourished child and show empathy toward the sick child rather than being judgmental. Sometimes, the term 'kwashiorkor' was mentioned as having a negative connotation, reflecting poorly on the mother and, therefore, local terms were preferred instead. Particularly vulnerable were children of vendors, mine workers and sex workers as these caregivers would often leave their children in care of others and they would be away for extended periods of time. Additionally, children from families belonging to the Apostolic Church and/or similar religious groups were reported to face increased vulnerability as they are not permitted to visit health facilities.

Therapeutic itinerary

The questionnaire for non-covered SAM/MAM cases continues with a question about a treatment that a caregiver initiated after observing child's symptoms. *Please note that this question is only asked to caregivers who recognised key symptoms of malnutrition in their child in the preceding question.*

A considerable difference between treatment preferences was observed among caregivers in urban and rural districts. While in urban districts 50% (n=11) of caregivers proceeded to a health facility for a consultation, only 27% (n=9) of caregivers in rural districts did the same. This means that children in urban districts have a potentially higher chance of being screened and treated for malnutrition.

In addition, while only 27% (n=6) of caregivers in urban districts did not initiate any treatment after having observed the symptoms, more than 36% (n=12) of caregivers in rural districts stayed passive. This is a concerning trend as an observation of child's illness and an accurate reading of symptoms did not translate into an appropriate treatment choice and therefore caregiver's lack of action can constitute a barrier to IMAM programme in rural contexts. Other treatment preferences in rural districts included prayer (n=4), enriched meals (n=3), and traditional healer and/or medicinal plants (n=3). These treatment options were less prominent and/or lacking in urban districts.

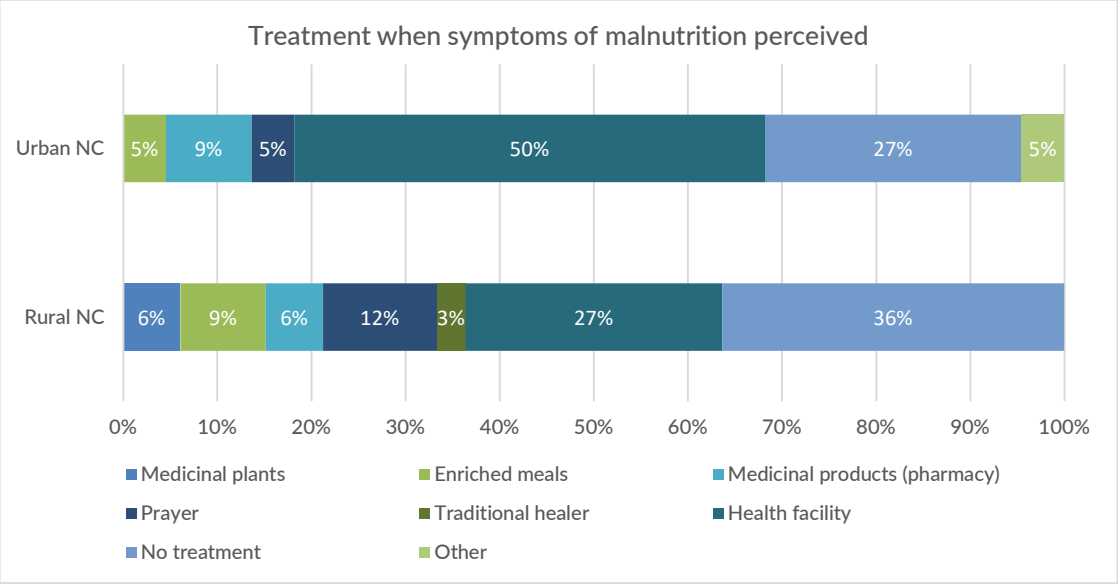


FIGURE 17: Initiated therapeutic itinerary among caregivers of SAM and MAM cases not covered by the IMAM programme across urban and rural districts who observed symptoms of malnutrition in their children, Zimbabwe, July 2024.

This was only partially corroborated during an in-depth qualitative inquiry, during which caregivers declared to approach a village health worker first, asking them for advice and then taking their child to a health facility for treatment. Traditional treatment practices were only mentioned when child's illness was believed to be linked with witchcraft. Herbal remedies were not mentioned.

Decision-making power

The questionnaire for non-covered SAM/MAM cases continues with a question about a holder of a decision-making power with respect to child's treatment. *Please note that this question is only asked to caregivers who recognised key symptoms of malnutrition in their child.*

In urban districts, mothers of children seemed to hold an almost exclusive decision-making power with regards to their child's treatment. Other decision-makers included village health workers and other family members. In rural districts, only 52% (n=13) of mothers could take a decision with respect to child's treatment. Other decision-makers included village health workers (n=7), fathers and other family members. This scenario highlights the prominence of village health workers in rural settings and the consideration of their advice when child is screened and referred for treatment.

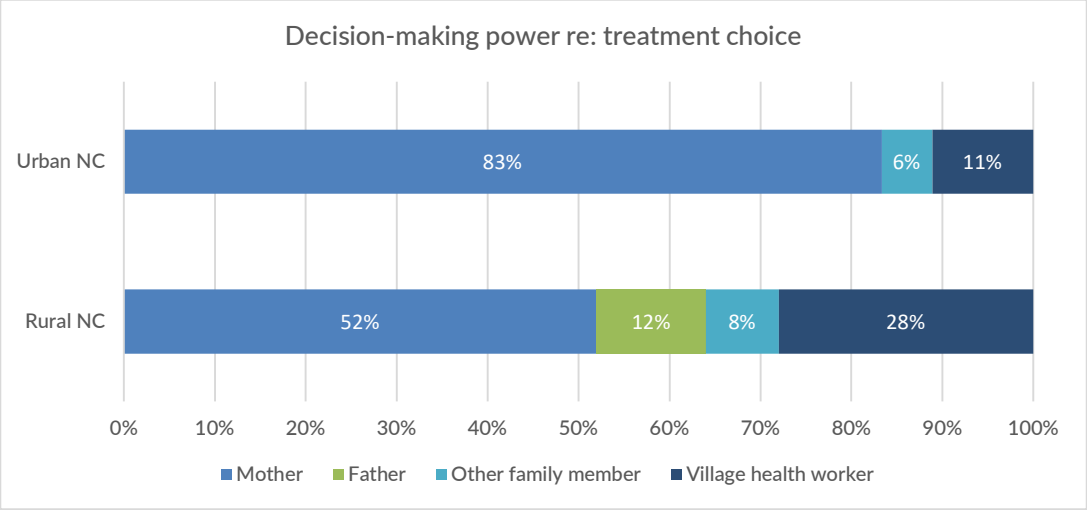


FIGURE 18: Holders of decision-making power with respect to child's treatment, as perceived by caregivers of SAM and MAM cases not covered by the IMAM programme across urban and rural districts, Zimbabwe, July 2024.

Awareness of programme

The questionnaire for non-covered SAM/MAM cases continues with a question about an awareness of IMAM programme to understand whether they are aware of a specific service to treat their child's condition. *Please note that this question is asked to all caregivers who recognised that their child is unwell.*

Caregivers in rural districts seemed to be more aware of the existence of IMAM programme than their counterparts in urban districts. While almost 64% (n=23) of caregivers in rural districts confirmed that they were aware of the existence of the service, only 45% (n=14) of caregivers in urban districts confirmed the same. Therefore, based on these results, it is possible to infer that a lack of awareness of IMAM programme constitutes a barrier to access services in urban districts. Nevertheless, an awareness of the programme in rural districts could also be improved.

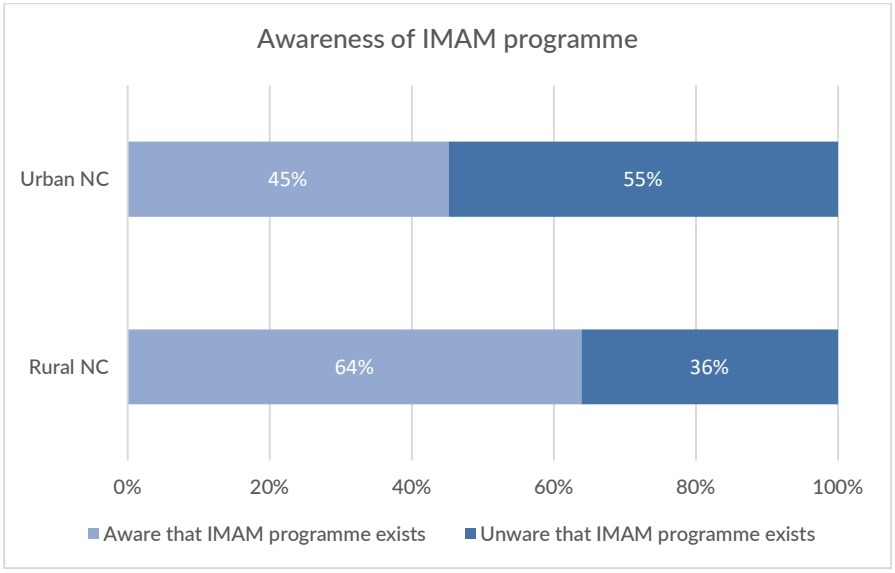


FIGURE 19: Awareness of IMAM programme among caregivers of SAM and MAM cases not covered by the IMAM programme across urban and rural districts, Zimbabwe, July 2024.

This was corroborated during the in-depth qualitative inquiry, which confirmed community's inadequate awareness about the IMAM programme and its eligibility criteria. Most respondents were very well aware of growth monitoring activities and how to access them but lacked information about how to access the IMAM programme in case their child would be screened as malnourished. Respondents who were aware of the existence of IMAM programme often referred to it as a "PlumpyNut® programme". However, given a low prevalence of malnutrition, communities do not always know what happens when a child is found malnourished as very few members effectively use the service. Some respondents associated the programme with growth monitoring only, some confused it with supplementary feeding programmes / porridge preparation activities (where available). Communities further away from health facilities were less aware of IMAM programme services. In Harare, a lesser engagement of Health Promoters (Cf. **Growth monitoring**) creates an important awareness gap among caregivers in that district as caregivers do not benefit from regular in-community screening, and therefore information sharing, which would boost the recognition of the importance of growth monitoring for child's development and available treatment pathways.

Barriers of access

The questionnaire for non-covered SAM/MAM cases continues with a question about reasons of non-enrolment in IMAM programme to understand caregiver's barriers of access. *Please note that this question is asked only to caregivers who stated that they are aware of IMAM programme's existence.*

As the barriers to access to IMAM programme at this level differed substantially between urban and rural districts, separate figures are provided below to better display respective elements highlighted by caregivers of non-covered SAM/MAM cases.

Predominant barriers among caregivers in urban districts included the occupation of the caregiver, i.e. being too busy to attend a health facility (n=2), caregiver's lack of awareness that child is malnourished (n=2) and child missed during monthly check-ups at the health facility despite his MUAC measurement <125mm (n=2). The third element is particularly troubling from the point of view of quality care if parents complied with growth monitoring recommendations, but their children were not diagnosed despite regular screenings. This could potentially highlight weaknesses in the knowledge and/or application of the IMAM protocol by health facility staff. One caregiver stated that they would feel ashamed to enrol their child in the programme, one preferred traditional treatment and one child was a relapse.

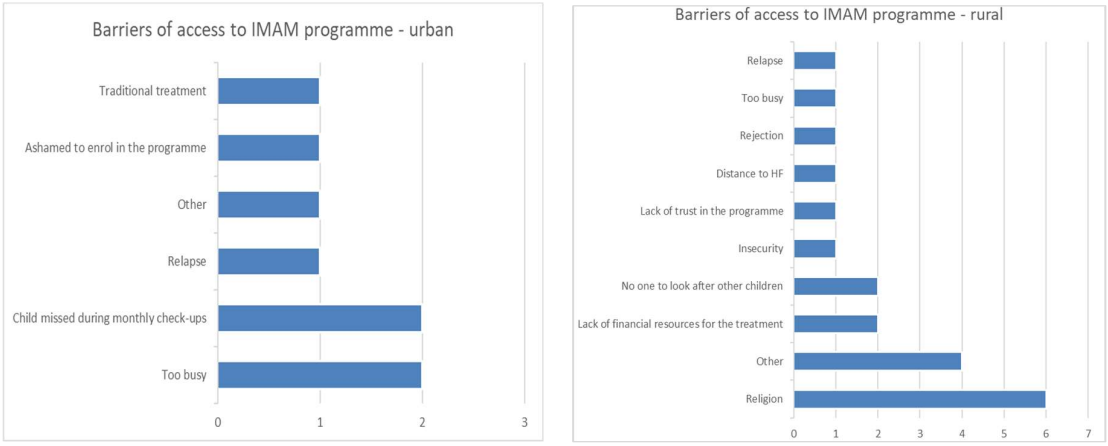


Figure 20: Barriers of access to IMAM programme among caregivers of SAM and MAM cases not covered by the IMAM programme across urban and rural districts, Zimbabwe, July 2024.

Predominant barriers among caregivers in rural districts include religious beliefs (n=6), other barriers (not specified by the survey team) (n=4), lack of financial resources for treatment (n=2) and no one to look after other children when a caregiver takes a child to health facility for treatment (n=2). One caregiver each cited insecurity, lack of trust in the programme, distance, workload and rejection of a child on admission. One child was a relapse.

BOOSTERS OF ACCESS AND COVERAGE

Caregivers of all SAM and MAM children covered by IMAM programme, including the recovering cases, were asked to answer a few questions to explore their motivation for enrolling their children in the programme and their satisfaction with the provided service.

It is to be noted that the total initial sample size falls short of 6 questionnaires, which were missing[28] or had to be discarded when a wrong questionnaire was deployed. After a thorough data cleaning, a total of 27 questionnaires from six selected districts were retained for the analysis. In order to differentiate between a potentially diverse boosters of access in urban and rural settings, the questionnaires were divided into two groups. A total of 12 questionnaires from Harare and Bulawayo were analysed together to represent the urban context while 15 questionnaires from the remaining districts were analysed to represent the rural context.

Number of admissions

In urban districts, almost 92% (n=11) of covered SAM and MAM cases were enrolled in IMAM programme for the first time and all enrolled children were the only children in that household enrolled in the programme. Only one child relapsed after a caregiver could not continue the treatment because of transport issues and was therefore admitted for the second time.

In rural districts, almost 80% (n=12) of covered SAM and MAM cases were enrolled in IMAM programme for the first time and all except one were the only children in that household enrolled in the programme. Three children relapsed, one of them being enrolled in the programme for the third time. In the latter case, the mother was not sure why her child needed repetitive care. In other cases, children might have relapsed due to a wrong application of the discharge criteria (wrong measurement).

During the qualitative inquiry, key informants stated that relapses are very rarely seen. Hypothesised causes for relapse included food insecurity, poor feeding practices, including cold food served to children. As for IMAM data management, it is believed that relapsed children are registered as new admissions, especially if taken to treatment to a different health facility.

[28] Not provided by survey teams.

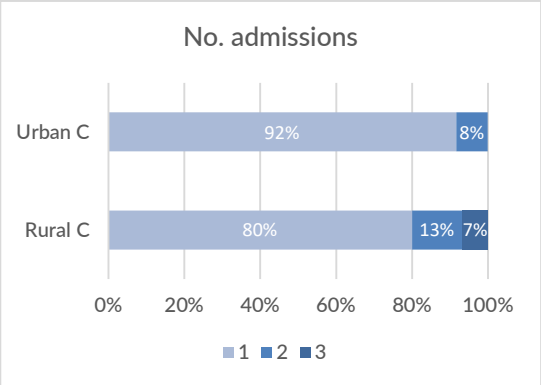


FIGURE 21: Number of admissions per child among SAM and MAM cases covered by the IMAM programme across urban and rural districts, Zimbabwe, July 2024.

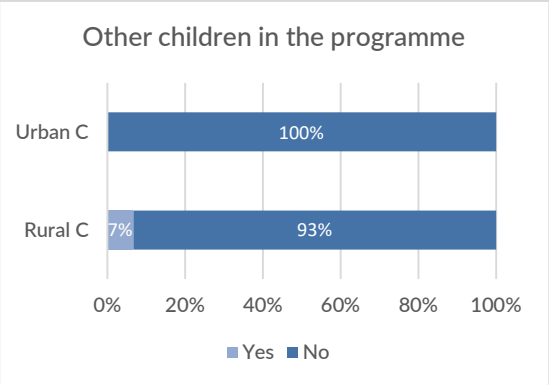


FIGURE 22: Enrolment of other children in the household among SAM and MAM cases covered by the IMAM programme across urban and rural districts, Zimbabwe, July 2024.

Boosters of access

In both urban and rural districts, a diagnosis of malnutrition by health facility personnel is a key reason for enrolment in IMAM programme, having been cited by approximately 60% of caregivers. A recognition of malnutrition by caregivers themselves represented a reason for enrolment for three caregivers in urban districts and four caregivers in rural districts. A supplementary feeding programme by NGO partner motivated one caregiver in rural districts to enrol in their child in the programme. In urban districts, one caregiver appreciated the support and encouragement of a health promoter and one caregiver enrolled their child because health facility was easily accessible.

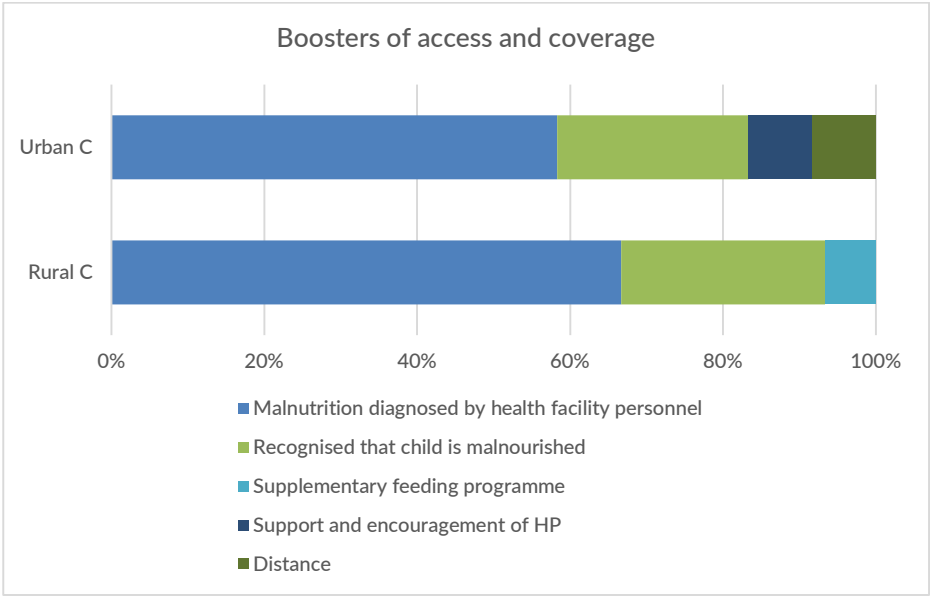


FIGURE 23: Boosters of access to IMAM programme among caregivers of SAM and MAM cases covered by the IMAM programme across urban and rural districts, Zimbabwe, July 2024.

Service satisfaction

Among caregivers of SAM and MAM children enrolled in IMAM programme, almost all caregivers in urban and rural districts expressed being satisfied or very satisfied with the service. Only one caregiver in rural districts was not satisfied. A similar trend can be observed

for a satisfaction with the reception, satisfaction with the quality of treatment and satisfaction with provided information. Only one caregiver in each case expressed being unsatisfied. Respective caregivers clarified that they were unsatisfied because of RUTF stockout and/or lacking information on laboratory tests performed on their child.

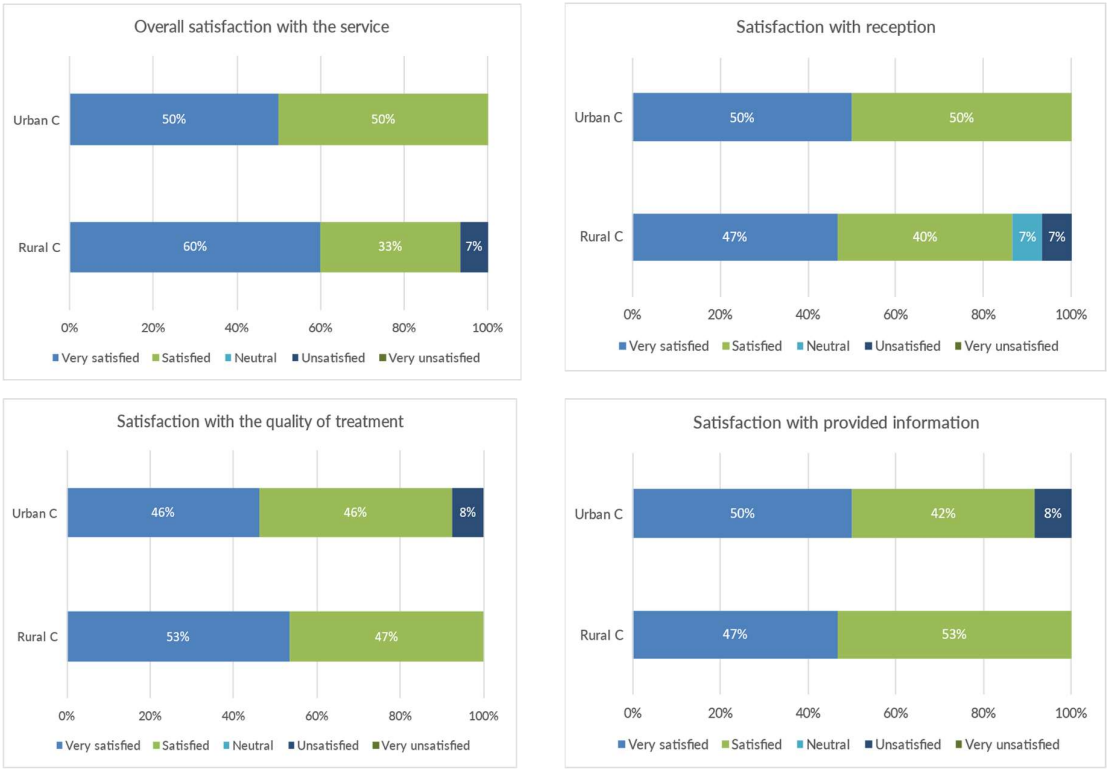


FIGURE 24: Perception of satisfaction with the service among caregivers of SAM and MAM cases covered by the IMAM programme across urban and rural districts, Zimbabwe, July 2024.

C. IN-DEPTH QUALITATIVE ANALYSIS OF BARRIERS AND BOOSTERS OF IMAM ACCESS AND COVERAGE

Similarly to the quantitative data analysis in sub-section A, all qualitative data was organised using the bottleneck analysis framework, focusing on 3 key pillars of effective service delivery (supply, demand and quality). Any additional data, which might have been collected, which is not directly linked with these three pillars, were integrated into sub-section B for triangulation purposes.

Supply: Community outreach

Barriers	Boosters
▪ ***Geographical*** – *Mobility constraints* ▪ ***Financial*** – *Low and delayed remuneration for VHWs and HPs* – *Insufficient airtime* – *Lack of financing for care group activities → decrease in number of functioning groups* ▪ ***Temporal*** – *Heavy workload* – *Heavy workload of caregivers, i.e. lack of time by to attend multiple outreach activities* ▪ ***Quality of care*** – *Lack of (refresher) training on IMAM* – *Insufficient coaching and supervision* – *Shortage of essential equipment, incl. MUAC tapes and height boards* – *Lack of IEC materials in local languages*	▪ *Approachable, resourceful and trustworthy VHWs, providing extra support through home visits based on individual needs* ▪ *Good collaboration between VHWs and health facilities* ▪ *Occasional coaching sessions from nurses and EHTs* ▪ *Engagement of community leaders (except for Shurugwi and Mazowe)* ▪ *Care groups initiatives in place in various districts and appreciated by caregivers*

Village Health Workers (VHWs) have been playing a vital role in IMAM programme implementation in terms of active screening, referrals to health facilities and health education in rural districts. They are viewed as approachable, resourceful and trustworthy, their level of trustworthiness exceeding that of health facility personnel because they are part of the community. However, many VHWs report not having been trained on IMAM and/or having been trained only partially and therefore expressed the need for (refresher) trainings and supervision. Some VHWs admitted feeling isolated and in need of hands-on guidance during community engagement, screening and follow up, in order to maintain and/or positively influence their reputation and recognition within the community. At the moment most VHWs benefit from occasional coaching sessions from nurses at the clinic and/or environmental health technicians (EHT) during outreach activities at the Expanded Programme on Immunisation (EPI) points.

Common challenges experienced by VHWs with impact on their motivation include **a)** mobility constraints, impacting their ability to reach isolated areas due to long distances and a lack of transportation means, such as bicycles, **b)** heavy workload due to a large number of households they are required to visit each month, **c)** low remuneration, which amounts to approximately 42 USD per quarter and is often delayed, **d)** insufficient airtime and/or a lack of telephones, which affects timely communication between VHWs and healthcare facilities, **e)** shortage of essential equipment, such as height boards, scales, MUAC tapes, referral slips or registers, and **f)** lack of Information, Education, and Communication (IEC) materials in local languages.

VHWs also play an essential role in prevention activities, such as care groups initiatives. The number of functional groups has decreased in recent years due to insufficient technical and financial support as well as food insecurity challenges at household level, which push mothers to be more and more involved in income-generating activities, meaning they no longer have time to participate in knowledge sharing sessions, while they might also find themselves in a difficulty to bring a required food contribution to participate to cooking demonstrations. However, these initiatives have shown positive results in raising awareness, and boosted regular community participation to prevent and treat malnutrition cases.

In urban districts, the community outreach's role is carried by Health Promoters (HP). Specifically in Harare, the lack of budget allocation for nutrition activities presents a significant barrier to community outreach activities. While VHWs and HPs receive a financial contribution

of 42 USD per quarter for their support to communities, HPs in Harare deem such financial support inadequate with regards to their expenses in the capital and therefore focus on other health promotion initiatives, which are financially compensated, e.g. vaccination and HIV awareness. As a consequence, they resort to passively screening children based solely on visible signs of malnutrition, such as skinny appearance/visible weight loss, oedema, change in hair colour, and a presence of a distended belly, without consistently performing anthropometric measurements. This practice results in missed cases, inaccurate data collection, and lower programme effectiveness.

Supply: Growth monitoring services

Barriers	Boosters
▪ *Lack of disaggregated data for growth monitoring at health facility and community level* ▪ *Lack of regular height checks due to the unavailability of height boards* ▪ *Lack of regular screening activities in Harare due to a lack of financial support to HPs*	▪ *Growth monitoring activities conducted at both health facility and community level* ▪ *Multiple community screening opportunities on a monthly basis, incl. monthly screening by caregivers (Family MUAC approach)* ▪ *Integration of health education sessions to sensitise caregivers on key topics* ▪ *Community adhesion to growth monitoring (with the exception of religious objectors)* ▪ *Discreet referral for treatment*

Children under-five years of age are screened during monthly growth monitoring activities either at the health facility or community level. In rural districts, the community screening in rural districts takes place at a VHW home, through door-to-door visits or at the Expanded Programme on Immunisation (EPI) points, where children receive vaccination and/or vitamin A supplementation. This allows for multiple screening opportunities each month.

Growth monitoring includes MUAC measurements, weight and oedema checks but height is usually not checked due to the unavailability of height boards, even at the health facility level. In Bulawayo, HPs were reported doing only door to door screening with MUAC and unable to do growth monitoring sessions as no other equipment is available.

The integrated health education sessions tend to focus on topics, such as nutrition, caregiving practices, hygiene and sanitation. During the COVID-19 pandemic caregivers were also provided with MUAC tapes and some still screen their children once a month in addition to the growth monitoring checks by village health workers and/or health facility personnel. Caregivers are typically informed about screening schedules during regular visits, through posters, community meetings, or communication channels like WhatsApp, through which messages are sent to community leaders.

The majority of caregivers, except for religious objectors, bring their children to growth monitoring sessions systematically each month, understanding the importance of this prevention measure and usefulness of shared advice to maintain child's health. Caregivers appreciate the convenience of having their children checked close to their homes, which increases their access to service and allows for an early detection of cases. They also appreciate that they are advised and referred to the clinic for admission to the IMAM programme discreetly, not in a public setting, when a child is screened as malnourished. In addition to VHWs, community leaders are actively involved in raising awareness, mobilising and encouraging communities to use health facilities.

During an in-depth qualitative inquiry observation, the research teams were rarely to see children under 6 months at health facilities and, in those rare occasions weight, length and oedema were checked. Identification of failure to thrive (FTT) cases below 6 months prompted

a breastfeeding counselling session for the caregiver, including a suggestion of supplementation with expressed breastmilk and formula, when needed.

Supply: Trained staff availability

Barriers	Boosters
▪ *Lack of training opportunities for new staff* ▪ *Lack of refresher trainings for trained staff* ▪ *Training preference for senior staff / Non-systematic cascading of training to junior staff* ▪ *High turnover of health facility personnel / frequent rotations* ▪ *Lack of technical support to address uncertainties with regards to IMAM protocol* ▪ *Overloaded plans for supervision visits*	▪ *Staff interested in learning and/or learning opportunities enabling to carry out their tasks properly* ▪ *Staff seeking information from their senior colleagues* ▪ *Occasional mentorship during quarterly district meetings*

Considerable gaps in IMAM training have been highlighted among health workers across districts affecting equally nursing staff at in-patient and outpatient facilities as well village health workers at a community level.

Most nursing staff are overdue for their IMAM training refresher, with their last training done five years ago or often even longer. Training was provided only to senior staff which took on a responsibility to cascade to the rest of staff. However, considering their high workload, the cascading training has been most probably considerably truncated as the interviewed staff lacks information on many aspects of IMAM programme, including z-score calculations, dosage for SAM and MAM cases, etc. In addition, in recent years, a high turnover of trained nurses is constantly causing loss of information about IMAM programme with most new staff not yet been trained on IMAM due to the lack of training opportunities. Some have reported not having received formal training yet and relying on information passed down by senior colleagues on the job.

Nurses reported to benefit from occasional supervision and mentorship opportunities during quarterly meetings with the District Health Executive (DHE) office members. They reported not having prompt and/or regular access to a technical support to address their uncertainties, leading to several grey areas in their understanding of the IMAM protocol and/or their ability to implement it, per instructions. In Mudzi, key informants regretted the discontinuation of mentorship visits, which were conducted between 2017 and 2021 and contributed to a higher quality of IMAM programming. The limited mentorship opportunities were also linked with an overloaded planning of supervision visits to multiple clinics per day, which then limits the time for a mentor and mentee to address all questions, especially if staff do not happen to be trained on IMAM.

Demand: Initial utilisation – community barriers of access and coverage

Barriers	Boosters
▪ ***Geographical*** – *Distance to health facility, especially during a rainy season* ▪ ***Temporal*** – *Caregiver's occupation (juggling multiple income-generating activities, especially among caregivers engaged in mining and sex workers)* – *Long waiting times due to staff shortages and/or motivation* ▪ ***Financial*** – *Limited financial resources for transportation, food and accommodation during treatment → need to mobilise/borrow resources prior* ▪ ***Socio-cultural*** – *Religious beliefs* – *Decision-making power re: access to health facilities controlled by fathers (relevant for members of the Apostolic Church)* – *Fear of judgement and stigmatisation associated with malnutrition (women blamed for not taking proper care of their children or being HIV positive)* – *Increased difficulty in approaching male village health workers, who are less available during the day than female VHW while it is less appropriate to seek their assistance at night* ▪ ***Quality of care*** – *Some staff displaying judgmental and unfriendly behaviour towards caregivers* – *RUTF stockouts*	▪ ***Financial*** – *Free of charge services* ▪ ***Socio-cultural*** – *Programme acceptance → recognition of the benefits of early detection and recovery of malnourished children* ▪ ***Quality of care*** – *Religion-sensitive programme adaptations, e.g. secret screening and check-ups provided by VHWs and nurses for members of the Apostolic Church* – *Welcoming staff providing adequate information about treatment* – *Treatment efficacy of RUTF (visible improvement of child's nutritional status) → boost of community trust* – *Provision of food items by NGO partners to households with SAM and MAM children (Mudzi district only)*

Most barriers perceived at a community level are of socio-cultural nature. Religious beliefs among Apostolic Church members and/or similar religious groups opposing modern health services in general represent a significant barrier of access to IMAM programme. In Johan Marange and Gospel of God communities, seeking medical assistance from health facilities or healthcare providers, including VHWs, is prohibited. Instead, they rely exclusively on prayer and traditional remedies to address illnesses, including child malnutrition. The belief is that medication contaminates the body and is incompatible with prayer and spirituality. When asked how they prevent malnutrition in their children, members of these communities mentioned feeding children with healthy foods like fruits and vegetables and treating illnesses like diarrhoea with homemade ORS solutions made of salt and sugar. In addition, they seek assistance from religious leaders who conduct prayer sessions to improve the child's health. During discussions with other caregivers, it was mentioned that members of these churches use unconventional treatments like giving raw eggs and Coca-Cola to treat malnutrition, although this specific practice was not confirmed by any interviewed member from the Apostolic Church.

Caregivers belonging to these religious groups who seek medical help at health facilities risk being suspended from the church until they receive a permission to return. This is conditioned by a prayer cleansing and regaining of acceptance by a religious leader. Despite the reluctance of these religious communities to engage with health services, there is a growing trend of individuals seeking discreet help for their children's medical needs, especially among a younger generation. In fact, some caregivers have started seeking healthcare services for their children, often at night-time with late visits to nurses or VHWs houses, who provide them advice and treatment in secret. Members deviating from strict religious beliefs prefer to seek support from

VHWs, who are perceived as more approachable and trustworthy than health facility nurses because they are part of the same community.

Case study: Religious objectors

Nyasha[29] is a member of the Gospel of God Apostolic Church. She is in a polygamous marriage with six children, including a three-year-old daughter. Her daughter is the youngest child, born when Nyasha was around 40 years old. Despite following the religion, she has been discreetly seeking advice from VHWs to ensure the well-being of her youngest daughter. She reported doing this in secret as her husband would not accept the behaviour. While he would not harm her if he found out, her behaviour would compromise his relationship with the church leaders. In addition, leaving the church would be difficult because she would not be part of the community anymore. This is why she chose to access health services in secret while she continues to attend the church.

All her children have been vaccinated during school campaigns. She feels at a greater ease when this happens at school because there are very few children from the same church so church members do not learn easily about her children getting vaccinated. Her husband is usually not at home because of work, making it easier to access health services whenever she needs them.

Her decision to seek health services from the VHW was influenced by advice from her relative, a nurse, who emphasized the importance of healthcare services. When her daughter was one month old, she approached the VHW for advice on Infant and Young Child Feeding and Vitamin A supplementation. During her first visit to VHW, she was also given a MUAC tape. Over the years she cultivated a strong relationship with the VHW, ensuring her husband remained unaware of her interactions. For example, she keeps the child's health card at a friend's house, and the VHW informs the friend about any activities or growth monitoring sessions that she needs to attend. This friend is also a church member, but her husband works in South Africa, making it easier to maintain secrecy. Nyasha attends monthly growth monitoring sessions and sometimes travels to a more distant clinic where her relative works as a nurse. She feels uncomfortable with the idea of being seen at the health facility close to her domicile.

As the church forbids association with healthcare professionals, any interactions with the VHW can raise suspicion within the community. She believes that if community leaders would make health education and growth monitoring sessions mandatory for all community members, church leaders may be less resistant. Seeking permission from the church leaders would be the most effective way to encourage mothers from her church to access prevention services without taking medications. She explained that while the church generally forbids medical treatment, they have allowed individuals with chronic diseases like diabetes and hypertension to seek treatment. She thinks this shows a level of understanding and openness about the necessity of healthcare in certain situations, which could definitely be extended to some activities in the IMAM programme.

When it comes to quality-of-care barriers, several districts have faced larger-scale RUTF stock outs in the past year (2023) with some clinics still lacking the stock at the time of the data collection for this assessment. This was said to have discouraged some caregivers from continuing the treatment, especially when they learnt about the stockout after a long journey to a health facility. Some districts reported re-distributing the remaining stocks among facilities in favour of those in areas with higher caseloads during stockout periods. During this time, World Vision's porridge cooking programme in Mudzi provided a crucial alternative, allowing caregivers to access additional skills to care for their malnourished children. Care Group members provide all ingredients for the porridge, with WVI providing technical support with a cooking demonstration of a nutrient-dense porridge using the ingredients contributed. VHWs from others districts also reported advising caregivers to prepare porridge made with nutritious ingredients for their children in the absence of RUTF. Some interviewees suggested to bring RUTF closer to the community, allowing VHWs to provide outpatient treatment within the community or at the EPI points, especially in communities further away from health facilities.

[29] The name has been replaced to protect the respondent's confidentiality

Demand: Continuous utilisation

Barriers	Boosters
▪ *Ineffective transfer-out system → "transfers" recorded as new admissions if they seek care in a new facility* ▪ *Re-admission of already enrolled cases (duplication) if health card lost or health record not found* ▪ *High mobility of local population* ▪ *Missing patient data (.e.g. contact number)* ▪ *Religious and cultural beliefs*	▪ *N/A*

Interviewed health facility staff and community members demonstrated a generally low awareness of defaulting. Common reasons for potential defaulting included a high mobility of local population, particularly in urban districts of Harare and Bulawayo, attributed to financial instability and frequent increases in rental prices. Caregivers moving to different areas do not advise health facility of their move, making it challenging for staff to trace enrolled children afterwards. The transfer system between clinics is ineffective and if a caregiver changes the facility, a child is enrolled in the programme as a new admission. Additionally, incomplete patient data in programme registers (e.g. lack of home address and/or contact telephone number) contributes to a risk of a "loss of sight" for some children who stop coming for treatment and health facility staff cannot trace in their home communities. Some defaulters were also linked with caregivers prioritising their work, religious objectors from the Apostolic Church or cultural barriers, such as stopping treatment because the child was bewitched and instead looking for alternative treatment from local healers.

Quality: IMAM programme implementation

Barriers	Boosters
▪ *Heavy workload → lack of time to adequately supervise VHWs and to engage in outreach communities* ▪ *IMAM protocol adhesion discrepancies (prescription of the same RUTF dosage for SAM and MAM cases, under-utilisation of z-scores)* ▪ *Unofficial fees for treatment (Harare)* ▪ *Lack of IEC materials*	▪ *Programme fully integrated into a national health system, incl. centralised monitoring (DHIS2)* ▪ *NGO partners supporting MoH efforts by sponsoring vehicles and other essential resources (limited to high priority districts)*

Shortage of staff and/or trained staff, which translates into a heavy workload of existing workforce, hinders their ability to adequately supervise VHWs, to engage in outreach activities and to provide quality IMAM service. A few years ago in Harare, UNICEF actively supported ward nutritionists who were stationed at health facilities. These nutritionists offered consultations, managing admissions and discharges, completing OTP cards and registers. Upon the cessation of the funding, the workload was transferred to remaining nurses. This shift left many nurses feeling overwhelmed, as they were accustomed to having nutritionists on hand to handle the IMAM agenda and perceived these new added activities beyond their scope of responsibilities. In addition, it also leads to multiple discrepancies with IMAM programme protocol adhesion, which includes **a)** incorrect treatment protocol, such as prescribing the same RUTF dosage for SAM and MAM cases, **b)** underutilisation of z-scores, which complicates the accurate assessment and management of malnourished patients, and **c)** omission of an appetite test**.**

In Harare, even if IMAM programme services are officially free of charge, unofficial payments of 3 USD were reported to be sometimes requested, impacting the use of the service by

caregivers who may not have resources to pay. These charges were specifically mentioned for misplaced children's health cards or missed growth monitoring visits.

RUTF acceptance and utilisation

Caregivers generally noticed weight gain and improved health outcomes in children consuming RUTF and said to follow the treatment till child's recovery. While many children enjoy the taste, some experienced vomiting during the initial days of consumption. A recurrent challenge is RUTF sharing among siblings, as it is often perceived as food rather than medicine "because it makes the child gain weight". To address this issue, some nurses reported dispensing extra packets for households with multiple children to ensure that the malnourished child receives the appropriate dose. Efforts from health staff and VHWs to educate caregivers about the specific use of RUTF, emphasising it as a medicinal product rather than regular food, were also mentioned. The sale of RUTF across surveyed districts was perceived as extremely rare. In some facilities in Bulawayo and Mazowe, following an incident of RUTF being sold, measures to control the misuse, including storing RUTF in pharmacies and tightening dispensing procedures, were implemented.

During the in-depth qualitative inquiry, the research teams observed a delivery of care in multiple health facilities. They perceived the atmosphere in health facilities as welcoming, with staff having generally positive interactions with patients. The presence of key resources such as scales, height boards, MUAC tapes but also water points, toilets and shaded places for caregivers to sit while waiting were also noted, all contributing to a positive healthcare environment. Growth monitoring and community engagement activities were observed to take place but heights boards were not used during multiple growth monitoring sessions. Their non-utilisation was verified through the children's health cards where height was non-systematically measured, usually every few months. In one location, caregivers were observed being explained MUAC measurements with emphasis on their importance, as well as encouraging mothers to actively monitor their child's growth. Areas requiring improvement include prolonged waiting times reaching up to 2 hours across multiple locations, mostly linked to staff shortages. The absence of Information, Education, and Communication (IEC) materials in some clinics was highlighted as a limitation in health promotion efforts by staff members.

Data management

Barriers	Boosters
▪ *Heavy workload → lack of time for regular data entry and consolidation* ▪ *Irregular attendance of VHW at monthly health facility meetings due to delayed remuneration* ▪ *Lack of airtime* ▪ *Shortage of referral slips and/or screening registers* ▪ *Multiple registers for data entry* ▪ *Occasional DHIS2 system failures* ▪ *Only selected data appears in DHIS2 statistics despite more ample reports being submitted*	▪ *N/A*

During in-community screening, Village Health Workers collect data on weight, MUAC and oedema. A child needing a referral receives a referral slip while the information is also recorded in a register for a future follow-up. Once the child is enrolled in the programme, the nurse informs the VHW by phone to follow-up, as needed. Once a month, VHW participate in meetings at health facility level to report on their activity. Several challenges, potentially incurring data losses, were reported. For example, some VHWs are missing referral slips and/or register to properly record data on screened/referred cases. The communication between health facility staff and VHWs can also be hindered by a lack of airtime while VHWs monthly visits at health facilities become irregular if VHW feels demotivated by a delayed quarterly payment.

At a health facility level, nurses record enrolled cases data in the Integrated Management of Nutrition and Childhood Illness (IMNCI) register as well as SAM and MAM registers. Some

facilities have only one register for both SAM and MAM cases. Not only this is problematic for a systematic follow-up of SAM and MAM cases, respectively, but additional entry into IMNCI register may result in data omissions. In addition, heavy workload and staffing changes negatively affect regular data entry, creating backlogs and increasing a risk of data gaps. The observation of IMAM registers during the qualitative inquiry revealed incongruences in admission criteria, omissions of discharge statuses and un-recorded lengths of stays, while RUTF stock cards often did not match new admissions and/or a total number of children enrolled in the programme. While these trends themselves can lead to misreporting, this is further exacerbated during occasional system failures in DHIS2, after which other staff than a sister-in-charge (who is responsible for a quality control) may need to submit the report, themselves not having enough information about IMAM programme caseload.

Nurses compile data from all VHWs who submitted their activity figures and all data from OTP registers and submit it to the district by the 7th day of each month. Data verification and analysis occur at the district level by the 14th of each month, with only SAM cases included in DHIS2 statistics. District level nutritionists and health facility staff meet on a monthly basis to discuss challenges and review the submitted data. However, in Chimanimani, for example, the absence of a district nutritionist and limited involvement of a nutrition assistant was reported to cause gaps in IMAM quality checks and data analysis.

In in-patient settings, data entry, verification, and analysis are conducted by the matron and the hospital health information department. Challenges in data retrieval of patient notes lead to the creation of new patient records for relapsed cases. Stabilised children are discharged to local health facilities for continued outpatient care, but issues with the transfer system often results in them being admitted as new patients in the OTP facility in their catchment area.

VII. CONCLUSION

Based on an available sample, the IMAM treatment coverage in Zimbabwe is classified as low with less than 20% of children eligible for treatment effectively accessing the programme. The functioning of the IMAM programme should therefore be thoroughly revisited in order to increase its outreach and effectiveness. Considering a low coverage estimation, programme improvements and adaptations will be required at supply, demand and quality levels. The recommendations provided in the following section may provide a basis for reflection and prioritisation of needed interventions. Taking into account an added value of prevention, key areas of focus should include strengthening of growth monitoring and awareness raising activities, especially at community level. Religion-sensitive adaptations should be considered in districts with a higher prevalence of households belonging to the Apostolic church and/or similar religious groups. In health facilities, key areas of focus should include staff capacity building to ensure IMAM programme protocol adhesion and effective data management.

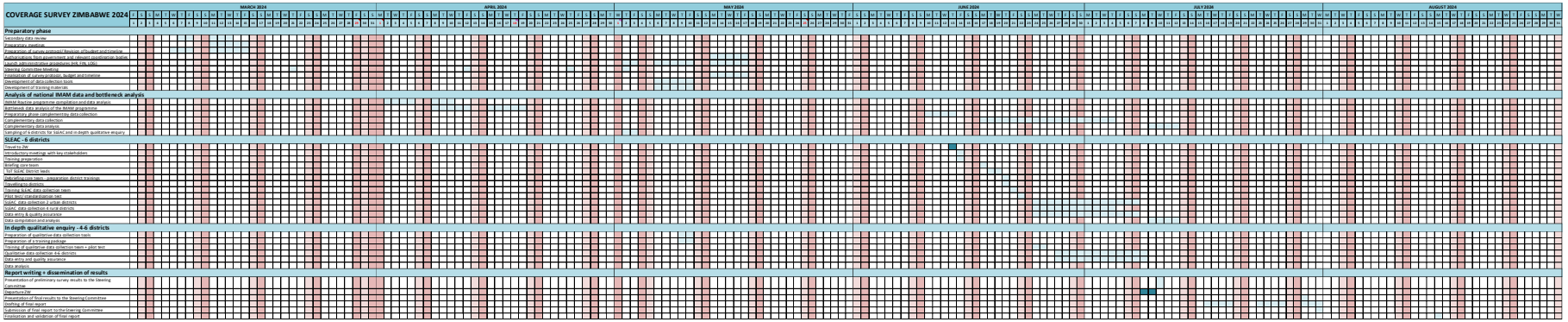
VIII. RECOMMENDATIONS

Based on the findings of this coverage assessment, the following recommendations are proposed to address the identified barriers of access and coverage of IMAM programme in Zimbabwe.

- Review the national IMAM protocol in line with 2023 WHO guidelines on the prevention and management of wasting and nutritional oedema (acute malnutrition) in children under 5 years of age in order to align in-country practice with new evidence-based recommendations, including consideration of a provision of treatment by Village Health Workers;
- Replace the outdated guidance on the enrolment of SAM and MAM cases into IMAM programme by a new guidance with clear instructions on admission and discharge protocols, RUTF dosage and reporting;
- Include a comprehensive module on the national IMAM programme in pre-service training curriculum for all healthcare workers (Nurses, Doctors and VHWs) not only nutritionists – as is currently the case
- Carry out in-person training sessions on the updated national IMAM protocol for all staff involved in the IMAM programme, especially new staff who have not yet been trained;
- Develop and roll-out the use of online training modules, to be used by all staff in need of refresher training on IMAM protocol. Among other things, a focus should be given to a clear definition of different categories of children (e.g. non-recovery) and a calculation of z-scores;
- Consider the implementation of a helpline for remote technical support and coaching on IMAM protocols, which all staff could have access to when in need of clarifications;
- Develop a specific and comprehensive guidance for VHWs and health facility personnel for screening and enrolment of children from households with religious beliefs, who might otherwise miss out on healthcare service;
- Consider streamlining IMAM data management processes in order to limit duplication of efforts as well as data losses and discrepancies. As much as possible, data should be entered, compiled and analysed via electronic platforms;
- Consider conducting routine monitoring data analyses every six months at district level and every twelve months at provincial level to track progress against SPHERE standards and, most importantly, to continue adapting IMAM programme recommendations to evolving key indicators;
- Expand and enhance community engagement initiatives to raise awareness about the signs of malnutrition and the availability of the IMAM program, utilizing a diverse range of actors and platforms and with particular emphasis on hotspot areas
- Streamline the functioning of Village Health Workers in rural districts and Health Promoters in urban districts to ensure effective growth monitoring of all children under 5 years of age. This should include proper training and supervision as well as a distribution of all tools for an effective completion of tasks. Special attention should be given to vulnerable “hotspots” in urban districts;

ANNEXES

1. Timeline


COVERAGE SURVEY ZIMBABWE 2024
MARCH 2024
APRIL 2024
MAY 2024
JUNE 2024
JULY 2024
AUGUST 2024
Preparatory phase
Secondary data review
Preparatory meeting
Preparation of nutrex proposal/ Revision of budget and timeline
Authorizations from government and relevant coordinating bodies
Launch sole/restrictive procedure (link Fifa UNO)
Steering Committee Meeting
Finalization of nutrex protocols, budget and timeline
Development of data collection tools
Development of training materials
Analysis of national IMAM data and bottleneck analysis
IMAM Routine programme compilation and data analysis
Bottleneck data analysis of the IMAM programme
Preparatory phase complementary data collection
Complementary data collection
Complementary data analysis
Sampling of 6 districts for SLEAC and in-depth qualitative enquiry
SLEAC - 6 districts
Travel to ZW
Introductory meetings with key stakeholders
Training preparation
Briefing core team
TOT SLEAC District leads
Debriefing core team - preparation district trainings
Travelling to districts
Training SLEAC data collection team
Pilot test/ training+pilot test
SLEAC data collection 3 urban districts
SLEAC data collection 4 rural districts
Data entry & quality assurance
Data compilation and analysis
In depth qualitative enquiry - 4-6 districts
Preparation of qualitative data collection tools
Preparation of a training package
Training of qualitative data collection team + pilot test
Qualitative data collection 4-6 districts
Data entry and quality assurance
Data analysis
Report writing + dissemination of results
Presentation of preliminary survey results to the Steering Committee
Debriefsum ZW
Presentation of final results to the Steering Committee
Drafting of final report
Submission of final report to the Steering Committee
Finalization and validation of final report

2. SLEAC Field manual

FIELD MANUAL

COVERAGE SURVEY

SAM Treatment Programme

Zimbabwe
June 2024

FIELD CHECKLIST

TO PREPARE THE EVE OF DEPARTURE AND CHECK BEFORE DEPARTURE!!

	Article	Quantité
1	Notebook	2 units
2	Pen	2 units
3	Plastic folder	2 units
4	Tablet[30]	1 unit
5	Case finding summary	2 copies
6	Referral slip	3 coupons
7	SLEAC Field manual	2 copies
8	MUAC band (DO NOT FOLD !!!)	2 units
9	Water/Snacks	as needed
10	Telephone + daily phone credit	1 unit
11	List of EAs to visit	1 copy

NB: If your team is going to the field for several days, make sure you have SUFFICIENT quantity of EACH item to cover your entire stay/total number of EAs to visit.

KEY CONTACTS

Name	Position	Telephone no.

[30] Never forget to charge it the evening before to make sure you can fully use it the following day.

KEY ASSESSMENT TERMINOLOGY

Malnutrition

Malnutrition is an umbrella term, commonly considered synonymous with "**undernutrition**" although technically it also includes **overnutrition** (i.e. overweight and obesity). Malnutrition occurs when the diet does not provide the nutrients necessary for growth and maintenance of the body, often due to economic, political and socio-cultural factors, or when the food ingested is not fully utilized in due to illness.

Acute malnutrition

Also known as **wasting**, acute malnutrition is characterized by a sharp deterioration in nutritional status (loss of body fat and muscle tissue) over a **short period of time**. Depending on the severity, we differentiate between **moderate acute malnutrition (MAM)** and **severe acute malnutrition (SAM)**, within which we further differentiate between emaciation (low weight-to-height ratio) and/or oedema (i.e. retention water in body tissues).

Chronic malnutrition

Chronic malnutrition or "**stunting**" is a form of a growth disorder that develops over a **long period**. Inadequate nutrition over long periods (including poor maternal nutrition and poor infant and young child feeding practices) and/or repeated infections can lead to chronic malnutrition. In children, it can be identified using the height-age ratio.

Term	Definition
Management of Severe Acute Malnutrition	Through Outpatient Therapeutic Program sites for Severe Acute Malnutrition without complications and in Stabilization Centre for Acute Malnutrition with complications, often integrated into health centres and hospitals.
Management of Moderate Acute Malnutrition	Through Outpatient Therapeutic Program sites or through dietary management
Ready to Use Therapeutic Food (RUTF)	PlumpyNut® (treatment of SAM and MAM)
Middle Upper Arm Circumference (MUAC)	Circumference of the arm measured between the shoulder and the elbow, in the middle of the biceps brachii. It allows to diagnose SAM (< 115mm) and MAM (<125mm).
Nutritional oedema	Swelling on the feet (+), legs (++) or face (+++), allowing to diagnose SAM (kwashiorkor).
Recovering	Child admitted to the IMAM program with SAM or MAM but who has in the meantime partially recovered (i.e. his MUAC is within the range of MAM or a healthy child, respectively.)
Default	Child who has not attended the IMAM program for at least 2 consecutive weeks.
Discharged cured	Child has met IMAM exit criteria (i.e. z score -1 for 2 weeks or MUAC ≥ 125 mm, and no oedema for 2 weeks)
Discharged uncured / Non-responsive to treatment	Child has not reached IMAM exit criteria (i.e. target weight and is not considered nutritionally healthy)

LOCAL TERMINOLOGY

Local expression	English translation
Acute malnutrition - Maramus	
Bunyane$_{nd}$	A very thin object
Inuta$_{nd}$	An unhealthy calf or kid
Tukunya$_{nd}$	An inactive child with dry and unhealthy skin
Kanyane$_{T}$	Wrinkles on the body are likened to an old man's wrinkles
Masato$_{nd}$	A very thin child and the condition is ascribed to infidelity by one of the parents
Nkonde$_{na}$	Very thin
Syakalwazi$_{na}$	A person who is constantly sick
Acute malnutrition - Kwashiorkor	
Sdudla$_{T,}$	A person who is very fat with a big body
Toobo$_{T}$	A big stomach
Chizimbili$_{T}$	This is a term used to describe a swollen body and a child is given that name as his body will be in the same state.
Tumbulusu$_{nd}$	A big stomach. A child suffering from kwashiorkor is given that name.
Kwashi$_{nd}$	A common name used to call a child with Kwashiorkor, the name is shortening for kwashiorkor.
Tshina$_{nd}$	A flying machine.
Chimimba$_{na}$	Pregnant woman or big belly
Dilalizhale$_{na}$	The swollen body and a big stomach resembles a drum
Khandakhulu$_{nd}$	A person with a big head
Mabhonzo$_{nd}$	Severe loss of body weight and the ribs and facial bones appear prominent
Stunting	
Kadandala$_{T}$	An orphaned calf
Kanduba$_{T}$	A very short child.
Syantili$_{T}$	A very short person
Undofa$_{nd}$	Goblin
Ukufuba$_{nd}$	Delayed growth of plants or animals
Shoti$_{nd}$	A very short person
Kashaku$_{na}$	Goblin
Mbonembonele ngaphi?$_{na}$	It is a question 'How did you spot me' implying that is difficult to identify a short person
Kandolindoli$_{T}$	People who do not grow in height especially the dwarfs.
Kagalani$_{T}$	The name given to a short and underweight child
Dwafu$_{nd}$	A very short object
Titisi$_{nd}$	Small dog breed
Isiqinti$_{nd}$	A short object

EXHAUSTIVE SCREENING

- Exhaustive screening of ALL children 6 - 59 months in sampled EAs (<100 children)
- DOOR-TO-DOOR → NEVER in public gathering!!

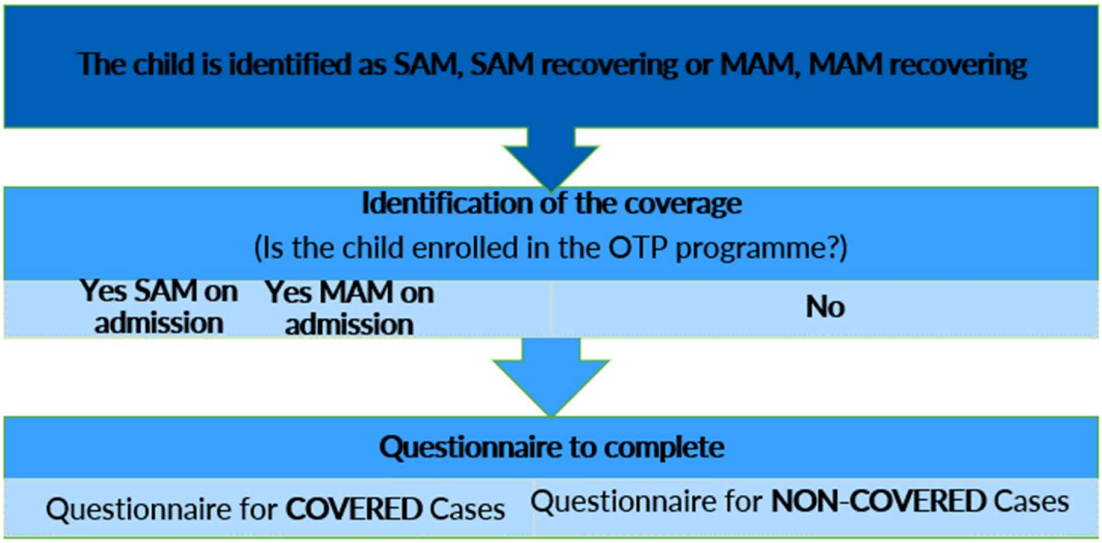
ARRIVAL IN THE VILLAGE

A. Visit a house of the village chief, introduce yourself and explain the purpose of your visit;
B. Ask the village leader to draw the boundaries of the EA and compare with the map. Make a note of the EA's boundaries, as explained.
C. Ask the village chief to confirm your estimates of the total population/children 6-59 months;

D. Ask the village chief to assign you a guide during your visit (e.g. community health worker);
E. Tour the EA to confirm identification of boundaries
F. Conduct door-to-door case finding.

ARRIVAL IN THE HOUSEHOLD

A. Introduce yourself to the head of household and explain the purpose of your visit, emphasizing the healthy growth of children. Ask for his consent;
B. Ask the head of household to show you all children 6-59 months living in the household. Verify their age through official documents (e.g. birth certificates), if available, or estimate it through a local calendar of events;
C. Measure all children 6-59 months. Write down the MUAC values;
D. Check for oedema. Write down the values;
E. Explain to parents the results for each measured child, even the healthy one.
F. Follow the decision tree to decide if the administration of questionnaires for covered or uncovered SAM/MAM cases should be deployed.
G. If yes, ask the caregiver for a few minutes for the administration of the respective questionnaire.



CASE DEFINITIONS

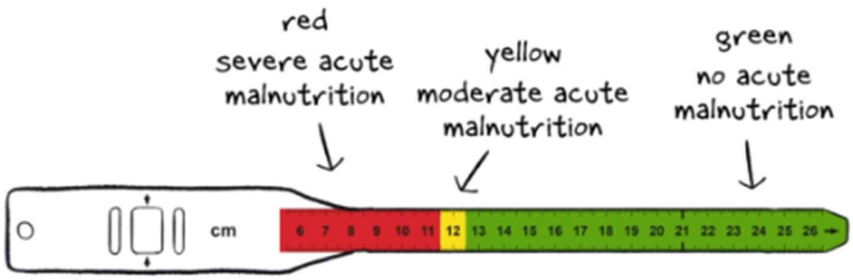
CURRENT SAM CASE	Child who meets the admission criteria for the SAM treatment, i.e. ▪ Middle Upper Arm Circumference < 115 mm (**114 mm**!!!) ▪ Presence of bilateral pitting oedema
COVERED SAM CASE (Cin) ***SAM Cin***	Child with MUAC < 115 mm or child with bilateral oedema who is enrolled in the SAM treatment
NON-COVERED SAM CASE (Cout) ***SAM Cout***	Child with MUAC < 115 mm or child with bilateral oedema who is NOT enrolled in the SAM treatment
CURRENT MAM CASE	Child who meets the admission criteria for the MAM treatment, i.e. ▪ Middle Upper Arm Circumference 115mm-124mm ▪ No bilateral pitting oedema
RECOVERING CASE (Rin) ***SAM Rin***	Child who has recently been a SAM case and has meanwhile partially recovered but has not yet met the exit criteria for SAM treatment (i.e. is still enrolled in the program)
COVERED MAM CASE (Cin) ***MAM Cin***	Child with MUAC < 125 mm who is enrolled in the MAM treatment (check admission criteria on health card)
NON-COVERED MAM CASE (Cout) ***MAM Cout***	Child with MUAC < 125 mm who is NOT enrolled in the MAM treatment
HEALTHY CHILD	Child with MUAC ≥ 125 mm without bilateral pitting oedema.
RECOVERING CASE (Rin) ***MAM Rin***	Child who has recently been a MAM case and has meanwhile partially recovered but has not yet met the exit criteria for MAM treatment (i.e. is still enrolled in the program, check admission criteria on health card)

KEY ETHICAL CONSIDERATIONS

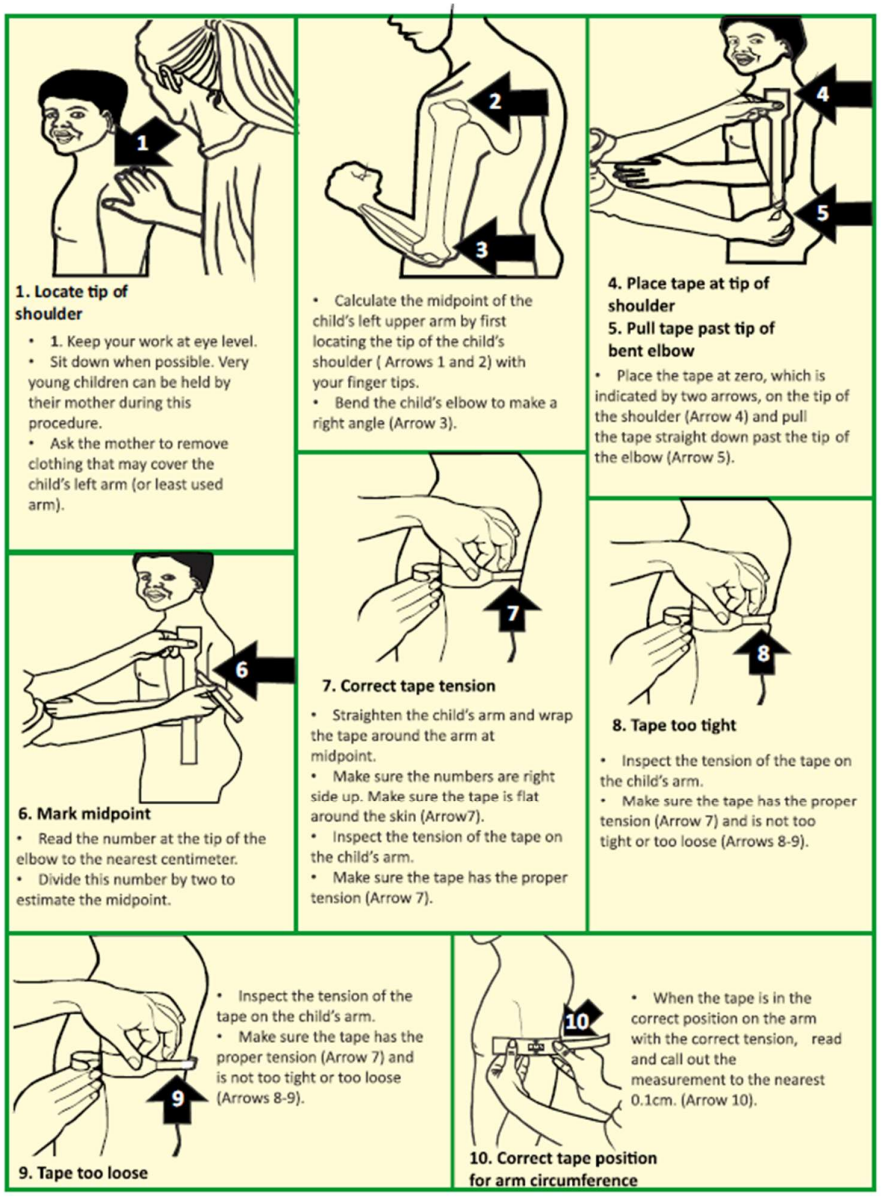
- Respect for anonymity and confidentiality;
- Principle of non-judgment;
- Free expression;
- Faithfulness of the testimonies and expressed opinions.
- Children under the age of 5 years of age eligible for treatment for acute malnutrition must be systematically oriented and referred to the nearest health facility in the event of a positive screening for moderate or severe acute malnutrition.
- Families and/or community members should be referred to competent professionals when seeking information on acute malnutrition and/or IMAM programme.

ANTHROPOMETRIC MEASUREMENTS

MIDDLE UPPER ARM CIRCUMFERENCE (MUAC)



This rapid diagnosis of malnutrition enables rapid treatment of vulnerable children, thus saving lives.



1. Locate tip of shoulder

- 1. Keep your work at eye level.
- Sit down when possible. Very young children can be held by their mother during this procedure.
- Ask the mother to remove clothing that may cover the child's left arm (or least used arm).

- Calculate the midpoint of the child's left upper arm by first locating the tip of the child's shoulder (Arrows 1 and 2) with your finger tips.
- Bend the child's elbow to make a right angle (Arrow 3).

4. Place tape at tip of shoulder
5. Pull tape past tip of bent elbow

- Place the tape at zero, which is indicated by two arrows, on the tip of the shoulder (Arrow 4) and pull the tape straight down past the tip of the elbow (Arrow 5).

6. Mark midpoint

- Read the number at the tip of the elbow to the nearest centimeter.
- Divide this number by two to estimate the midpoint.

7. Correct tape tension

- Straighten the child's arm and wrap the tape around the arm at midpoint.
- Make sure the numbers are right side up. Make sure the tape is flat around the skin (Arrow7).
- Inspect the tension of the tape on the child's arm.
- Make sure the tape has the proper tension (Arrow 7).

8. Tape too tight

- Inspect the tension of the tape on the child's arm.
- Make sure the tape has the proper tension (Arrow 7) and is not too tight or too loose (Arrows 8-9).

9. Tape too loose

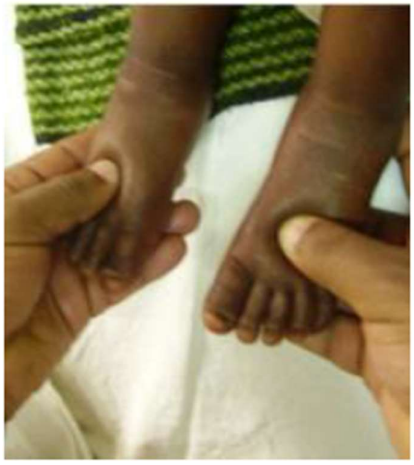
- Inspect the tension of the tape on the child's arm.
- Make sure the tape has the proper tension (Arrow 7) and is not too tight or too loose (Arrows 8-9).

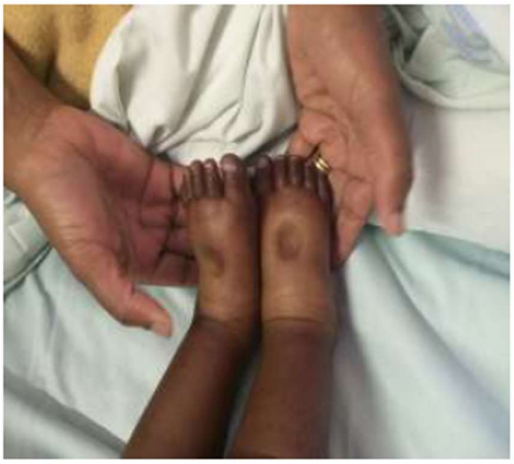
10. Correct tape position for arm circumference

- When the tape is in the correct position on the arm with the correct tension, read and call out the measurement to the nearest 0.1cm. (Arrow 10).

OEDEMA

A. Test on both extremities at the same time.
B. Press with thumbs on the top of the feet /on the shins / on the forehead.
C. Hold the pressure for about three seconds while counting slowly: “one Mississippi, two Mississippi, three Mississippi”.
D. If there is oedema, an imprint will remain for a few seconds on the pressed area (pitting sign).





END-OF-DAY CHECKLIST

1. Ensure that all eligible children are visited and all data is complete, legible and well recorded before you leave the village.
2. Review all data with your SLEAC Survey Lead. If in doubt, call Uwimana/Patrizia to check which procedure to apply.
3. Keep all the forms in plastic folders in order to avoid losing/damaging them. Give them to SLEAC Survey Lead at the end of the day.
4. Take care of your tablets. Submit them for data download when requested and/or at the end of each day.

3. SLEAC Data collection tools

A. Questionnaire for caregivers of covered SAM/MAM cases

District: _____ **Catchment area:** _____

EA: _____ **HH GPS coordinates:** _____

Team: _____ **Date:** _____ _____ **2024**

1. Is this the first time that your child has been enrolled in the IMAM programme?	
☐ Yes → **Q5**	☐ No → **Q2**

2. How many times has your child been enrolled in the IMAM programme?			
☐ 1	☐ 2	☐ 3	☐>3

3. Why has your child returned to the IMAM programme?	
☐ a. Child has discontinued the programme and returned.	a[1]. Why? _____
☐ b. Child was cured and relapsed.	b[1]. Why? _____

4. Do you have other children enrolled in the IMAM programme?				
☐ Yes	a[1]. How many?	☐ 1	☐ 2	☐ 3
☐ No				

5. Why did you decide to enrol your child in the IMAM programme?	
☐ a. Recognition of the disease	☐ b. Disease diagnosed by health personnel
☐ c. Failed traditional treatment	☐ d. Referral by traditional healer
☐ e. Short distance; estimation in km _____ How many minutes on foot? _____	☐ f. Minimal or non-existing security risks
☐ g. Accessibility (no seasonal barriers)	☐ h. Availability of transport
☐ i. Availability of financial resources for transport	☐ j. Availability of company during the journey to the health facility
☐ k. Support and encouragement of the husband	☐ l. Support and encouragement of another family member
☐ m. Support and encouragement of parents with SAM children	☐ n. Support and encouragement of a community health worker
☐ o. Support and encouragement of neighbours	☐ p. Support and encouragement of community leaders
☐ q. Programme appreciated by the community	☐ r. Programme staff is friendly and patient
☐ s. Availability of RUTF	☐ t. Availability of systematic treatment
☐ u. Free service	☐ v. Efficiency of treatment (quick and visible results)
☐ w. Known child cured	☐ x. Access to PlumpyNut®

☐ y Other, please specify _____

6. How have you been overall satisfied with the service?

☐ a. Very satisfied
☐ b. Satisfied
☐ c. Neither satisfied nor unsatisfied
☐ d. Unsatisfied
☐ e. Very unsatisfied

7. How have you satisfied with reception (how you are treated when you come to the health facility)?

☐ a. Very satisfied → **Q9**
☐ b. Satisfied → **Q9**
☐ c. Neither satisfied nor unsatisfied → **Q9**
☐ d. Unsatisfied → **Q8**
☐ e. Very unsatisfied → **Q8**

8. Why are you not satisfied with reception?

_____

9. How have you been satisfied with the quality of treatment?

☐ a. Very satisfied → **Q11**
☐ b. Satisfied → **Q11**
☐ c. Neither satisfied nor unsatisfied → **Q11**
☐ d. Unsatisfied → **Q10**
☐ e. Very unsatisfied → **Q10**

10. Why are you not satisfied with the quality of treatment?

_____

11. How have you been satisfied with the information you receive about the health status of your child?

☐ a. Very satisfied
☐ b. Satisfied
☐ c. Neither satisfied nor unsatisfied
☐ d. Unsatisfied → **Q12**
☐ e. Very unsatisfied → **Q12**

12. Why are you not satisfied with the information you receive about the health status of your child?

_____

13. Has your child ever received any vaccination or vitamin A supplementation?

☐ Yes ☐ No

Thank you

Comments:

B. Questionnaire for caregivers of non-covered SAM/MAM cases

District: _____ **Catchment area:** _____

EA: _____ **HH GPS coordinates:** _____

Team: _____ **Date:** _____ **2024**

1. Do you think your child is unwell?	
☐ Yes	☐ No → **Q4**

1a. What symptoms is your child suffering from?		
☐ a. Vomiting	☐ b. Fever	☐ c. Diarrhoea
☐ d. Weight loss	☐ e. Loss of appetite	☐ f. Apathy
☐ g. Swelling	☐ h. Loss of hair	☐ i. Skin lesion
☐ j. Other, please specify: _____		

1b. How have you tried to treat this illness or how are you going to treat it?		
☐ a. Medicinal herbs/roots	☐ b. Enriched meals	☐ c. Fast
☐ d. Medicinal products (bought at the market)	☐ e. Medicinal products (bought at the pharmacy)	☐ f. Prayer
☐ g. Consultation of a traditional healer	☐ h. Consultation at the health facility	☐ i. No treatment
☐ j. Other, please specify: _____		

1c. Who made a decision about the choice of treatment?		
☐ a. Mother of a child	☐ b. Father of a child	☐ c. Mother and father together
☐ d. Grand-parents	☐ e. Community health worker	☐ f. Other, please specify: _____

2. Do you know that there is a service at the health facility dedicated to the treatment of malnutrition?	
☐ Yes → **Q3**	☐ No → **Q5**

3. Why didn't you bring your child to the health facility for the treatment?	
☐ a. Too far; distance in km _____ how many hours on foot? _____	☐ b. Insecurity
☐ c. Inaccessibility (seasonal flooding, etc.)	☐ d. Non-availability of means of transportation
☐ e. Non-availability of the company for the journey	☐ f. Non-availability of financial resources for the journey
☐ g. Husband/family refusal	☐ h. Non-availability of financial resources for the treatment
☐ i. Caregiver ill	☐ j. Family member ill

☐ k. Too busy; reason: _____	☐ l. No-one to look after other children
☐ m. Ashamed to enrol in the programme	☐ n. Lack of belief that the programme can help the child
☐ o. Fear of hospital stay (away from HH, fees)	☐ p. Preference of traditional treatment
☐ q. Previous rejection of a child; when? ___	☐ r. Rejection of a known child
☐ s. Quantity of PlumpyNut® is too little to justify the journey	☐ s. Plumpy Nut Stock out

4. Has your child been already enrolled in IMAM programme?

☐ Yes ☐ No → **Q5**

4a. Why isn't your child still in the programme?

☐ a. Defaulted	☐ a^1. When? _____	☐ a^2. Why? _____
☐ b. Discharged as cured	☐ b^1. When? _____	
☐ c. Discharged but not cured	☐ c^1. When? _____	☐c^2. Why? _____
☐ d. Unavailability of Plumpy Nut®		
☐ e. Other reason, please specify: _____		**STOP**

5. Has your child ever received any vaccination or vitamin A supplementation?

☐ Yes ☐ No → **STOP**

Thank you!

Comments:

C. Data collection summary: Exhaustive screening

District: _____ **Catchment area:** _____ **EA:** _____ **Team** _____

No.	Age (months)	Sex (m/f)	MUAC (mm)	Oedema (Y/N)	Case (SAM/MAM)	Enrolled in IMAM (in-patient/ OTP/ no)	Status upon enrolment in OTP (SAM/ MAM)	Case definition (Cin, Cout, Rin)	No.	Age (months)	Sex (m/f)	MUAC (mm)	Oedema (Y/N)	Case (SAM/MAM)	Enrolled in IMAM (in-patient/ OTP/ no)	Status upon enrolment in OTP (SAM/ MAM)	Case definition (Cin, Cout, Rin)
1									28								
2									29								
3									30								
4									31								
5									32								
6									33								
7									34								
8									35								
9									36								
10									37								
11									38								
12									39								
13									40								
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15									42								
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23									50								
24									51								
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26									53								

27									54									
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57									80									
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64									87									
65									88									
66									89									
67									90									
68									91									
69									92									
70									93									
71									94									
72									95									
73									96									
74									97									
75									98									
76									99									
77									100									

CHILDREN MUAC< 115 MM (RED)			COVERED SAM CASES (Cin)	NON-COVERED SAM CASES (Cout)
CHILDREN WITH EDEMA				

CHILDREN MUAC ≥ 115 MM ≤ 124 MM (YELLOW)		RECOVERING SAM CASE (Rin)	COVERED MAM CASES (Cin)	NON-COVERED MAM CASES (Cout)

CHILDREN MUAC ≥ 125 MM (GREEN)		RECOVERING SAM CASES (Rin)	RECOVERING MAM CASES (Rin)	WELL NOURISHED	SCREENED CHILDREN

4. SLEAC Supervision checklist

Date : _____	**District :** _____	**EA :** _____
Surveyor: _____	**Supervisor:** _____	**Final note:** _____/82

COMMUNITY ENTRY

	2	1	0
Presentation of the objective of the visit			
Presentation of the way of working			
Request for a number of residents/children 6-59 months			
Team leader verifies the delimitation of the EA with GPS and map			
Request for a guide, if necessary			

*** 2 (without errors), 1 (with errors), 0 (omitted)** /10

HOUSEHOLD ENTRY / FILLING OF CASE FINDING SUMMARY

	2	1	0
Presentation of the purpose of the visit			
Request for consent			
Team verifies the number of children 6-59 months in the household			
Team verifies the ages of all children 6-59 months in the household through official documents or events' calendar			
Team ensures that all children 6-59 months old in the household are measured and records the respective values			
Team checks all children 6-59 months for bilateral oedema and records the respective values			
Team explains to parents the results for each child measured			
Team follows the decision tree to decide whether to deploy the questionnaire for covered or uncovered SAM/ MAM cases			

*** 2 (without errors), 1 (with errors), 0 (omitted)** /16

ANTHROPOMETRIC MEASUREMENTS - MUAC

	2	1	0
Team uses MUAC tape to measure a child's arm			
Team uses correct markers (shoulders/elbows)			
Child's arm is bent to identify mid-point of the arm			
Mid-point of the-arm is calculated correctly			
Team uses pen to trace mid-point of the arm			
Child's arm is unbent to measure the circumference			
End point of the MUAC tape is slid through the window			
MUAC tape is well adjusted (not too tight, not too loose)			
Team verifies the positioning of the MUAC tape			
Measurer reads the value out loud and surveyor notes it in the case finding summary while repeating the value out loud			

*** 2 (without errors), 1 (with errors), 0 (omitted)** /20

ANTHROPOMETRIC MEASUREMENTS - OEDEMA

	2	1	0
Team uses thumbs to assess a child's oedema			
Team assesses oedema on two feet at the same time			
Team uses correct pressure			
Team uses a correct counting technique out loud			
*** 2 (without errors), 1 (with errors), 0 (omitted)**			/ 8

DEPLOYMENT OF QUESTIONNAIRES (TABLETS)

	2	1	0
Team verifies child's health card and presence of PlumpyNut®			
Team deploys a correct questionnaire			
Team asks all respective questions			
Team rephrases questions so that a caregiver can understand them, if they have difficulty in understanding/has difficulty in answering			
Team asks for explanations in case of unclear answers			
Team selects a correct answer from the options noted on the questionnaire			
Team does not judge the answers given and treats the caregiver with great respect			
Team thanks the caregiver for their time			
*** 2 (without errors), 1 (with errors), 0 (omitted)**			/16

VERIFICATION OF CASE FINDING SUMMARY

	2	1	0
Team ensures that all children 6-59 months in the village are measured			
Team uses one case finding summary per village			
Team conducts a case count at the end of the day			
Team ensures that numbers for different categories of cases match			
Team cross-checks a number of questionnaires for covered and non-covered cases on the tablets			
Team submits completed case finding summaries at the end of the day			
*** 2 (without errors), 1 (with errors), 0 (omitted)**			/12

EXHAUSTIVE CASE FINDING

The supervisor will visit 10 households selected randomly and confirm if they have been visited by the teams of enumerators.

Number of households out of 10 who confirm they have been visited by the enumerators:	

COMMENTS / OBSERVATIONS

5. SLEAC Lists of Enumeration Areas

Geocode	TotalHH	NumbofPersons	Geocode	TotalHH	NumbofPersons
0210150050	89	245	3051110080	116	431
0210150180	93	301	3051110150	101	375
0210250010	109	382	3051210050	127	592
0210250140	92	308	3051210120	73	297
0210250260	102	352	3051210200	122	515
0210250390	62	226	3051210270	111	519
0210250510	85	289	3051310080	88	360
0210250630	66	271	3051310150	90	265
0210250770	72	242	3051410080	107	470
0210350070	101	275	3051410150	82	213
0210350200	87	305	3051410230	113	351
0210350320	102	453	3051410300	89	337
0210350450	97	386	3051410380	89	306
0210350570	98	348	3051410450	99	441
0210350700	81	263	3051410530	76	320
0210350820	75	220	3051410610	92	301
0210350950	83	200	3051510080	91	368
0210450060	84	255	3051510150	92	411
0210450200	118	378	3051510220	68	296
0210450320	88	267	3051510300	76	298
0210450450	96	286	3051610060	86	381
0210450570	102	342	3051610140	83	376
0210450700	98	288	3051610210	105	463
0210450820	101	358	3051710050	72	351
0210550080	88	348	3051710120	87	290
0210550200	91	311	3051810040	129	534
0210550320	71	185	3051810110	97	409
0210550450	74	239	7070141020	84	384
0210550570	86	276	7070141050	93	427
0210650010	109	323	7070141080	102	471
0210650130	93	322	7070241030	64	297
0210650260	108	380	7070241060	81	374
0210650380	84	320	7070410010	43	169
0210750110	88	362	7070510020	68	234
0210750230	81	344	7070510050	92	381
0210750360	94	375	7070510070	111	415
0210750480	124	445	7070641010	115	512
0210850120	119	379	7070710010	78	300
0210850240	100	380	7070710040	98	387
0210850370	100	339	7070810010	113	431
0210850490	91	341	7070810040	95	387
0210950030	96	408	7070910010	126	550
0210950150	97	346	7070910040	115	436
0210950280	80	323	7070910070	106	392
0210950400	67	285	7070910100	117	411
0210950520	76	309	7071010020	101	423
0210950650	116	482	7071010090	91	349
0211050070	124	503	7071010120	117	444
0211050200	113	415	7071010150	131	565
0211050320	96	361	7071010180	105	329
0211050450	93	350	7071080050	100	321
0211050570	93	304	7071110010	110	381
0211050700	94	397	7071110040	107	411
0211150060	78	263	7071110070	124	513
0211150190	106	425	7071110100	94	381
0211150310	110	365	7071110130	123	493
0211150440	129	437	7071210020	101	376
0211250090	92	386	7071210050	103	364
0211250220	90	347	7071210070	103	361
0211250340	71	258	7071210100	62	285
0211250470	104	359	7071310010	80	300

0211250590	100	381	7071310040	100	339
0211250720	74	280	7071310070	88	326
0211350120	117	458	7071410010	93	337
0211350240	95	335	7071410040	109	413
0211350370	61	241	7071410070	95	385
0211350490	87	298	7071510030	95	344
0211450120	100	346	7071510060	100	410
0211450240	74	244	7071610060	107	490
0211450370	101	360	7071641030	96	453
0211450490	82	303	7071641070	142	508
0211550060	97	379	7071741020	95	257
0211550180	85	348	7071741050	100	455
0211550310	101	393	7071741140	115	178
0211650080	91	347	7071742100	84	269
0211650210	102	374	7071745120	100	420
0211650330	88	313	7071842370	86	317
0211650460	71	263	7071842400	90	412
0211750120	72	249	7071842430	117	392
0211750250	80	292	7071847340	85	235
0211750370	74	259	7071880150	105	271
0211850030	103	380	7071880320	54	205
0211850150	94	340	7071880470	101	349
0211850280	97	358	7071842030	68	258
0211850400	87	304	7071842060	77	336
0211850520	73	201	7071842090	76	292
0211850650	78	300	7071842120	124	480
0211950100	92	369	7071842200	104	428
0211950230	82	305	7071842230	75	268
0211950350	108	422	7071842260	73	328
0211950480	95	353	7071842290	91	423
0212050050	69	278	7071842330	91	379
0212050180	107	408	7071941030	118	601
0212050300	84	343	7071941060	133	629
0212050430	120	428	7071942080	132	584
0212150030	107	447	7071942110	109	713
0212150160	74	293	7072041010	96	420
0212150280	97	347	7072041040	58	216
0212150410	80	266	7072041070	101	460
0212150530	115	410	7072141010	97	423
0212150660	90	372	7072141040	53	237
0212250070	77	290	7072141070	120	432
0212250200	74	315	7072141100	88	302
0212250320	83	336	7072141130	106	495
0212250440	82	348	7072141160	90	353
0212350080	93	377	7072310030	66	232
0212350200	84	307	7072310050	97	427
0212350330	84	293	7072410010	98	334
0212350450	91	361	7072410040	81	370
0212450040	73	290	7072410070	128	549
0212450160	69	247	9210250120	88	344
0212450290	102	385	9210250390	84	276
0212450420	88	303	9210250700	87	308
0212450550	93	336	9210250980	93	330
0212450670	108	434	9210350240	94	310
0212550130	106	412	9210350520	117	383
0212550250	98	345	9210450140	104	399
0212550380	97	407	9210550020	130	426
0212550500	81	330	9210550300	80	240
0212550630	91	311	9210650020	204	410
0212650090	77	306	9210650320	75	189
0212650220	83	351	9210650610	102	237
0212650340	112	397	9210750180	72	190
0212650460	93	351	9210750460	122	253
0212650590	102	337	9210750740	86	376
0212750080	83	304	9210850140	89	343
0212750210	85	332	9210850420	113	323
0212750330	106	408	9210950100	82	286
0212750460	108	435	9210950380	76	259

0212750580	91	377	9210950670	77	251
0212750710	78	243	9210950941	106	405
0212750830	95	345	9210950970	87	405
0212750950	110	497	9211050010	114	372
0212750998	104	411	9211050290	92	312
0212850130	71	270	9211050570	125	504
0212850250	84	345	9211150280	67	235
0212850380	64	238	9211150560	83	322
0212850500	104	380	9211250260	92	329
0212850630	121	499	9211250530	92	299
0212850750	93	351	9211350200	106	386
0212850790	109	399	9211350490	99	320
0212850883	98	377	9211450160	65	259
0212850895	76	254	9211450440	91	316
0212850908	101	373	9211450710	112	385
0212850920	65	261	9211450990	87	333
0212850933	70	254	9211550230	65	275
0212850945	72	262	9211550510	91	308
0212850958	101	381	9211550790	76	238
0212850970	92	358	9211550889	60	222
0212850983	114	395	9211550918	78	298
0212950030	90	313	9211550946	90	314
0212950160	125	431	9211550974	114	479
0212950280	105	368	9211650070	85	325
0212950410	106	407	9211650340	111	384
1020110130	101	302	9211650620	92	368
1020142090	119	479	9211650900	75	345
1020210030	127	532	9211650928	105	401
1020310020	110	499	9211650957	97	413
1020310120	87	325	9211750250	63	125
1020410030	103	425	9211750520	81	270
1020410140	108	384	9211850080	115	422
1020410230	75	275	9211850360	70	194
1020510030	81	275	9211850660	112	349
1020510120	67	306	9211850890	90	299
1020610010	105	421	9211950070	102	382
1020741030	128	503	9211950350	89	346
1020741120	88	364	9212050120	78	282
1020810010	123	559	9212050400	124	446
1020810100	113	438	9212050680	109	479
1020810200	96	326	9212150270	110	393
1021010010	93	385	9212150550	77	281
1021142020	123	517	9212250220	81	313
1021230170	77	194	9212250500	137	519
1021242090	93	391	9212250770	84	380
1021310030	94	395	9212250959	86	316
1021310290	125	571	9212350060	76	261
1021341170	137	587	9212350340	116	449
1021341320	76	336	9212350610	82	392
1021430100	69	295	9212350638	111	462
1021560010	112	316	9212350666	69	217
1021560110	86	240	9212350693	75	305
1021610010	100	412	9212350811	112	406
1021630130	86	314	9212450160	116	445
1021642090	85	302	9212450420	79	273
1021642310	99	403	9212450700	86	298
1021710010	72	284	9212550150	73	266
1021710110	123	500	9212550430	99	327
1021810080	97	323	9212550710	131	409
1022010010	92	376	9212650150	92	296
1022010110	95	327	9212650430	69	232
1022010200	63	256	9212650700	78	277
1022110090	69	298	9212650980	86	179
1022110180	101	381	9212750260	88	316
1022210060	74	219	9212750540	96	357
1022210150	93	439	9212750820	78	276
1022210250	97	414	9212850150	78	244
1022310040	69	318	9212850420	74	279

1022310140	85	362	9212850700	91	360
2040110110	113	414	9212950180	111	423
2040310010	125	545	9213050130	89	327
2040410030	133	536	9213050420	80	259
2040510090	106	428	9213050602	96	351
2040610100	123	484	9213050720	111	420
2040710120	104	469	9213050841	95	383
2040810130	112	408	9213150060	114	372
2040810310	118	495	9213150340	81	347
2040910170	144	556	9213250040	86	256
2041010160	84	308	9213250320	122	413
2041110100	126	446	9213250600	96	333
2041210100	132	550	9213250880	84	259
2041310010	77	375	9213350120	65	226
2041310200	103	366	9213350400	64	259
2041443210	115	466	9213350660	62	266
2041580090	98	373	9213350904	84	304
2041643060	137	582	9213350932	104	377
2041680310	78	297	9213350964	61	224
2041780120	78	284	9213450030	108	395
2041842160	123	550	9213450300	98	354
2041943120	112	339	9213550010	103	360
2042030210	84	327	9213550290	98	370
2042043030	103	312	9213650030	95	436
2042043550	107	418	9213650310	117	473
2042080400	76	310	9213750240	56	197
2042143150	102	370	9213750420	68	240
2042280030	121	452	9213750511	92	299
2042343030	67	193	9213750539	103	327
2042443090	116	214	9213750567	111	403
2042542080	105	461	9213750594	78	338
2042545220	115	381	9213750730	74	296
2042647150	82	219	9213750830	82	350
2042742060	107	512	9213850170	110	409
2042942020	107	462	9213850450	97	277
2042943170	80	248	9213850720	82	323
2043042120	97	389	9213950060	90	348
2043142160	74	272	9213950340	109	374
2043145190	63	305	9214050010	67	228
2043245110	111	333	9214050092	110	446
2043380150	71	260	9214050136	109	399
2043430010	99	384	9214050165	108	359
2043443200	112	419	9214050221	83	317
2043530100	90	304	9214050305	115	511
3050110150	82	350	9214050500	109	383
3050110220	88	320	9214050760	92	369
3050110300	64	273	9214150130	78	182
3050180060	91	350	9214150400	84	301
3050210020	90	342	9214150670	64	285
3050210090	83	283	9214150905	73	290
3050210170	70	273	9214150933	61	233
3050310010	71	306	9214150960	61	272
3050310090	119	482	9214150988	82	220
3050310160	81	316	9214250250	109	361
3050310240	65	313	9214250520	94	337
3050410060	94	424	9214250800	82	308
3050410140	61	256	9214250916	109	456
3050410210	90	398	9214250944	88	371
3050510030	153	491	9214250972	89	331
3050510100	105	393	9214350010	83	285
3050610040	100	356	9214350038	93	335
3050610110	63	244	9214350066	91	320
3050710040	122	443	9214350093	83	354
3050710110	63	279	9214350121	84	307
3050710200	67	276	9214350149	84	281
3050710270	82	321	9214350177	86	309
3050810050	99	472	9214350205	79	346
3050810120	84	349	9214350232	96	375

3050910030	73	319	9214350260	91	351
3050910100	117	521	9214450240	102	397
3050960010	72	315	9214450520	70	269
3051010070	74	280	9214550060	82	293
3051010340	73	283	9214550330	86	347
3051060140	74	311	9214550620	100	343
3051060220	74	222	9214550900	127	428
3051060300	69	290	9214650200	102	400

6. Tally sheets for complementary data collection


Tally%20sheet_MUAC_Admission.docx


Tally%20sheet_MUAC_Cure.docx


Tally%20sheet_MUAC_Defaulter.docx


Tally%20sheet_LoS_Non-recovered.docx


Tally%20sheet_LoS_Cure.docx


Tally%20sheet_LoS_Cure-Transfer%20out_


Tally%20sheet_LoS_Default.docx


Tally%20sheet_MUAC_Non-recovered.docx

QUALITATIVE INTERVIEW GUIDE

COVERAGE SURVEY

IMAM Programme

Zimbabwe

May 2024

INTRODUCTION

Background information

In Zimbabwe, child undernutrition is a critical public health issue. The country faces a triple burden of malnutrition including under nutrition, over nutrition and micronutrient deficiencies. Recurrent droughts, the recent Covid19 pandemic, the economic meltdown and compromised food system are among determinants of increased malnutrition in the country. The problem of acute malnutrition has been compounded by the HIV epidemic in the country with an estimated HIV prevalence of 11.58%.

The burden of malnutrition in all its forms remains a critical issue in Zimbabwe, and hundreds of thousands of Zimbabwean children are eating too little of what they need early in life to grow and develop well, while older children, adolescents and adults are increasingly eating too much of what they do not need. Fewer than one in five Zimbabwean children meets the minimum dietary diversity translating to 750,000 children living in food poverty in Zimbabwe, not receiving the diets they need to provide sufficient nutrients for optimal growth and development. Poor diets are a major risk factor for the burden of disease in Zimbabwe. Zimbabwe has made great investments to address child nutrition from a public health standpoint and has a well-established cadre of trained nutrition personnel across the country at district, provincial and national level. Nutrition programming is well established in the health system, with 83 per cent and 88 per cent of health facilities having at least one health worker trained in infant and young child feeding counselling and the integrated management of acute malnutrition, respectively. Zimbabwe has established a multi-systems approach to prevention of all forms of malnutrition through the National Care Group approach implemented by the Ministry of Health and Child Care and the network of multi-sectoral Food and Nutrition Security Committees (FNSCs) at District and Provincial level managed by the Food and Nutrition Council which sits in the Office of the President and Cabinet. Eighty-five per cent of districts now have functioning FNSCs, scaled up from 5 per cent in 2016. These investments have resulted in Zimbabwe being on-track to meet the global nutrition targets to maintain child wasting and overweight to less than 3 per cent, however emerging threats including the climate crisis and un-regulated food systems are threatening this progress. A triple burden of malnutrition exists, with an unfinished agenda of reducing undernutrition (child stunting and wasting), high levels of micronutrient deficiencies and a prevalence of overweight that increases rapidly with age. Routine health information indicates that there is a rise in the number of new cases of diet related non-communicable diseases (NCDs) which reflect the quality of diets and consumer behaviour. Zimbabwe remains off-track to meet the remaining 4 global nutrition targets (of a 50% reduction in stunting and anaemia, 30% reduction in low birthweight and to increase exclusive breastfeeding to 70%). At 42%, rates of exclusive breastfeeding in Zimbabwe are among the lowest in the Eastern and Southern Africa region.

Stunting, or chronic malnutrition, remains a key concern in Zimbabwe, with an unfinished agenda for reduction. While Zimbabwe has made steady progress in reducing both the proportion and number of children who are stunted (Figure 1), still latest estimates show that nearly a quarter of Zimbabwean children – over half a million – are suffering from stunted growth and development, permanently altering the development trajectory for each of those children (Figure 1). Regional variations exist and Manicaland has the highest prevalence as well as numbers of stunted children, and rural areas have a higher burden of stunting compared to urban areas. Adolescent pregnancy and early marriage contribute to the inter-generational cycle of undernutrition. One in 3 girls in Zimbabwe gets married before the age of 18, and almost 1 in 10 babies are born with a low birthweight (8.7% <2.5kg), signifying nutritional deficiencies during pregnancy. Approximately 160,000 children in Zimbabwe were estimated to suffer from wasting in 2023, including an estimated 19,000 children who needed life-saving treatment for severe wasting. Due to a lack of investment for quality improvement and funding

constraints that lead to stock-outs of essential nutrition supplies, just 9,666 children with severe wasting were reached with the treatment services they need. Although the prevalence of wasting in Zimbabwe remains lower compared to other countries in the region, the effects of the climate crisis can be seen, where cyclical droughts and floods caused by weather phenomena like El Nino and La Nina, are becoming more regular and more intense, affecting household food security. Zimbabwe's last major El Nino event in 2016 caused a 25% increase in the number of children admitted for treatment of severe wasting (Ministry of Health and Child Care data). While the focus of UNICEF's programming for nutrition in Zimbabwe remains the prevention of all forms of malnutrition, good quality treatment services must be available where prevention fails, in order to prevent excess mortality and save lives.

The treatment of moderate and severe acute malnutrition is supported by national integrated management of acute malnutrition (IMAM) guidelines. In 2019, a guidance note was issued to guide the dual use of RUTF to treat children with both severe and moderate acute malnutrition during emergencies.

Assessment justification

According to the Zimbabwe Vulnerability Assessments of 2022 and 2023, child malnutrition has been steadily increasing since pre-Covid-19 with a global wasting prevalence above 5% (at 7.2%) in 2022 for the first time since 2005. At 4.1% in 2023, global wasting remained above the pre-Covid levels of 2.5% in 2018. These findings of increasing wasting illustrate a precarious nutrition situation for women, children and adolescents, however despite the increases, admissions to treatment programmes for wasting have reduced every year for the last 7 years, since the last El Nino event in Zimbabwe, which caused a 25% increase in admissions for treatment of wasting.

Using the latest available nationally approved survey data – the MICS data from 2019, and a standard incidence correction factor of 1.6, Zimbabwe estimates a burden of malnutrition of 16,677 children per year. However, as illustrated by the ZimVAC results above, the prevalence of wasting found in 2019, pre-Covid, is likely to underestimate the current prevalence of wasting. In 2023, the Ministry of Health and implementing partners have carried out over 2 million screening episodes (repeated children included), yet admissions in 2023 are the lowest recorded in the last 7 years. The country has experienced large stock-outs of ready to use therapeutic foods in 2023, with 50.1% of facilities reporting stock-outs which has likely had a negative impact on admissions. IMAM services are available through all health facilities in Zimbabwe, and 88 per cent of health facilities reported at least one health worker trained in the integrated management of acute malnutrition (National VMAHS survey, Oct 2023).

With this background, a coverage survey is needed to assess the coverage of the programme for the management of severe wasting, to identify the barriers and boosters to access to treatment and to assess the quality of programming for treatment of wasting in Zimbabwe.

▪ OBJECTIVES

General objective

The general aim of this survey is to assess the coverage of the IMAM programme in Zimbabwe, to identify the barriers and boosters to access to treatment and to assess the quality of programming for treatment of wasting in country.

Specific objectives

- Analyse routine programme monitoring data of the IMAM programme to identify areas with low and high coverage. This will include the analysis of the length of stay and

adherence to IMAM guidelines for in-patient services for treatment of wasting and the assessment of the quality of data and reporting, identifying issues that need strengthening;
- Carry out a bottleneck analysis of the IMAM programme;
- Classify the coverage of the IMAM programme in selected districts according to the SLEAC methodology, using a three-tier classification system;
- Identify and analyse the factors which are preventing and/or facilitating access to and coverage of IMAM programme, based on feedback from carers of children with wasting screened during the SLEAC survey;
- Carry out a qualitative study in areas with low and high coverage to deepen the understanding of factors which are preventing and/or facilitating access to and coverage of IMAM programme in these areas;
- To generate practical recommendations for improving access to and coverage of the IMAM programme.

METHODOLOGY

Coverage surveys aim to measure the **treatment coverage** of IMAM programs. *Treatment coverage refers to the proportion of children eligible for treatment for severe wasting / severe acute malnutrition (SAM) or moderate wasting / moderate acute malnutrition who actually receive this treatment.*

Coverage is one of the key principles of the operational model for the management of acute malnutrition. If coverage is high, this could indicate that a large proportion of children in the program is successfully treated to cure. At the same time, high coverage could be an indicator of the effectiveness of the program's community outreach. The most common methodologies used by nutrition programs to assess treatment coverage are **SQUEAC**[31] and **SLEAC**[32].

The SLEAC methodology was developed by Valid International, FANTA, BrixtonHealth, Concern Worldwide, Action Against Hunger and World Vision to classify and/or estimate the coverage of CMAM programmes and to identify barriers of access to treatment. The SLEAC methodology is the most appropriate method for estimating coverage in large geographical areas. It allows to classify the coverage in the service delivery unit as "low", "moderate" or "high ". The classification method is derived from the simplified LQAS classification technique. The advantage of this approach is that it is sufficient to use a relatively small sample (for example, n = 40) to perform an accurate and reliable classification.[33]

This coverage survey will consist of an analysis of routine programme monitoring data at the level of provinces and/or districts, which will be integrated into a bottleneck analysis, to identify high and low performing provinces and/or districts. In the second stage, a series of SLEAC surveys will be conducted across the selected high and low performing districts to identify key barriers and boosters of access and coverage from the community perspective. In the third stage, an in-depth qualitative inquiry will be conducted to further deepen the understanding of identified barriers and boosters in Stage 1 and 2 and to formulate meaningful recommendations adapted to the context.

IN-DEPTH QUALITATIVE ANALYSIS OF BARRIERS AND BOOSTERS OF ACCESS TO IMAM PROGRAMME

The qualitative data collection will be primarily focusing on the 6 sampled districts for the SLEAC but could be further reduced to 4 districts, depending on their similarities/differences

[31] Semi-Quantitative Evaluation of Access and Coverage.
[32] Simplified LQAS Evaluation of Access and Coverage.
[33] It should be noted that an n=96 sample allows coverage to be estimated at district level without the need to combine results from other adjacent districts for a combined coverage estimate.

to capture the qualitative representativeness of IMAM programmatic contexts. The qualitative data collection will follow the sampling framework as detailed in Table 3, where two catchment areas will be selected in each district. The selection criteria include the availability of health workers trained in IMAM, RUTF availability, the number of functional care groups and the number of village heath workers, in order to further deepen the understanding of barriers and boosters to access in low and high performing districts. Principally, within these 6 districts, it is estimated that about 72 semi-structured interviews and focus group discussions will be conducted.

Province	District	Health facility catchment area	Semi-structured interviews	Focus group discussions	Observations	Case studies
Bulawayo	**Bulawayo**	PMR Heath Centre	1 x Health personnel 2 x VHW 1 x Community leader	1 x SAM/MAM caregiver		1 x SAM/MAM caregiver
		Maqhawe Heath Centre	1 x Health personnel 2 x VHW 1 x Community leader	1 x SAM/MAM caregiver		1 x SAM/MAM caregiver
Manicaland	**Chimanimani**	Shinja Health Centre	1 x Health personnel 2 x VHW 1 x Community leader	1 x SAM/MAM caregiver		1 x SAM/MAM caregiver
		Bumba Health Centre	1 x Health personnel 2 x VHW 1 x Community leader	1 x SAM/MAM caregiver		1 x SAM/MAM caregiver
Mashonaland East	**Mudzi**	Gozi Health Centre	1 x Health personnel 2 x VHW 1 x Community leader	1 x SAM/MAM caregiver		1 x SAM/MAM caregiver
		Dendera Heath centre	1 x Health personnel 2 x VHW 1 x Community leader	1 x SAM/MAM caregiver		1 x SAM/MAM caregiver
Harare	**Harare**	Budiriro Satelite health centre	1 x Health personnel 2 x VHW 1 x Community leader	1 x SAM/MAM caregiver		1 x SAM/MAM caregiver
		Avondale satelite clinic	1 x Health personnel 2 x VHW 1 x Community leader	1 x SAM/MAM caregiver		1 x SAM/MAM caregiver
Midlands	**Shurugwi**	Tana Health Centre	1 x Health personnel 2 x VHW 1 x Community leader	1 x SAM/MAM caregiver		1 x SAM/MAM caregiver
		Zvarota Health Centre	1 x Health personnel 2 x VHW	1 x SAM/MAM caregiver		1 x SAM/MAM caregiver

			1 x Community leader			
Mashonaland Centre	**Mazowe**	Iron duke clinic	1 x Health personnel 2 x VHW 1 x Community leader	1 x SAM/MAM caregiver		1 x SAM/MAM caregiver
		Christon bank clinic	1 x Health personnel 2 x VHW 1 x Community leader	1 x SAM/MAM caregiver		1 x SAM/MAM caregiver

TABLE 21: Sampling frame for the in-depth qualitative study in Zimbabwe, May 2024

At village level, the following categories of participants will be selected to take part in semi-structured interviews or focus group discussions:

d. Community leaders (village chiefs, religious leaders, traditional healers or birth attendants, other key community figures);
e. Caregivers of children under 5 (parents, grandparents, caregroup members or other carers);
f. Community health workers;

In addition, at the health facility level, semi-directive interviews with health staff, in particular doctors and nurses providing care for acute malnutrition, will be organised. As far as possible, an observation of the provided care in the health facility will be included in the data collection in at least 2 out of 3 health facilities in the study area. Interviews and observations at health facility level will include both outpatient and in-patient settings. The views of other key informants, such as staff from non-governmental organisations that support the IMAM programme directly or indirectly (implementing nutrition-sensitive activities that target households with malnourished children) and caregivers of SAM inpatient children will also be sought.

Additional interviews may be conducted each day based on the emerging information in order to collect more in-depth data on themes of interest and/or importance for the survey. The geographical location and key informants will be selected purposively.

▪ SURVEY ORGANISATION

Survey zone

MAP 1: Provinces in Zimbabwe

Based on analyses from the first stage of the assessment, the six districts selected for the SLEAC surveys are as follows:

Performance	Province	District
High performance	Bulawayo	Bulawayo
	Manicaland	Chimanimani
	Mashonaland East	Mudzi
Low performance	Harare	Harare
	Midlands	Shurugwi
	Mashonaland Centre	Mazowe

Survey duration

The survey will be conducted over a period of five months with the scheduled start of the data collection in June 2024. The triangulated results of the survey will be available in August 2024, unless there are considerable delays during the delivery, outside of the sphere of influence of a consultant. The primary data collection will be supported directly and will last approximately one month, including both qualitative and quantitative data. The final report drafting phase will be conducted remotely.

Survey team

The qualitative data collection team will consist of two teams of 4 research assistants, each one supervised by the lead researcher from AAH UK, and a co-lead researcher. A community mobiliser (community health worker) may be recruited locally to help mobilise participants.

The SLEAC survey and qualitative data collection team members will be recruited in advance based on their previous relevant experience in nutrition assessments.

Ethical considerations

The following provisions will be respected during the course of the coverage survey:

g. All relevant national, provincial and district authorities will be duly informed about the survey and will have expressed their agreement with the survey implementation via support letters addressed and delivered to UNICEF Zimbabwe;
h. The health facility personnel, community health workers as well as community leaders will be informed of the selection of their catchment area/community for the purpose of an assessment qualitative study at least one day in advance.
i. The participants will be selected equitably and their oral informed consent will be sought to ensure that they participate in the assessment voluntarily;
j. The anonymity of participants will be ensured during all stages of the assessment (data collection, data analysis and data storage). Their names will not be collected nor shared;
k. The assessment team will follow recommendations of the Global Nutrition Cluster's *Interim guidance on restarting population level surveys and household data collection in humanitarian situations during COVID-19 pandemic, as necessary;*
l. All children aged 6 – 59 months who will be identified as suffering from severe acute malnutrition and/or other medical conditions and who will not be enrolled in the IMAM program, will be referred to the nearest health facility for appropriate treatment;
m. Caregivers and/or community members in need of information on acute malnutrition will be referred to competent professionals in their area.

Consent process

In order to administer any questions to study participants, the following steps will be taken to inform, obtain, and document consent.

A. *Enumerators' understanding of the importance of consent*: It is natural for the enumerators to feel fatigued after a long day of surveying and to be tempted to go through the consent form rapidly. The Coverage Survey Lead will ensure that:
   - Enumerators are aware of the importance of the consent process;
   - Enumerators are thoroughly trained on the consent process, and practise delivering the consent statement during training;
   - The time required to obtain informed consent is calculated into the time required to administer the questionnaire;
   - The Coverage Survey Lead checks that the consent process is being conducted, and collects and retains all consent forms.

B. *Ensuring the consent of villages participating in the study*: The approval of local administration and village leaders will be requested before entering any villages. Leaders will be informed of the selection of their community for the purpose of a qualitative study at least two days in advance. During the initial meeting they will receive a detailed planning of research activities in their villages in order to facilitate the participant selection process and ensure the participants' availability at stated times. While the village leaders may approve of the study in the village, leaders will also be fully aware that any participant has the freedom to decline participation at any time in the study.

C. *Ensuring the consent of FGD and KII participants in the study*: Before any key informant interview (KII) or focus group discussion (FGD) begins, the enumerator will formally request the consent of the potential interviewee to participate. The enumerator will explain clearly, using language and expressions that the potential participant can easily understand:
   - Which organisation the Coverage Survey Lead and other data collection team members represent and how they can be contacted;
   - What are the objectives of the study;
   - What is expected from the participant (e.g. answering questions);
   - What is the approximate duration of their participation;
   - How the information collected will be used;

- How their identity will be protected (e.g. ensuring the response confidentiality from the moment the study begins.);
- That the participation in the study is voluntary and the participant can choose not to answer any question that they don't want to answer and/or they can choose to cease their participation at any time, no justification required, and without consequence to themselves or their families;
- That choosing not to participate does not affect their eligibility to receive any type of programme benefits in the future (where applicable);
- The potential risks of the participation include minor risks of potential discomfort from sensitive questions or inconvenience to their time;

D. *Procedure for maintaining confidentiality*: The study will maintain rigorous levels of confidentiality during and after the study as follows:
   - <u>During the interview process</u>:
     - Confidentiality starts from the moment the study begins; the enumerator performing the quantitative data collection will request that the survey be conducted in a quiet and private place in the household;
     - When seeking informed consent of participants, the enumerator will notify participants of any intention to use direct quotes from the focus group discussions in the Coverage Survey report (even if anonymous quotations are used). Participants must be given the opportunity to consent or deny their consent to be quoted directly;
     - For key informant interview and focus group discussions, no names will be recorded.

   - <u>During the data synthesis and post reporting</u>: The information on the raw questionnaires as well as the notes taken during the community-level qualitative inquiry will remain strictly confidential and accessible only by the team members.
     - For the household survey, no personal identifiers will be collected and thus they will not be included in the electronic database. Once the quantitative data are entered into an electronic database, ID codes will replace any and all identifying information that could be used to trace a set of data back to an individual, family, or household. Only when all the data have been de-identified with ID codes will the database be shared with external partners.
     - Notes taken during the qualitative interviews will not use names, but the data will nonetheless remain confidential.

QUALITATIVE DATA COLLECTION TOOLS (INTERVIEW GUIDES)

Coverage Survey in the districts of Bulawayo, *Harare*, *Chimanimani*, *Shurugwi*, *Mudzi*, *Mazowe* **from the** *Bulawayo*, *Harare*, *Manicaland*, *Midlands*, *Mashonaland East*, *Mashonaland Centre* **Provinces, Zimbabwe** is conducted the Ministry of Health with a technical from UNICEF and Action Against Hunger UK. The main objective of the survey is to identify contextual barriers of access and coverage to IMAM program in order to help strengthen its effectiveness.

Name of principal researcher: Patrizia Pajak

INVITATION: We would like you to participate in an assessment conducted by the Ministry of Health whose activities include health and nutrition, hygiene and basic education.

ASSESSMENT OBJECTIVES: The objective of this survey is to evaluate the coverage of the IMAM programme. We are hoping that this survey will help us to identify positive and negative factors influencing access to IMAM programme in your community so that together and with the involvement of local health authorities we can improve program's services in the future. The assessment will take place from 27th June to 8th July 2024 in a number of sampled communities in Bulawayo, *Harare*, *Chimanimani*, *Shurugwi*, *Mudzi*, *Mazowe* Districts.

PROCEDURE: We would like to spend 1 day in your community. The assessment concerns primarily parents of children under 5 years of age but other key informants may be solicited to contribute. Any person desiring to share his opinion outside of scheduled household visits, structured interviews and focus group discussions can approach the assessment team to do so. Focus groups discussions and semi-structured interviews will be organised around themes linked with access and coverage of Integrated Management of Acute Malnutrition (IMAM) programme. Do you agree to let us conduct this study in your community? Do you have any questions? If so, we will need you to appoint a community mobiliser. It needs to be someone that is known and respected by all members of your community. The role of this person will be to guide us through the community and to mobilise participants for semi-structured interviews and focus group discussions. Please note that the participation of a community mobiliser will not be remunerated and needs to be fully voluntary.

Please note that there is no good or bad response to our questions, no good or bad opinion, and no good or bad way of doing things. We are sincerely interested in your opinions and perceptions. If you agree to participate, we will ask for about one hour of your time.

CONFIDENTIALITY: We will not ask for your name and will not share the content of our discussion with other people in your community. Your name will not appear in our study and no one will be able to identify what you shared with us.

RISKS: Unfortunately, apart from our sincere appreciation, we cannot promise you anything in exchange for your participation in this study. The participation in this study does not guarantee your selection in future Ministry of Health or UNICEF activities nor should it have a negative effect on your involvement in ongoing activities.

INFORMED CONSENT: The participation in this study is your choice. You are free to stop the interview or leave the focus group discussion at any time. Your participation is fully voluntary. If you do not wish to answer a question, you may decline to do so and we will move onto a next question. If you have any questions about us or the work we do, you can ask us any time.

INTERVIEW GUIDE A: MOH REPRESENTATIVES AND/OR NGO STAFF INVOLVED IN IMAM PROGRAM AT DISTRICT LEVEL

1. **Professional profile**: What is your role? How long have you been in your role? How many people work under your responsibility?
2. **IMAM experience**:
   How many years of experience do you have with IMAM? What evolution (improvement/deterioration) have you observed during this time? (PROBE: country protocol, staff availability, training, supervision, quality of care, supply, data management, community approach - screening, NGO support).
3. **IMAM implementation**: What do you think of the program at the moment? What works well/less well? What are the biggest challenges you are facing right now? How has the programme been impacted by the extended admission criteria/RUTF stockouts? What improvements are needed to make the program more functional? (PROBE: country protocol, staff availability, training, supervision, quality of care, supply, data management, community approach, MoH/NGO collaboration, internal transfers)
4. **IMAM Data Management**: What are the biggest challenges you are facing right now in relation to data management? What improvements are needed to make data management more functional?
   - *Data collection*: by whom? how often? who controls the data quality at this stage? what type of data is more difficult to collect? what type of data seems useful but is not currently collected? what errors/inconsistencies do you regularly observe when collecting data? what improvements would you suggest to avoid this type of difficulty in the future?
   - *Data compilation*: by whom? how often? who controls the data quality at this stage (e.g. consistency of individual files vs. registers vs. IMAM database)? what type of data is more difficult to compile? what type of data tends to be missing/not accurate (probe: relapses in 2023, meaning of zeros/NAs in programme data)? what errors/inconsistencies do you regularly observe when compiling data? what improvements would you suggest to avoid this type of difficulty in the future?
   - *Data analysis*: by whom? how often? who controls the data quality at this stage? what analyses are regularly carried out? what type of data is more difficult to analyse? what type of data tends to miss/not be accurate which prevents analyses? What errors/inconsistencies do you regularly observe when analysing data? what improvements would you suggest to avoid this type of difficulty in the future?
   - *Data sharing*: by whom? with whom? how often? what data/analysis is regularly requested/shared? how often? what data/analysis is routinely used for programmatic decision-making? what type of bias could these data create? do you complement data collection/analysis in case it is not available?
5. **Collaboration**: How do you collaborate with other actors involved in the program? What is working well/less well? What improvements would you suggest to make collaboration more functional?
6. **Community barriers**:
   - What type of difficulties do communities/caregivers of SAM children face in terms of access to the program? (PROBE: geographical, temporal, financial, socio-cultural and/or quality of care barriers) What do they appreciate about the program?
   - What challenges do you face in connection with communities/caregivers of SAM children' utilisation of IMAM program? Have you noticed any adverse behaviour, e.g. sharing or sale of PlumpyNut®? How have you tried to overcome these difficulties? What improvements are needed to improve the situation further?
   - **Default**: How common is it for a child to be enrolled in the program and abandon the treatment some time after? Why do you think this happens? How should this be addressed to encourage caregivers to complete the treatment?

- **Relapse**: How common is it for a child to be cured and relapse sometime after? Why do you think this happens? What additional support should households be offered to help children heal and maintain their health?
- **Non-recovery:** How common is it for a child to non-recover? Why do you think this happens? What additional support should caregivers be offered to help children heal and maintain their health?

INTERVIEW GUIDE B: HEALTH FACILITY PERSONNEL INVOLVED IN IMAM PROGRAM AT CATCHMENT AREA LEVEL

1. **Professional profile**: What is your role? How long have you been in your role?
2. **IMAM training**: Have you benefited from the training on IMAM? When/How often? How satisfied were you with the IMAM training?
3. **IMAM experience**:
   - How many years of experience do you have with IMAM? Do you benefit from supervision/monitoring of your activities? By whom/how often? How satisfied are you with the IMAM supervision?
   - What evolution (improvement/deterioration) have you observed during this time? (PROBE: staff availability, training, supervision, quality of care, supply, data management, community approach, NGO support)
4. **IMAM implementation**:
   - What do you think of the program at the moment? What is working well/less well? What are the biggest challenges you are facing right now? What improvements are needed to make the program more functional? (PROBE: community perception, quality of care - systematic screening, reception/information sharing, circuit, admission/discharge criteria, internal transfer, supply, community approach, MoH/NGO collaboration.
   - How has the programme been impacted by the extended admission criteria/RUTF stockouts? What challenges are you experiencing with uptake/returning to full capacity? What strategies have you developed to make it easier? How has the community reacted to the stock-out and how has it influenced their interaction with the programme now?
   - What happens to children <6m when they are found malnourished? What admission trends have you noticed among young children (<6m) in the past year? What challenges are you experiencing in regards to management of children <6 months? What could be improved?
   - **For Harare/Bulawayo districts**: What are specificities of working in the urban context? What consequences do they have on service delivery? What adaptations have you been able to make to the programme to reflect those specificities? What further adaptations do you think are necessary?
   - How many care groups are present? What is their effect on the IMAM programme implementation? What are the main challenges? How can they be improved?

     Screening at health facility
   - Who is responsible for screening? How is it organised? How often? How is it recorded and reported? What are the main challenges of screening? What improvements are needed to make the program more functional?
5. **IMAM Data Management**: What are the biggest challenges you are facing right now in relation to data management? What improvements are needed to make data management more functional?
   - *Data collection*: by whom (individual forms/registers/IMAM database)? how often? who controls the quality at this stage? what type of data is more difficult to collect? what errors/inconsistencies do you regularly observe when collecting data? what improvements would you suggest to avoid this type of difficulty in the future?

- *Data compilation*: by whom? how often? who controls the quality at this stage (e.g. consistency of individual files vs. registers vs. IMAM databases)? what type of data is more difficult to compile? what type of data tends to be missing/not accurate (probe: relapses in 2023, meaning of zeros/NAs in programme data)? How does the reporting system and follow-up between OTP and SC work? what errors/inconsistencies do you regularly observe when compiling data? what improvements would you suggest to avoid this type of difficulty in the future?
- *Data analysis*: by whom? how often? who controls the quality at this stage? what analyses are regularly carried out at catchment area level? what type of data is more difficult to analyse? what type of data tends to be missing/inaccurate which prevents analyses? What errors/inconsistencies do you regularly observe when analysing data? what improvements would you suggest to avoid this type of difficulty in the future?
- *Data sharing*: with whom? how often? what data/analysis is regularly requested/shared? how often? what data/analysis is routinely used for programmatic decision-making? what type of bias could these data create? do you complement data collection/analysis in case it is not available?

6. **Collaboration**: How do you collaborate with other actors involved in the program? What is working well/less well? What difficulties do you encounter at your level in relation to this collaboration? What improvements would you suggest to make collaboration more functional?
7. **Community barriers**:
   - How does the community perceive IMAM program? What type of difficulties do communities/caregivers of SAM children face in terms of access to the program? (PROBE: geographical, temporal, financial, socio-cultural and/or quality of care barriers) What do they appreciate about the program?
   - What challenges do you face in connection with communities/caregivers of SAM children' utilisation of IMAM program? Have you noticed any adverse behaviour, e.g. sharing or sale of PlumpyNut®? How have you tried to overcome these difficulties? What improvements are needed to improve the situation further?
   - What proportion of children in need of SAM treatment do you think is enrolled in IMAM program? Why aren't others enrolled?
   - **Default**: How common is it for a child to be enrolled in the program and abandon the treatment sometime after? Why do you think this happens? How should this be addressed to encourage caregivers to complete the treatment?
   - **Relapse**: How common is it for a child to be cured and relapse sometime after? Why do you think this happens? What additional support should households be offered to help children heal and maintain their health?
   - **Non-recovery:** How common is it for a child to non-recover? Why do you think this happens? What similarities have you noticed between children that non-recover? What trends have you noticed among children that do not recover in the past year?

INTERVIEW GUIDE C: HEALTH FACILITY PERSONNEL INVOLVED IN IMAM PROGRAM CATCHMENT AREA LEVEL (IN-PATIENT)

1. **Professional profile**: What is your role? How long have you been in your role?
2. **IMAM training**: Have you benefited from the training on IMAM? When/How often? How satisfied were you with the IMAM training?
3. **IMAM experience**:
   - How many years of experience do you have with IMAM? Do you benefit from supervision/monitoring of your activities? By whom/how often? How satisfied are you with the IMAM supervision?

- What evolution (improvement/deterioration) have you observed during this time? (PROBE: staff availability, training, supervision, quality of care, supply, data management, community approach, NGO support)

4. **IMAM implementation**: What do you think of the program at the moment? What is working well/less well? What are the biggest challenges you are facing right now? What improvements are needed to make the program more functional? (PROBE: community perception, quality of care - systematic screening, reception/information sharing, circuit, admission/discharge criteria, internal transfer, supply, community approach, MoH/NGO collaboration.
   - How has the programme been impacted by the extended admission criteria/RUTF stockouts? What challenges are you experiencing with uptake/returning to full capacity? What strategies have you developed to make it easier? How has the community reacted to the stock-out and how has it influenced their interaction with the programme now?
   - What happens to children <6m when they are found malnourished? What admission trends have you noticed among young children (<6m) in the past year? What challenges are you experiencing in regards to management of children <6 months? What could be improved?
   - **For Harare/Bulawayo districts**: What are specificities of working in the urban context? What consequences do they have on service delivery? What adaptations have you been able to make to the programme to reflect those specificities? What further adaptations do you think are necessary?

     Screening at health facility
   - Who is responsible for screening? How is it organised? How often? How is it recorded and reported? What are the main challenges of screening? What improvements are needed to make the program more functional?
5. **IMAM Data Management**:
   - What are the biggest challenges you are facing right now in relation to data management? What improvements are needed to make data management more functional?
   - *Data collection*: by whom (individual forms/registers/IMAM database)? how often? who controls the quality at this stage? what type of data is more difficult to collect? what errors/inconsistencies do you regularly observe when collecting data? what improvements would you suggest to avoid this type of difficulty in the future?
   - *Data compilation*: by whom? how often? who controls the quality at this stage (e.g. consistency of individual files vs. registers vs. IMAM databases)? what type of data is more difficult to compile? what type of data tends to be missing/not accurate (probe: relapses in 2023, meaning of zeros/NAs in programme data)? How does the reporting system and follow-up between SC and OTP work? what errors/inconsistencies do you regularly observe when compiling data? what improvements would you suggest to avoid this type of difficulty in the future?
   - *Data analysis*: by whom? how often? who controls the quality at this stage? what analyses are regularly carried out at catchment area level? what type of data is more difficult to analyse? what type of data tends to be missing/inaccurate which prevents analyses? What errors/inconsistencies do you regularly observe when analysing data? what improvements would you suggest to avoid this type of difficulty in the future?
   - *Data sharing*: with whom? how often? what data/analysis is regularly requested/shared? how often? what data/analysis is routinely used for programmatic decision-making? what type of bias could these data create? do you complement data collection/analysis in case it is not available?
6. **Collaboration**: How do you collaborate with other actors involved in the program? What is working well/less well? What difficulties do you encounter at your level in relation to

this collaboration? What improvements would you suggest to make collaboration more functional?

7. **Community barriers:**
   - How does the community perceive IMAM program? What type of difficulties do communities/caregivers of SAM children face in terms of access to the program? (PROBE: geographical, temporal, financial, socio-cultural and/or quality of care barriers) What do they appreciate about the program?
   - What challenges do you face in connection with communities/caregivers of SAM children' utilisation of IMAM program? Have you noticed any adverse behaviour, e.g. sharing or sale of PlumpyNut®? How have you tried to overcome these difficulties? What improvements are needed to improve the situation further?
   - What proportion of children in need of SAM treatment do you think is enrolled in IMAM program? Why aren't others enrolled?

INTERVIEW GUIDE D: COMMUNITY HEALTH WORKERS

1. **Professional profile**: What is your role? How long have you been in your role? What are your responsibilities within IMAM program (PROBE: screening, home follow-up visits, community awareness)
2. **IMAM training**: Have you benefited from the training on IMAM? When/How often? How satisfied were you with the IMAM training?
   IMAM experience:
   How many years of experience do you have with IMAM? Do you benefit from supervision/monitoring of your activities? By whom/how often? How satisfied are you with the IMAM supervision?
3. **IMAM implementation**:
   What do you think of the program at the moment? What is working well/less well? What are the biggest challenges you are facing right now? What improvements are needed to make your job easier? (PROBE: screening and community awareness - frequency, tools, targeting, home visits - follow-up of defaulters, registration/discharge criteria, internal transfer, supply)
   How has the programme been impacted by the extended admission criteria/RUTF stockouts?
   What challenges are you experiencing with uptake/returning to full capacity? What strategies have you developed to make it easier? How has the community reacted to the stock-out and how has it influenced their interaction with the programme now?
   Screening by community health workers:
   - How are you involved in the screening? How is it organised? How often do you conduct it? How do you record the data? How is it transferred to a health facility? What happens to children that are screened as SAM/MAM? How are you involved in their follow-up when they get admitted to a program? How are you involved in their follow-up when they get admitted to a program?
   - What are key challenges with the screening activities in the communities? What works well and not so well? How do you think the community screening complements the screening at the health facility level? What advantages/disadvantages have you observed in the complementarity of screenings? How does the community feel about the screening activities?
4. **IMAM data management**:
   - *Data collection*: what type of data are you asked to collect? by whom? how often? Who controls the quality of this data? what type of data is more difficult to collect? what improvements would you suggest to avoid this type of difficulty in the future?
5. **Collaboration**: How do you collaborate with health facility staff involved in IMAM? What is working well/less well? What difficulties do you encounter at your level in the face of

this collaboration? What improvements would you suggest to make collaboration more functional?

6. **Community barriers:**
   - How does the community perceive IMAM program? What type of difficulties do communities/caregivers of SAM children face in terms of access to the program? (PROBE: geographical, temporal, financial, socio-cultural and/or quality of care barriers) What do they appreciate about the program?
   - What challenges do you face in connection with communities/caregivers of SAM children' utilisation of IMAM program? Have you noticed any adverse behaviour, e.g. sharing or sale of PlumpyNut®? How have you tried to overcome these difficulties? What improvements are needed to improve the situation further?
   - What proportion of children in need of SAM treatment do you think is enrolled in IMAM program? Why aren't others enrolled? How common is it for a child to be rejected at admission? On what grounds is child rejected?
   - **Default**: How common is it for a child to be enrolled in the program and abandon the treatment sometime after? Why do you think this happens? How should this be addressed to encourage caregivers to complete the treatment?
   - **Relapse**: How common is it for a child to be cured and relapse sometime after? Why do you think this happens? What additional support should households be offered to help children heal and maintain their health?
   - **Non-recovery:** How common is it for a child to non-recover? Why do you think this happens? What similarities have you noticed between children that non-recover? What trends have you noticed among children that do not recover in the past year?

INTERVIEW GUIDE E: HEALTH FACILITY PERSONNEL + COMMUNITY HEALTH WORKERS RE: COMMUNITY PERCEPTION OF MALNUTRITION AND IMAM PROGRAM

1. **Community perception of malnutrition**: What does the community think about marasmus/kwashiorkor? How similar or different are they, according to them, from other childhood illnesses? What words do they use to describe children suffering from marasmus or kwashiorkor? Are some words more sensitive/stigmatising than others? Why? How does the community treat marasmus and/or kwashiorkor?
2. **Seasonal/historical variations**: Which type of malnutrition (marasmus/kwashiorkor) is more common? In which season/month do you see more children being like this? (Cf. *Seasonal calendar*) Have you observed an increase/decrease in cases in certain years? (Cf. *Historical calendar*) How will you explain these variations?
3. **IMAM program awareness**: How familiar is the community with IMAM program? Who ensures the community awareness of the program? How? How often? How are these initiatives planned/monitored/reported?
4. **Growth monitoring**: Who ensures the growth monitoring of children 6-59 months? How? How often? How are these initiatives planned/monitored/reported? How do caregivers react if their child is referred to IMAM program? Who in the household makes a decision about child's effective enrolment in the program? What are common reasons for refusal of enrolment?
5. **Community perception of IMAM program**:
   - What does the community think about IMAM program and its way of working? What type of feedback do you often receive from them about IMAM implementation? What barriers of access to IMAM program does the community experience most often? Why? What do they appreciate about IMAM program? Why?
   - What challenges do you face in connection with communities/caregivers of SAM children' utilisation of IMAM program? Have you noticed any adverse behaviour, e.g. sharing or sale of PlumpyNut®? How have you tried to overcome these difficulties? What improvements are needed to improve the situation further?

- What proportion of children in need of SAM treatment do you think is enrolled in IMAM program? Why aren't others enrolled?
- **Default**: How common is it for a child to be enrolled in the program and abandon the treatment sometime after? Why do you think this happens? How should this be addressed to encourage caregivers to complete the treatment?
- **Relapse**: How common is it for a child to be cured and relapse sometime after? Why do you think this happens? What additional support should households be offered to help children heal and maintain their health?

INTERVIEW GUIDE F: COMMUNITY LEADERS

1. **IMAM awareness**: Have you been invited to awareness raising sessions about IMAM program? Who ensures the community awareness of the program? How? How often? How are these initiatives planned/monitored/reported?
2. **IMAM implementation**:
   - What is your experience with IMAM program/How are you included in the program implementation? What type of children are enrolled in the program? How are they identified?
   - How do you collaborate with health facility staff and/or community health workers? What is working well/less well? What difficulties do you encounter at your level in relation to this collaboration? What improvements would you suggest to make collaboration more functional?
3. **Community perception of IMAM program**: What does the community think about IMAM program and its way of working? What type of feedback do you often receive from them about IMAM implementation? What barriers of access to IMAM program does the community experience most often? Why? What changes would you suggest to improve children's access to the program? What do they appreciate about IMAM program? Why?
4. **IMAM coverage**: What proportion of children in need of SAM treatment do you think is enrolled in IMAM program? Why aren't others enrolled? How common is it for a child to be rejected at admission? On what grounds is child rejected?
5. **Default**: How common is it for a child to be enrolled in the program and abandon the treatment some time after? Why do you think this happens? How should this be addressed to encourage caregivers to complete the treatment?
6. **Relapse**: How common is it for a child in this community to be cured and relapse some time after? Why do you think this happens? What additional support should households be offered to help children heal and maintain their health?

INTERVIEW GUIDE G: CAREGIVERS OF SAM CHILDREN ENROLLED IN IMAM PROGRAM

1. **IMAM awareness**: How did you hear about the program? What did you hear? How often do you hear about the program? Who ensures the growth monitoring of children 6-59 months? How? How often?
2. **IMAM experience**:
   - Why did you decide to enrol your child in the program? What do you think of the program following your experience? What major strengths/weaknesses did you observe? What improvements would you suggest to make the program more functional?
   - What is the normal waiting time before being attended to? What do you while you wait? What do you think of the available facilities (water points, toilets, seating area, etc.)
   - How much time do you spend with the nurse during the consultation? What do you think of their reception? What do you think of the information you receive regarding your child's health?
   - How many sachets of PlumpyNut® do you receive? Has the health facility staff explain how to use it? What do you think of its preparation? Does the child like to consume

PPN? Have you observed any symptoms after consumption (e.g. diarrhoea)? Do you think you will continue the treatment until the child is cured? Why/Why not?
    - Will you recommend this service to other members of your community? Why/Why not? Do you know other children in your community in need of treatment? Why are they not in the program? Do you know any children who have been rejected? Why? Do you know any children who have dropped out of treatment? Why?
3. **CHW support**: What type of support have you received from CHW during your experience with the IMAM program? What do you think of that support? How relevant and timely has this support been? What improvements would you suggest to make this support even more beneficial?
4. **Other support**: Do you receive other support (food aid, cash transfers)? Which organization provides you with this support? How are you satisfied with this support?

INTERVIEW GUIDE H: CAREGIVERS OF SAM CHILDREN NOT ENROLLED IN IMAM PROGRAM (DEFAULTER/NON-RESPONDER/CHILD NOT ADMITTED INTO PROGRAM – REJECTION)

5. **IMAM awareness**: How did you hear about the program? What did you hear? How often do you hear about the program? Who ensures the growth monitoring of children 6-59 months? How? How often?
6. **IMAM experience**:
    - Why did you decide to enrol your child in the program? Can you tell us about your experience during admission? Why was your child rejected/why did you abandon the treatment/why did not your child cure?
    - Do you know of any other children in the community who have been rejected/dropped out of the program/did not cure? Do you know why it happened?
    - What do you think of the program following your experience? What major strengths/weaknesses did you observe? What improvements would you suggest to make the program more functional?
    - What is the normal waiting time before being attended to? What do you while you wait? What do you think of the available facilities (water points, toilets, seating area, etc.)
    - How much time do you spend with the nurse during the consultation? What do you think of their reception? What do you think of the information you receive regarding your child's health?
    - [*If relevant*] How many sachets of PlumpyNut® did your child receive? Did the health facility staff explain how to use it? What did you think of its preparation? Did the child like to consume PPN? Did you observe any symptoms after consumption (e.g. diarrhoea)?
    - Will you recommend this service to other members of your community? Why/Why not? Do you know other children in your community in need of treatment? Why are they not in the program?
7. **CHW support**: What type of support did you receive from CHW during your experience with the IMAM program? What do you think of that support? How relevant and timely was this support? What improvements would you suggest to make this support even more beneficial?
8. **Other support**: Did you receive other support (food aid, cash transfers)? Which organization provided you with this support? How were you satisfied with this support?

INTERVIEW GUIDE I: CAREGIVERS OF CHILDREN <5 YEARS OF AGE RE: MALNUTRITION

1. **Awareness of malnutrition**:
    - (*WARNING TO PARTICIPANTS*: *Some images may be disturbing. You may choose not to view them, if you think they might bring you distress*). What do you think of the children

in these photos? (Cf. *Photos of malnourished children (marasmus/kwashiorkor*) What disease do they suffer from? What words do you use to describe such children in your community? Are some words more sensitive/stigmatising than others? Why? What are the reasons why a child would become like this?
    - In which season/month do you see more children being like this? (Cf. *Seasonal calendar*) Have you observed an increase/decrease in cases in certain years? (Cf. *Historical calendar*) How will you explain these variations?
    - What do you think of these diseases? How are they similar or different from other childhood illnesses? Which type is more common in your community? How do you treat these diseases in your community?
2. **IMAM program awareness**: Have you been invited to awareness raising sessions about program, which treats children like these? What have you heard about the program? How often do you hear about it? How are children enrolled in the program?
3. **Community perception of IMAM program**: What does the community think about IMAM program and its way of working? What type of feedback do you often receive from them about IMAM implementation? What barriers of access to IMAM program does the community experience most often? Why?
4. **Rejection/Default**: Do you know any children in your community in need of treatment? Why are they not in the program? Do you know any children who have been rejected? Why? Do you know any children who have dropped out of treatment? Why
5. **Relapse**: How common is it for a child in this community to be cured and relapse some time after? Why do you think this happens? What additional support should households be offered to help children heal and maintain their health?

8. Quality assurance monitoring

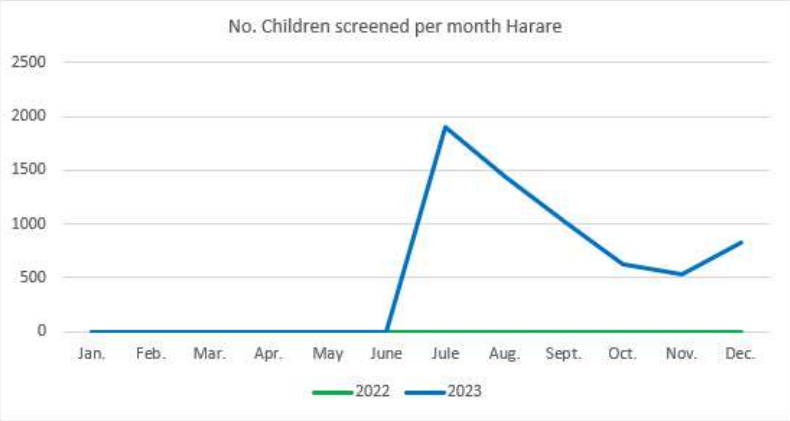
Quality assurance	Criteria	Final survey achievement
Training of trainers		
Knowledge acquired during the training matches expectations	Post results ≥ 80%	64% participants scored ≥ 80%
Trainers are able to conduct and analyse a standardisation test	MUAC TEM<2.7 Bias<2.0	N/A
Training of survey teams		
Knowledge acquired during the training matches expectations	Post results ≥ 80%	53% participants scored ≥ 80%
Anthropometric measurements are standardized	MUAC TEM<2.7 Bias<2.0	3 out of 6 districts repeated a second round of standardisation 70% participants met criteria
Surveyors understand and master data collection procedures and tools	Supervision score during pilot test ≥ 75%	Average supervision score: 95%
Data collection - SLEAC		
EA boundaries are respected	GPS coordinates for covered and non-covered cases are matching GPS coordinates for the limits of EAs - Mismatch <20%	N/A – district maps showing location of EAs sampled not available
Case finding is exhaustive	No. of screened children per EA is matching an estimate of eligible children >90% Random checks of 10 HH during – HH not visited <20%	<90% in all districts: - Sub-total urban: 62.62% - Sub-total rural: 71.37% 94% of random checks satisfactory
Data collected are accurate and complete	Case counts and case classification errors <10%	<10% in all districts
Case classifications are correct	Case classifications errors <10%	<10% in all districts
Measurements are accurate	Measurement procedures are rigorously followed	< 10% of photos of MUAC measurements and/or oedema verified not compliant
Data collection procedures and tools are effectively managed	Each team visited at least twice during data collection Supervision score ≥ 85%	Teams visited twice in 4 out of 6 districts Average supervision score 98%
Data collection – Qualitative data collection		
Triangulation by source and method is comprehensive	80% of conducted SSI/FGDs per target sample	> 80% for all sampled location
Interviews and FGDs are conducted in-depth	Detailed notes covering at least 80% of questions on the interview guide	> 80% for all sampled interviews

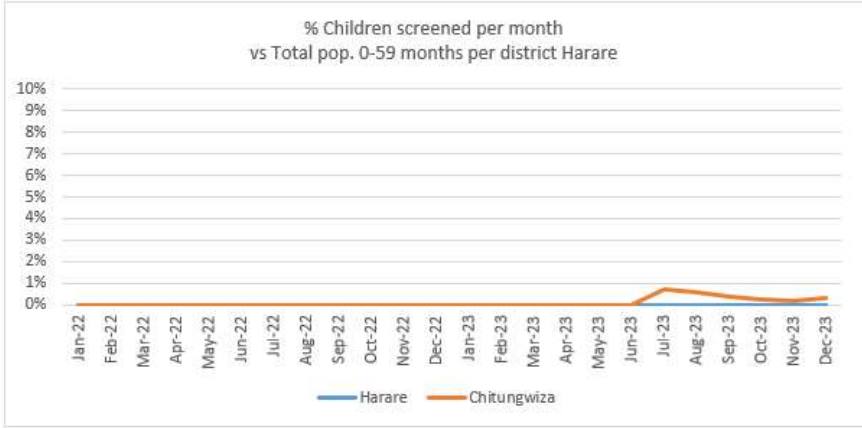
9. Provincial profiles

ROUTINE MONITORING DATA ANALYSIS 2022-2023

Harare

GROWTH MONITORING





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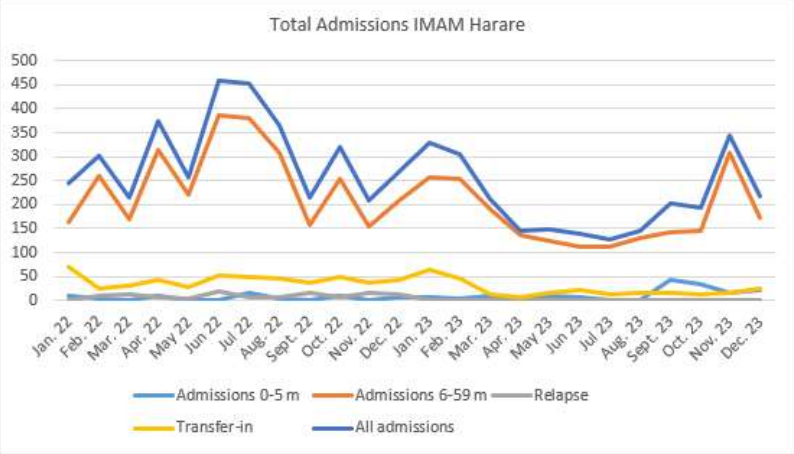

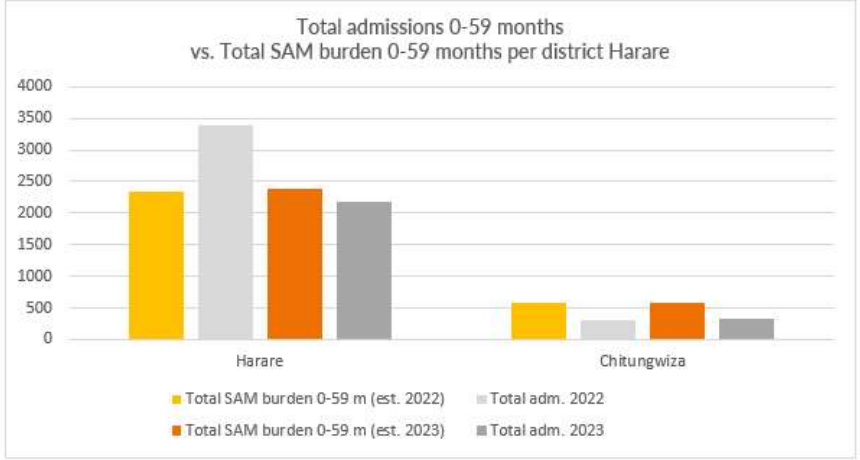

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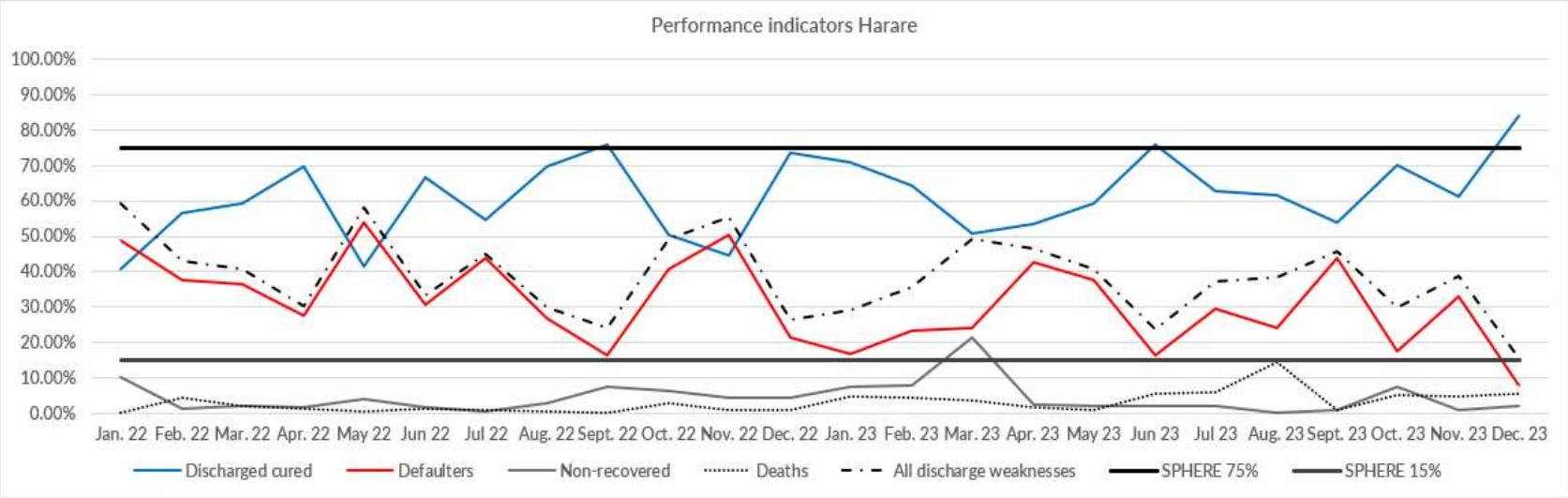


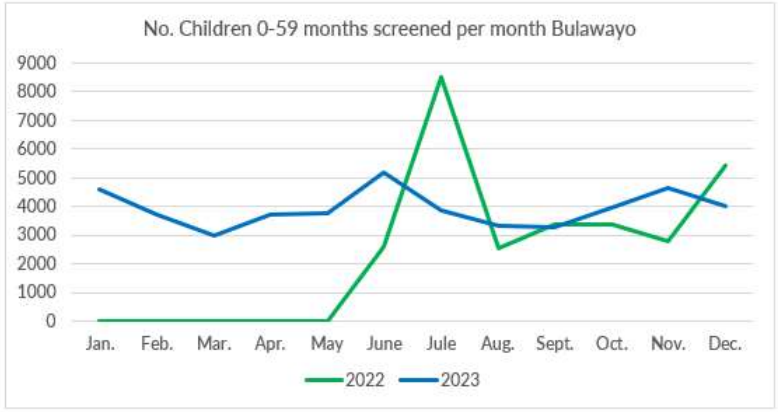
BOTTLENECK ANALYSIS

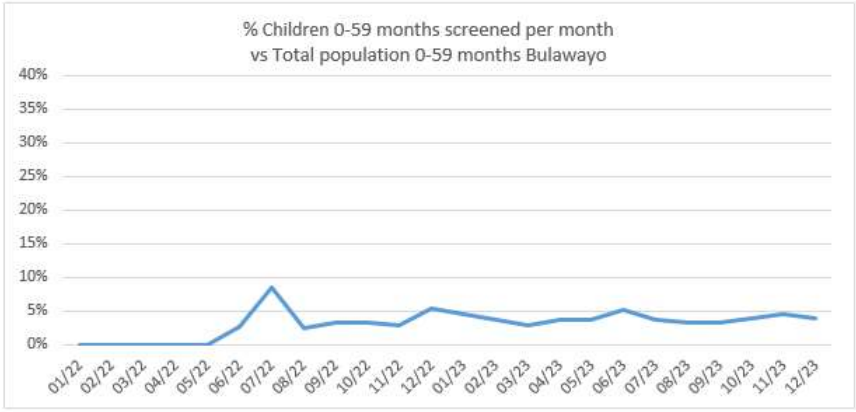
Criteria		Harare		Chitungwiza
% screening acts/ U5 pop (2023)	0%	1	9%	1
% Admissions / SAM burden (2023)	108%	3	58%	2
Performance - months with cured rate >75%	17%	1	8%	1
Performance - months with defaulter rate <15%	8%	1	38%	2
Supply - % Health facilities with RUTF available Q2 2023	33%	1	33%	1
Supply- % Health facilities with health workers trained in IMAM	52%	2	67%	2
Supply - % Functioning care groups	45%	1	67%	2
Total Score		**10**		11

ROUTINE MONITORING DATA ANALYSIS 2022-2023

Bulawayo

GROWTH MONITORING





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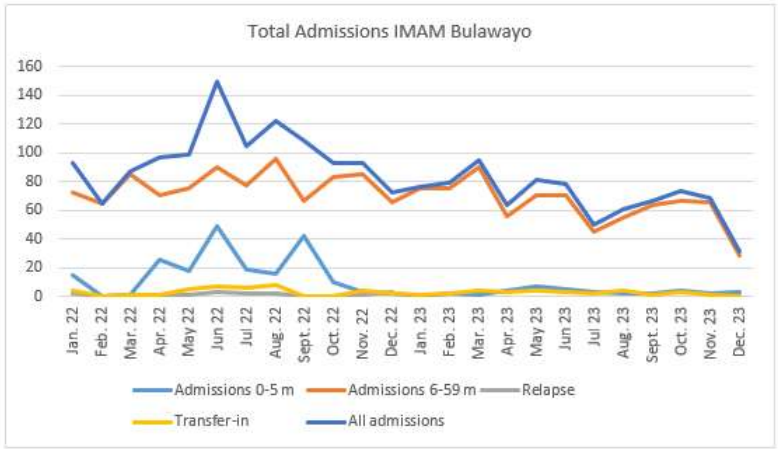

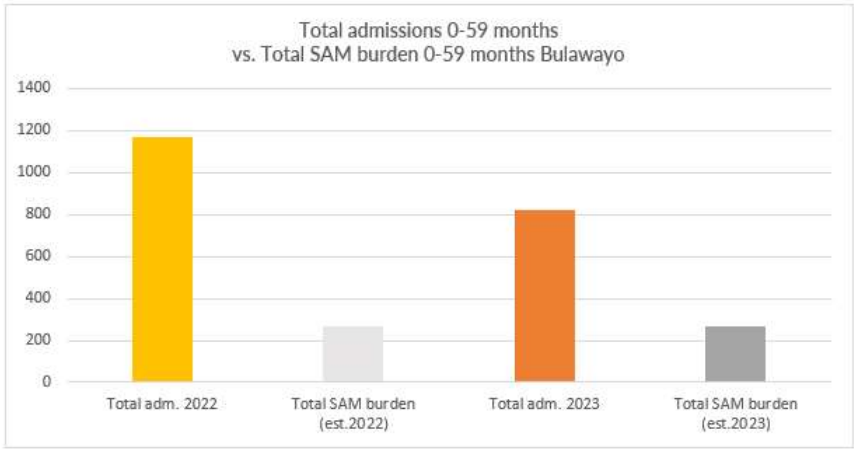

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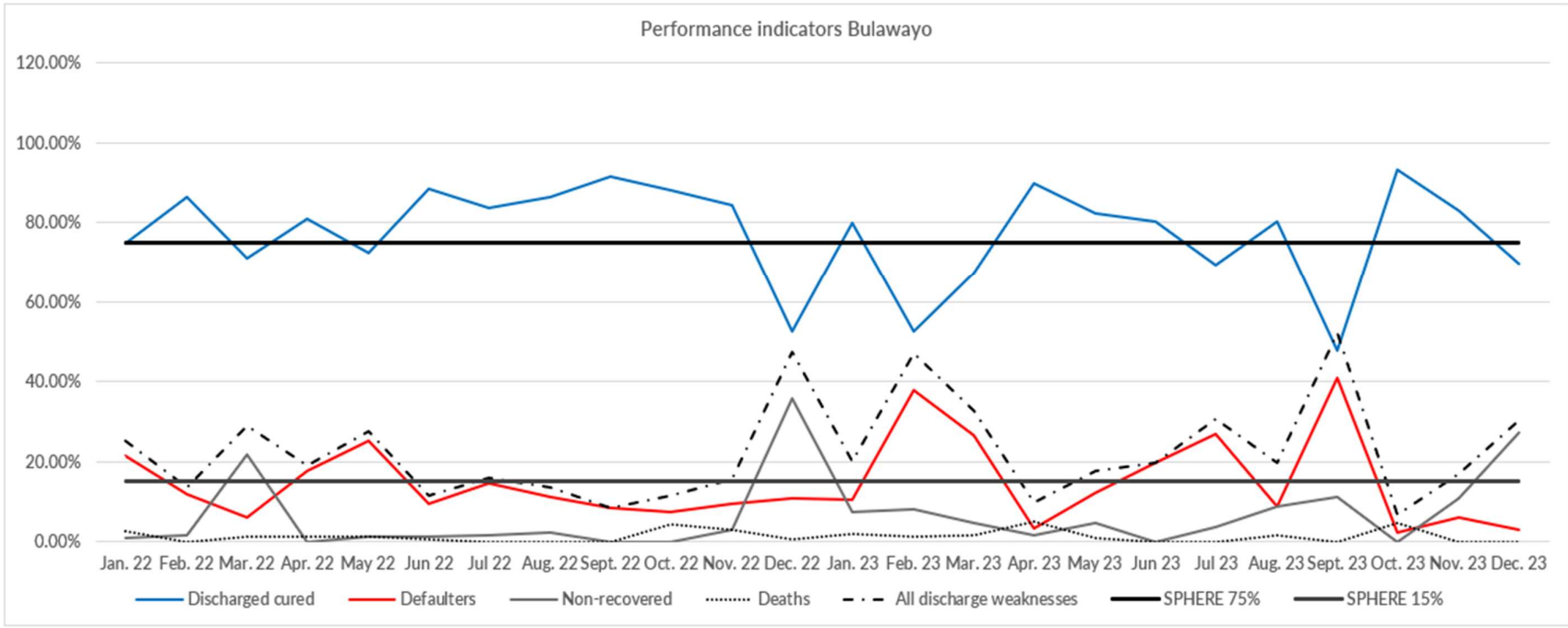


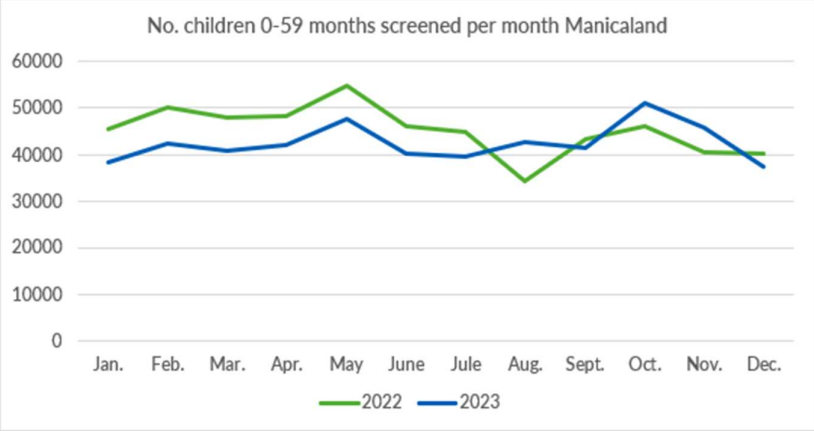
BOTTLENECK ANALYSIS

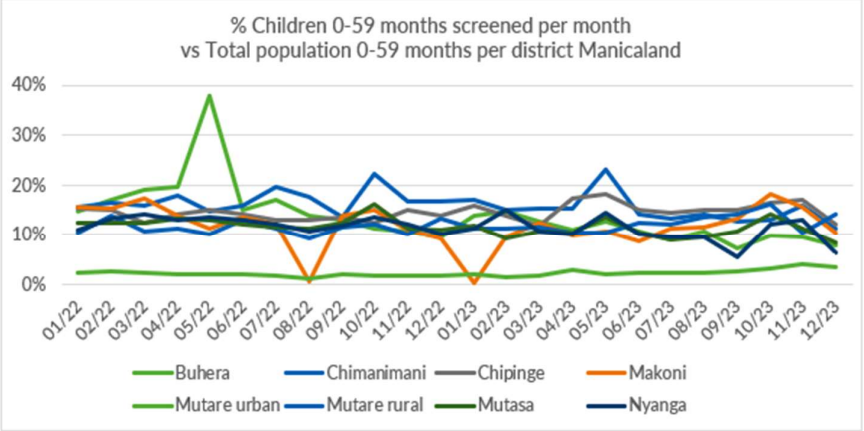
Criteria	Bulawayo	
% screening acts/ U5 pop (2023)	46%	1
% Admissions / SAM burden (2023)	306%	3
Performance - months with cured rate >75%	63%	3
Performance - months with defaulter rate <15%	67%	2
Supply - % Health facilities with RUTF available Q2 2023	78%	3
Supply- % Health facilities with health workers trained in IMAM	87%	3
Supply - % Functioning care groups	9%	1
Total Score		16

ROUTINE MONITORING DATA ANALYSIS 2022-2023

Manicaland

GROWTH MONITORING





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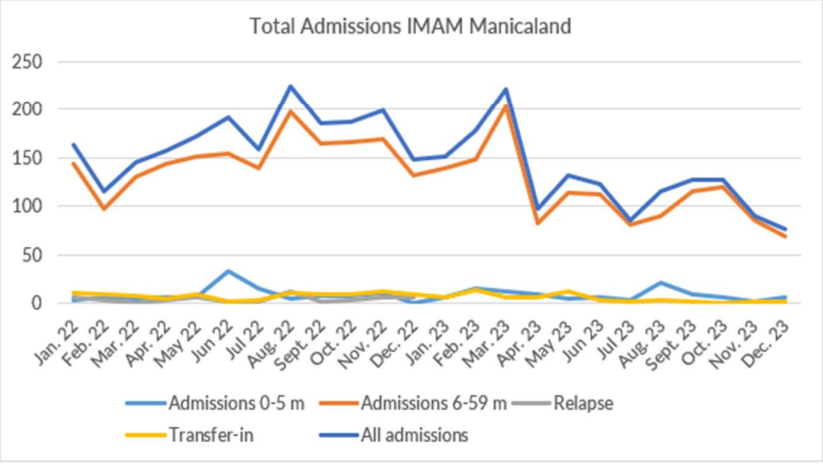

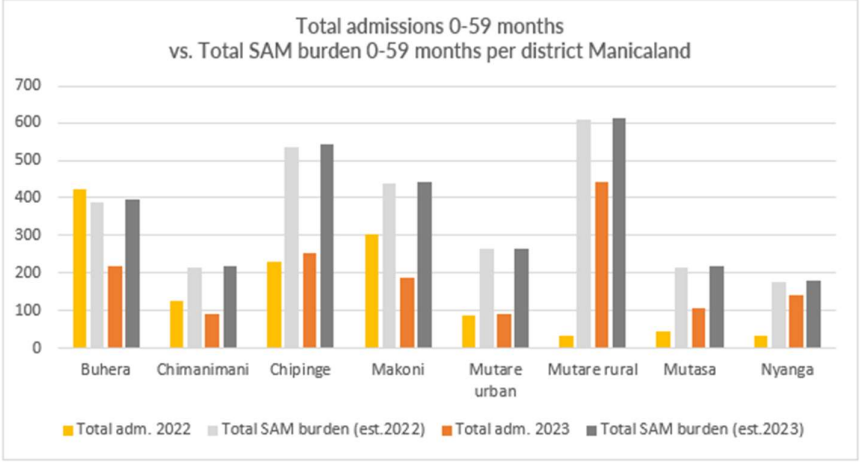

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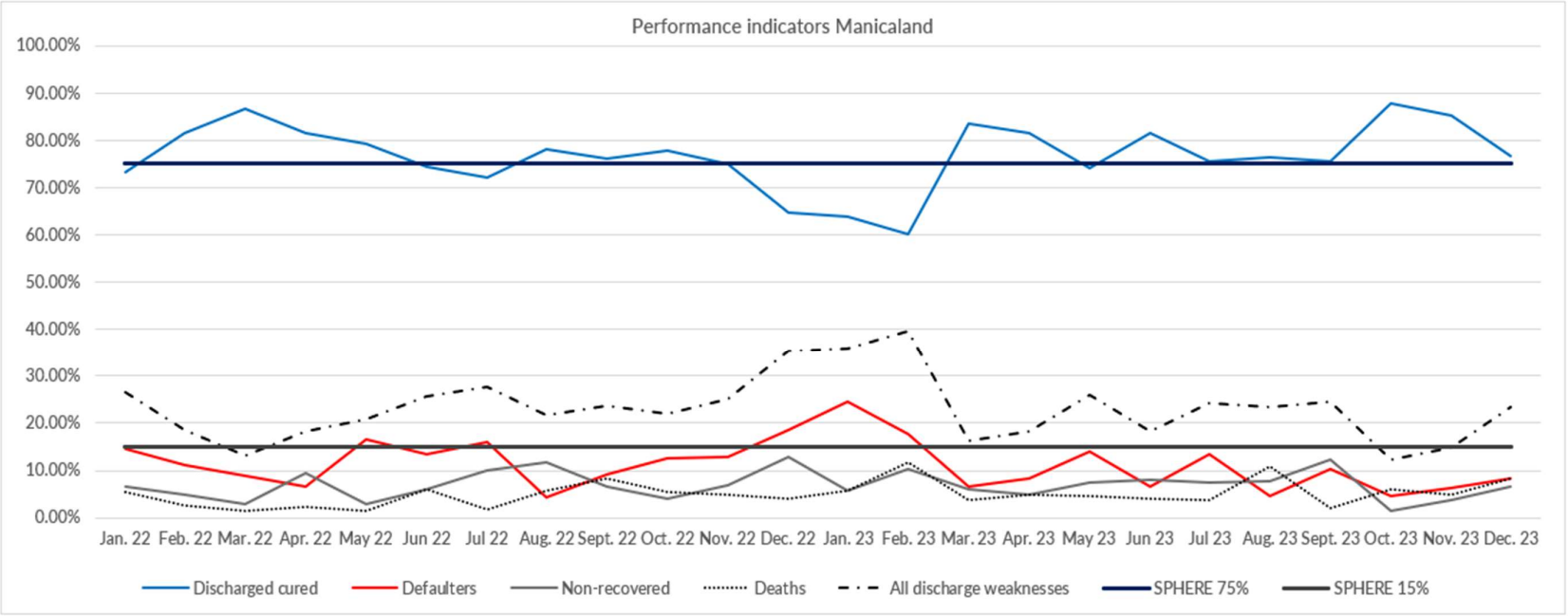


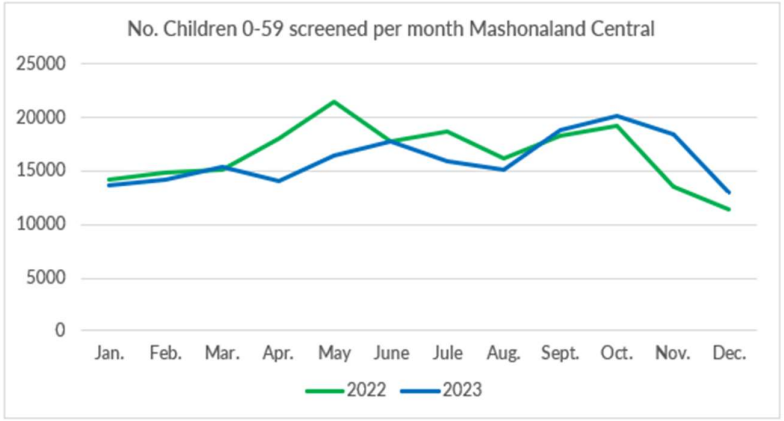
BOTTLENECK ANALYSIS

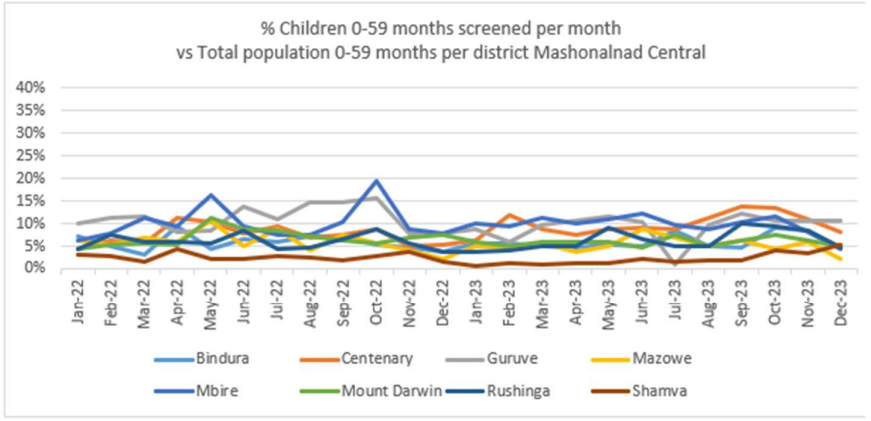
Criteria	**Buhera**		**Chimanimani**		**Chipinge**		Makoni		Mutare urban*		Mutare rural		**Mutasa**		Nyanga	
% screening acts/ U5 pop (2023)	130%	3	181%	3	182%	3	132%	3	132%	3	30%	1	129%	3	128%	3
% Admissions / SAM burden (2023)	56%	2	41%	2	47%	2	42%	2	33%	2	72%	3	49%	2	78%	3
Performance - months with cured rate >75%	67%	3	75%	3	42%	2	42%	2	29%	1	54%	2	75%	3	38%	2
Performance - months with defaulter rate <15%	67%	2	96%	3	50%	2	67%	2	75%	2	71%	2	75%	2	71%	2
Supply - % Health facilities with RUTF available Q2 2023	54%	2	39%	1	63%	2	33%	1	78%	3	40%	1	83%	3	14%	1
Supply- % Health facilities with health workers trained in IMAM	94%	3	100%	3	93%	3	96%	3	67%	2	93%	3	88%	3	68%	2
Supply - % Functioning care groups	74%	2	86%	3	83%	3	46%	1	11%	1	73%	2	45%	1	71%	2
Total Score		**17**		**18**		**17**		14		14		14		**17**		15

ROUTINE MONITORING DATA ANALYSIS 2022-2023

Mashonaland Central

GROWTH MONITORING





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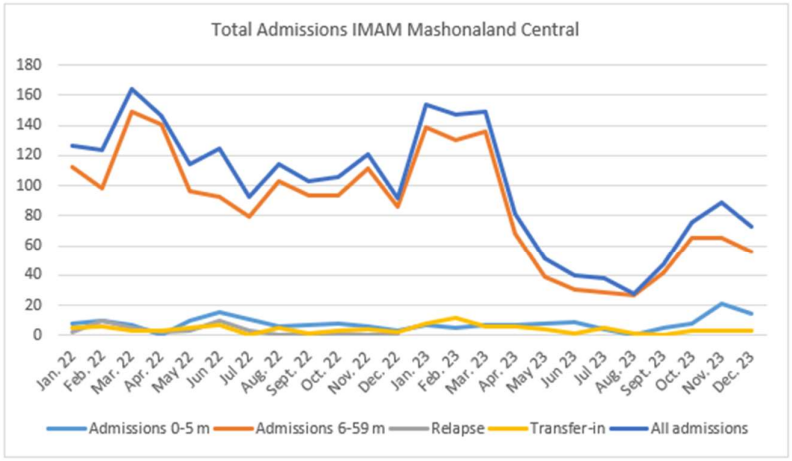

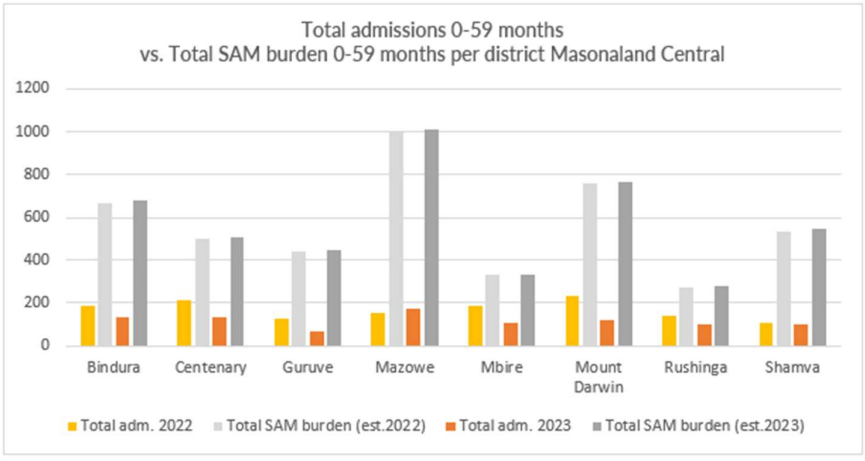

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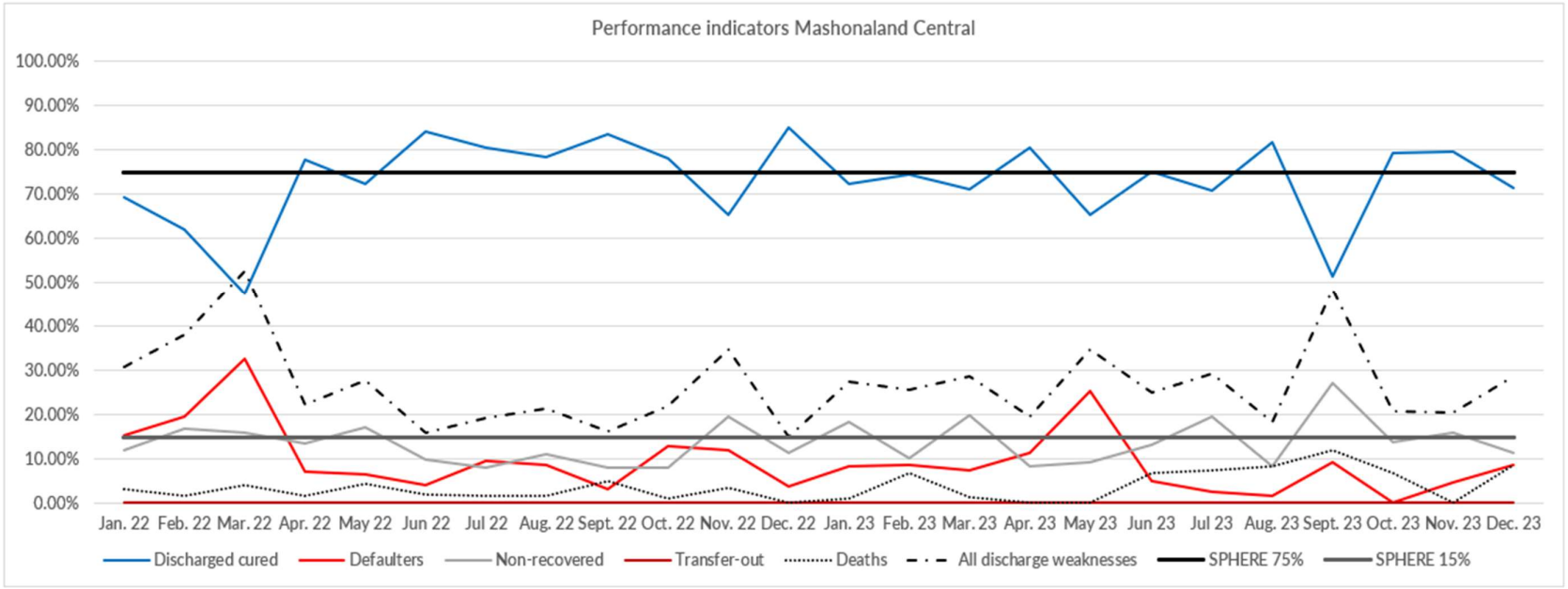
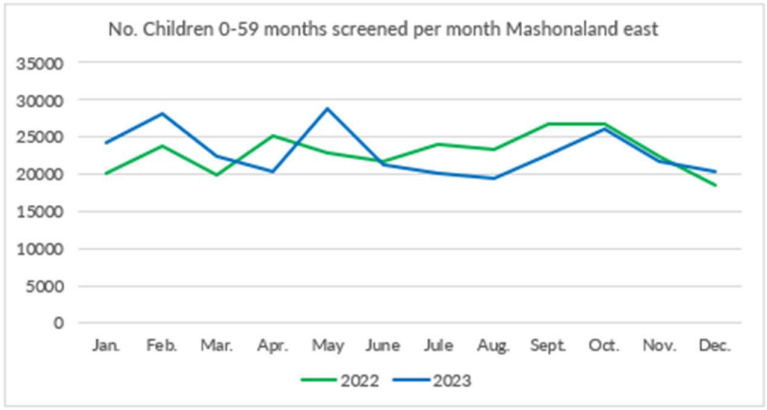
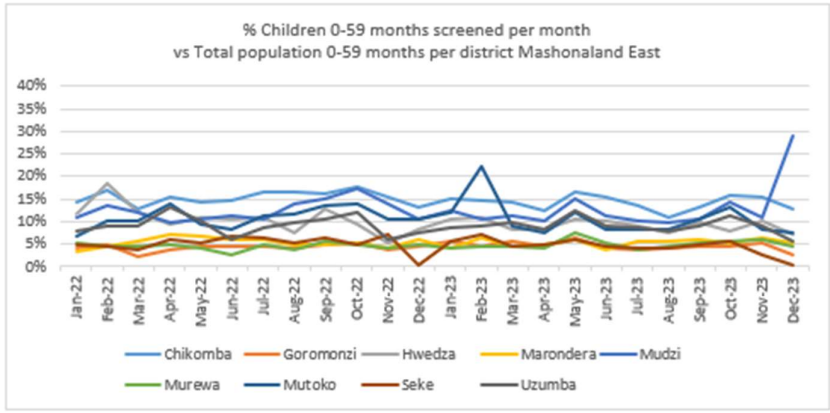


ROUTINE MONITORING DATA ANALYSIS 2022-2023

Mashonaland East

GROWTH MONITORING





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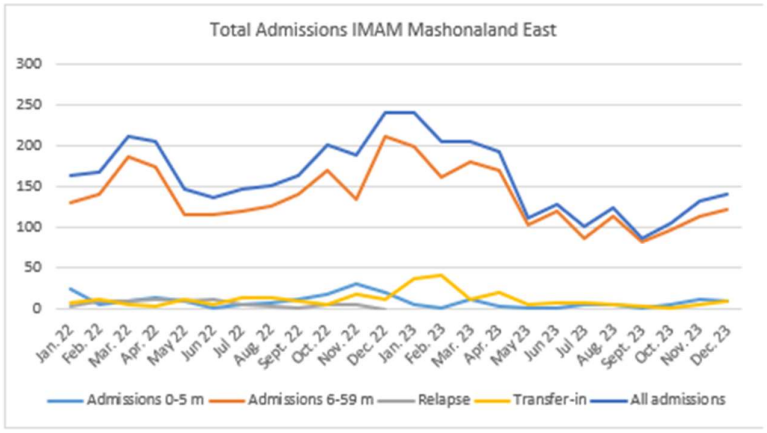

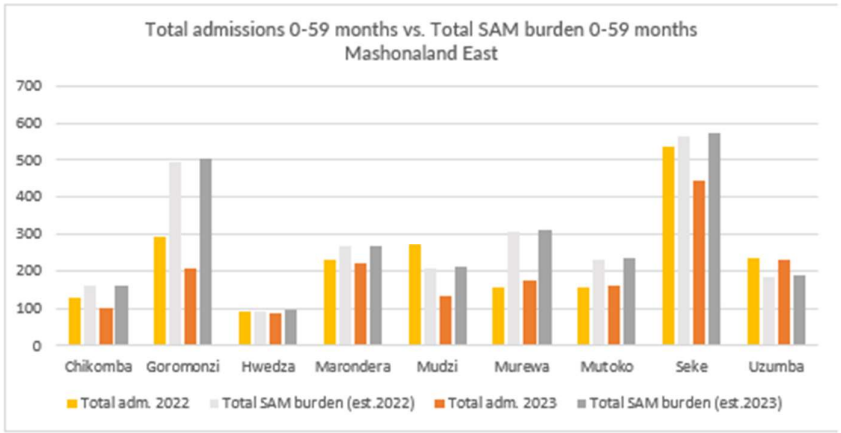

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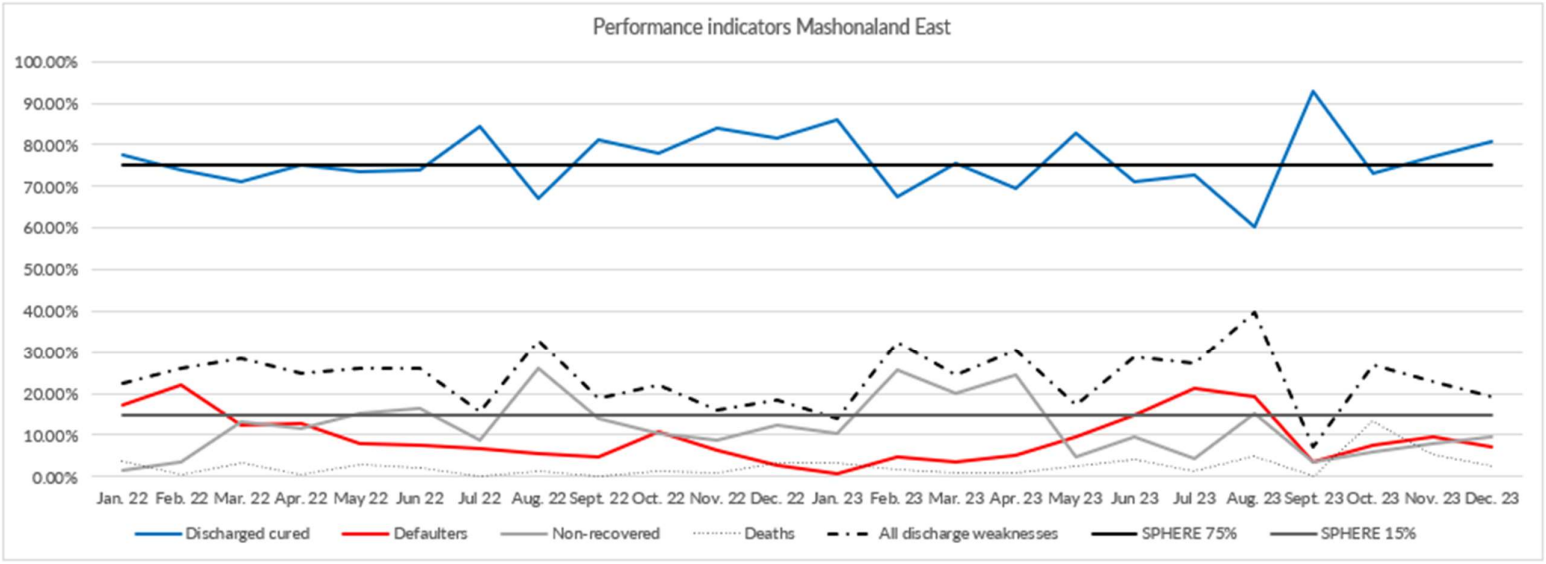


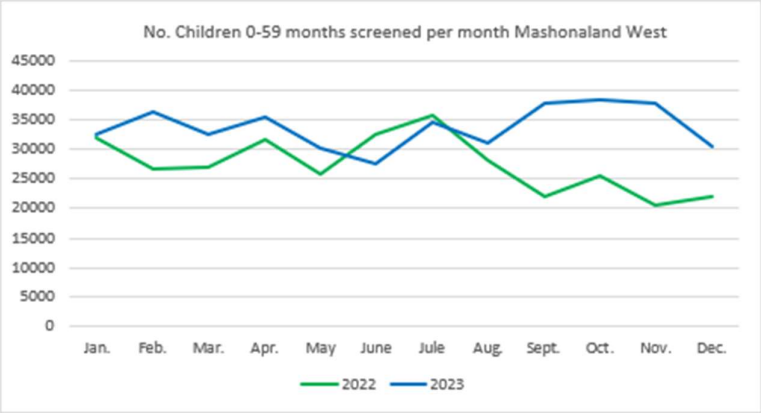
BOTTLENECK ANALYSIS

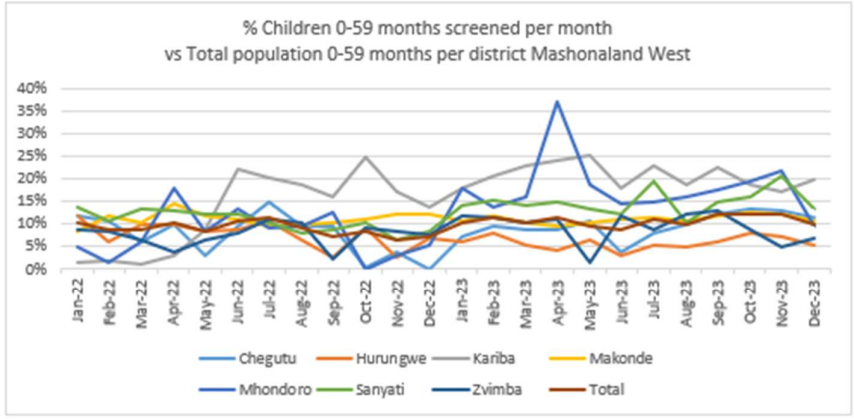
Criteria	Chikomba		Goromonzi		Hwedza		Marondera*		Mudzi		Murewa		Mutoko		Seke		Uzumba	
% screening acts/ U5 pop (2023)	170%	3	56%	2	110%	3	64%	2	156%	3	60%	2	127%	3	54%	2	109%	3
% Admissions / SAM burden (2023)	62%	3	41%	2	92%	3	82%	3	65%	3	56%	2	69%	3	78%	3	123%	3
Performance - months with cured rate >75%	63%	3	46%	2	58%	2	54%	2	63%	3	83%	3	50%	2	83%	3	17%	1
Performance - months with defaulter rate <15%	83%	3	63%	2	71%	2	75%	2	88%	3	83%	3	79%	3	88%	3	71%	2
Supply - % Health facilities with RUTF available Q2 2023	50%	2	81%	3	100%	3	43%	1	43%	1	72%	2	76%	2	67%	2	67%	2
Supply- % Health facilities with health workers trained in IMAM	75%	2	77%	3	93%	3	67%	2	90%	3	90%	3	92%	3	87%	3	81%	3
Supply - % Functioning care groups	22%	3	2%	1	67%	2	14%	1	57%	2	7%	1	32%	1	53%	2	5%	1
Total Score		19		15		18		13		18		16		17		18		15
no. empty cells (discharges)		47		0		0		0		0		0		0		40		0

ROUTINE MONITORING DATA ANALYSIS 2022-2023

Mashonaland West

GROWTH MONITORING





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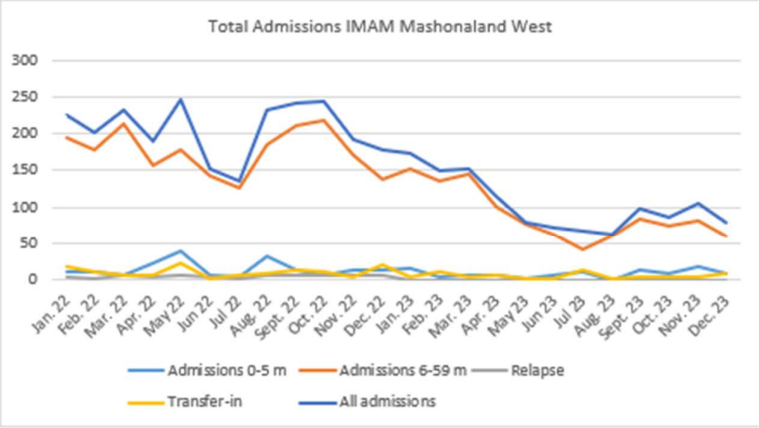
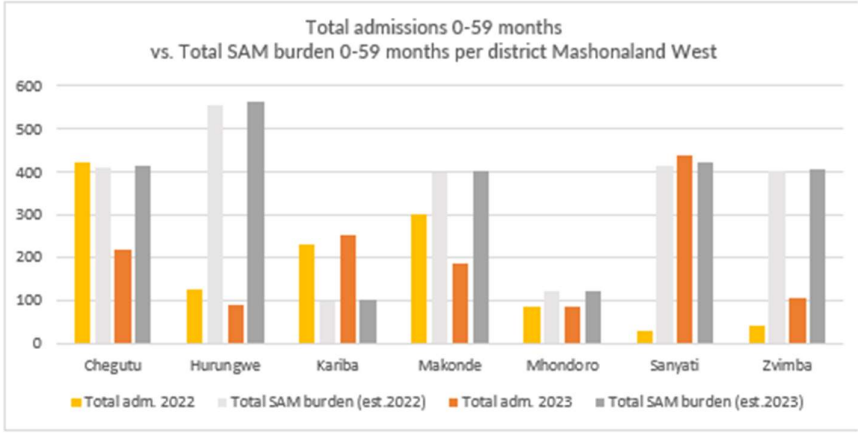
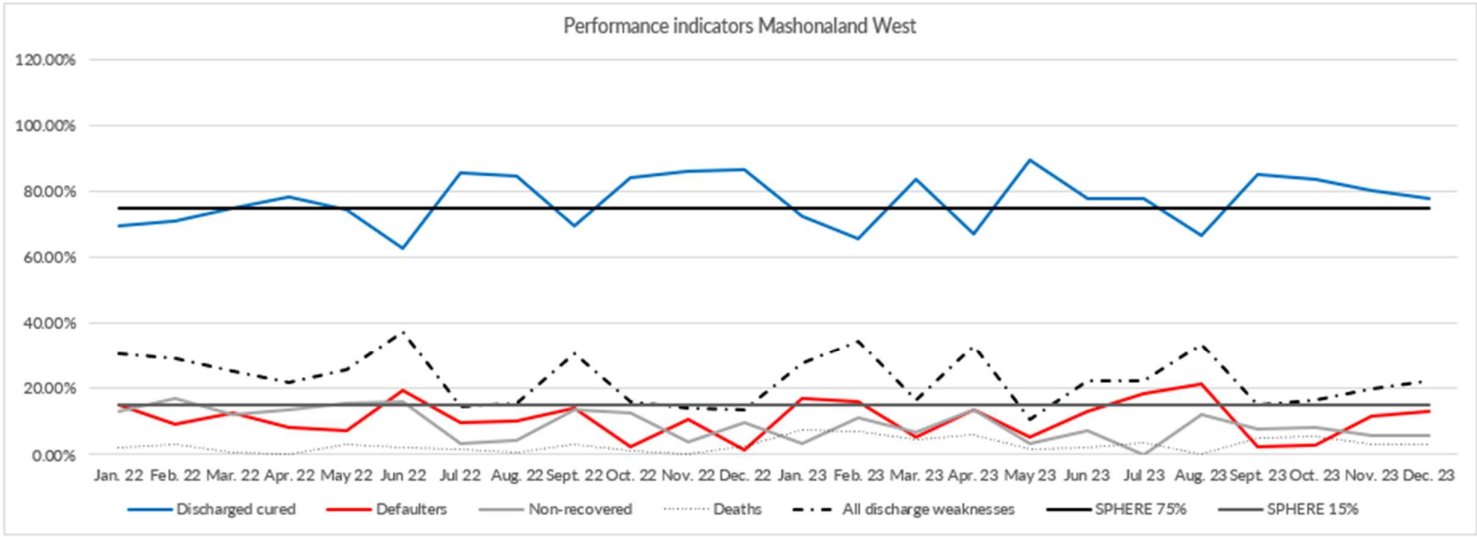




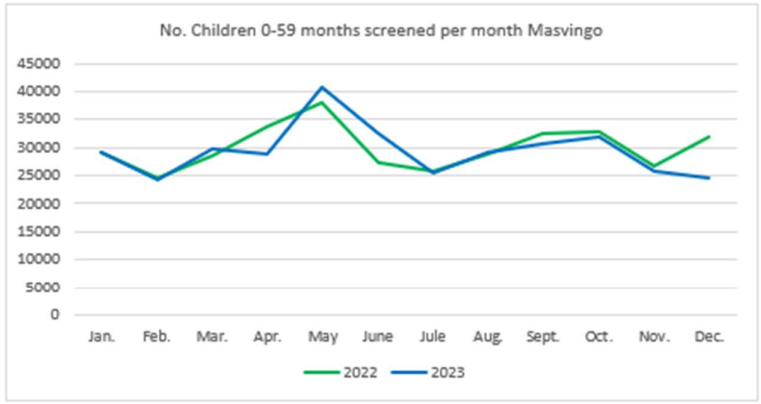
PERFORMANCE INDICATORS

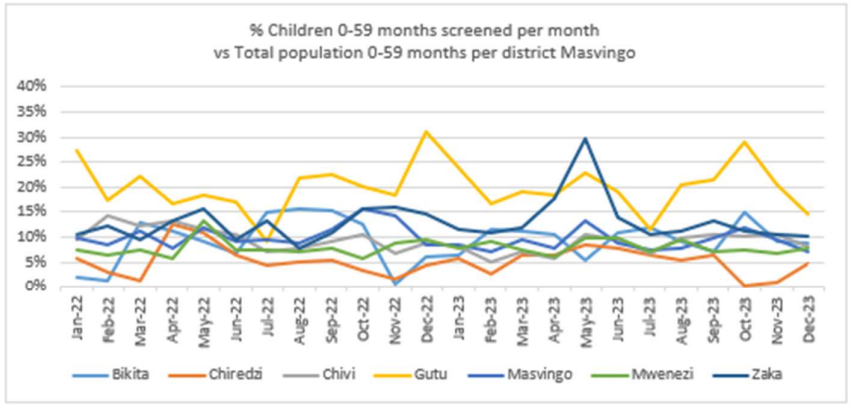


ROUTINE MONITORING DATA ANALYSIS 2022-2023

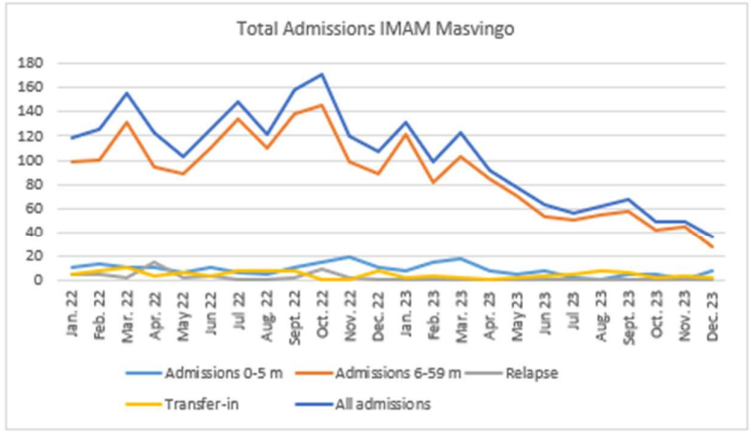
Masvingo

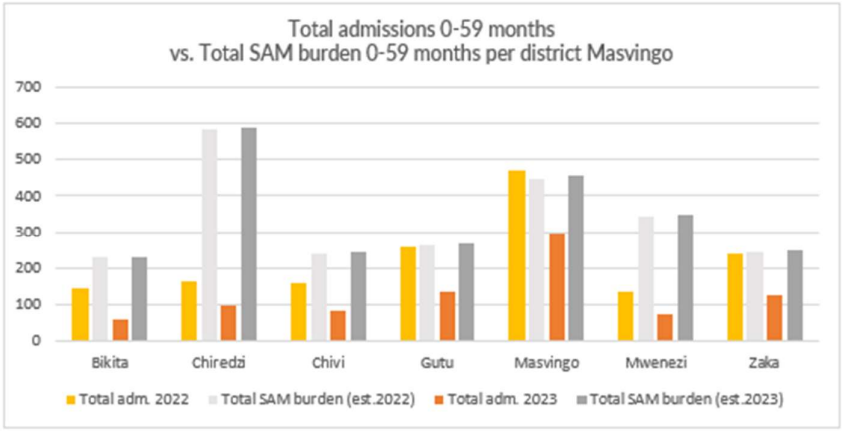
GROWTH MONITORING



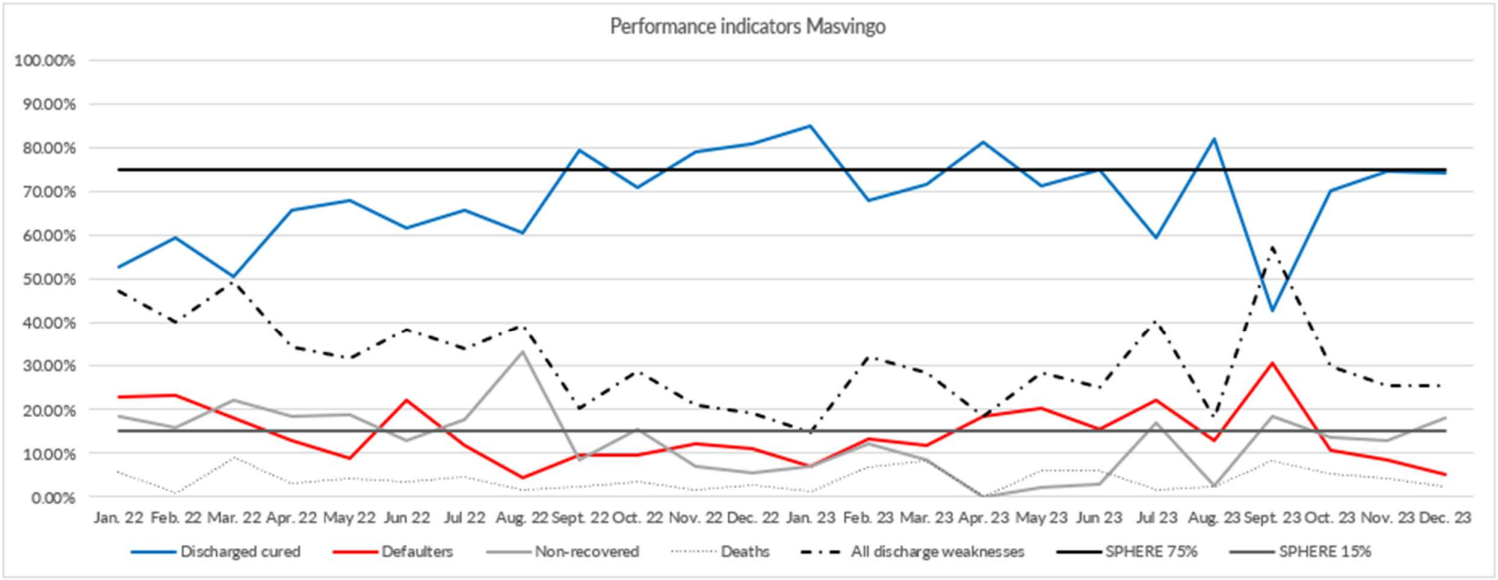


TOTAL ADMISSIONS





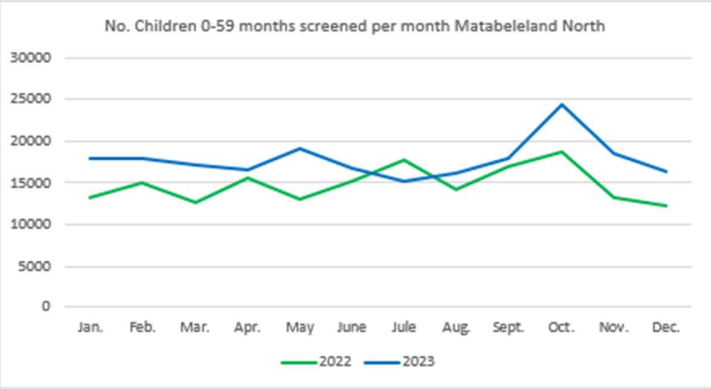
PERFORMANCE INDICATORS

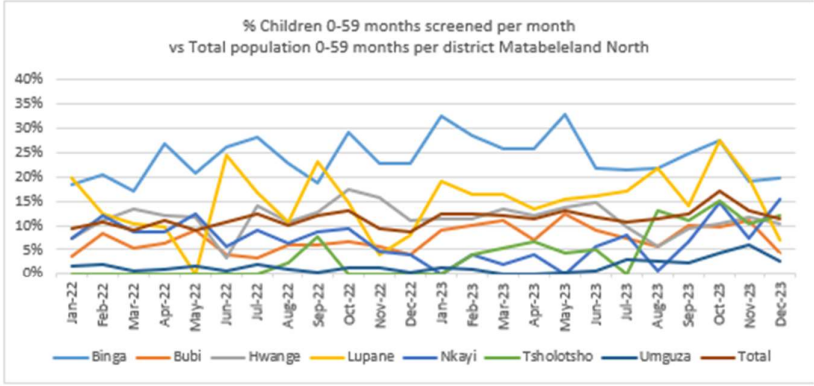


ROUTINE MONITORING DATA ANALYSIS 2022-2023

Matabeleland North

GROWTH MONITORING





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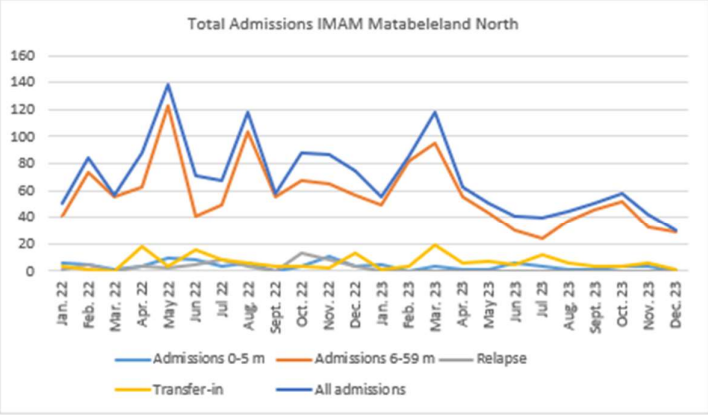

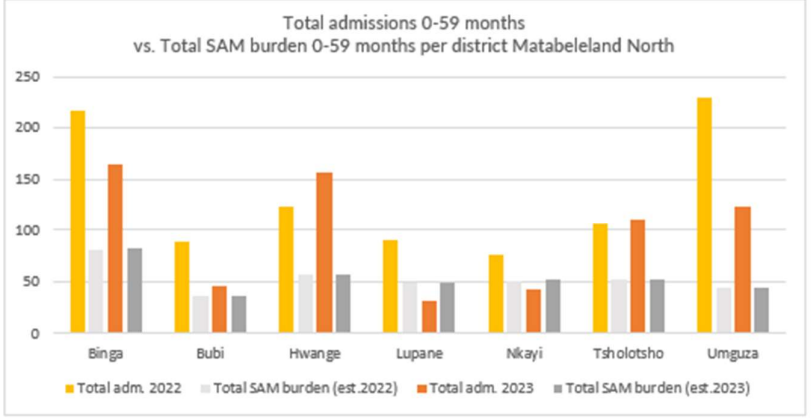

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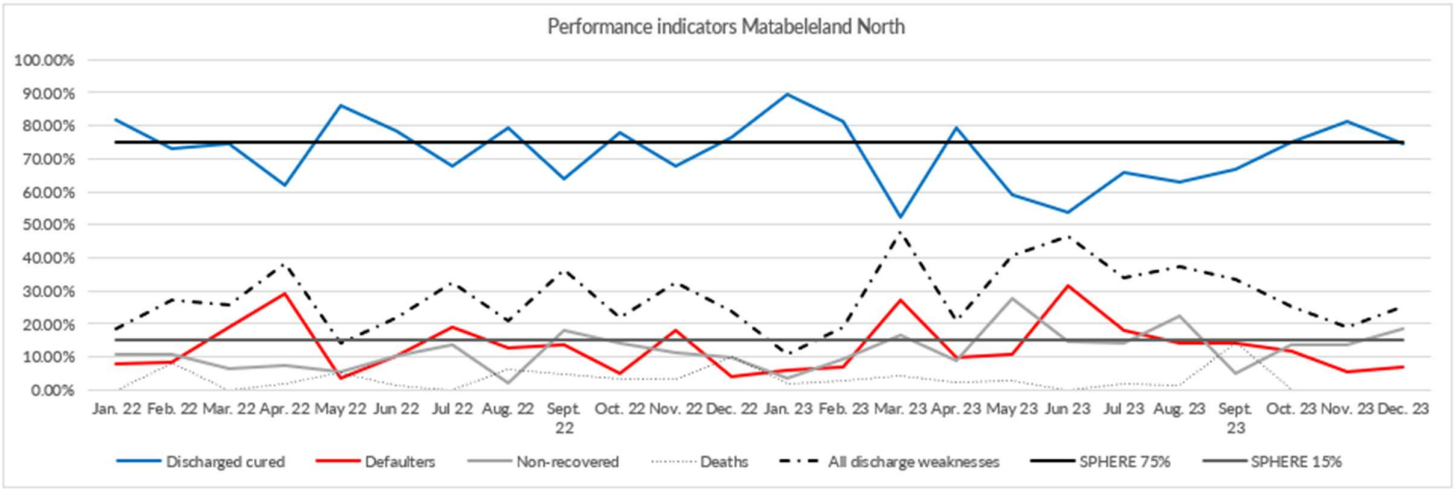
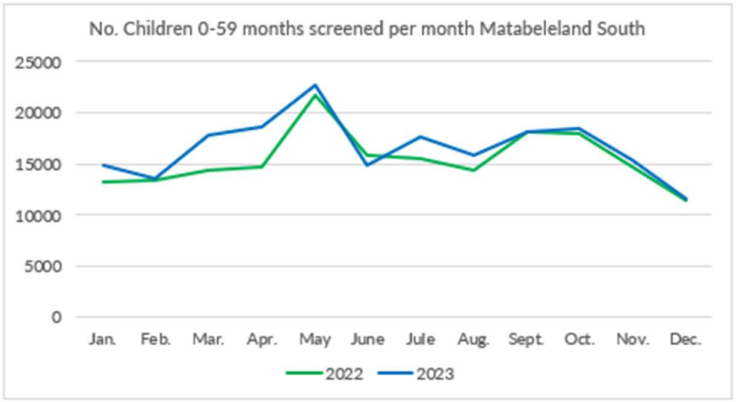
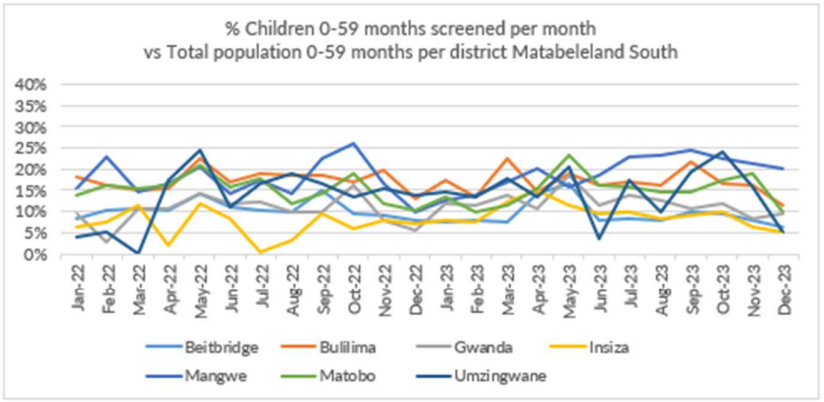


ROUTINE MONITORING DATA ANALYSIS 2022-2023

Matabeleland South

GROWTH MONITORING





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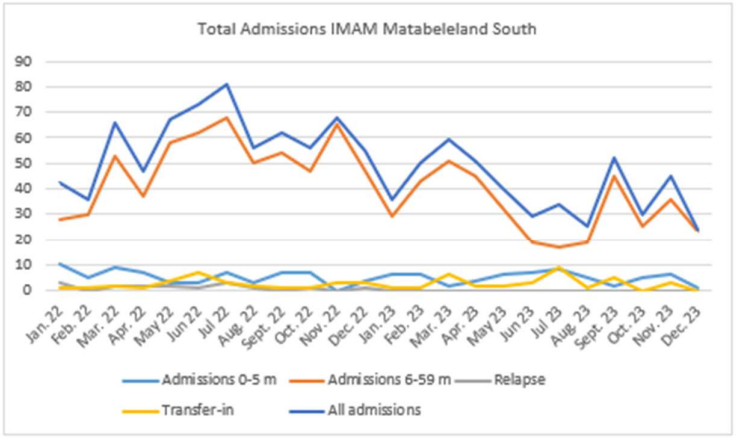

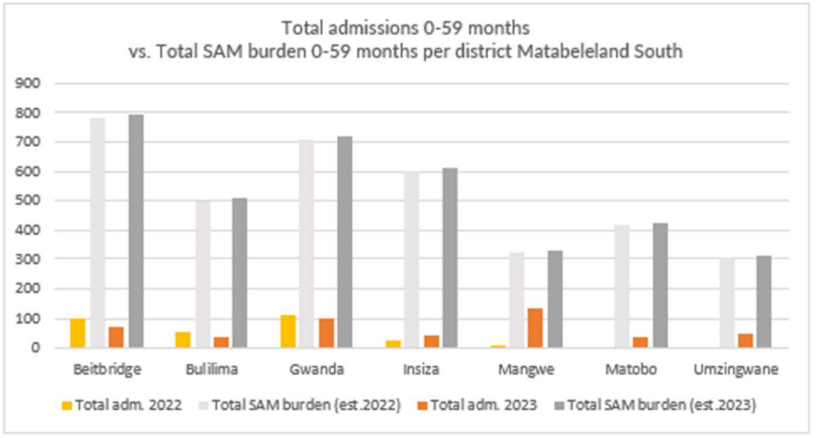

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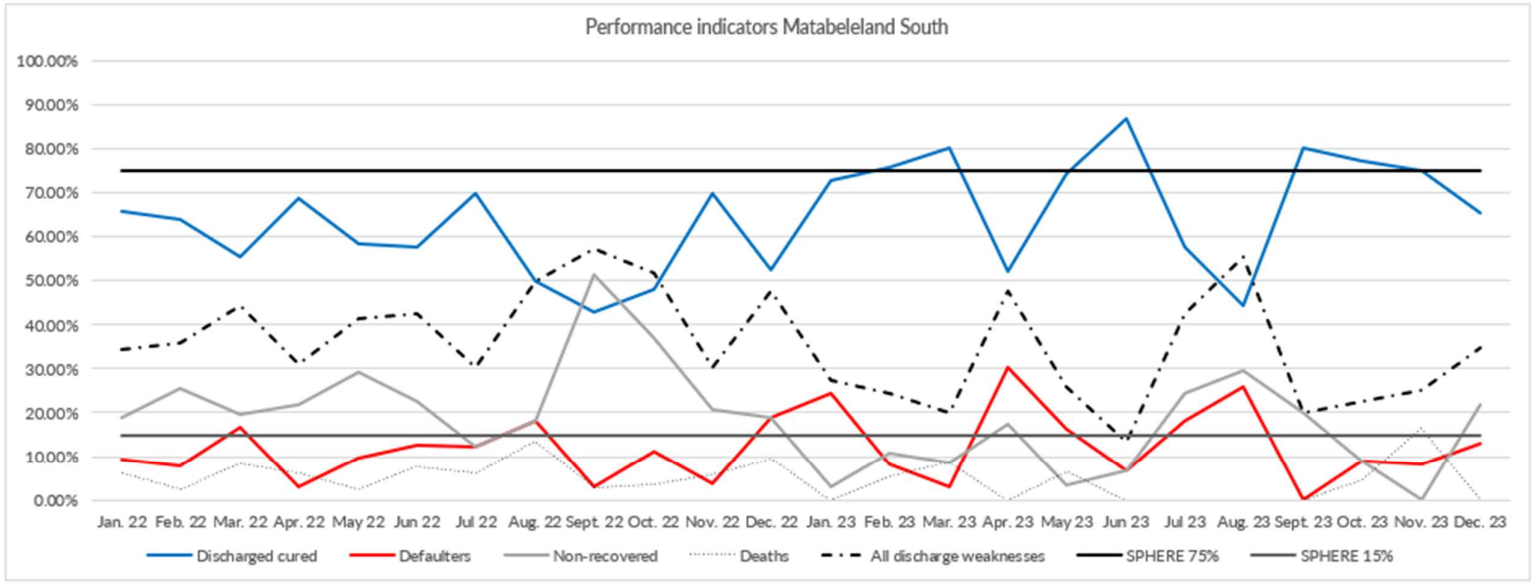
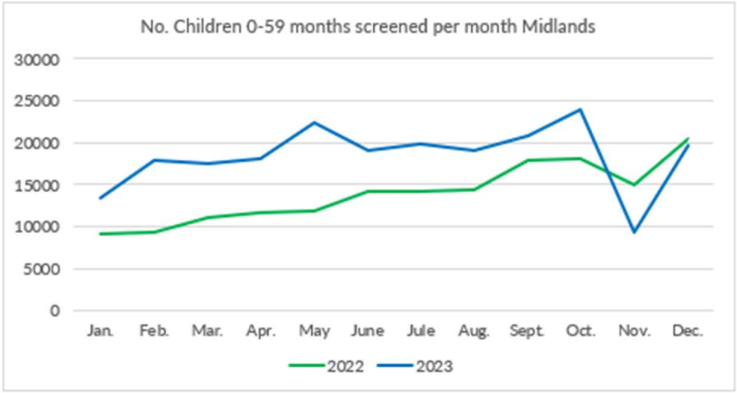
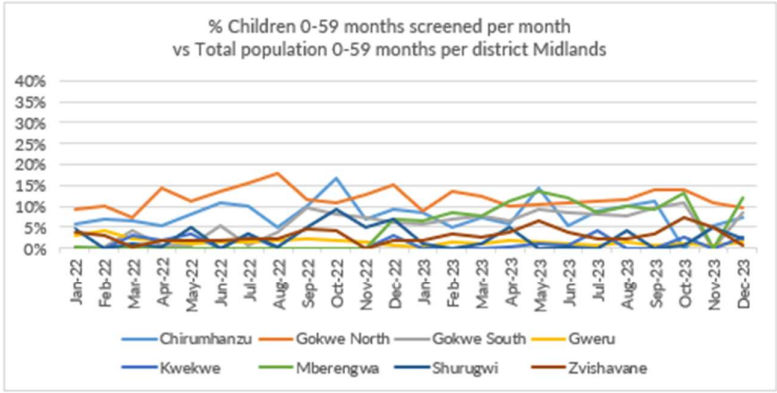


ROUTINE MONITORING DATA ANALYSIS 2022-2023

Midlands

GROWTH MONITORING





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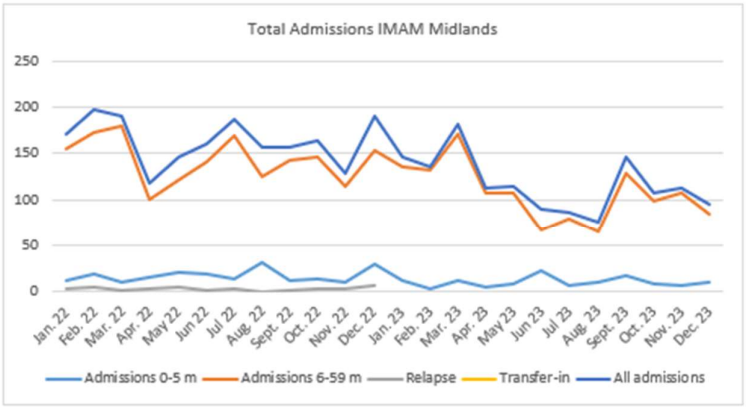

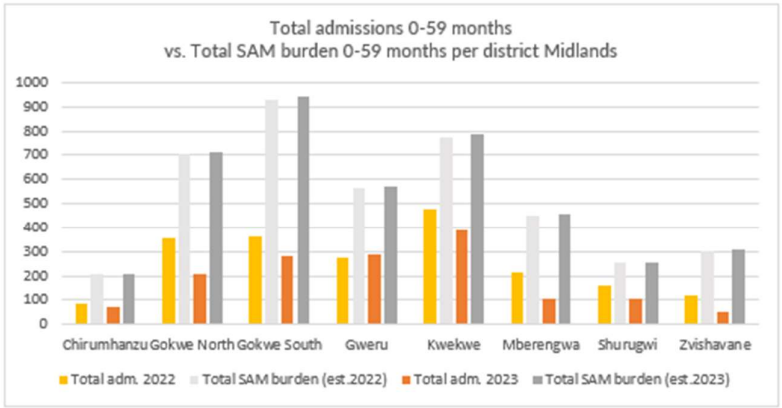

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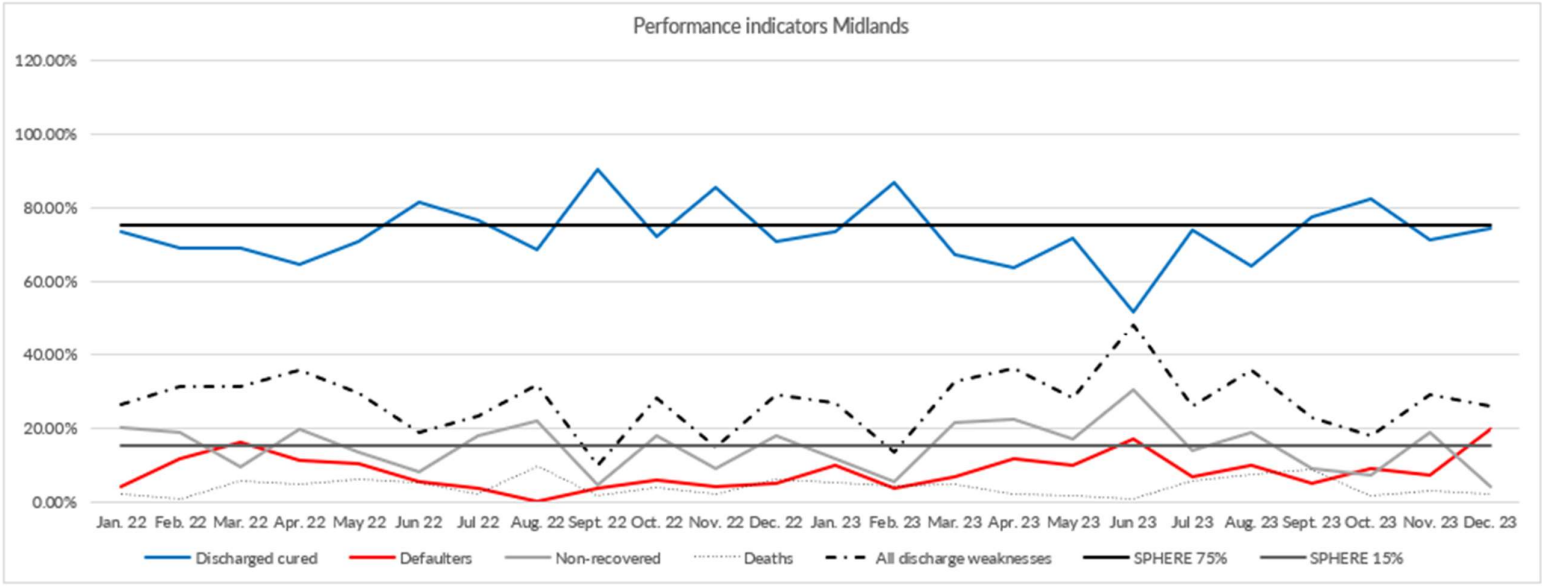

BOTTLENECK ANALYSIS

Criteria	Chirumhanzu		Gokwe North		Gokwe South		Gweru*		Kwekwe		Mberengwa		Shurugwi		Zvishavane	
% screening acts/ U5 pop (2023)	89%	2	137%	3	90%	2	14%	1	11%	1	113%	3	19%	1	43%	1
% Admissions / SAM burden (2023)	35%	2	29%	1	30%	1	50%	2	49%	2	23%	1	40%	2	17%	1
Performance - months with cured rate >75%	54%	2	50%	2	50%	2	88%	3	17%	1	54%	2	38%	2	21%	1
Performance - months with defaulter rate <15%	92%	3	83%	3	75%	2	96%	3	67%	2	88%	3	75%	2	83%	3
Supply - % Health facilities with RUTF available Q2 2023	58%	2	23%	1	40%	1	70%	2	58%	2	34%	1	33%	1	41%	1
Supply- % Health facilities with health workers trained in IMAM	74%	2	86%	3	97%	3	87%	3	89%	3	66%	2	20%	1	76%	3
Supply - % Functioning care groups	100%	3	82%	3	86%	3	90%	3	81%	3	20%	1	17%	1	24%	1
Total Score		16		16		14		17		14		13		**10**		11